

Massachusetts Department of Early Care and Education Alignment Study

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Presentation Overview

- *Part I: Background and Purpose of the Study*
- *Part II: Methods*
- *Part III: Major Findings So Far*
- *Part IV: Recommendations*

Part I:
*Background and Purpose of
the Study*

Background for the Study

- Massachusetts is engaged in an ambitious effort to improve the quality of its early childhood services.
- Central to these efforts is a focus on creating the highest quality early learning and development standards for young children.
- The standards articulate multi-domain expectations for children's growth and support continuity in early education from birth through kindergarten.

Background for the Study

- This vision requires standards that are:
 - Aligned with each other, so that they express cohesive expectations for early development;
 - Aligned with other milestone documents, such as the Common Core and Head Start Child Development Early Learning Framework (HSCDELFF); and,
 - Aligned with the assessments used in early childhood programs throughout the state.
- This is hard to do!

Purpose of the Study

- Therefore, the Department commissioned an alignment study.
- When complete, the 18-month study will present detailed analyses of:
 - Alignment of the Massachusetts toddler, preschool, and kindergarten standards;
 - Alignment of the preschool standards and the HSCDEL F; and,
 - Alignment of the standards with three assessment instruments used in the state.

Work Completed So Far

- So far, we have completed the first two parts of the study:
 - An analysis of the content of the infant/toddler, preschool, and kindergarten standards, and,
 - An analysis of the alignment of the older toddler, preschool, and kindergarten standards, and the preschool standards with the HSCDELf.

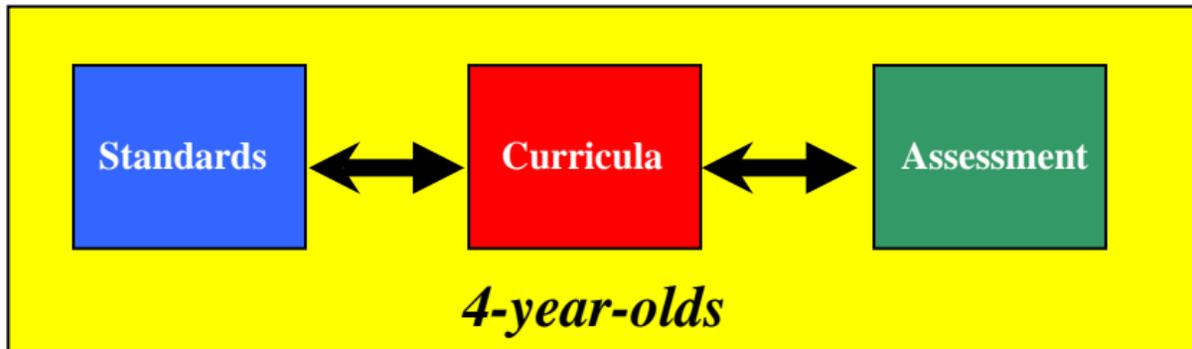
Part II:
Methods

Focus for Today's Presentation

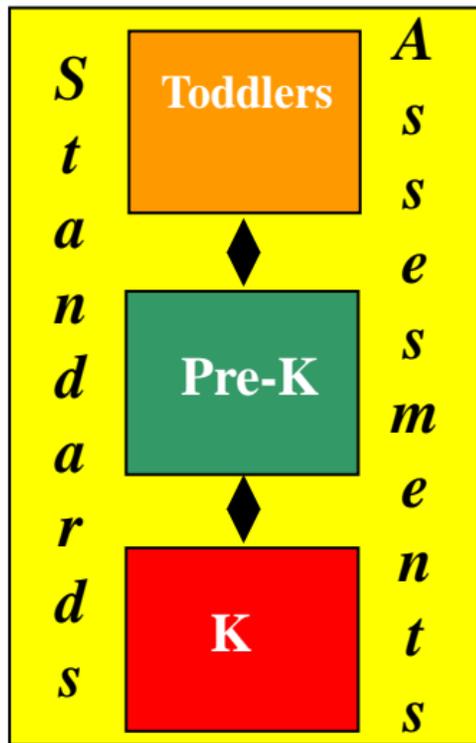
- Today we will focus on three of Massachusetts' questions:
 - How does the content of the older toddler standards compare to the the preschool standards?
 - How does the content of the preschool standards compare to the the kindergarten standards?
 - How does the content of the preschool standards compare to the HSCDELf?

The Terms We Use: Horizontal Alignment

Horizontal alignment refers to the consistency of standards and assessments *within* a given age cohort (e.g., Preschool and the HSCDEL F).



The Terms We Use: Vertical Alignment



Vertical alignment refers to the consistency of standards *between* age cohorts (e.g., Toddlers vs. Pre-K).

The Documents We Used

- The Early Learning Guidelines for Infants and Toddlers (May 2011) – *older toddlers (22 to 33 months)*
- The Guidelines for Preschool Learning Experiences (April 2003) in all domains except English Language Arts and Mathematics
- The Kindergarten Learning Experiences (April 2008) in all domains except English Language Arts and Mathematics
- The Curriculum Framework for English Language Arts and Literacy (March 2011): Standards for Pre-K and Kindergarten
- The Curriculum Framework for Mathematics (March 2011): Standards for Pre-K and Kindergarten

Alignment Analyses

- To analyze alignment, we created a construct template:
 - Provides an objective and thorough metric for collecting data.
 - Enables us to compare items across age levels and documents, and even different types of documents.
 - Brings a new level of consistency and precision to the analysis.
- The construct template organizes all the content from the standards into five domains:
 - Physical Development and Motor Skills
 - Social and Emotional Development
 - Approaches Toward Play and Learning
 - Language and Communication Development
 - Cognitive Development and General Knowledge

Alignment Analyses

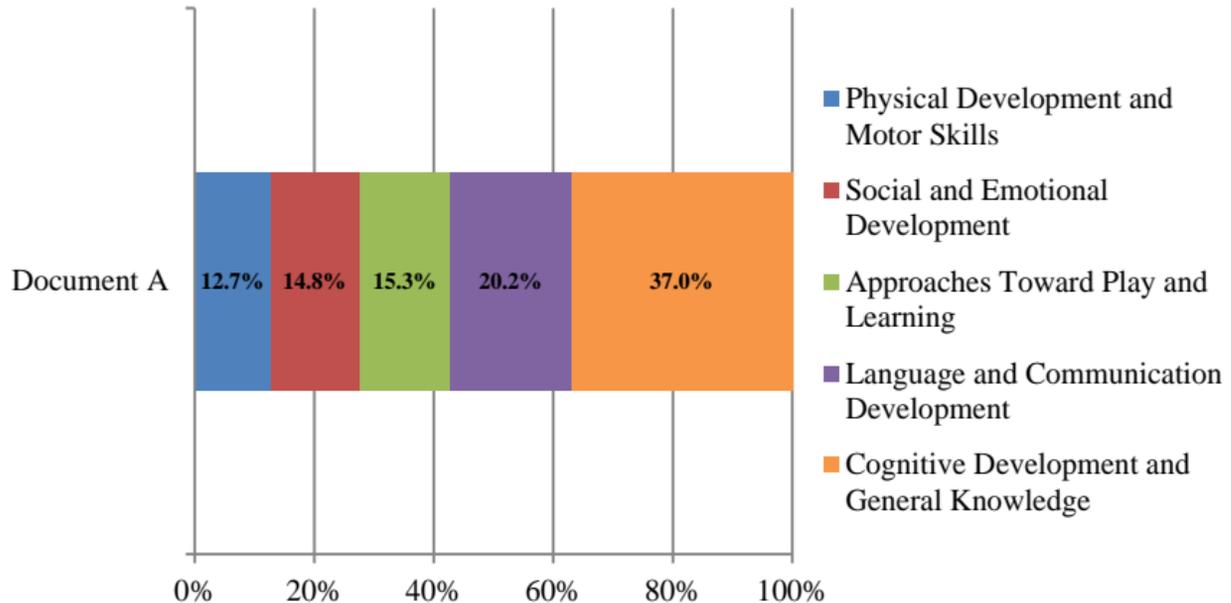
- We looked at both match and quality:
 - Match looks at how well indicators are aligned.
 - Quality looks at whether indicators are age-appropriate and complete.
 - Can have well matched indicators, but they may not be high quality.
- We analyzed alignment on three parameters:
 - Balance
 - Coverage/Depth
 - Difficulty

The Parameters: BALANCE

- The percentage of all indicators devoted to each domain.
 - Do the documents exhibit the same balance across the five domains?
 - Does one document emphasize some domains more/less than another document?
 - Do the documents cover the different domains sufficiently?

The Parameters: BALANCE

Balance Analysis: Document A

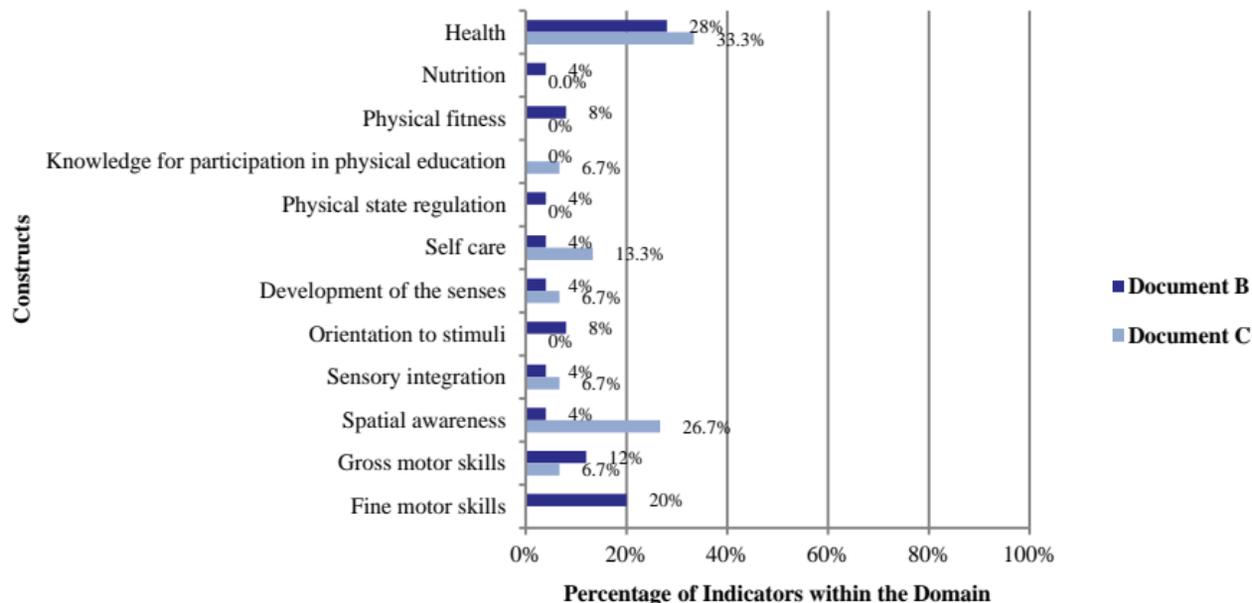


The Parameters: COVERAGE/DEPTH

- The percentage of indicators within the domain focused on each construct.
 - To what extent do the documents address individual constructs?
 - Do the documents emphasize constructs to the same degree?
 - Do the documents cover the constructs with sufficient thoroughness?
 - Are there constructs absent from one or both documents that should be considered for inclusion?

The Parameters: *COVERAGE/DEPTH*

Coverage/Depth Analysis: Document B and Document C: Physical Development and Motor Skills



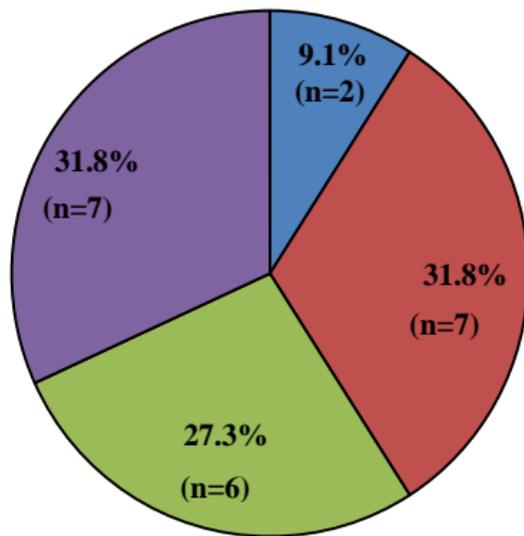
The Parameters: DIFFICULTY

- Comparing the level of cognitive demand in pairs of indicators across documents.
 - Do the levels of difficulty of indicators in the documents match?
 - Do the documents represent a cohesive progression of difficulty over time?

The Parameters: DIFFICULTY

Difficulty: Document D and Document E: The Arts

Indicator Pairs (n=22)



Unpaired Indicators

Document D: 0
Document E: 5

- Document E more difficult than Document D (-)
- Equal difficulty (=)
- Document D more difficult than Document E (+)
- Document D much more difficult than Document E (++)

Summary of the Alignment Study

- We developed a construct template as a means to bring comparability and consistency to the data.
- We used three parameters (Balance, Coverage/Depth, and Difficulty) to answer the questions that were asked by the Department.
- This allowed for multiple complex analyses as a basis for answering the Department's questions.

Part III:
Major Findings So Far

Major Findings #1

- Massachusetts has a solid set of standards that address the birth-through-five age continuum.
- The Department has made a good effort to align its standards across a broad age spectrum and with seminal documents, particularly the Common Core.

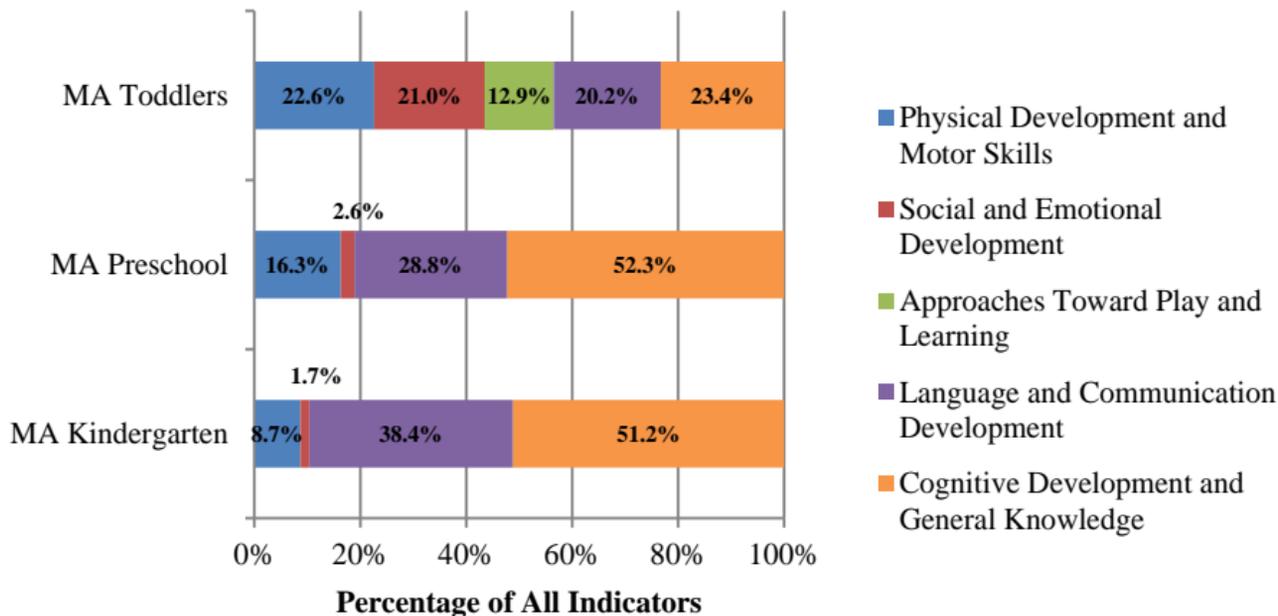
Major Findings #2

Balance

- The toddler standards are quite balanced across the five domains in the construct template.
- The preschool and kindergarten standards place more emphasis on Cognitive Development, particularly the subject areas, and less attention on Social-Emotional Development and Approaches Toward Play and Learning.
- The tension between an academic and holistic orientation--*not unique to Massachusetts*--is thus evident in the toddler, preschool, and kindergarten standards.

Major Findings #2

Balance Analysis: MA Toddlers, MA Preschool, and MA Kindergarten



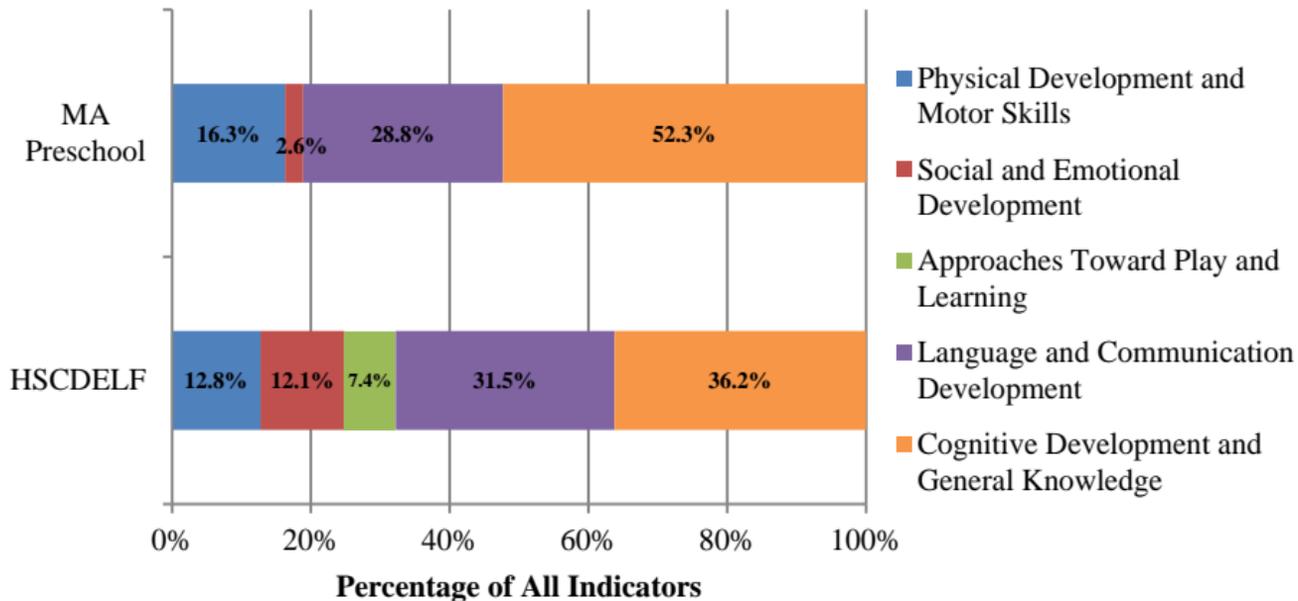
Major Findings #3

Balance

- The HSCDELf and preschool standards align well on Language and Communication.
- The preschool standards place a somewhat greater emphasis on Physical Development and a much greater emphasis on Cognitive Development than the HSCDELf.
- The HSCDELf places a much greater emphasis on Social-Emotional Development and Approaches Toward Play and Learning than the preschool standards.

Major Findings #3

Balance Analysis: MA Preschool and the HSCDELF



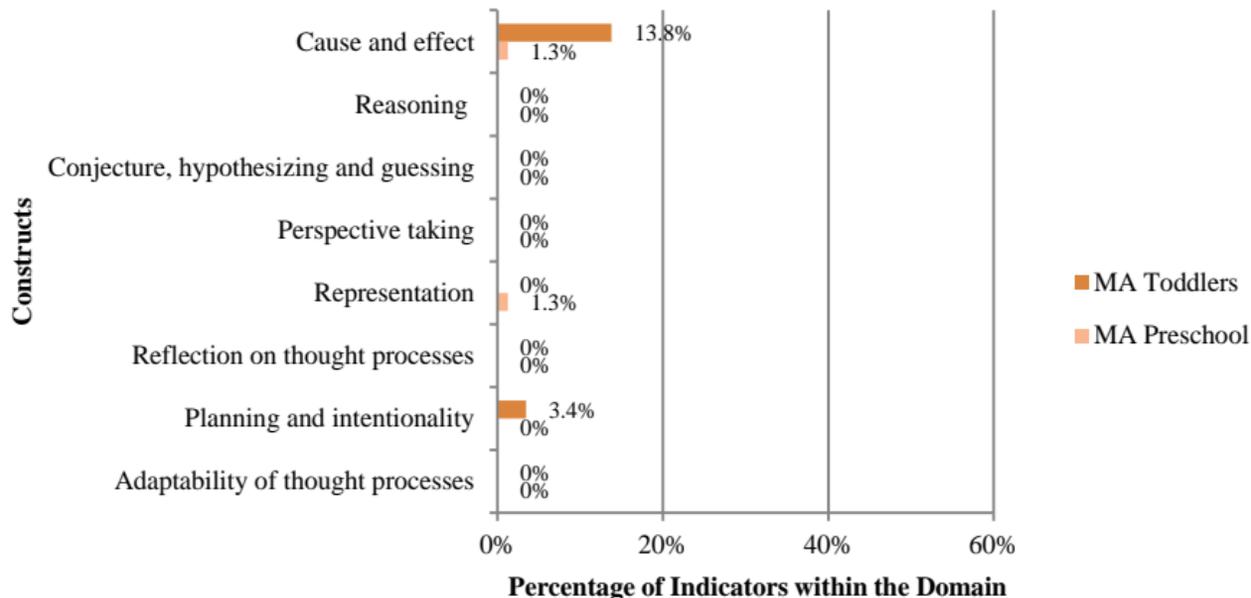
Major Findings #4

Coverage/Depth

- The coverage of specific constructs was generally good in the toddler standards, with only a few missing constructs, such as nutrition and vocabulary.
- There were more constructs missing in the preschool and kindergarten documents, with several missing constructs related to physical fitness, social-emotional development, approaches toward play and learning, and **the cognitive processes**.

Major Findings #4

Coverage/Depth Analysis in the Cognitive Processes: MA Toddlers and MA Preschool



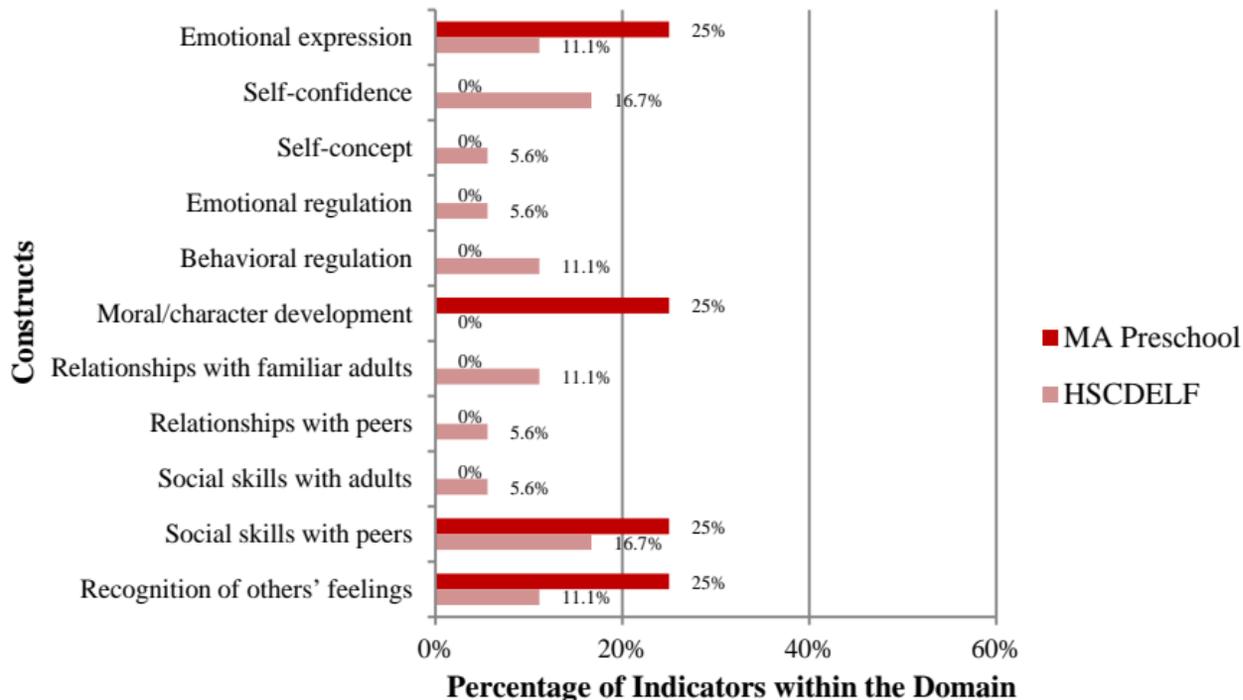
Major Findings #5

Coverage/Depth

- Alignment between the HSCDELf and Massachusetts preschool standards is pretty good in some areas, such as physical development.
- The HSCDELf covers a broader array of constructs that address social and emotional development, approaches toward play and learning, and the cognitive processes.
- The HSCDELf devotes a large portion of indicators to English language acquisition; the preschool standards do not.
- In Mathematics, neither the HSCDELf nor the preschool standards covers data and mathematics processes.

Major Findings #5

Coverage/Depth Analysis in Social and Emotional Development: MA Preschool and the HSCDELF



Major Findings #6

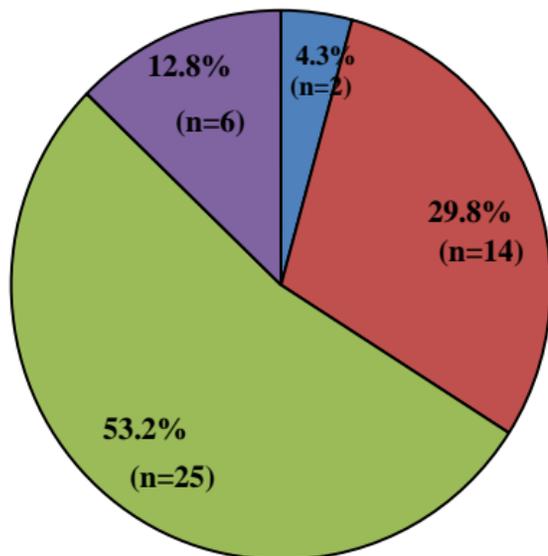
Difficulty

- The progression of difficulty from toddler to preschool was particularly strong, and the progression from preschool to K was good.
- There were some examples of equal difficulty between the preschool and kindergarten standards, and some in which kindergarten was much more difficult.
- Alignment with the HSDCELf was mixed; in some areas, the HSCDELf was more difficult, while in others, the preschool standards were more difficult.

Major Findings #6

Difficulty: MA Preschool and MA Kindergarten: English Language Arts and Literacy

Indicator Pairs (n=47)



Unpaired Indicators

MA Preschool: 3

MA Kindergarten: 19

- MA Preschool more difficult than MA Kindergarten (-)
- Equal difficulty (=)
- MA Kindergarten more difficult than MA Preschool (+)
- MA Kindergarten much more difficult than MA Preschool (++)

Summary

- In the Massachusetts standards, we found many examples of good alignment across the age levels, but fewer between the preschool standards and HSCDELf.
- The progression of difficulty between the preschool and kindergarten standards was somewhat inconsistent.
- Some areas that were under-addressed in the preschool and kindergarten standards:
 - Social and Emotional Development
 - Approaches Toward Play and Learning
 - English Language Acquisition
 - The Cognitive Processes

Part IV:
Recommendations

Next Steps

- Massachusetts has developed a solid set of standards to address birth through age five, and made a great effort to align the standards with the Common Core for kindergarten.
- This analysis has yielded recommendations regarding revisions that would further strengthen the Massachusetts standards, and we suggest that the Department consider revising the standards with those recommendations in mind.

Solomon's Dilemma

- Our two national documents, the HSCDEL and Common Core, are not very well aligned.
- This poses a problem, not only for Massachusetts, but for the entire early childhood field.
- Both documents are important and valuable to children and the field of early education.

Recommendations

- We recommend creating a robust set of standards that does not ignore either of the national documents, but aligns with them as appropriate within the context of Massachusetts.
- Specifically, we suggest adding indicators to the preschool and kindergarten standards to fully address Social and Emotional Development, Approaches Toward Play and Learning, the Cognitive Processes, and English Language Acquisition.
- It would also be worth “tweaking” some of the indicators to make the progression of difficulty between the preschool and kindergarten standards more consistent.

The Goal

- The revisions would help to:
 - Improve the alignment of the Massachusetts toddler, preschool and kindergarten standards, and to improve alignment of the preschools standards with the HSCDELF.
 - Improve the quality of the documents and ease the tension between a holistic and academic orientation across the age spectrum.

Where to Begin?

- We recommend the Department begin by revising the preschool standards.
- Consider using the HSCDEL as a metric (albeit an imperfect one) to improve the quality of the preschool standards, and then revise the toddler and kindergarten standards as needed to improve alignment.

Massachusetts as a Leader

- Resolving the challenges inherent in Solomon's dilemma is not only germane to Massachusetts, but to all the states.
- The Massachusetts standards could become the base for common standards that could be voluntarily adopted by other states.
- This would again position Massachusetts at the forefront of early childhood education.
- In any case, Massachusetts starts with a solid set of standards for early childhood learning. Bravo, Massachusetts!