The Spatial Awareness Skills Program (SASP) is designed to do exactly what its title implies. It addresses the visual-motor deficits exhibited by many children with hard-to-explain school learning problems—children who are often classified as having dyslexia, or learning disability, or attention deficit disorder. The SASP helps children at two levels. Fundamentally, it helps them recognize the logic of the coding systems we call reading, writing, spelling, and arithmetic. At a more conceptual level, it helps them recognize how information—be it concrete or abstract—can be analyzed and organized.

The SASP stems from a two-volume program that was first published in 1986 under the name of PREP (*Preparation for Learning*, Rosner, 1986), which in turn was a revision of an earlier (1975) program called the *Perceptual Skills Curriculum* (PSC) (Rosner, 1973). The PSC was designed to be a developmental program, as a way of helping preschool, kindergarten, and primarygrade teachers ensure, as best they could, that their students developed the analytical abilities known then as visual and auditory perceptual skills (now known as *spatial* and *phonological awareness skills*). Students typically are assumed to have these skills when they begin formal reading, writing, spelling, and arithmetic instruction. Because some do not, the PSC was created to help students *before* they had fallen behind in school because of a delay in the development of those critical basic learning aptitudes.

The PSC was a complicated, highly structured program, built around precisely stated behavioral objectives, criterion-referenced tests, directly related teaching activities, and lots of record keeping. It was the product of more than 5 years of effort carried out while I was at the University of Pittsburgh's Learning Research and Development Center (LRDC). Because of the PSC's demanding design, proper classroom implementation required both a teacher and a classroom aide, plus careful and frequent testing. It was a good program (and an excellent research tool) but it was expensive to run.

The PSC was used in many research-cooperating schools in the United States and abroad, and yielded a lot of information, which led to the revisions incorporated into the easier to implement PREP. The PREP, too, focused on visual and auditory perceptual skills. It, too, was designed to be used developmentally, but many used it for remediation, that is, for helping children who had entered formal schooling "unready" in respect to their perceptual skill development and had already fallen behind.

The PREP has been around for over 10 years and, although it continues to be useful, it is not as good as it could be. It was time to rewrite, incorporating what has been learned over the past decade. Thus, the SASP, and its companion the *Phonological Awareness Skills Program* (PASP), were developed.¹

The SASP is more than an updated version of its predecessors. It takes a new, broader look at an aspect of development that is often ignored. Indeed, I largely ignored it when I wrote the PSC and PREP. When I wrote those programs, I assumed---correctly in many cases, but not in as many as I thought--that once analysis skills were established, organization skills would follow automatically. The SASP does not make that assumption; it teaches analysis skills and an array of organization skills, enough to sensitize the child to the essential concepts of organizing information that has been analyzed.

The SASP teaches analysis skills with activities that show children how to disassemble spatially organized patterns into their structural elements, paying attention to such features as absolute and relative quantities, magnitudes, and position—the very things that numerals represent in mathematics. (The PREP and the PSC also taught this, but the SASP does it better.) The SASP teaches organization skills with activities that show children how to use graphic devices and certain words to sort and assemble those structural elements in different ways on the basis of specific spatial features. One of the important benefits from acquiring organization skills is that it leads to the ability to "chunk" separate bits of information into larger units of analysis, thereby improving one's ability to process information more efficiently.

The SASP is divided into two major sections. The first, Analysis and Organization Skills, is arranged into seven levels (A through G), each representing an age interval. Levels A through C provide activities that teach the analysis skills that 3- to 6-year-olds are expected to have developed; Levels D through F continue to teach analysis skills and introduce basic organization skills; Level G teaches third- and fourth-grade organization skills, skills that are built on previously developed analysis skills. (See Rationale for an explanation of why the program stops at the fourth-grade level.)

The second section, Verbal Organizers, provides activities for teaching many of the words that individuals often use (aloud and mentally) when looking at, listening to, and arranging (and rearranging) information.

There are also four appendixes. Appendix A includes questions that are worth answering about the program and development of spatial awareness skills. Appendix B contains blank dot maps and matrices that are used for assessments and exercises. Appendix C is the Student Progress Chart, on which the teacher records students' progress through the program. Finally, Appendix D includes a list of related readings.

¹Although spatial awareness is a critical, developmentally derived precursor to elementary school achievement, *it is not the only one.* Phonological awareness skills are also important, and many children manifest deficits in both. That is why I wrote the companion *Phonological Awareness Skills Program* (PASP), also published by PRO-ED. Although the two programs differ in the skills they teach, they also have much in common. I recognize that the SASP will probably be of greater interest to occupational therapists and developmental optometrists, whereas the PASP is likely to be used by speech pathologists and remedial reading specialists, but I believe that it is highly desirable for all these professionals (and the teachers and parents they advise) to have an appreciation of how the two sets of skills—and the professionals who test and teach them—interrelate. The Rationale section was written with that in mind. It describes both sets of skills and how they connect; therefore, it serves as the introduction for both programs.

Coincident with the publication of this SASP Curriculum Manual is the release of the *Spatial Awareness Skills Program* Test, which was designed to assess spatial analysis and organization skills. The SASP Test is a revised version of the *Test of Visual Analysis Skills* (TVAS) (Rosner, 1975), which was published in the early 1970s. The TVAS, in turn, came from the *Visual Analysis Test* (VAT) (Rosner, 1971), which was designed to determine the relative difficulty of a number of tasks that I had found to be extremely useful as criterion-referenced training objectives. My research showed that teaching children the strategies needed to accomplish these objectives transferred to many other activities that were closely linked with school performance, and thus that learning these strategies had a positive effect in the classroom. The VAT did what I hoped it would do; it provided the data for constructing the TVAS. This newly revised SASP Test resembles the TVAS, but it is shorter and much easier to score reliably.

The SASP Test can serve two purposes. First, it will identify those children whose spatial awareness skills are not developing at the expected rate, children who should be enrolled in a properly designed skills training program (e.g., the SASP Curriculum). Second, the SASP Test score can be used to determine the child's placement within the SASP Curriculum. The test results indicate the level at which skills training should begin and the level at which it should eventually stop.

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