

# Instructional Tips: Supporting the Educational Needs of Students With Fetal Alcohol Spectrum Disorders

Susan Marie Ryan

---

*A Case Study Published in*

*TEACHING Exceptional Children Plus*

*Volume 3, Issue 2, November 2006*

---

# Instructional Tips: Supporting the Educational Needs of Students With Fetal Alcohol Spectrum Disorders

Susan Marie Ryan

---

## Abstract

The Center on Disease Control, Substance Abuse and Mental Health Administration (2005) identified the prevalence of Fetal Alcohol Spectrum Disorders (FASD) as being 10 per 1,000. The Substance Abuse and Mental Health Services Administration (SAMHSA) has further explained (2005) that FASD now outranks autism and Down syndrome in prevalence. Students with FASD typically receive their instruction in general education classrooms. This article highlights instructional tips that teachers in Alaska say are helpful when teaching students with FASD.

---

## Keywords

fetal alcohol spectrum disorders, fetal alcohol syndrome, intervention strategies

### Acknowledgments:

The author would like to acknowledge the educators of students with FASD in Alaska who were interviewed for this project.

### SUGGESTED CITATION:

Ryan, S.M. (2006). Instructional tips: Supporting the educational needs of students with fetal alcohol spectrum disorders. *TEACHING Exceptional Children Plus*, 3(2) Article 5. Retrieved [date] from <http://escholarship.bc.edu/education/tecplus/vol3/iss2/art5>

## Introduction

Identified by Lemoine, Harousseau, Borteyrun, & Menuet in 1968 as *fetal alcohol syndrome* (FAS), the term *fetal alcohol spectrum disorders* (FASD) refers to a wide spectrum of alcohol-related neurological disorders and describes the range of effects that can occur in an individual whose mother drank alcohol during pregnancy. There has been an increase in awareness and diagnosis of FASD in the nearly four decades since 1968 (Astley & Clarren, 1997; 2000; Cordero, Floyd, Martin, Davis, & Hymbaugh, 1994; Dehaene, 1995; Jones, 1988; May, Hymbaugh, Aase, & Samet, 1983; National Institute on Alcohol Abuse and Alcoholism, 1987).

In 1996, researchers at the Institute of Medicine estimated that in the United States each year between 0.5 and 3.0 of every 1,000 infants are born with some degree of FAS (1996). In 2005, however, the U.S. Department of Health and Human Services, Substance Abuse, and Mental Health Services Administration (SAMHSA) reported an increase in the rate of FASD to 10 per 1,000 live births (SAMHSA, 2005), or 40,000 babies per year born with FASD. In addition, SAMHSA (2005) recently reported that FASD “now outranks Down syndrome and autism in prevalence” (p. 2).

Another spectrum disorder, autism spectrum disorder or ASD, has witnessed increases in incidence and prevalence rates. Two potential explanations for the increase in the prevalence and rate of ASD in the United States are: (a) more complete diagnoses; and (b) a broader definition of autism spectrum disorders (Fombonne, 1999; National Research Council, 2001). These explanations may also account for the increase in the prevalence and incidence of FASD.

Students with FASD are not included in the Individuals with Disabilities Education Improvement Act (IDEIA) categories of disabilities eligible for services. Despite this fact, teachers who have students who experience FASD in their classrooms may need useful and practical strategies for supporting the educational needs of their students. We believe that since most students with FASD are in regular education classrooms and are not readily eligible for special education services (Ryan & Ferguson, 2006a, 2006b), educators could particularly benefit from knowledge of interventions and strategies for accommodating and modifying their instruction to support the needs of these students.

Students with FASD typically receive their instruction in general education classrooms with teachers who are often ill prepared to meet their learning, behavioral, and social needs (Ryan & Ferguson, 2006a, 2006b). This article highlights instructional tips that teachers in Alaska say are helpful when teaching students with FASD. The tips come from regular and special education teachers in Alaska who were involved in a 4-year project which investigated the educational needs of students with FASD (Ryan & Ferguson, 2006a, 2006b). The project involved interviews with approximately 25 teachers and observations in their classrooms over the course of 4 years (Ryan & Ferguson, 2006a, 2006b). We believe these recommendations represent an emerging set of practices that are effective with students with FASD.

Table 1. What the Literature Says About Students with FASD

**Various forms of FASD include the terms** alcohol-related neurological disorders, prenatal exposure to alcohol, static encephalopathy with sentinel physical findings/alcohol exposed, fetal alcohol effects, and fetal alcohol syndrome (Astley & Clarren, 2000).

**Diagnosing FAS involves verification of:** (a) abnormal facial features including small eye opening, indistinct philtrum (groove between nose and upper lip), and thin upper lip; (b) growth deficiencies that stunt prenatal or postnatal development; (c) permanent brain damage resulting in neurological abnormalities, delays in development, intellectual impairment, and learning/behavioral disabilities; and (d) maternal alcohol use during pregnancy (Astley & Clarren, 2000).

**Secondary Disabilities include** mental health disorders (94%); disruptive school experiences (60%); trouble with the law (42%); confinement (50%); inappropriate sexual behavior (45%); and alcohol and drug problems (35%) (Streissguth, 1997).

**ACADEMIC/LEARNING CHALLENGES** and learning characteristics of students with FASD may include the following:

- \***Abstract thinking:** Difficulties with abstract reasoning (Coggins, Friet, & Morgan, 1998)
- \***Receptive communication/comprehension:** Understanding what is meant in a conversational interchange (Alberta Learning Special Programs Branch, 2004).
- \***Receptive communication/discrimination:** Understanding whether words are the same or different (Coggins, Friet, & Morgan, 1998)
- \***Selective attention:** Knowing which items of information are important to focus on (Coggins, Friet, & Morgan, 1998)
- \***Attending:** Challenges attending during group instruction (Kleinfeld & Wescott, 1993)
- \***Self-image:** Poor self-image (Aronson, 1984)
- \***Memory:** Difficulty remembering routines or information (Burden, Jacobson, Sokol, & Jacobson, 2005; Mitchell, 2002)

**SOCIAL COMMUNICATION CHALLENGES** and learning characteristics of students with FASD may include the following:

- \*Recognizing social cues (Tanner-Halverson, 1993)
- \*Looking at a situation from another person's point of view (Kellerman, 2002)
- \*Making or keeping friends (Bartholomew-Lorimer, 1993)
- \*Participating in a conversation
- \*Being suggestible or easily influenced by others (Streissguth, 1997)

**BEHAVIORAL CHALLENGES** and learning characteristics of students with FASD may include the following:

- \*Temper tantrums and frustration (Packer, L. E. 2006; Timler & Olswang, 2001; Weiner & Morse, 1994)
- \*Impulsivity (Gerhardt-Cyrus, 2005, November; National Organization on Fetal Alcohol Syndrome, (n.d.))
- \*Poor judgment (Ryan & Ferguson, 2006a, 2006b)
- \*Involvement with drugs and alcohol (Streissguth, 1997)

### **Instructional Tip #1: Think Person/Child First**

Jan Lutke (1996) is a parent of a young adult with FASD. The following description of her daughter captures the essence of a person-first philosophy:

*My daughter would say to you: I am not a statistic. I am not like you, but my brain works. I am not an FAS case. I am a person with FAS. I have a disability, but my spirit is whole (p. 1).*

Students who experience FASD are first and foremost children. The teachers we interviewed felt it was important to view the student with FASD as an individual and recognize that each student represents a vast array of abilities and interests. When teachers were aware of the child's FASD characteristics, they did not stereotype the student; rather, they felt it was important to observe and draw conclusions based upon their observations, not on the diagnosis. One teacher described a student she worked with as "active," "personable," and "interested in everything." This teacher used the child's own characteristics and interests as a way of "hooking" the student into a topic or academic area. Another teacher believed that she "makes a difference" in each child's life. She felt it was her role as teacher to build successful experiences for all children based upon their individual interests, strengths, and needs. Yet another teacher used the term *child first* to focus the discussion on viewing the child as a person and not the sum of his or her prenatal exposure to alcohol. She shared: "I view the child with FASD as a child or student first. The fact that he has been diagnosed with FASD does not alter my view that it is important to first start with the philosophy of person first."

Underlying the instructional tip of *think person/child first* is the belief in the

power of developing and supporting a positive relationship with the student. "Getting to know the child, seeing the child as a human being" was the way one teacher described her philosophy, noting that taking the time to establish a relationship with the student with FASD would go a long way towards supporting his or her educational needs.

### **Instructional Tip #2: Build a Relationship with the Student's Family**

Educators know well the importance of family in the life of a child. Teachers we talked to had many strategies for building relationships with families and demonstrating respect for their knowledge of their child and love for their well-being. The following are five examples that teachers shared with us.

- Help parents encourage good study habits at home.
- Closely monitor students' work, and immediately get with struggling students and their families to help create a plan for success, so that the student stays engaged.
- Have a parent/student social night.
- Invite elders or local residents into school to teach the cultural history of that region.
- Have elders perform traditional ceremonies in the school.

Ensuring that there is a strong link between the school and the home was a frequent theme teachers discussed. One teacher shared how she used a notebook that she sent back and forth to the student's home. In the notebook she shared the student's successes during the day. She felt that sharing the successes of the student regularly with his family helped her when she had to then communicate challenges that the student would have. She shared:

*If I only use the notebook to tell the parents what their child is doing wrong then it would be all about negatives. Instead, I try to share things with the families that they can be proud of. Then, when something happens that is not positive I always talk with them personally about that. Making a personal connection with each family has really helped me. I feel like the families trust me more.*

### **Instructional Tip #3: Develop Partnerships and Build Collaboration Between Families, Schools, and Community Agencies, and Implement Wrap-Around Services**

Multiple home placements either in foster or adoptive care characterize the lives of children with FASD (Ryan & Ferguson, 2006a, 2006b; Streissguth, 1997). Compounding the issue of multiple placements is the fact that the services are provided to students with FASD by a variety of professionals and agencies. For example, due to the fact that individuals with FASD have mental health problems (94%), inappropriate sexual behaviors (43%), disruptions in school experiences (43%), and often have trouble with the law (42%); students with FASD often require psychological counseling, and psychiatric and medical services (Streissguth, 1997).

As a consequence of the involvement of multiple professionals and agencies in the life of a child with FASD, teachers we talked with recognized the need to develop and maintain a partnership between school, families, and agencies. One effective intervention utilized by teachers, schools, and agencies we talked with is the concept of a wrap-around support system. Teachers we talked with stressed the lifelong support needs of students with FASD. They cited the incidence among

students with FASD in Alaska of being expelled from school, getting in trouble with the law, or being jailed as reasons why there needs to be a system of care which provides wrap-around services and lifelong supports. Teachers in Alaska identified the following types of supports which their students with FASD and their families needed: (a) counseling and coaching on social and behavioral skills for the students; (b) planned after-school activities for students; (c) family support and counseling on issues related to their child's behavior; and (d) respite care for families.

### **Instructional Tip #4: Develop Social Skills**

Students with FASD have difficulty making friends, establishing caring and healthy relationships, understanding boundaries, demonstrating self-control, and possessing a positive and healthy self-image (Streissguth, 1997). Parents, teachers, and the students with FASD themselves highlighted the importance of teaching social skills. One teacher of a preschool boy with FAS described how he could not keep his hands to himself during circle time. She told us: "He constantly grabs and kisses the child sitting next to him." She felt it was her job to help teach the child more appropriate ways to get attention from his peers. One strategy she used was giving children their own carpet square to sit on. She wanted the child with FASD to learn about boundaries. At other times during the day she told us that she "scheduled one-on-one play sessions for the child. During the one-on-one sessions I facilitated sharing toys and turn taking. I began to notice that both things (e.g., using the carpet square and scheduling play sessions) seemed to help (name of child) learn his boundaries and learn self-control. She felt that in her role

as a teacher she could “help (name of child) learn how to be a good friend.”

Some high school teachers we talked with described students with FASD as having difficulty choosing friends and that these students were “easily taken advantage of.” One teacher used peer partners and worked on teaching the importance of setting boundaries. She told us that “using social stories and scripts helps because it gives the student a sense of what to expect and a way to practice skills.”

One junior high school teacher we interviewed stressed the importance of developing lessons on expectations and maintaining boundaries in interpersonal relationships. He felt that his students needed to have guidelines on safe touch and behavior towards individuals of the opposite sex. Although the subject he taught was history, he found a way to embed these concepts in his classroom by the way he set up his cooperative learning groups. He suggested:

*I developed a guidebook with the students. In this guidebook we outlined how to interact and talk with other students in a respectful and kind manner. I do not tolerate harassment in my classroom. I have students practice social skills within the history cooperative learning lessons in my classroom.*

Teachers felt that it was important to embed social skills training across the student’s day. Teaching social skills in isolation is not an effective practice for students with FASD. In fact, teachers shared that it was critical to generalize the skills taught in school to other environments (e.g., home and community) and to other people (e.g., parents and siblings).

### **Instructional Tip #5: Provide a Structured Environment**

Establish a predictable schedule that gives the child concrete blocks of time to work. Students with FASD are often described as “distractible” or “having attention problems.” Teachers described the use of techniques that were effective with students with attention deficit disorders as being applicable to their students with FASD. Establishing a predictable routine or schedule with a lot of structure was recommended as appropriate for both longer and shorter periods of time (i.e., an entire day or a 60-minute period). Similar to Streissguth’s recommendation to “vigorously pursue absences, tardiness, and any other deviations from the student’s routine behavior” (1997, p. 220), Alaskan teachers stressed the importance of using a predictable schedule with rules that are clearly and consistently applied. These teachers suggested: “Provide enough structure to help the student with FASD stay in control, but at the same time to hold the student accountable for taking some responsibility for self-control and for setting realistic goals.” One principal shared that he had a program for reinforcing students. He said it had been effective with students with FASD:

*When the students have met their goal for the week we have an elder meet with the student and share a story that is special to their culture. For example, one boy with FASD came to school every day and went to all his classes. This was a big deal as he was often late or absent. On one such day the village elder shared a story of a moose hunt that he had been on. (Name of student) loved the time with the elder because his own family was involved in subsistence hunting and he liked*

*the special time with the elder to listen to the stories.*

### **Instructional Tip #6: Use Repetition and Consistency**

All teachers spoke of the importance they placed on the strategy of repetition. Be consistent with the child's activities and routines. Provide one direction or rule at a time and review the rules regularly. Always check for understanding. Do not ask "Do you understand?" or "Do you have any questions?" Have a lot of patience.

The following quote illustrates one teacher's use of consistency and repetition for a student in her 7th grade English class:

*I'll greet the child at the door and review the classroom routines and expectations. While reviewing school routines, I'll also use visual cues to help teach the routine I have in my English class. I use the same PECs (picture exchange system) as I use for one of my students with ASD. It seems to work.*

Another teacher described how she assisted the family and child care setting to develop a picture schedule paired with verbal cues to help a child transition in his child care setting:

*I am working with (name of child) parents to conduct a task analysis of their morning routines. We are making a picture schedule to depict all the steps in the morning routine to help remind (name of child) and prepare him for what comes next.*

### **Instructional Tip #7: Modify the Classroom Environment and Modify the Curriculum**

Teachers gave many examples of the ways in which they modified the environment of their classrooms and modified the curricu-

lum. Several teachers used the strategy of "seating the student with FASD near the front of the classroom." Another teacher told us of "assigning specific students/peers to specific areas or groups which would result in increased opportunities for good modeling." Breaking tasks into small segments accompanied by explicit instructions was recommended. Gentle reminders to stay on task were also viewed as critical for success.

The use of visual cues was highlighted by a number of teachers. Use specific colors or symbols to define an area. Use the Board Maker Pro symbol for books to define the reading area; use the symbol or picture for the calculator to define the math area. Teachers described the beneficial effect of using pictorial or other visual symbols to depict various activities in the student's schedule (of the day). Some teachers talked about the role of the parents in helping students come to school organized. They shared that "asking the parents to help their child get ready the next day by getting school materials and the next day's clothing laid out the night before" helped ensure the student came to school more prepared and less stressed.

Other teachers found that shortening the time of the task, setting time limits for tasks, or limiting the number of required items (e.g., on a math assignment) were effective in reducing the student's frustration. Yet another teacher gave the suggestion of "providing a break and letting the child finish the assignment at another time," which worked well. This teacher also "debriefed" with the student afterwards and "listened carefully" to what the student shared would be helpful for his or her learning.

### **Instructional Tip #8: Make a Referral to Special Education and to an FAS Diagnostic Clinic**

The disorder of FASD is not currently an eligibility category under IDEIA. Further, many children are diagnosed with attention deficit hyperactivity disorder or learning disabilities when in fact they have FASD. Teachers recommended that students be referred for special education services if they did not respond to classroom environmental or instructional techniques discussed above. Teachers felt that it was important to learn whether or not the child did in fact have FASD. They believed the child would benefit from the services and supports that would be forthcoming after a diagnosis was obtained.

### **Conclusions**

All teachers work with diverse learners. Since FASD occurs in the population at a rate of 10 per 1,000, and many students with FASD are not diagnosed, teachers will have students with FASD in their classroom without knowing it. Students with FASD benefit from teachers who are prepared to support their social, behavioral, and academic learning needs. Teachers can successfully support the needs of students with FASD through: (1) gathering information on the student's strengths, interests, and needs; (2) implementing the recommended practices described above; and (3) gathering information (i.e., collecting data) on how the student responds to the interventions implemented.

The instructional strategies described in this article were offered by a group of teachers who support students with FASD living in rural and remote areas of Alaska. The cultural context of these teachers' classrooms and their communities surely differ from classrooms in the lower forty-eight. There are, however, commonalities in these

instructional strategies that may help other teachers throughout the United States. We encourage teachers to support students with FASD, considering the instructional tips suggested in this article.

### **References**

- Alberta Learning Special Programs Branch. (2004). Teaching students with fetal alcohol spectrum disorder [Monograph]. *Programming for Students With Special Needs* (10).
- Aronson, M. (1984). *Children of alcoholic mothers*. Unpublished doctoral dissertation, University of Goteborg, Departments of Pediatrics and Psychology, Sweden.
- Astley, S., & Clarren, S.K. (1997). *Diagnostic guide for FAS and related conditions*. Seattle: University of Washington.
- Astley, S., & Clarren, S. (2000). Diagnosing the full spectrum of fetal alcohol-exposed individuals: Introducing the 4-digit diagnostic code. *Alcohol & Alcoholism*, 35, 400-410.
- Bartholomew-Lorimer, K. (1993). Community building: Valued roles for supporting connections. In A. N. Amado

- (Ed.), *Friendships and community connections between people with and without developmental disabilities* (pp. 169-180). Baltimore: Paul H. Brookes.
- Burden, M. J., Jacobson, S. W., Sokol, R. J., & Jacobson, J. L. (2005, March). Effects of prenatal alcohol exposure on attention and working memory at 7.5 years of age. *Alcoholism*, 29(3), 443-452. Retrieved February 24, 2006, from Ovid database (00000374-200503000-00020):  
<http://asimov.uaa.alaska.edu:2053/gw1/ovidweb.cgi>
- Coggins, T., Friet, T., & Morgan, T. (1998). Analyzing narrative productions in older school-age children and adolescents with fetal alcohol syndrome: An experimental tool for clinical applications. *Clinical Linguistics & Phonetics*, 12 (1), 221-236.
- Cordero, J. F., Floyd, R.L., Martin, M.L., Davis, M., & Hymbaugh, K. (1994). Tracking the prevalence of FAS: Alcohol across the life span. *Alcohol Health and Research World*, 18, 82-85.
- Dehaene, P. (1995). La grossesse et l'alcool [Alcohol and pregnancy]. *Que Sais-Je?*, 2934. Paris: Presses Universitaires de France.
- Evensen, D. & Lutke, J. (1997). *Eight magic keys: Developing successful interventions with students with FAS*. Retrieved January 16, 2006 from <http://www.fascenter.samhsa.gov>
- Fombonne, E. (1999). *Epidemiological investigations of autism and other pervasive developmental disorders*. Paper presented at the Committee on Educational Interventions for Children with Autism, National Research Council, Washington, D.C.
- Gerhardt-Cyrus, J. (2005, November). *FASD in the classroom: Proactive planning for student success*. PowerPoint presentation presented at FAS Summit 2005: Honoring our past, shaping our future, Anchorage, Alaska.
- Institute of Medicine, National Research Council. (2000). *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: National Academy Press.
- Jones, K. L. (1988). *Smith's recognizable patterns of human malformations* (4th ed.). Philadelphia: W. B. Saunders.
- Kellerman, T. (2002). *SCREAMS: Seven secrets to success in preventing secondary conditions associated with fetal alcohol syndrome disorders*. Retrieved January 17, 2006 from <http://www.fasalaska.com>.
- Kleinfeld, J., & Wescott, S. (1993). *Fantastic Antone succeeds: Experiences in educating children with fetal alcohol syndrome*. Fairbanks, AK: University of Alaska Press.
- Lemoine, P., Harousseau, H., Borteyrun, J. P., & Menuet, J. C. (1968). Les enfants de parents alcooliques: Anomalies observées, à propos de 127 cas [Children of alcoholic parents: abnormalities

- observed in 127 cases]. *Ouest Medical*, 21, 476-482. Selected Translations of International Alcoholism Research (STIAR). Rockville, MD: National Institute on Alcohol Abuse and Alcoholism.
- Lutke, J. (1996, September). *Hope for children with FAS through understanding*. Lecture presented at the FAS/FAE Secondary Disabilities Conference, Seattle, WA.
- May, P. A., Hymbaugh, K. J., Aase, J. M., & Samet, J. M. (1983). Epidemiology of fetal alcohol syndrome among American Indians of the southwest. *Social Biology*, 30, 374-387.
- Mitchell, K.T. (2002). *Fetal alcohol syndrome: Practical suggestions and support for families and caregivers*. Washington, D.C.: National Organization on Fetal Alcohol Syndrome.
- National Institute on Alcohol Abuse and Alcoholism (NIAAA). (1987). *Sixth special report to the U.S. Congress on alcohol and health*. Washington, DC: U.S. Department of Health and Human Services.
- National Organization Fetal Alcohol Syndrome. (n.d.) *Educators*. Retrieved March 11, 2006, from <http://www.nofas.org/educator/>
- National Research Council. (2001). *Educating children with autism*. Washington, D.C.: National Academy Press.
- Packer, L. E. (2006). *School Behavior*. Retrieved March 1, 2006, from [www.Schoolbehavior.com](http://www.Schoolbehavior.com)
- Ryan, S., & Ferguson, D. (2006a). On, yet under, the radar: Students with fetal alcohol spectrum disorders. *Exceptional Children*, 72(3), 363-379.
- Ryan, S., & Ferguson, D. (2006b). The person behind the face of fetal alcohol spectrum disorders: Student experiences and family professionals' perspectives on FASD. *Rural Special Education Quarterly*, 25(1), 32-40.
- Streissguth, A. (1997). *Fetal alcohol syndrome: A guide for families and communities*. Baltimore, MD: Paul H. Brookes.
- Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Disease Control. (2005). *The language of fetal alcohol spectrum disorders*. Retrieved May 3, 2005 from <http://fascenter.samhsa.gov>
- Tanner-Halverson, P. (1993). Snagging the kite string. In J. Kleinfeld & S. Westcott (Eds.), *Fantastic Antone succeeds!* (pp. 201-222). Fairbanks: University of Alaska Press.
- Timler, G. R., & Olswang, L. B. (2001). Variable structure/variable performance: Parent and teacher perspectives on a school-age child with FAS. *Journal of Positive Behavioral Interventions*, 3(1), 48-56.
- Weiner, L., & Morse, B. A. (1994). Intervention and the child with FAS. *Alcohol*

*Health & Research World*, 18(1), 67-73. Retrieved February 27, 2006, from

EBSCO database.

***About the author:***

Susan Marie Ryan is a professor at the University of Alaska, Anchorage in the Counseling and Special Education department and the new director of the Vermont University Center on Excellence in Developmental Disabilities.