Are most early childhood teachers “well versed in the essentials of many academic disciplines and content areas,” as suggested by the new NAEYC Standards for Early Childhood Professional Preparation (NAEYC 2001, 21; Hyson 2002)? Are most prospective teachers acquiring this knowledge? In my own experience, far too often the answer to these questions is no.

As an early childhood teacher educator, I’ve become increasingly focused on prospective and practicing teachers’ knowledge of essential subject matter outcomes for children and their ability to use this knowledge to plan appropriate curriculum. Because national and state subject matter standards define essential outcomes, I have become especially interested in my students’ knowledge and skills regarding the content portions of these subject matter standards.

**The policy-practice gap**

One change in the new NAEYC Standards for Early Childhood Professional Preparation is an “enhanced emphasis on subject matter” (NAEYC 2001, 7). However, in the early childhood curriculum courses I teach, I find that most students

- strongly prefer to discuss methods rather than goals, content, and outcomes;
- can cite only general outcomes for their lessons and activities;
- know little about state and national content standards for the different subject matter disciplines; and
- struggle to describe the connections between their lessons and activities and content standards.

All of this is perfectly understandable given the early childhood field’s historic focus on child development. In fact, the preferences of prospective and practicing teachers reflect what I believe is a common pattern in the field. We typically discuss subject matter in very general terms: “Children learn geometry from playing with blocks, they learn social studies through visits from community helpers, and they learn science by observing and recording weather.” However, I wonder—do children always learn something from these activities, and what do they learn? Are they learning critical knowledge and skills, or trivia? When teachers do not have solid knowledge of content standards, their curriculum, teaching, and assessment may not focus on the essential outcomes in various subject matter disciplines, as the new NAEYC Standards for Early Childhood Professional Preparation require.

This gap between policy and practice is surprising, given that subject matter and standards have been prominent in NAEYC position statements for a decade.

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prominent in NAEYC position statements for a decade. For example, the position statement of NAEYC and the National Association of Specialists in State Departments of Education states that “curriculum content has intellectual integrity; content meets the recognized standards of the relevant subject matter disciplines” (Bredekamp & Rosegrant 1992, 21). More recently, “the subject matter of the disciplines” appears as the first source of ideas for constructing appropriate curriculum in the NAEYC position statement on developmentally appropriate practice (Bredekamp & Copple 1997, 20). Other recent position statements have addressed appropriate curriculum content for young children learning literacy (IRA & NAEYC 1998) and mathematics (NAEYC & NCTM 2002). In addition, NAEYC and the National Association of Early Childhood Specialists in State Departments of Education (NAECS/SDE) recently issued a joint position statement on early learning standards (2002).

Subject matter is important, and the national subject matter content standards provide one framework for identifying important and appropriate goals and objectives for children. Important content from subject matter standards also provides a powerful focus for thematic units (Erickson 1998). In addition, the standards have the potential to improve teaching methods as practitioners use them to guide their choices of materials and activities, as well as their interactions with children. Cazden quotes a primary school headmaster: “If a teacher is not aware of . . . the intellectual skills and concepts in the simplest activity, she cannot nourish those skills and concepts in the context of children’s play” (1971, 121). Teachers cannot see all of the important skills and concepts they must nourish merely by knowing children and development well—they must also know the subject matter content well.

The content standards are important for preschool teachers as well as K–3 teachers. Although most national standards are written for grades K–12, they are often written in broad language, making them applicable in some cases to prekindergarten. Some national standards written for the primary grades begin with pre-K. Furthermore, most states have developed or are developing their own content standards, and these often include pre-K content standards. The Head Start Child Outcomes Framework (2002), based on the Head Start Program Performance Standards, is composed of 8 general domains, 27 domain elements, and 100 examples of specific indicators of children’s skills, knowledge, and behaviors. They serve as a framework of building blocks that are important for school success.

Learn about the content standards

My first recommendation is that teacher educators learn more about the content standards for each subject matter discipline. Content standards are not pleasure reading, and it may be easiest for teacher educators to learn more about them when using them in a meaningful way in their professional lives (for example, course assignments, research, advocacy efforts). Information for accessing national content standards appears at the end of the article.

Becoming familiar with the standards of one’s state is especially critical, as many school districts focus curriculum on state standards more than national standards. State standards are generally patterned to a moderate or extensive degree on the national standards, and are typically more specific about the expected outcomes for specific ages or grade levels. Content standards vary from state to state and can generally be accessed through state departments of education.

Recommendations for teacher educators

Many early childhood teacher educators have been increasingly integrating the subject matter standards into their programs for several years, and have been involved in the standards movement in other ways. However, in my experience, in-depth attention to the standards covering subject matter content is still not the norm nationwide. To promote an enhanced emphasis on subject matter standards, teacher educators can

- learn about the content standards
- reexamine beliefs about subject matter
- emphasize content standards in coursework
- develop resources that clearly reflect the content standards
- participate in the revision and improvement of state and national standards
Reexamine beliefs

Second, teacher educators must reexamine common beliefs that pose obstacles to an enhanced emphasis on subject matter. One important belief is reflected in the statement, “Because a subject-matter approach to the curriculum is expert based, much of the content is difficult for children to understand” (Jalongo & Isenberg 2000, 205). I believe that a reading of the subject matter standards suggests otherwise. For the most part, the standards define content that is appropriate for young children. Indeed, both national and state subject matter standards often underestimate the content that is appropriate for young children, as reflected by the fact that some primary-grade standards and benchmarks are appropriate in the preschool years. For example, preschool children can and should learn many things related to the K–2 science benchmark “Change is something that happens to many things” (AAAS 1993, 72).

At the same time, the standards do sometimes suggest challenging content. I believe this element of challenge is important. While we do not want to hurry children, or overwhelm them with content, many children are turned off to learning because we underestimate them and fail to engage them with curriculum that is sufficiently challenging (Klee 1998). Succeeding at challenging tasks—not easy ones—is critical for developing self-esteem and a strong sense of self-efficacy (Bandura 1995). Indeed, providing appropriate challenges is an important part of caring for children, because as Noddings noted, “it is clear that caring implies a continuous drive for competence” (2001, 101). Learning important content at appropriate times is also an important part of what Spodek and Saracho (1994) called the “educational appropriateness” of curriculum, or what Katz and Chard termed the “vertical relevance” of curriculum—meaning “instruction that prepares the learner for the next level of instruction” (1989, 4).

Also worth reexamining is the belief that subject matter and developmental domains are quite different. This belief is reflected in discussions about whether developmental domains or subject matter should provide the central organizing framework for curriculum. Are subject matter and developmental domains really so different?

Let’s imagine a teacher named Carol. Among her curriculum goals are promoting motor skills, developing problem-solving abilities and curiosity, and helping children learn to compare and describe the characteristics of objects (e.g., shape). Carol also emphasizes nutrition and hygiene (e.g., brushing teeth), empathy, learning about the community, specific reading skills, and book knowledge.

Are developmental domains or subject matter standards the starting point for Carol’s curriculum? It’s impossible to tell—each item above appears in one or more developmental descriptions of curriculum content (e.g., Katz 1985; Hohmann & Weikart 1995) and also in one or more sets of content standards (e.g., AAAS 1993; Kendall & Marzano 1997). In fact, the overlap between developmental frameworks and subject matter standards is enormous. I suggest that there is no meaningful qualitative distinction between the kinds of educational goals in subject matter frameworks and those appearing in curriculum content frameworks organized by developmental domains.

A third belief to reexamine is that organizing curriculum solely by subject matter often leads to “fragmented, isolated skill development or the exclusion of other kinds of knowledge and skills essential to children’s ultimate success in society” (Kostelnik, Soderman, & Whiren 1999, 71; also see Jalongo & Isenberg 2000, 205). Given the similarity of developmental domains and subject matter, I suggest that inappropriate curriculum is not necessarily a result of an emphasis on subject matter. Inappropriate curriculum can result from other planning and design problems such as goals and objectives that are trivial, too easy, or too difficult; inattention to students’ interests; and lack of a meaningful context or task for learning knowledge and skills. Subject matter can clearly be the starting point for meaningful integrated curriculum.

Finally, some subject matter standards do include a great number of factual or knowledge goals. Therefore, it is important to reexamine the common belief that a clear focus on knowledge outcomes inevitably leads to inappropriate curriculum. Teacher educators should certainly not advocate curriculum filled with countless facts to be memorized by rote. However, it is important to help prospective and practicing teachers recognize that learning facts does not necessarily prevent curriculum from being meaningful or interesting.

In fact, children absolutely love to learn facts—about people, numbers, dinosaurs, why cars go bumpety-bump when crossing railroad tracks, how scrapes on our knees heal, and where food comes from. Further, although it is both common and reasonable to view a heavy emphasis on memorization as an indicator of less appropriate practice, memoriza-
Emphasizing standards in coursework

Teacher educators can help students learn about content standards by incorporating them into course assignments and assessments. I have found that some of the most meaningful and thought-provoking assignments in the curriculum courses I teach involve using content standards to develop activity and lesson plans. I ask my students to plan lessons, activities, and units that focus on specific standards and benchmarks, and to articulate the connection between the standards and those plans. One important goal in this process is to move students away from always thinking first about fun activities related to a topic. Instead, I help students get into the habit of thinking first about appropriate content for children, and then designing activities and lessons with that content firmly in mind. Even with emergent curriculum, it helps to reflect on the possible directions activities might take, and to be prepared to support children’s learning of specific knowledge and skills related to those classroom activities.

For example, to ensure that their lessons emphasize some of the outcomes that science educators deem crucial for children’s development as scientists, teachers should consult the two sets of national science standards. One set was developed by the National Research Council (NRC), and the other set by the American Association for the Advancement of Science (AAAS). There are many science content standards that could be the focus, for example, of lessons in a weather unit. These include learning that “The sun warms the land, air and water” (AAAS 1993, 83) and that “Weather can be described by measurable quantities, such as temperature, wind direction and speed, and precipitation” (NRC 1996, 134). Lessons might also focus on dispositions listed in science standards, such as learning “How do you know?” in appropriate situations and attempt reasonable answers when others ask them the same questions” (AAAS 1993, 298).

Many of the specific benchmarks that appear within standards documents provide a powerful focus for weather units and lessons because they are generalizations—knowledge that is true across a variety of situations (see Erickson 1998). For example, the benchmark “Change is something that happens to many things” (AAAS 1993, 72) could be explored when studying weather and revisited when studying many other science phenomena. We often stress the importance of focusing on big ideas and making connections in learning; standards-based generalizations are an important tool for achieving these goals. In addition to science standards, standards from other disciplines such as mathematics and language and literacy could be addressed through a weather unit.

In my experience, teacher educators need perseverance to keep students focused on content standards because most students prefer to discuss teaching methods. It is important to help students discover that teaching can still be very inappropriate—regardless of the use of hands-on materials, play, substantial child choice, respectful adult-child interactions, integrated curriculum, portfolio assessment, and creative activities—if curriculum content is inappropriate or trivial.

Developing standards-based resources

Teacher educators should help develop a variety of resources (textbooks, videos, CDs, or DVDs) that can be used to teach about content standards and about appropriate uses of the standards in early childhood education. My own review of 27 introductory and curriculum textbooks for early childhood education revealed that very few give substantial attention to the subject matter standards and their relevance for planning activities and curriculum. Resources to be developed for preschool-only audiences should include all the main content standards, and address in detail their multiple uses in education. Texts for preschool-only audiences should at least address in detail the use of the many standards that are appropriate for preschool.

Teacher educators can also play a major role in revising the instruments used to evaluate teaching so that those instruments include an appropriate focus on content standards. For example, the program accreditation criteria from the National Acad-

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emony of Early Childhood Programs (NAEYC 1998) currently include very little on appropriate subject matter content and nothing at all on state or national content standards (e.g., Dickinson 2002). Also, many evaluation tools (e.g., Harms, Clifford, & Cryer 1998; Hemmeter et al. 2001) include few or no criteria that focus on curriculum content. Fortunately, NAEYC is aware that content standards are not adequately represented in the program accreditation criteria. Thus, one likely result of the current reinvention of the accreditation process will be that the content standards will be better represented in the new accreditation criteria.

**Revising and developing improved content standards**

Early childhood teacher educators have an important role to play in revising state and national content standards. Ideally, I believe the content standards would benefit from three ambitious changes.

First, extend all national content standards to encompass the preschool years. Currently, the vast majority of national content standards are designed for K–12 education only.

Second, include in these new standards a substantial range of dispositions, feelings, and other socioemotional outcomes traditionally valued in our field. Imagine if a standard regarding “increased intrinsic motivation to learn subject matter” appeared in national standards, along with the more traditional knowledge and skill standards. This, and other standards reflecting outcomes associated with developmentally appropriate education (e.g., increased independence and cooperation, less child stress [see Dunn & Kontos 1997]) would foster improvements in other aspects of national standards and in their application.

Third, ensure that the new standards merge the outcomes listed within subject matter content standards with those found within developmental frameworks (e.g., Hohmann & Weikart 1995). Although this is an ambitious task, it can be accomplished. One prekindergarten to fifth grade assessment system incorporates many national standards as well as knowledge of child development (Dichtelmiller et al. 2001). I noted earlier the remarkable similarities between the subject matter standards and developmental frameworks. However, subject matter standards often include more detail about desirable knowledge and skill outcomes, while developmental frameworks often provide more detail about socioemotional, moral, and motivational outcomes.

An integrated set of content standards would have many benefits. It would be more comprehensive and balanced than either developmental or subject matter frameworks alone, would reduce the redundancy found in existing content frameworks, and would also be easier to use than multiple standards documents and developmental frameworks when planning curriculum. An integrative prekindergarten through third grade curriculum framework may also help improve the transition from pre-kindergarten to kindergarten, and the standards-writing process would allow early childhood professionals to influence primary grade curriculum and testing policies. While opposing high-stakes testing, early childhood professionals have been clear about what we are against; advocating effectively for more appropriate curriculum and assessment requires us to be much clearer about what child outcomes we are for. NAEYC representatives have been actively involved with the development of national standards; more teacher educators should add their voices to the development of new national standards.

**Changing Content Standards**

1. **Extend all national content standards to encompass the preschool years.**
2. **Include in these new standards a substantial range of dispositions, feelings, and other socioemotional outcomes traditionally valued in our field.**
3. **Ensure that the new standards merge the outcomes listed within subject matter content standards with those found within developmental frameworks.**

**Concluding thoughts**

Emphasizing subject matter content standards is important because doing so can improve early childhood education and yield long-term benefits for the development and learning of the whole child. In promoting this change, we need to help practicing and prospective teachers to:

- learn more about curriculum content while also continuing to learn about appropriate teaching methods;
- balance responsibility to content standards with responsiveness to learners (e.g., Ball 1993); and,
- increase their focus on standards-based outcomes without reverting to heavy reliance on traditional teaching methods.
Learning content standards and incorporating them into teaching will require a great deal of effort, especially from preschool teachers. Preschool teachers might reasonably expect higher pay for this further education. I believe that advocacy efforts for better teacher compensation would be more successful if preschool teachers were invested in using curricula that incorporated the standards that K–12 educators and subject matter experts recognize as critical.

As Hyson (2000) noted, children will be the greatest beneficiaries when teachers meet the recently revised NAEYC Standards for Early Childhood Professional Preparation. There is much work to be done before most teachers are “well versed in the essentials of many academic disciplines and content areas,” as those new standards (NAEYC 2001, Standard 4c) suggest they should be. Teacher educators will play a pivotal role in helping move the field closer to reaching this important goal.

References


