

# A Framework for Considering the Validity of Learning Standards

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**L**earning standards have long been part of K–12 education in the United States (Ravitch 1995; Apple 2001), and they have become increasingly present in early childhood education starting in the 1990s (see, e.g., Brown 2009; Kagan 2012). Learning standards specify a set of expectations for children that can be charted against a child’s age or progression through schooling. These can then be used to build curriculum, guide instructional goals, and inform assessment. Standards provide the “what” of education, while instruction captures the “how.”

Articulating a clear set of goals for children’s learning brings with it potential advantages and disadvantages (see, e.g., Kagan 2012), the primary value being driven by general agreement that the standards are appropriate for the children for whom they are intended to apply. At their best, learning standards provide “clear, research-based expectations for the content and desired results of early learning experiences [that] can help focus curriculum and instruction, aiding teachers and families in providing appropriate, educationally beneficial opportunities for all children” (NAEYC & NAECS/SDE 2002, 4). At their worst, “standards can also run the risk of being rigid, superficial, or culturally and educationally narrow. In the K–12 arena, at times standards have driven curriculum toward a more narrowly fact- and skill-driven approach with a resulting loss of depth, coherence, and focus” (NAEYC & NAECS/SDE 2002, 3). The critical challenge, then, is ensuring that the content of learning standards matches what we know about child learning and development. When standards are set too low, they undermine potential learning and development, while those set too high may compel teachers to use instructional approaches that do not foster learning and development and may “teach to the test.”

## The Risks Posed by Poorly Designed Standards

The major risk of any standards movement is that the responsibility for meeting the standards will be placed on children’s shoulders rather than on the shoulders of those who should provide opportunities and supports for learning... Negative consequences potentially face children who fail to meet standards, because the data may be used to label children as educational failures, retain them in grade, or deny them educational services. Standards can also run the risk of being rigid, superficial, or culturally and educationally narrow. In the K–12 arena, at times standards have driven curriculum toward a more narrowly fact- and skill-driven approach with a resulting loss of depth, coherence, and focus. In the early childhood field, this trend could undermine the use of appropriate, effective curriculum and teaching strategies.

—NAEYC and NAECS/SDE (2002, 3)

RESEARCH

POLICY

PRACTICE

In a 2015 brief on the Common Core State Standards and developmentally appropriate practice (DAP), the National Association for the Education of Young Children (NAEYC) (2015, 6) noted that “any standards that expect children to demonstrate learning in ways that run contrary to what is known about the sequence of learning will inherently be inappropriate and could undermine DAP. Concerns will continue until the standards are subjected to formal, data-driven validation studies based on implementation.”

This brief outlines an approach to conducting such studies that is informed by efforts in early childhood to define early learning standards (NAEYC & NAECS/SDE 2002). While early learning standards have traditionally been applied to standards for children prior to school entry, they are equally applicable to young children in the early elementary years, kindergarten to 3rd grade. Indeed, the years K-3 provide a critical overlap between traditional early learning with K-12 systems (see, e.g., NAEYC 2012). Furthering this connection requires “cautious enthusiasm” (Neuman & Roskos 2005, 126) that doing so will propel the early childhood perspective into early elementary school (e.g., Halpern 2013) rather than open the door for furthering the pushdown of K-12 into early childhood (Hatch 2002). This approach applies not only to the Common Core standards but to the continuum of standards, including those for early learning and K-12, with a focus on standards that guide the experiences of children from birth to third grade.

## The Context of Learning Standards

Before considering the specific questions that guide content validation, it is important to recognize that standards exist within a context: standards exist as sets; alignment must occur across standards, instruction, and assessment; and different learning standards must be aligned through an ongoing development and revision process.

### Standards exist as sets

It is tempting to look at the limited focus of the Common Core State Standards (English language arts [ELA] and mathematics) as a critical shortcoming. However, states are not limited in developing or adopting standards in other areas. Whether they do so or not is reflected in the breadth of learning standards present in a state. While a limited focus on these two domains would be a critical shortcoming of a state’s set of standards, it does nothing to validate or invalidate the content of the ELA and mathematics standards within their identified domains. That is, the ELA and mathematics standards could be valid for each domain, but the limited breadth of the set of standards would be a persistent problem.

### Alignment of Standards, Instruction, and Assessment

As indicated in “Early Learning Standards: Creating the Conditions for Success,” the joint position statement of NAEYC and the National Association of Early Childhood Specialists in State Departments of Education (NAECS/SDE) (2002), learning standards



exist within a larger context and are linked to instruction and assessment. A similar expectation exists within K–12 education. As Roach, Niebling, and Kurz (2008, 158) observe, “To ensure effective schooling, the design and implementation of three components of the educational environment—curriculum, instruction, and assessment—must be coordinated. . . . The degree to which these components work together to facilitate student learning is often referred to as alignment.”

Accurate validation of learning standards is premised on an assumption that each component (standard, instruction, assessment) within the system is valid. When alignment among these components is strong, determining the validity of the standards is reasonably direct. A valid assessment aligned with an expected learning goal provides an accurate indicator of children’s ability to meet a standard. When the standard and its assessment are also aligned with instruction, we can draw accurate conclusions about the validity of the standard. If all components are aligned but children do not meet the standard, it is likely too high; if all components are aligned and children meet the standard, it may be reasonable.

If, however, the standard and its assessment are aligned but instruction is not, we cannot know whether the instruction was insufficient to allow children to meet the standard. In other words, the accuracy of the standard is still unknown.

Likewise, data coming from an invalid, or nonaligned, assessment does not provide any useful information about children’s potential to meet standards. Poor performance on such assessments does not mean that the intended standard lacks validity, but rather that the standard was not assessed adequately.

### Standards alignment

In addition to aligning standards, curriculum, and assessments, learning systems should provide for an appropriate alignment across standards. In this context, alignment is most typically seen as an issue where early learning standards meet and potentially overlap with K–12 standards—that is, in K–3. According to the NAEYC and NAECS/SDE (2002, 4) position on early learning standards, “Carefully developed early learning standards, linked to K–12 expectations, can

### Why Is Systems Alignment Important?

Consider an expectation that by the end of kindergarten, children “read emergent-reader texts with purpose and understanding” (NGA & CCSSO 2010, 16) Imagine at the end of the kindergarten year that child assessment data suggest a child has not met this expectation. We might conclude any of the following:

- a) The standard is not appropriate because the child cannot meet it
- b) The standard is appropriate, but this child cannot meet it
- c) The standard is appropriate, but the child did not meet it because the instruction was not aligned with the expectation
- d) The assessment given was not valid as a measure of emergent reading, so we cannot evaluate either the standard or whether the child met it

Alignment of standards, instruction, and assessment is critical to evaluating the validity of the standards.



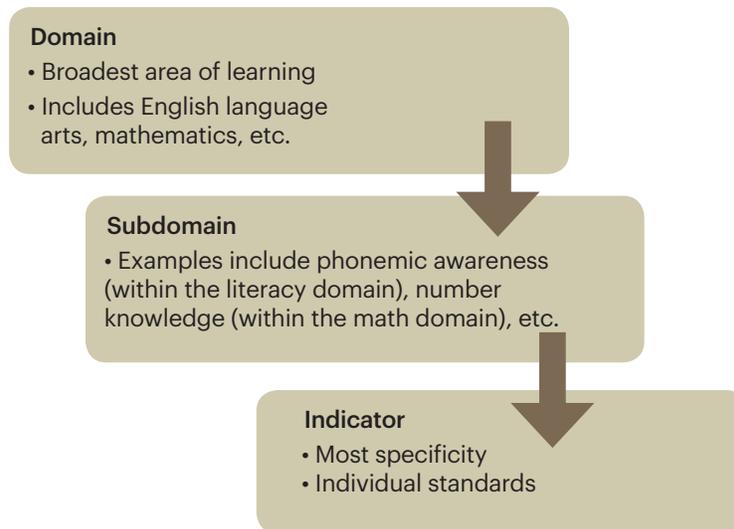
also contribute to a more coherent, unified approach to children’s education. Educators, families, and other community members see the connections between early learning opportunities and positive long-term outcomes.” As a result, studies on the alignment between early learning and K–12 standards are reasonably common. Scott-Little, Kagan, and Frelow (2010) and Roach, Niebling, and Kurz (2008) have provided good models for the conduct of alignment studies.

### Structure of standards

Most learning standards follow a similar structure that is important to consider when assessing their validity. As shown in Figure 2, standards can be defined by three levels of specificity:

- At the highest level, standards identify broad **domains** of children’s learning. The Common Core State Standards specify two: English language arts and mathematics. Expectations for young learners were initially conceptualized by the National Education Goals Panel to include five domains for children’s school readiness: physical well-being and motor development, social and emotional development, approaches toward learning, language development, and cognitive and general knowledge (Kagan, Moore, & Bredekamp 1995).
- Domains are further defined by two or more **subdomains**. These are more specific areas of development within the broader domains. For example, the domain of social and emotional development may include subdomains on social skills, emotion regulation, and so on.
- Within subdomains are sets of specific **indicators** that define discrete expectations for children. Indicators most closely resemble assessment items.

Figure 2. Typical structure for learning standards.



## Why Validation Matters

Validation of learning standards addresses a straightforward sounding question: Are the expectations reasonable for children at the age (or in the grade) specified? A failure of validity in this context means that expectations for children are inconsistent with what we know about child learning and development and are more likely than not to be met by a large proportion of children. Developing curriculum, providing instruction, and assessing children based on standards that lack validity runs contrary to best practice and professional ethics. As a result, establishing the validity of learning standards is a practical as well as moral imperative.

Establishing the validity of learning standards is (or should be) an ongoing process. Of course, new standards (or heavily revised standards) should be introduced following a development process that establishes some basic validity. But standards should be continuously examined as well. Many education experts have noted that the introduction of the Common Core standards represents a dramatic shift in expectations for students in K–12 (see Porter et al. 2011), so considering their content is especially important. Indeed, much of the debate about the content of the Common Core standards can be attributed directly to how they differ from prior expectations for children, especially those in grades K–3. For example, the Common Core State Standards for English Language Arts (NGA Center & CCSSO 2010) introduce two widely noted changes in expectations for young children’s literacy experiences—increasing focus on nonfiction literature and a specified ladder for text complexity—as well as the direct expectation that children be able to “read emergent reader texts with purpose and understanding” (p. 16). The mathematics standards have likewise raised concerns due to changes in how mathematics concepts are presented to children (e.g., Cobb & Jackson 2011). These changes have led researchers to conclude that many of the specific indicators need empirical verification (Main 2012; Hiebert & Mesmer 2013). These are just a few examples of why validation is especially critical for those standards that are new and change the way children have been previously taught.

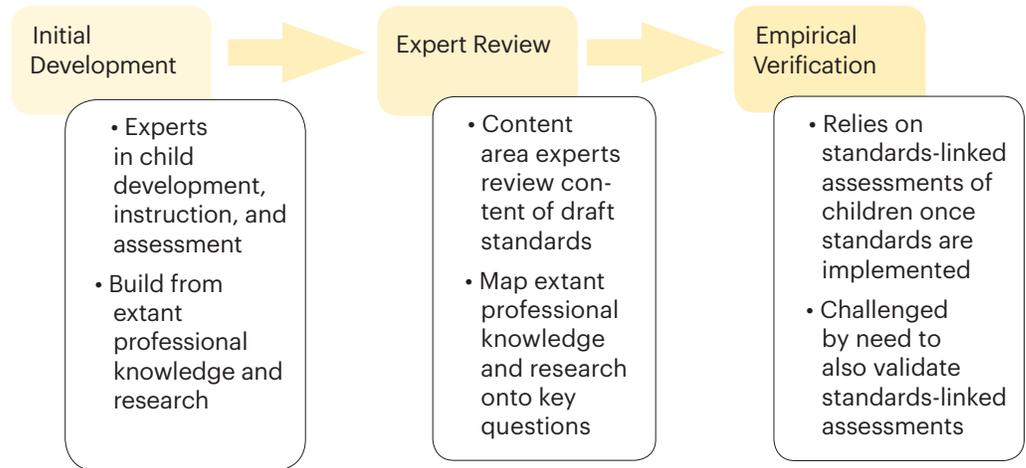
## Content Validation as a Process

Considering the validity of learning standards is not a single act. It is a process that begins with the initial development of standards, continues through expert review, and ends with collection of assessment data to empirically validate the standards. This process is shown in Figure 1. Ideally this is an ongoing process that engages all stakeholders in the community (NAEYC & NAECS/SDE 2002).

### Initial development

In the initial development period, there is a need for expertise across a range of knowledge, including children’s learning and development, instruction, and assessment. Ideally, these areas of expertise capture the full range of ages and

Figure 1. A process model of standards validation.



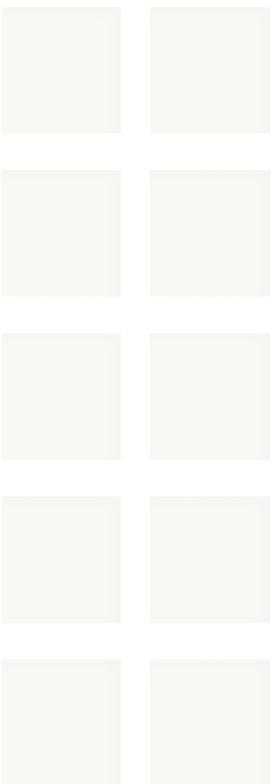
domains of children’s development that the standards intend to articulate. Including expertise in instruction and assessment provides a necessary bridge between the content of the standards being developed, instruction and curriculum, and assessment to ensure a closely aligned system that supports children’s learning.

### Content review and validation

Content review and validation studies rely on experts’ application of knowledge of child learning and development. In this model, a group of reviewers is recruited, with expertise in one or more of the domains of child development captured by the standards. The panel is provided with complete documentation and guided through a structured data collection process to elicit feedback on the standards using a brief list of key content questions (described below). This feedback can include quantitative as well as qualitative data that can be analyzed and integrated across the panel. Whereas initial development of the standards includes broad expertise, analysis of the standards’ content relies on deep content expertise. A typical review panel, then, would include reviewers with expertise in each of the areas covered by the standards, as well as expertise in child development and learning for the ages or grades covered by the standards. So, for example, a review panel for kindergarten standards would include experts in the learning and development of children around kindergarten age in each of the domains covered by the standards.

### Empirical verification

While initial development and content review processes can be built around existing knowledge and data, both are limited in that they consider the validity of standards without using data linked to the specific standards or data collected once standards are being implemented. The final procedure in



validation requires collecting data on children’s performance as described by the set of standards under study. Only with valid, standards-aligned assessments can the appropriateness of the standards be fairly considered. Likewise, assessment of children’s performance against a set of standards needs to occur once standards are being implemented. In other words, a fair test of the validity of a set of standards requires that children be given opportunities through aligned instruction and curriculum to meet the standards. This is especially the case when standards represent new or differing expectations for children. For example, assessing the validity of a standard specifying that children be able to complete basic single-digit operations (e.g.,  $1 + 3 = 4$ ) requires both a valid assessment of the standard as well as confirmation that children have the opportunity to learn the content required (e.g., children have opportunities to learn basic single-digit operations).

## Key Questions About the Validity of Learning Standards

In their early learning standards position statement, NAEYC and NAECS/SDE describe the content requirements for standards (2002, 4):

To be effective, early learning standards must explicitly incorporate (1) all domains of young children’s development; (2) content and desired outcomes that have been shown to be significant for young children’s development and learning; (3) knowledge of the characteristics, processes, and sequences of early learning and skill development; (4) appropriate, specific expectations related to children’s ages or developmental levels; and (5) cultural, community, linguistic, and individual perspectives.

These expectations can be articulated as five questions concerning the content of learning standards:

1. Do the standards adequately capture all domains of children’s development?
2. Do the standards reflect significant content or desired outcomes for children?
3. Do the standards reflect the known process of development and sequences of learning for each standard?
4. Are the standards appropriate for the identified age period?
5. Do the standards adequately account for diversity in community, cultural, and linguistic backgrounds, and developmental abilities?

These content questions apply to different levels of analysis within the structure of the standards. As shown in Table 1, some of the questions apply to the broad domain level while others focus on specific indicators. Importantly, most of the questions can be considered through all aspects of the process described above. Each of the five questions is discussed below.

**Table 1. Distribution of study questions across multiple levels of analysis.**

Content question	Level of analysis		
	Domain	Sub domain	Indicator
Do the standards adequately capture all domains of children’s development?	X		
Do the standards reflect significant content or desired outcomes for children?	X	X	
Do the standards reflect the known process of development and sequences of learning for each standard?		X	X
Are the standards appropriate for the identified age period?		X	X
Do the standards adequately account for diversity in community, cultural, and linguistic backgrounds, and developmental abilities?	X	X	X

**Do the standards adequately capture all domains of children’s development?**

To fully consider the scope of coverage provided by articulated learning standards, the complete set of domains included within them needs to be considered. This question applies to the entire set of standards and speaks only to a goal of providing standards that capture the breadth of child learning and development. If a state has adopted the Common Core standards for K–3 but has not provided additional standards, then the state would not be adequately capturing that breadth. On the other hand, states that include standards in areas not included in the Common Core may be addressing the breadth of child learning and development through these additional standards. Kauerz (2006) found that only three states had standards for K–2 that captured all five domains indicated by the National Education Goals Panel. A more recent review by the Collaborative for Academic, Social, and Emotional Learning (Dusenbury et al. 2014) found only three states with comprehensive social and emotional learning standards in grades K–12, whereas 49 had such standards for pre-K. Clearly, there is work necessary to ensure that standards capture the whole child.

**Do the standards reflect significant content or desired outcomes for children?**

Considering standards at the domain level, as noted above, can give a sense of the breadth of standards, which also provides a view that is difficult to devalue. Indeed, the five primary domains noted by the Education Goals Panel are generally accepted as the critical areas of child learning and development. To evaluate the significance



of the content provided by standards, however, requires looking more deeply at their subdomains (or topics) and specific indicators. Each of these can be considered for its *importance* to child learning and development but also for its *value*. The importance of each topic and indicator can (and should) be research based. Standards for one grade or age should build toward more complex outcomes, drawing their importance from the degree to which they contribute to later learning. The value (or desirability) of standards, while related to their importance and research base, is less objective. For example, recent research shows that kindergarten has become more focused on academics over the past 10 to 15 years (Bassock, Latham, & Rorem 2015). While there is good evidence that building academic skills earlier may have benefits for children (e.g., Claessens, Engel, & Curran 2014), the importance of this early focus is countered by our views of children and how much academic versus nonacademic focus their early education should have (e.g., Miller & Almon 2009). Recent discussion about expectations in kindergarten pertaining to emergent reading (Shanahan 2013; Carlsson-Paige, McLaughlin, & Almon 2015) provides a good example of the complexities involved in debating the significance and desirability of specific skills.

### Do the standards reflect the known process of development and sequences of learning for each standard?

Child learning and development is progressive. Decades of research on child development has identified typical sequences that take place. While there is diversity in the timing of the developmental sequence, its order tends to be consistent. This consistency should be reflected by standards. For example, children's reading progresses in a reasonably specified sequence (e.g., Shanahan et al. 2010) that should be reflected in literacy standards. Likewise, our understanding of children's learning in mathematics (Kilpatrick, Swafford, & Findell 2001) and science (Duschl, Schweingruber, & Shouse 2007) have grown through research that should inform our expectations for children. Knowledge of children's development in other academic content areas, as well as their development in social and emotional skills and self-regulation, is understood enough that standards can be crafted to reflect these processes.

Of course, general agreement on developmental processes does not mean there is clear consensus. The work of the National Reading Panel (NICHD 2000) and the National Early Literacy Panel (2008) has been subject to debate since their respective reports were released (e.g., Cunningham 2001; Shanahan 2003; Dickinson, Golinkoff, & Hirsh-Pasek 2010; Lonigan & Shanahan 2010; Neuman 2010). Similarly, debate continues about how children learn mathematics (e.g., Kamii 2015; Rittle-Johnson, Schneider, & Star 2015). These debates underscore the importance of creating an ongoing process for content validation that includes diverse voices from research *and* practice to consider not only most reasonable expectations for children's learning but also best practices in supporting them.

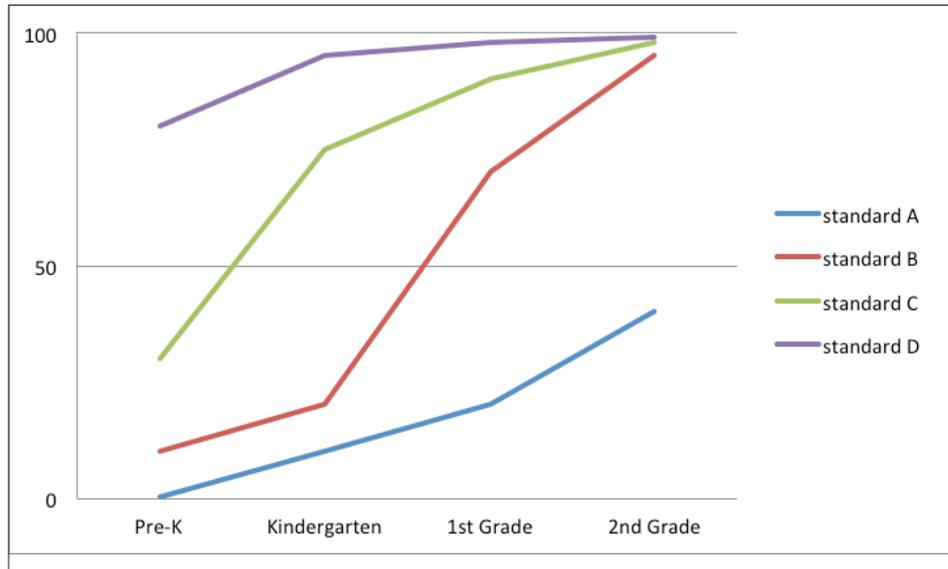
## Are the standards appropriate for the identified age period?

While the sequence of learning and development follows a predictable trajectory, standards are also established for children's age (early learning standards) or year in school (K–12 standards). Even where the developmental sequence may be consistent, the age at which children reach each milestone is far more variable. Especially in young children, learning and development reflects a complex set of processes that result in variations in the timing of reaching specific milestones (Bowman, Donovan, & Burns 2000). This creates challenges in setting standards for all children as well as in assessing children against those standards in ways that are fair (Snow & Van Hemel 2008). Can standards be established that accommodate the known, typical variation in timing for young children? Likewise, can standards be written to allow for variation in how children demonstrate meeting standards? Most early learning standards—and to a limited extent the Common Core standards (NAEYC 2015),—allow for some modest variation in demonstration. For example, standards may specify that they may be met through different modalities (e.g., orally, by drawing, or by showing) or “alone or with assistance.” These considerations are especially critical for children in K-3 based upon our understanding of early childhood development.

The process of determining the age appropriateness of a set of standards is sometimes referred to as age validation. Like other aspects of content validation, age validation can in part be addressed through expert review of content. In general, the question is this: Does this expectation generally conform to what we know about child development at this age? A diverse set of experts with backgrounds in practice and research can evaluate standards in this way. However, their judgment may be limited by the degree to which curriculum, instruction, and assessment have been aligned with these expectations in the past. If a specific standard reflects a new expectation or a previously unstated expectation, then it is not clear whether children will have adequate opportunity to meet the standard, and their potential may be underestimated. As a result, an evaluation of the age appropriateness of the standards must co-occur with an understanding of whether children will have had the opportunity to meet the standard.

There is also a more directly data-driven, or empirical, approach that can be taken. Once assessments and instruction/curriculum are aligned with the standards, data from aligned assessments can be used to inform the age appropriateness of the standards. Examining the percentages of children in each grade that meet each standard can give an indication of the age (or grade) appropriateness of the standards. For example, Figure 3 shows the percentage of children pre-K through second grade who meet four hypothetical standards.

Figure 3. Percentage of children in each grade meeting four hypothetical standards.



What can we infer about the age appropriateness of these four standards?

- Standard A: Most children do not meet this standard until after second grade.
- Standard B: Most children do not meet this standard until first grade, and nearly all children do so by second grade.
- Standard C: Some children meet this standard in pre-K, but only in kindergarten do the majority of children meet this standard.
- Standard D: The majority of children meet this standard in pre-K, and nearly all meet it by kindergarten.

Data like those illustrated in Figure 3 can inform decisions about the age appropriateness of specific standards. In this case, standard D would seem appropriate for pre-K, standard C for kindergarten, standard B for first grade, and standard A would not seem appropriate until after second grade. Although the data in Figure 3 are hypothetical, data linked to standards can be collected and analyzed in this way to evaluate standards' age appropriateness.

While data may exist that can be used initially, the best data will come from assessment of children who have experienced opportunities to learn as they are defined by the standards. Therefore, the best data can come from children only as standards have been effectively implemented. This does create an ethical impasse. To determine the age validity of standards, and therefore their appropriateness for children in different grades, we have to use instruction and assessments aligned with the expectations for those children.

While important, this concern can be partially offset if the sequence of learning and development is appropriate but the age not determined. Teachers can change their instruction based on children's progress toward each standard. In other words, the only fair test of the age appropriateness of a standard is the degree to which children can meet the standard when teachers are using developmentally appropriate practice to support children in reaching them. Demonstrating this kind of validity among standards requires use of valid assessments to guide instruction but not as a means of evaluating children or teachers.

### **Do the standards adequately account for diversity in community, cultural, and linguistic backgrounds and developmental abilities?**

By their design, standards are intended to be applicable to and appropriate for all children. However, we know there is dramatic diversity among children. In addition to the well-documented increased racial, ethnic, cultural, and linguistic diversity among children in the United States (see, e.g., Castro et al. 2011), children also come from broad sociodemographic backgrounds and with a range of developmental abilities. Just as standards need to be considered for their age appropriateness, they need to be considered also for the degree to which they are appropriate for children with differing backgrounds and characteristics.

Dual language learners (DLL) present special challenges for standards writers because DLLs combine linguistic and cultural diversity in myriad ways (Rendon, Harjusola-Webb, & Gatmaitan 2014). The most substantial challenge is that in K–12 education, standards are written under an assumption of English language instruction and demonstration. This immediately places dual language learners at a disadvantage because it means that instruction and assessment in all areas of interest most likely occur in a language that these children are in the process of acquiring. A number of states are participating in the WIDA consortium (see <https://www.wida.us/index.aspx>), which has created standards for English language development. It is important to note that, in general, children who are DLLs follow the same developmental progression as English language children, although they may lag behind these peers chronologically. Many DLLs live within a multicultural world where cultural practices and values may also come into play in ways that need consideration within standards. While the importance of English language skills is clear, cultural differences in behaviors and other expectations also need to be considered.

In general, the fields of early childhood education and K–12 education have gotten better at identifying the range of developmental differences among children, including the presence of disabilities. The breadth and diversity of disabilities presents some challenges to inclusive education (e.g., Nolet & McLaughlin 2000), but where inclusion and access are possible for children

with disabilities, oftentimes standards for all children are within reach (Division for Early Childhood 2007). Clearly, however, the degree to which any given standard is appropriate for a child is a function of the child's specific disability (or disabilities). For example, a standard that requires children to see ("Recognize the letters of the alphabet when printed") may not be appropriate for a child who is visually impaired, but an appropriate analog may exist. For example, a visually impaired child could be expected to show progress in reading Braille.

One final consideration that must be given to standards for children in grades K-3 is our understanding of differences between children when they enter school. There are large disparities in a range of school-readiness skills between groups of children when they enter kindergarten (e.g., Halle et al. 2009; Garcia 2015). The reality of these differences, and what it means for the potential of children to reach common standards from uncommon starting points, is profound. The most advanced children entering kindergarten may already meet, or be very near to meeting, most standards. Children at the other extreme are doubly challenged to meet the same standards. Not only are they further from meeting the standard, but the conditions that contributed to this disadvantage may also limit their potential in school. Put another way, children closer to achieving the standards are more likely to reach the standards with little burden on their kindergarten learning experience, while children furthest from the standards may be unable to catch up regardless of the quality of the kindergarten experience.

## Moving Ahead

Clearly, the Common Core standards have progressed from the initial development period into implementation and the beginnings of Common Core-linked assessment, at least in the later elementary grades. Concerns have been raised about the appropriateness of the Common Core for young children in grades K-3 (see NAEYC 2015), with special focus on the content of the standards themselves. This brief has presented a framework for considering the validity of the standards. In this conclusion, key points about standards validation are summarized and placed into the larger systems model.

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### The entire standards–instruction–assessment system must be evaluated

As indicated in this brief, standards exist within an aligned system that includes instruction and assessment. The power of this system is that when each element (standards, instruction, and assessment) is valid and aligned with the others, children are likely to reach their greatest developmental and learning potential. However, a failure in alignment, or a failure in the validity of one or more of the system components, will tend to limit the positive impact of the system on children.

### Standards need to be validated

While the development process for standards, including the Common Core State Standards and others, provides some degree of initial validation, it is not sufficient to ensure the validity and vitality of the standards. The content must continuously be examined and evaluated for the degree to which it captures the important areas of child learning and development so as to ensure that it does so in ways that are appropriate for the ages indicated and for diverse populations of children.

### Assessment and instructional approaches must be evaluated

Because standards, instruction, and assessment should all be aligned, the strength of the system is premised on the validity and appropriateness of each element for supporting children’s learning. As such, it is important to establish and maintain the appropriateness of instructional and assessment approaches and tools for children. If these are appropriate and aligned, child development and learning will be maximized.

### Change the assumptions

This brief is intended to provide a frame for considering the validity of a set of learning standards. For those who assume standards are set in stone and their validity is not subject to scrutiny, this will be an unusual starting place. However, in order to fully consider the system within which the standards operate, it is necessary to consider the validity or appropriateness of each component.

If the standards are assumed to be valid, but they cannot be met in the presence of appropriate instruction and assessment, then there is evidence that they are not valid. If we employ our best practices to support children’s learning and development in areas that we deem important and valuable, but children do not meet the standards we have set, then the standards may be inappropriate. If however, we cannot be confident that we are employing best practices, then failure to meet the standards may be due to limitations in the standards, or the limitation could lie in our instructional approaches. In other words, we must consider that instruction (the “how”) and the standards (the “what”) may not be valid for children at a given age or in a given grade. This is not the same as saying that children do not meet the standards, so therefore the standards must be invalid. Nor does it follow that instruction should move away from what is known to be best practice solely to meet a set of standards. In other words, pursuit of standards should not lead away from developmentally appropriate practice (NAEYC 2015).

### Maintain appropriate assessment practices

In an earlier brief, NAEYC (2015) identified three areas of inquiry around the Common Core standards: the need to validate the standards’ content, the need to maintain developmentally appropriate practices, and the need to preserve appropriate approaches to assessment for young children. Throughout this brief, the ties between instruction and the content of standards, and the need for our



accumulated knowledge in each, has been underscored. With new or revised standards being implemented, the burden would seem to be on validating the standards. At the same time, we must leave open the possibility that there may be new and better ways to effectively teach children. We should certainly continue to assess young children in ways that are consistent with best practice (e.g., Snow & Van Hemel 2008) as a means of guiding instruction and gaining feedback on what children can learn when they are provided optimum instruction and high standards. Appropriately assessing what children can learn is the best tool we have in setting standards that are appropriate for them.

## Conclusion

The subtitle to the NAEYC and NAECS/SDE (2002) position statement on early learning standards is “Creating the Conditions for Success.” Indeed, standards—and the instructional and assessment systems with which they align—constitute our best understanding of the conditions for success. This brief attempts to provide a framework for considering the content of standards, including but not limited to the Common Core. This does not mean that we should assume that our instruction and assessment are valid and appropriate—indeed, we should not. We cannot ignore the role of appropriate instruction and assessment practices as part of an effective system to promote children’s learning and development. Yet we are clearly in a standards-based and standards-driven era of K-12 education including the K-3 years. Therefore, if we are going to put standards at the fore, we must be exceptionally cautious and skeptical about their validity before we allow them (potentially) to drive changes in how we teach and assess young children.

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