Developmentally appropriate evaluation (DAE) and developmentally appropriate practice (DAP) are clearly allied. The concept of DAP has expanded to include cultural, economic, ethnic, religious, and familial appropriateness. These same concepts are equally applicable to appropriate evaluation. Factors to consider for appropriate evaluation include: (1) the importance of naturalistic observation; (2) evaluation effectiveness; (3) the context of the child, including the child's social environment; (4) biological maturation; (5) measuring quality of care; (6) parents as partners, including improving parent-teacher communication; and (7) professional observation. Key components of DAE include: (1) objective recording of the child's behavior; (2) selection of appropriate methodologies for recording; (3) recognition of biases; (4) emphasis on process of individual development; (5) basing of evaluations on objective data; (6) validation of inferences drawn from observations; and (7) careful use of theoretic models. (Contains 13 references.) (BGC)
Developmentally Appropriate Evaluation: convincing students and teachers of the importance of observation as appropriate evaluation of children.

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The DAE - DAP Link

Developmentally Appropriate Evaluation (DAE) is a significant component of Developmentally Appropriate Practice (DAP). To have quality appropriate practice in our work with young children we must plan, carry out and evaluate every part of our role and responsibility, paying attention to the needs of the children and the families we serve.

Financial constraints, changing social problems and a myriad of increased expectations have led many early childhood educators to be demoralised. Some have responded by reducing the quality of what they are offering. This is the most likely way to bring about the results we fear most. The opposite trend is much harder to establish, but it has never been more important not just to sustain our standards of practice, but to enhance them in ways that demonstrate our commitment to children, our professional status and the high quality of our service delivery. If we see current challenges as two steps forward and then one step backwards, the general trend will still be positive even if the progress is slow!

There is a cycle of improvement that is possible. We can see that all components of practice require planning, careful maintenance and reflective evaluation. Developmentally Appropriate Practice is dependent upon this systematic evaluation of the children’s development. This involves observing and ascertaining the needs of individual children, reflecting upon the group’s functioning, and the effectiveness of the environment, and in planning for the children on the basis of our observations. If we don’t observe them, how can we judge the appropriateness of the program we offer.

Recently the concept of appropriate practice has broadened to embrace cultural, economic, ethnic, religious, familial, as well as developmental appropriateness. These same concepts are equally applicable to appropriate evaluation. Evaluation must be carried out in a manner which takes account of all aspects of the child’s individuality and identity. Hills in ‘Reaching Potentials’ 1992 points this out by saying “Assessment strategies that are not sensitive to cultural differences
in learning style and rate and those that are not designed for children from linguistically diverse backgrounds cannot provide an accurate picture of children’s strengths and needs.” Without appropriateness of methodology the outcome of any evaluation will be faulty.

**Naturalistic observation**
Naturalistic observation enables adults to see children perform in an optimal way, in familiar surroundings doing what the children want to do. This is the way to see what children can do. “Naturalistic observation requires as little interference with children’s behavior as possible” explains Bentzen (1993). This kind of evaluation avoids stress and focuses on true ability rather than the inferred failures that are typical of many testing instruments.

**Portfolio assessment**
Observation of children in their everyday pursuits fits well with the evolving focus on the portfolio philosophy of assessment. Portfolio advocates such as Farr & Tone (1994) and Martin (1994) focus on the ongoing recording of observation as the key component of the portfolio; other aspects involve regular appraisal and updating of records, involvement of parents and families in the collection and evaluation of the material collected, examples of the products of the child’s work and play, collections of photographs and any other technologically assisted data collection such as audio recordings of language, pertinent health information and contextual data. The portfolio assessment approach considers every aspect of the child’s life and forms a profile which addresses the interacting holistic nature of every individual. With an emphasis on the process of development there is also an inclusion of the products which might illustrate that development.

Over time the portfolio provides an overview of the individual’s pattern of development and the significant life experiences of the person profiled. The portfolio can have the increasing involvement of the child which gives that individual a sense of her own development and some personal empowerment. The process can include learning logs kept by school age children and develop later into profiles of skills and competencies that can assist in finding employment, or even applying for college credits! “Portfolios are one of the principal methods used in assessing. Portfolios provide a vehicle for consciously reflecting on learning through engagement with the process of identifying, assessing, documenting and evaluating the learning” (Cohen & Witaker, 1994) While these words pertain to adult learners, the principles are exactly the same for early learners!
Evaluation effectiveness

Appropriate evaluation must be both reliable and valid. Because appropriate evaluation depends upon naturalistic observation the bias of a 'standardized' measuring tool is almost eliminated. With developed skill, teachers are able to carry out observations in both the participant and non-participant modes and thereby focus on the abilities of the individual child, rather than identify weaknesses, failures or skills which haven't yet emerged. An appropriate process of evaluation is positive in nature and is likely to have the effect of boosting the child's confidence by acknowledging achievements. If we trust the child to develop we should have little need for over-structured plans. What interests the child should be the basis of her curriculum; we need to observe the interests, support the motivation and extend the learning. Vygotsky (1978) offers us an explanation of the adult's importance in this child's activity. "The zone of proximal development" theory highlights the extension of skill and understanding that can occur with an adult's help. The child centred curriculum involves the adult. What we need to do is evaluate the child's performance, but without looking at our own involvement in the child's activity, the observation will not be complete or make much sense. Appropriate curriculum needs to evolve to be responsive. The response is to observed behavior. Activities designed to address children's supposed defects, goals to achieve the 'next' developmental stage, or some externally imposed theme are shallow curriculum design models - Developmentally Appropriate Evaluation leads to exemplary Developmentally Appropriate Practice.

The Context of the child

Developmentally Appropriate Practice may define the child's curriculum or program to be every element of the child's experience. It is not only the physical environment which contributes to the construction of that experience. The child's parents, family, caregivers and teachers are parts of that environment. Any evaluation process must factor in all the components of the child's experience if it is to be appropriate. Bronfenbrenner's (1986) ecological model which demonstrates elements of the child's social environment provides us with an understanding of the systems that comprise the child's experience. Without acknowledgement of the child's context, behavior cannot be understood. I am not suggesting that we should judge the parenting style, socially determined behaviors or the kind of family. Much more important is the need to understand the value system and ethos of the family to enable us to interpret the child's demonstrated behavior. Working as a team, the adults can gain mutual understanding and be more likely to assist each other in providing for the child's commonly perceived needs.

Observing maturation

Biological processes of maturation have been de-emphasised in the last few decades by educators who believe that the child's development is more
dependent upon environmental factors. Now that we understand more about genetic predispositions and potentials, we must revisit the nature v nurture debate with appreciation of the enduring characteristics of individuals and the part that heredity and biology have to play. It is essential to observe and recognise the child’s abilities so that they can be supported and achieved at mastery level rather than be directed to the ‘next’ skill on the developmental chart. How we observe knowledge, skills and dispositions is influenced by our own beliefs. If what we see is processed in our minds in a way that is well supported by research, we are going to be far more effective as evaluators. Consequently we need to ensure that our observations are made with good professional judgments. Such judgements are made when rooted in a sound knowledge base of what constitutes quality care, education and developmental progress.

Quality care and evaluation
The key indicators of quality care are usually characterized in terms of ratio, space, equipment, environmental components and quality of interaction. It is important to acknowledge the more subtle and less measurable aspects of the child’s experience, such as stressors. There is evidence that the stress produced from early high expectations is either counter-productive or at least not effective. Elkind (1981) cites many examples of the negative effects of overly high expectations. When evaluating observational data, an appreciation of the child’s context is necessary to make valid inferences. Some of the elements of context may be challenging to identify, but without them many behaviors cannot be explained.

Parents as partners
Parental involvement is possible in all stages of developmentally appropriate evaluation. “Frequent and two-way open communication with parents is the foundation for building parent-teacher relationships and for involving parents as partners in their children’s education.” Jones (1991). For appropriate evaluation of young children to occur it is essential to include parents in the team of caregiving adults in the child’s life; they will always have perspectives to offer which contribute to the broad knowledge of the child and they are the key people in the child’s life who have the strongest feelings, closest bonding and ultimate responsibility for the child.

Separating curriculum and evaluation processes in early childhood education would be unnecessarily time consuming and without appreciation of developmentally appropriate practice. “Curriculum and Assessment are integrated throughout the program; assessment is congruent with and relevant to ... the program,” says the NAEYC position statement (adopted Nov. 1990) on guidelines for appropriate curriculum content and assessment in programs serving children
ages 3 through 8. Through the delivery of curriculum we can see the success of our programming.

**Authentic assessment**

When we observe the children’s responses to the construction of the environment that we provided, we can assess whether it meets the developmental needs and interests of each child. When assessments are made outside the familiar early childhood settings they can be unreliable and provide an incomplete picture of the child’s abilities. When we emphasize continuous, ongoing observation we are underscoring the responsibilities of the caregiving team. With this assumption there is acknowledgement of the weight of responsibility to observe as objectively as possible, to analyse the content of the recordings with valid inferences and to respond to the findings by creating and modifying curriculum and guidance strategies to fit the child's needs. Although on the surface observation might appear to be rather casual, it is in fact a more systematic approach to evaluation than the more traditional assessment methods and it provides a more challenging way of evaluating components of curriculum than most currently employed. Puckett & Black (1994) explore the issue of the authenticity of assessment and assert that “assessment information must be used to change the curriculum to meet the individual needs of the children.” They do not claim that the process is easy - but that it is essential!

**Professional observation**

Seeing children's action is not the same as observing - there is a significant perceptual difference between the two. Observation involves not only seeing behaviors but identifying, selecting and interpreting these actions. Professional observation requires knowledge of child development and methodologies for recording, the skill to record information as objectively as possible and the application of knowledge to analyse the data and make valid inferences which can form the basis of adult response to the child. Cartwright & Cartwright (1974) understood this when they explained, "...only behaviour can be observed; the processes and the characteristics which caused the behaviours are out of sight. They can be inferred, but they cannot be observed...."

**Observation skill building**

This knowledge base and skill acquisition takes a long period of study, professional development opportunities and much practice. While we try to be as objective as possible we need to be able to make professional judgements: ".....there is subjectivity involved in techniques of observation.....without daring to be subjective, objectivity does not come. Observation will remain at the level of prejudice, unable to distinguish between what actual happens and their judgements about what happens," (Isaksen, 1986). This is the dilemma for teachers: when to make judgements and when to avoid subjectivity. Obviously we
need to make our judgements appropriate. Many teachers believe themselves to be effective observers but they merge their perceptions with interpretations without realising the inappropriate subjectivity that this can lead to. The separation of observed fact from interpretation is, however, an essential part of the process of the teacher's skill development. Early experience in observation is more likely to be successful if it uses narrative styles rather than rating scales, checklists or other interpretative methods of recording which require identifying, categorising and analyzing behaviours in one process. Understanding the strengths, weaknesses and possible uses of a wide variety of recording methods enables the adult to select the most appropriate way of gathering the information that is needed. Few teachers would disagree with the idea that observation is the key to developmentally appropriate practice, but they may not realise that their skill needs sharpening!

Planning for observation
Of course a belief in the necessity for systematic observation is essential but it needs to be reinforced with action. Structuring time, setting up recording systems, organising team meetings, using available technological facilities, identifying processes for securing valid inferences and establishing confidential storage and efficient retrieval protocols are the practical challenges which need to be addressed. It may be possible to dovetail new observation methods into existing reporting systems but if a school or child care centre wishes to shift its approach to embrace observation and portfolio philosophy it is likely that existing systems that had been developed under a differing notion of evaluation methodology would not be appropriate.

Data analysis
It is not only the recording component which presents the challenge. More difficult is the effective analysis of the data. Here is the gap for many teachers because their inferences are less than carefully drawn considerations. They may lack the support of any validation or make inferences that are insupportable. Ensuring that every statement of evaluation can be, and is supported by the application of reputable theoretical explanations of the behaviour, reference to reliable norms and, possibly, the confirmation of a fellow professionals' opinion, is the only process which can validate the evaluation. [For a detailed explanation see Martin (1994)]. Anything less than this leaves us open to criticism from those who want to use standardised assessment tools because they have concern for the validity of the evaluation process. Indeed there is some similarity between these two approaches even though they may seem divergent; they both conform to checks of reliability and validity in the traditional sense. The observation approach, however, requires the tool of measurement to be applied on the data after it has been collected rather than, in the traditional approach, as part of the data collection system itself.
Summary
The key components of developmentally appropriate evaluation are:

- the objective recording of the detail of the child's behaviour
- the selection of appropriate methodologies for recording, professional team work which includes parents in information collection and analysis
- the recognition of personal biases and professional perspectives of the observer
- the emphasis on the process of individuals pattern of development
- the necessity for ensuring that the evaluation of observations is based on objective data rather than casual perceptions
- the thorough validation of inferences drawn from the observational data
- the careful use of theoretical models and normative profiles to support developmental inferences, and
- the belief that in the observation of behaviour we reach the best understanding of each individuals development and richer appreciation of the patterns of the development of all children.

Developmentally appropriate evaluation and developmentally appropriate practice are clearly allied.
References


NAEYC "Guidelines for Appropriate Curriculum Content and Assessment in programs serving children ages 3 through 8", National Association for the Education of Young Children, 1990.
