Why Use the ERS in Quality Rating Systems?

The Environment Rating Scales have been incorporated into Pennsylvania's QRS systems, in part, because they are widely recognized nationally and internationally as a valid and reliable process quality instruments. Process quality consists of the various interactions that go on in a classroom between staff and children, staff, parents, and other adults, among the children themselves, and the interactions children have with the many materials and activities in the environment, as well as those features, such as space, schedule and materials that support these interactions. Process quality is assessed primarily through observation and has been found to be more predictive of child outcomes than structural indicators such as staff to child ratio, group size, cost of care, and even type of care, for example child care center or family child care home (Whitebook, Howes & Phillips, 1995). All of the scales were developed in close collaboration with realistic field-based sites. They have good interrater reliability and validity, making them suitable for research, program evaluation and program improvement efforts. The scales have been used in several major studies, including the National Child Care Staffing Study (Whitebook, Howes, & Phillips, 1989) and the Cost, Quality, and Child Outcomes Study (1995), the major studies of their time. In all of these studies, a relationship was found between higher scores on the ECERS and more positive child development outcomes in areas that are considered important for later school success.

The development of instruments to measure the quality of early childhood programs has been a major part of the work of the authors of these scales. In addition to the ERS, the authors have developed, in close collaboration with the sponsoring agencies, the following instruments for the field: the NAEYC Center accreditation classroom observation and the accreditation questionnaires; the CDA Classroom Observation; the Wellsley College ASQ school age care scale and director's questionnaire, which is now being used in the National School Age Care Alliance accreditation program; the Quality Criteria for Family Child Care; and the Military Family Child Care accreditation procedures and instruments. The authors also articulate in concrete ways the concepts of Developmentally Appropriate Practice into each item and scale. For instance, the DAP teaching method stated as "Adults help children explore and work with various art and music media and techniques..." (Developmentally Appropriate Practice in Early Childhood Programs, edited by Carol Kopple and Sue Bredekamp) is incorporated into art and music items in all of the scales and is evident in expectations of indicators of quality in the fives and seven levels.

ERS assessors undergo a rigorous training program on each scale before they can conduct an independent assessment. This training includes, but is not limited to a lengthy process of becoming reliable on each instrument with the regional supervisor. Once reliability has been demonstrated, each assessor must continually engage in reliability checks throughout the year. Regional supervisors have had training with the authors and also engage in on-going reliability. Additionally, every summary report is reviewed by the regional supervisor to assure that indicator rationales support each score.

The authors explain that they in using the scales, assessors need to incorporate a well known research and development theory known as "Fuzzy Logic Method". This concept has been in use in product design and assessment since the 1930s. The concept involves making decisions based on the reception of one, or a large number, of conditions which exist and then processing all these inputs according to human based, "If-Then" rules, which can then be expressed in plain language words. Debby Cryer explains it this way:

"The term 'fuzzy logic' has come to be associated with scales usage. If an assessor is doing the ECERS in a group of three year olds, that assessor cannot score the varied circumstances as she would need to score for five-year-olds. For example, the assessor needs to

think intelligently, and say, for example, 'IF I am assessing a group of 3-year-olds, then the fine motor materials should be larger and easier to manage by children (large stringing beads, larger interlocking blocks, puzzles with fewer pieces, etc.). But IF I am scoring for a group of 4-5 year olds, they would not need the same materials as 3's, and THEN they would need smaller interlocking blocks, puzzles with more pieces, smaller stringing beads, etc. I would not give the same score for the same materials in each room because the children's developmental levels require different materials'. In other words, just because a requirement is met in one group, having the same things in another group would not necessarily meet the requirement, because of differences in developmental levels."