International Journal of Early Childhood Education
1997, Vol. 2

Suggestions for Assessing Process Skills in the Classroom

Martha B. Bronson
Ilda Carreiro King
Boston College, U.S.A.

Teachers take process skills into account when assessing student performance and assigning grades. These include skills like planning, organizing and monitoring work, and making decisions. Teachers need a meaningful structure for their observations of process skills in order to reduce subjective judgements, create a clearer focus for teaching these skills, and facilitate communication with others about a child's status and progress. This paper suggests categories teachers might use as prototypes for structuring their observations of process skills. The categories provide objective evidence of a child's skills, a focus for teaching where skills are lacking, and a way of explaining process skills so that a child's progress may be monitored and communicated to others.

Suggestions for Observing Process Skills in the Classroom

As the body of information to be acquired by students increases exponentially, there growing dissatisfaction with a transfer-of-facts approach to teaching and a search for ways to promote skills that will support a lifetime of self-initiated, self-regulated learning (Biemiller & Meichenbaum, 1992; Zimmerman & Schunk, 1989). These skills include strategies for problem solving that help children cope effectively with a variety of learning tasks and social interactions. Repertoires of strategies are typically referred to as process skills, and there is national interest in developing and assessing such skills as part of the effort to promote what has become known as the "thinking curriculum" (Resnick & Klopfer, 1989).

In order to promote the development and use of process skills, teachers must know how to recognize them and evaluate them reliably. Since these skills are often more clearly revealed in ongoing behavior than in outcomes or products observational techniques are

Correspondence and requests for reprints should be sent to Dr. Marta Bronson, 201B Campion Hall, Boston College, Chestnut Hill, MA 02167, U.S.A.

a valuable means for evaluating them. Teachers usually have no difficulty using observations to assess a product or final outcome but may find assessment of process more elusive and subjective.

For instance, in a recent workshop pairs of teachers were assigned a fourth grade math performance task which involved making a bracelet from beads and wire. They were given the cost of each item and told to stay within a maximum total. Another teacher was assigned as observer and simply instructed to assess the task, with no further guidelines.

When teachers shared their observations they could all agree about the outcome or product of their efforts (whether the task was successfully accomplished with a correct use of measuring and counting and accurate use of multiplication, addition, etc. in determining cost), but it was clear that the processes involved in working toward the goal were very important. Teachers noted that outcomes were highly influenced by how the group organized, made decisions, shared tasks, monitored their work and used time, and whether the group devised specific strategies. They realized, however, that their schemes for evaluating these processes were subjective because they were dependent upon what they happened to observe. As we went around you could hear discussion and comments on what other teachers had observed such as, "oh, I didn't notice that," or "oh yeah, my group did that, too."

Teachers typically combine information from both content and process observations to arrive at a final grade. They may rate a child's ability to pay attention, follow directions, use time well, or other processes, but many do not feel confident or comfortable about their assessments. Studies by Stiggins and Bridgeford (1985) suggest that their concerns may be justified. They found that while many teachers plan for formal assessments of products, they often ignore process factors that contribute to the validity and reliability of performance assessments. In the absence of clear and consistent guidelines for processes used while working toward goals, their observations may be inadequate, biased, or even incorrect.

Creating and applying the same meaningful structure to observations for all student performances or projects would make teacher judgements less subjective. A written structure with behaviorally defined categories could also make the underlying processes that the teacher expects and values explicit to the learner. Teachers are searching for frameworks within which process can be observed in a natural setting in a meaningful and consistent manner (Barker, O'Neal, & Lynn, 1993; Brooks & Brooks, 1993).