the educational "meal." Classroom teachers and special educators are responsible for planning, adapting, and implementing literacy instruction much like executive chefs in creating a restaurant's fare. Inclusive classrooms might have paraprofessionals (i.e., teaching assistants, instructional aides, tutors, paraeducators) to help in this endeavor. A paraprofessional might be assigned as an assistant to the whole class or to help support a subset of students that have learning, personal care, or behavioral needs. Yet some teachers might have questions about the most effective ways to direct the work of paraprofessionals. General support strategies for effectively utilizing paraprofessionals have been documented in the literature (Dovle & Lee. 2007: French, 1998; Giangreco & Doyle, 2004; Giangreco, Edelman, & Broer, 2003). The practices listed in Table 1 (adapted from Giangreco & Doyle) offer concrete suggestions on how classroom teachers and special educators can effectively support the work of paraprofessionals. These general practices include: welcoming, acknowledging, orienting, planning for, and communicating with paraprofessionals. This article outlines ways in which teachers can effectively involve paraprofessionals in literacy instruction.

There are numerous resources that address working with paraprofessionals (Ashbaker & Morgan, 2006; Causton-Theoharis & Malmgren, 2005; Doyle, 2002; French, 1998; Giangreco & Doyle, 2004; Giangreco, Edelman, & Broer, 2001; Pickett & Gerlach, 2003), and there is a smaller—but growing—body of literature that specifically addresses the use of paraprofessionals for literacy instruction. The existing materials regarding utilizing paraprofessionals in literacy instruction primarily focus on students who have learning disabilities or who are considered to be at risk for failing in school. This literature documents that, under specific conditions, paraprofessionals and other noncertified

individuals can be employed to help

were explicitly and extensively trained in the research-based reading approach, (d) paraprofessionals were explicitly trained in behavior management, and (e) teachers and special educators provided paraprofessionals with ongoing monitoring and feedback regarding their instruction. Each of these themes is listed in the "Top Five Ways to Utilize Paraprofessionals Effectively for Literacy Instruction" box.

Much can be learned from these studies; they can provide useful information on using paraprofessionals to assist with reading instruction within the context of inclusive classrooms. General and special educators use a variety of literacy philosophies, strategies, and curricula, and it is not the intent of the authors to recommend any one over another. This article instead describes generic literacy support strategies that can be utilized across philosophies and as part of differing instructional approaches.

## Use Paraprofessionals for Supplemental Support

A number of studies (Foorman, Francis, Fletcher, Schatschneider, & Mehta, 1998; Gunn et al., 2002; Lane et al., in press; Miller, 2003; Simmons et al., 2003; Vadasy, Jenkins, & Pool, 2000; Vadasy, Sanders, Peyton, & Jenkins, 2002) examined utilization of either paraprofessionals or other nonprofessional tutors in instruction that supplemented—but did not replace—the classroom literacy program provided by the teacher or special educator. The litera-

ture on paraprofessionals in inclusive classrooms repeatedly notes concerns regarding circumstances where students with disabilities-especially those with moderate and severe disabilitiesreceive all or most of their instruction from paraprofessionals, rather than from qualified teachers and special educators (Giangreco, 2003; Giangreco, Broer, & Edelman, 1999; Marks, Schrader, & Levine, 1999). There is no evidence that this practice is effective in improving literacy outcomes for students with disabilities. It is critical, and now is mandated through the No Child Left Behind Act of 2001 (Pub. L. No. 107-110; NCLB), that all students have access to highly qualified teachers and special educators for their primary literacy instruction. Under NCLB, the definition of "highly qualified" requires that public elementary- and secondaryschool teachers be fully state certified or pass the state teacher-licensing examination and hold a professional license to teach in the state. IDEA 2004 clearly states that paraprofessionals must be trained and supervised in order to assist special education (IDEA 612(a)(14)(A)).

In addition to providing supplemental instruction, paraprofessionals can be used in supportive instructional roles. These roles can include having paraprofessionals answer individual questions, re-read stories, or reinforce skills, but such tasks do not include introducing new material (see box "How Can Paraprofessionals Support (Rather Than Instruct) During Literacy Instruction?"). By assigning paraprofessionals to specific instructional roles, teachers can maximize their own instructional contact time with students. As demonstrated by the studies listed previously, paraprofessionals can effectively supplement the literacy instruction of students with reading difficulties, but they should not replace qualified educators.

## Use a Research-Based Approach

In a restaurant, executive chefs use recipes that are tried and true. To succeed in the restaurant business, maintaining the quality and consistency of the food is essential. The same concept is true for reading instruction; maintaining the quality and consistency of the curriculum and instruction is essential. Paraprofessionals are most effectively utilized during instructional time if they are provided with research-based reading approaches that have explicit and systematic instructional guidelines. Just as sous-chefs use specific methods for food preparations, paraprofessionals should follow the particular instructional strategies and should not be put in the inappropriate position of making pedagogical decisions. Further, instruction in early literacy skills that is explicit, rather than incidental, is most effective for students who struggle with learning to read (Foorman et al., 1998). This practice also enables all school personnel involved in the literacy program to more readily replicate instruction in a manner that improves overall fidelity of implementation.

Paraprofessionals can be used in supportive Twpr.ofTng pTrystructiTrystruc d

mons et al., 2003; Vadasy, Jenkins, & Pool, 2000; Vadasy, Sanders, Peyton, & Jenkins, 2002).

Each of the studies that involved primary-age students used a researchbased reading intervention that included phonological awareness and phonics instruction. Manning (1979) illustrates what can happen when paraprofessionals do not utilize research-based practices. The findings of the Manning study showed that students did not make reading gains as a result of receiving support from untrained paraprofessionals who were not using a research-based approach. The teachers and paraprofessionals utilized their own daily lesson plans, selected their own materials, and did not use a specific research-based intervention.

Though dated, the practices highlighted in the 1979 Manning study still are seen in some classrooms today. In a meta-analysis of the research on one-toone instruction in reading conducted by Erlbaum, Vaughn, Hughes, and Moody (2000), design of the intervention was found to be one of the most important factors contributing to student success. It therefore is important to note that most paraprofessionals have a limited background in reading instruction and theory. When trained to implement a research-based program, however, these nonteacher instructors can provide the additional and explicit instruction and practice opportunities that some students need to acquire early reading skills.

## Train Paraprofessionals Explicitly and Extensively on the Reading Approach

The paraprofessional and sous-chef are not analogous when it comes to training. Sous-chefs are required to have extensive culinary training and experience before they are assigned to work with an executive chef, and all souschefs are prepared and trained in specific areas of cooking. A sous-chef should be trained in baking, for example, before being able to become a pastry sous-chef. Importantly, sous-chefs spend significant time and gain substantial instruction in each aspect of kitchen duties, to become comfortable

with the techniques, utensils, and equipment.

Similarly, paraprofessionals need initial training in literacy interventions they are to use. In some cases, however, paraprofessionals receive no specific training for carrying out delegated literacy instruction tasks or other classroom responsibilities. In a meta-analysis of studies examining one-on-one tutoring, the best indicators of student success were the qualifications and training of the instructor (Erlbaum et al., 2000).

In a recent study conducted by Lane et al. (in press) that examined the effectiveness of a paraprofessional-led intervention with youngsters at risk for reading and behavioral concerns, a paraprofessional was trained to directly teach children reading skills. The paraprofessional in this study was systematically trained to use a supplementary early-reading curriculum, Phonological Awareness Training for Reading (PATR; Torgesen & Bryant, 1994), which is designed to promote awareness of word-sound structure. The training took place during a 2-hour session and subsequent 30-minute monthly meetings. The findings of this study suggest that a reading intervention provided by a paraprofessional can lead to improvements in the early-literacy skills of students considered at risk for reading and behavioral concerns (Lane et al., in press). Similarly, Vadasy et al. (2006) and Miller (2003) studied the conditions of effective early-literacy tutoring and found that noncertified individuals can effectively increase reading skills when they are provided significant training.

In each of these studies, the paraprofessionals were trained intensively on the instructional techniques being used. Paraprofessionals require appropriate, initial, and ongoing training and coaching specific to the reading interventions that they are to use with students. Even when paraprofessionals are trained to help the classroom teacher provide parts of the core classroom reading instruction (Blachman et al., 1994; Torgesen et al., 2001), the classroom teacher provides the oversight and diag-

and make supplemental literacy instruction more effective. For students having a history of challenging behavior, paraprofessionals should have easy-to-follow written behavior plans that they can use to ensure that students receive consistent feedback. Such plans should include specific ways to engage students and help them to stay focused on specific tasks, to cue effectively, and to transition seamlessly between tasks. When teachers provide paraprofessionals with written plans, paraprofessionals clearly understand how to support students, and students can spend more time learning.

## Provide Paraprofessionals With On-Going Feedback

In a well-run kitchen, to ensure quality and consistency the executive chef continually monitors the work of the souschef. Although it might be expected that teachers do the same with regard to paraprofessionals (and some do), others fall prey to what Giangreco coined as the "training trap" (Giangreco, 2003, p. 51). The training trap occurs when teachers relinquish instruction of stu-

sider how paraprofessionals are being used in your literacy program. Consider the following questions.

- Are paraprofessionals providing supplemental or primary literacy instruction?
- Are you using a research-based approach to literacy instruction?
- Have the paraprofessionals in your school been explicitly and extensively trained on the reading approach?
- Do the paraprofessionals have the behavior management knowledge and skills needed to support instruction?
- Is a certified professional consistently monitoring and coaching the paraprofessionals in their supplemental instruction?
- Have you considered re-deploying paraprofessionals to noninstructional or support roles to allow teachers to have more instructional time with students?

instructional roles under direct teacher supervision.

For example, teachers could assign the paraprofessional tasks that can free the teacher to have more time to instruct students with disabilities or others in need of extra help. During literacy instruction, the teacher could assign the paraprofessional tasks that allow the teacher more direct instructional contact with every child in the classroom. Teachers should make sure that paraprofessionals understand that noninstructional assignments are valued contributions to the overall classroom program. The list in the box "What Are Noninstructional Roles for Paraprofessionals?" suggests supportive roles for paraprofessionals that free the teacher for literacy instruction.

In the food industry, the success or failure of the restaurant falls squarely on the shoulders of the executive chef. Similarly, in the classroom the effectiveness of literacy instruction falls squarely on the shoulders of the teachers and special educators. It is important to con-

Teachers should make sure that

- who support students with disabilities. *Exceptional Children, 67,* 485–498.
- Giangreco, M. F., Edelman, S. W., & Broer, S. M. (2003). School wide planning to improve paraeducator supports. Exceptional Children, 70, 63–79.
- Giangreco, M. F., Edelman, S., Luiselli, T. E., & MacFarland, S. Z. C. (1997). Helping or hovering? Effects of instructional assistant proximity on students with disabilities. *Exceptional Children*, 64, 7–18.
- Gunn, B., Smolkowski, K., Biglan, A., & Black, C. (2002). Supplemental instruction in decoding skills for Hispanic and non-Hispanic students in early elementary school. The Journal of Special Education, 36, 69–79.
- Individuals With Disabilities Education Improvement Act of 2004, Pub. L. No. 108-446, 118 Stat. 2647 (2004).
- Jenkins, J. R., Vadasy, P. F., Firebaugh, M., & Profilet, C. (2000). Tutoring first-grade struggling readers in phonological reading skills. Learning Disabilities Research and Practice, 15, 75–84.
- Lane, K. L., Fletcher, T., Carter, E., Dejud, & DeLorenzo, J. (in press). Paraprofessionalled phonological awareness training with youngsters at-risk for reading and behavioral concerns. Remedial and Special Education.
- Malmgren, K. W., & Causton-Theoharis, J. N. (2006). Boy in the bubble: Effects of paraprofessional proximity and other pedagogical decisions on the interactions of a student with behavior disorders. *Journal of Research in Childhood Education*, 20, 301–312.
- Manning, D. (1979). The reading and math achievement of remedial middle school students taught by teachers versus paraprofessionals. *Reading Improvement*, 16(1), 35–42.
- Marks, S. U., Schrader, C., & Levine, M. (1999). Paraeducator experiences in inclusive settings; helping, hovering, or holding their own? *Exceptional Children*, 65, 315–328.
- Miller, S. D. (2003). Partners-in-reading: Using classroom assistants to provide tutorial assistance to struggling first-grade readers. *Journal of Education for Students Placed at Risk, 8,* 333–349.
- Pickett, A. L., & Gerlach, K. (2003). Supervising paraeducators in school settings: A team approach (2nd ed.). Austin, TX: Pro-Ed.
- Simmons, D. C., Kame'enui, E. J., Stoolmiller, M., Coyne, M. D., & Harn, B. (2003). Accelerating growth and maintaining proficiency: A two-year intervention study of kindergarten and first-grade children at risk for reading difficulties. In B. R. Foorman (Ed.), Preventing and remediating reading difficulties: Bringing science to scale (pp. 197–228). Timonium, MD: York Press.

- Torgesen, J. K., Alexander, A. W., Wagner, R. K., Rashotte, C. A., Voeller, K., Conway, T., & Rose, E. (2001). Intensive remedial instruction for children with severe reading difficulties: Immediate and long-term outcomes from two instructional approaches. *Journal of Learning Disabilities*, 34, 33–59.
- Torgesen, J. K., & Bryant, B. R. (1994).
  Phonological Awareness Training for Reading [PATR]. Austin, TX: PRO-Ed.
- Vadasy, P. F., Jenkins, J. R., & Pool, K. (2000). Effects of tutoring in phonological and early reading skills on students at risk for reading disabilities. *Journal of Learn*ing Disabilities, 33, 579–590.
- Vadasy, P. F., Sanders, E. A., Peyton, J. A., & Jenkins, J. R. (2002). Timing and intensity of tutoring: A closer look at the conditions for effective early literacy tutoring. Learning Disabilities: Research and Practice, 17, 227–241.
- Vadasy, P. F., Sanders, E. A., & Peyton, J. A. (2006a). Code-oriented instruction for kindergarten students at risk for reading difficulties: A randomized field trial with paraeducator implementers. *Journal of Educational Psychology*, 98, 508–528.
- Vadasy, P. F., Sanders, E. A., & Peyton, J. A. (2006b). Paraeducator-supplemented instruction in structural analysis with text reading practice for second and third graders at risk for reading problems. Remedial and Special Education, 27, 227–241
- Vaughn, S., & Coleman, M. (2004) The role of mentoring in promoting use of research-based practices in reading. Remedial and Special Education, 25, 25–38.
- Julie N. Causton-Theoharis (CEC NY Federation), Assistant Professor, Department of Teaching and Learning, School of Education, Syracuse University, New York. Michael F. Giangreco (CEC VT Federation), Professor, Department of Education, University of Vermont, Burlington. Mary Beth Doyle (CEC VT Federation), Associate Professor, Department of Education, St. Michael's College, Colchester, Vermont. Patricia F. Vadasy (CEC WA Federation), Senior Research Associate, Washington Research Institute, Seattle.

ATGGSsSTceN25th De3e