

THE DEVELOPMENT OF CORE CROSS DISCIPLINARY EARLY CHILDHOOD COMPETENCY AREAS



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The Development of Core Cross Disciplinary Early Childhood Competency Areas

The Early Childhood Personnel Center (ECPC) was funded by the Office of Special Education Programs (OSEP) at the U.S. Department of Education to provide technical assistance to state systems of early childhood intervention and Institutions of Higher Education (IHE) on issues related to personnel development. One initiative of the ECPC has been to collaborate with professional organizations to identify core cross disciplinary competencies for all personnel serving infants and young children age birth to five with disabilities and their families.

Background

Over the past six years seven national organizations representing disciplines providing services in early childhood have participated in this initiative: the American Occupational Therapy Association (AOTA); the American Physical Therapy Association (APTA); the American Speech-Language-Hearing Association (ASHA); the Council of Exceptional Children (CEC) and the Division of Early Childhood (DEC), the National Association for the Education of Young Children (NAEYC); and Zero to Three.

In **early 2013** the ECPC identified representatives from each of the seven national organizations to participate in a cross disciplinary early childhood stakeholders' group. A first meeting of the stakeholders group was held on **October 29, 2013** in Washington, D.C. Representatives overviewed the competencies, skills, roles, and responsibilities required for professionals from each discipline serving children birth to five and families, and provided an update on the current activities and resources related to personnel preparation and continuing education from each professional organization. Stakeholders established a consensus on the need to identify core cross disciplinary early childhood competency areas.

In **April 2014** a draft alignment of early childhood personnel competencies was completed by the ECPC with the personnel standards of DEC aligned with the personnel standards of AOTA, APTA, ASHA and NAECY. This alignment was intended to inform the identification of common competency areas across the disciplines by the organization representatives.

On **December 11, 2014** the second cross disciplinary stakeholders meeting was held in Washington, D.C. Updates were provided from each of the national associations represented at the meeting related to knowledge and skills requirements for individuals serving children birth to five and their families. Representatives received a copy of the draft alignment of personnel competencies and collaboratively generated a preliminary list of common competency areas and sub-areas listed below in Table 1.

Table 1. Preliminary List of Common Cross Disciplinary Early Childhood Competencies identified by the Stakeholders Group in December 2014

Coordination and	Family Centered Practice	Data-based	Professionalism
Collaboration		Intervention/Instruction	
Knowledge and	 Listening to families 	Individualized	 Advocacy
respect of other	 Respecting family 	 Interaction based 	• Ethics
disciplines	background/structure/	Knowledge of Child	 Accountability
preparation and skills	culture and choices	Development and	 Responsibility
		Learning Theories	

Ability to develop and implement joint	 Sharing information and skills with families 	Application of Learning Theories	Orientation to professional
assessment,		• Assessment	service
planning,		Curricula (DAP)	• Leadership
interventions and	 Supporting and 	Using learning	
evaluation across	partnering with	opportunities through	
disciplines and	families	activities and routines	
learning contexts		Functional Curricula	
 Ability to collaborate 		(DAP)	
with others in		 Future Orientation 	
community including		and transition	
EC agencies,			
programs and setting			

The stakeholders agreed to next review current personnel standards of each organization to systematically identify commonalities across competencies with a focus on high-impact evidence-based practices, to prepare manuscripts by each discipline, and to work collaboratively to submit conference proposals related to progress made in the identification and endorsement of common personnel competencies.

On **July 30, 2015** the third cross disciplinary stakeholders meeting was held in Washington, D.C. Updates were provided from each of the national associations represented at the meeting related to knowledge and skills requirements for individuals serving children birth to five and their families. The ECPC presented examples of personnel standards from each discipline that corresponded with the four common competency areas and sub-areas identified in 2014. Collectively representatives identified the need to develop a crosswalk of all personnel standards from each discipline in the four common competency areas, discussed the process to obtain approval of the common competencies by the boards of each professional organization, and began to brainstorm methods of disseminating information on the common competency areas to the field such as webinars, information briefs, and case studies.

Also, in **2015**, the following four manuscripts related to the cross disciplinary personnel competencies were published in *Infants & Young Children*:

- Stayton, V. D. (2015). Preparation of early childhood special educators for inclusive and interdisciplinary settings. *Infants & Young Children*, 28, 113-122.
- Muhlenhaupt, M., Pizur-Barnekow, K., Schefkind, S. Chandler, B., & Harvison, N. (2015). Occupational therapy contributions in early intervention: Implications for personnel preparation and interprofessional practice. *Infants & Young Children*, 28, 123-132.
- Catalino, T., Chiarello, L. A., Long, T., & Weaver, P. (2015). Promoting professional development for physical therapists in early intervention. *Infants & Young Children*, 28, 133-149.
- Prelock, P. A. & Deppe, J. (2015). Speech-language pathology: Preparing early interventionists. *Infants & Young Children*, 28, 150-164.

On March 21, 2016 the cross disciplinary stakeholders participated in a conference call to create a plan for continued development and dissemination of materials pertaining to the core cross disciplinary early childhood competencies that will assist the professional organizations to share

the competencies with their members. Updates were provided from each of the national associations represented at the meeting related to knowledge and skills requirements for individuals serving children birth to five and their families. The stakeholders provided the most recent description(s) of their personnel standards or competency areas specific to their discipline to the ECPC. A comparison was done across each of these documents to organize each discipline's personnel standards into the four cross disciplinary competency areas and using a process of thematic analysis to identify the common sub-areas across the organization's personnel standards. Additional information on the methodology is described below.

Methodology for Organizing Discipline Standards into Four Core Cross Disciplinary Early Childhood Competency Areas

In April 2016 two members of the ECPC staff (1 post doc and 1 research assistant) began the process of organizing the personnel standards of AOTA, ASHA, APTA, CEC, DEC, NAEYC and Zero to Three into the four core cross disciplinary early childhood competency categories. First they requested confirmation from the national organizations on the document(s) containing the most current version of their personnel standards. The organizations provided between one and eleven documents for the alignment process. After reviewing each document, one document was identified from each national organization as the document containing the organization's personnel standards (i.e., knowledge and skill statements), with two organizations identified as having a secondary document also containing personnel standards. A total of 752 standards were identified across the organizations' documents. These standards were then compiled into a spreadsheet. The remaining documents, including position statements, technical reports and overviews of systematic reviews, were identified as supportive documents to provide context to the discipline's work.

Using the main and supportive standards documents from all of the national organizations, the two ECPC staff members created operationalized definitions of the four previously agreed-upon core cross disciplinary early childhood competency areas: a) coordination and collaboration, b) family-centered practice, c) intervention as informed by evidence, and d) professionalism. The definitions were based upon the organization's descriptions of these categories found in narrative statements such as introductions and other areas of the main documents, and text of the supportive documents. Definitions did not come from individual items or standards, and no definition is solely attributable to one disciplinary field. In addition, evidence-based references were identified from peer-reviewed journals for each of the four categories. Alignment rules were created to standardize the process of organizing all personnel standard items into the four interdisciplinary categories. These rules included: individual items can only be grouped into one of the four categories, all items will be categorized, and a tie breaker will be used for disagreements.

The two ECPC staff members individually grouped each item/standard (n=752) into one of the four competency areas using the operationalized definitions. Once completed the two staff

members came together to discuss their findings. Upon discussion, 96% of the items were coded the same between the two staff. Questions were brought up for 4% of the items (n=27), which the two staff could not come to consensus on a category based upon the operationalized definitions. These uncategorized items were then given to the Director who discussed items with the staff and categorized them as the tiebreaker. The category definitions were then updated and finalized based on these newly categorized items.

Documents were then created for the items assigned to each of the four cross disciplinary competency areas, and two independent reviewers (early childhood professionals and graduate students in early childhood intervention) conducted a review of each document to ensure that items had been properly assigned to the most relevant interdisciplinary category using the operationalized definitions for reference. The reviewers together identified 37 items (5%) of disagreement with the original coders. An expert reviewed these items and identified only 20 items (3%) to be re-categorized. These 20 items were re-categorized in the master document. The frequency of item assignment into the four core cross competency areas is provided below in Table 2.

Table 2. Organization of Early Childhood Personnel Standards into the Four Core

Cross-Disciplinary Early Childhood Competency Areas

_			Compete	ncy Areas	
	Number	Family Centered	Instruction/	Collaboration &	
Organization	of Items	Practice	Intervention	Coordination	Professionalism
Total	752	149	406	98	99
Percent		20%	54%	13%	13%
AOTA	40	1	20	6	13
APTA	40	8	17	11	4
ASHA	263	42	163	36	22
CEC	35	4	21	4	6
DEC	80	12	50	10	8
NAEYC	24	4	12	0	8
ZTT	270	78	123	31	38

Methodology for Organizing Discipline Standards into Subcomponents of the Four Cross Disciplinary Early Childhood Competency Areas

Together in May 2016, the same two members of the ECPC staff used a process of thematic analysis to group individual personnel standard items from each of four cross disciplinary competency areas into subcomponents. They cut strips of paper for each item and together physically grouped them by theme or idea, for example "transitions". All subcomponent titles were developed solely on the basis of the information in the personnel standard items. The two

staff grouped and named the subcomponents together. When unsure about a certain item, they left it out to the side. This categorizing process was iterative and the two staff reviewed and rereviewed the categories once grouped, and re-grouped items based on discussion. The ECPC Director then reviewed the groupings and the subcomponent names for each of the four competency areas. She acted as tie-breaker and categorized the previously undecided items. The items were then recorded in a word document and also coded in an excel document by competency area, subcomponent, and organization. The results of the item assignment into the four cross disciplinary subcomponent categories are provided below by competency area in Tables 3-6.

Table 3. Themes identified within the Cross Disciplinary Competency area of Family Centered Practice (n=149)

Subcategory	AOTA	APTA	ASHA	CEC	DEC	NAEYC	ZTT
(number of personnel standards)	1	8	42	4	12	4	78
Across 6 Organizations							
Family Involvement in Assessment (n=15)		2	5	1	4	1	2
Acro	ss 5 Orgar	nizations					
Cultural, Linguistic and Socioeconomic Competency (n=32)	1		7	2		1	21
Parent Partnership, Advocacy & Help-Giving (n=32)		2	13		2	1	14
Parent Education in Child Development & Interventions (n=24)		1	7		2	1	13
Family Systems Theory (n=16)		2	4	1	2		7
Acro	ss 3 Orgar	nizations					
Laws & Policies (n=3)			1		1		1
Acros	s 1-2 Orga	nizations					
Supporting Home Language Development (n=6)			2				4
Stress, Trauma, & Safety (n=6)		1					5
Parent/Caregiver Social Emotional/Attachment (n=6)					1		5
Communicating with Families (n=5)			3				2
Nutrition (n=4)							4

Table 4. Themes identified within the Cross Disciplinary Competency area of Intervention as Informed by Evidence (n=406)

Subcategory	AOTA	APTA	ASHA	CEC	DEC	NAEYC	ZTT
(number of personnel standards)	20	17	163	21	50	12	123
Across 7 Organizations							

Intervention	6	2	33	7	25	4	103
(n=180)							
Assessment	6	4	39	2	6	3	1
(n=61)							
Acro	oss 5 Orga	nizations					
Knowledge of Typical Child Development &			22	1	8	3	13
Behavior (n=47)							
Communicating & Interpreting Assessment	2	1	15	1	2		
Results (n=21)							
Progress Monitoring	1	4	10	1	1		
(n=17)							
Evidence Based Practice		3	10	1	2		1
(n=17)							
Health & Safety	4		7	1	1		2
(n=15)							
Acre	oss 4 Orga	nizations					
IEP/IFSP	1	3	5		1		
(n=10)							
Knowledge of Risk Factors & Atypical Child			14	1	2		1
Development							
(n=18)							
Accommodations & Adaptations			2	6	2		2
(n=12)							
Acr	oss 2 Orga	nizations					
Service Delivery Models			6			2	
(n=8)							

Table 5. Themes identified within the Cross Disciplinary Competency area of Coordination and Collaboration (n=98)

Subcategory	AOTA	APTA	ASHA	CEC	DEC	NAEYC	ZTT
(number of personnel standards)	6	11	36	4	10	0	31
Ac	ross 6 Org	anizations	;				
General Teaming	1	2	8	2	3		5
(n=21)							
Ac	ross 4 Org	anizations	;				
Resource & Referrals	2		16		2		6
(n=26)							
Transitions	3		2	1	3		
(n=9)							
Role as a Consultant		1	2	1	2		
(n=6)							
Ac	ross 3 Org	anizations	3				
Effective Communication		1	5				2
(n=8)							
Acro	oss 1-2 Org	ganization	15				
Teaming with Families		4					3
(n=7)							
Problem Solving			2				4
(n=6)							

Leader of a Team	3			1
(n=4)				
Medical Home		1		1
(n=2)				
Positive & Respectful Relationships				9
(n=9)				

Table 6. Themes identified within the Cross Disciplinary Competency area of Professionalism (n=99)

Subcategory	AOTA	APTA	ASHA	CEC	DEC	NAEYC	ZTT
(number of personnel standards)	13	4	22	6	8	8	38
,	Across 7 Or	ganizatio	าร				
Advocacy/Public Awareness	1	1	3	1	2	1	5
(n=14)							
,	Across 6 Or	ganizatio	ns				
Professional Development & Self-		1	2	1	1	3	12
Reflection (n=20)							
Knowledge of the Field	2		1	2	1	3	3
(n=12)							
,	Across 5 Or	ganizatio	ns				
Laws, Policies & Practice Standards	8	1	9		4		4
(n=26)							
Ethics	2		2	1		1	8
(n=14)							
,	Across 3 Or	ganizatio	ns				
Administrative Leadership		1	1				3
(n=5)							
Supervision			1	1			2
(n=4)							
	Across 1 O	rganizatio	n				
Communication			3				
(n=3)							
Wellness							1
(n=1)							

The sub-area items that appeared in at least two discipline documents are listed below in Table 7.

Table 7. Cross Disciplinary Early Childhood Personnel Competency Areas and Sub-Areas

COORDINATION & COLLABORATION	FAMILY CENTERED PRACTICE	INTERVENTION AS INFORMED BY EVIDENCE	PROFESSIONALISM
Effective	Communicating with	Accommodations &	Administrative Leadership
Communication	Families	Adaptations	
			Advocacy/Public
General Teaming	Cultural, Linguistic and Socioeconomic	Assessment Communicating &	Awareness
Leading a Team	Competency	Interpreting Assessment Results	Ethics

Medical Home	Family Involvement in	Evidence Based Practice	Knowledge of the Field
	Assessment		
Problem Solving		Health & Safety	Laws, Policies & Practice
	Family Systems Theory		Standards
Resource & Referral		IEP/IFSP	
	Laws & Policies	Intervention	Professional Development
Role as a Consultant			& Self-Reflection
	Parent Education in	Knowledge of Risk Factors &	
Teaming with Families	Child Development &	Atypical Child	Supervision
	Interventions		
Transitions		Development	
	Parent Partnership,	Knowledge of Typical Child	
	Advocacy & Help-Giving	Development & Behavior	
	Parent/Caregiver Social	Progress Monitoring	
	Emotional/Attachment		
		Service Delivery Models	
	Stress, Trauma, & Safety	,	
	Supporting Home		
	Language Development		

On **September 15, 2016** the fourth cross disciplinary stakeholders meeting was held in Washington, D.C. Updates were provided from each of the national associations represented at the meeting related to knowledge and skills requirements for individuals serving children birth to five and their families. Representatives from each of the seven professional organizations reviewed the results of the organization of the personnel standards into the four common competency areas and the identified sub-areas. Collectively the organization representatives revised the area of "data-based intervention/instruction" to "interventions has informed by evidence," and then identified three cross-category themes: i) evidence-based practice, ii) communication, and iii) cultural competency.

On February 28, 2017 the cross disciplinary stakeholders participated in a conference call to discuss the development and dissemination of products related to the core cross disciplinary early childhood competency areas, which included operationalized definitions for the cross disciplinary competency sub-areas, position papers for discipline organizations, a webinar series, an article for NAEYC, and IYC articles based on case study approaches. Updates were provided from each of the national associations represented at the meeting related to knowledge and skills requirements for individuals serving children birth to five and their families. Next organization representatives will be presenting these core competency areas for approval to each of their respective organizations. The ECPC will exemplars of practice to demonstrate the core cross disciplinary early childhood competency areas for use by professional organizations, Institutions of Higher Education and State Systems of Early Childhood Personnel Development.

In **July 2017**, the cross disciplinary stakeholders met in Washington, DC to discuss the future of the group as the ECPC was not going to be funded (at that point). The boards of six of the professional organizations had endorsed the competency areas. Updates from each organization was given. At the conclusion of the meeting, the group chose to continue to work together, and renamed themselves the Cross Disciplinary Workgroup.

After the ECPC was funded for another 5 years beginning in **January 2018**, the cross disciplinary work group met in CT for a 2-day meeting in **June 2018**. One of the workgroup members had been hired to coordinate the work groups product development. A video consultant came to the meeting to talk about identifying or developing videos to illustrate the competencies. The recommendation of the group was to begin by identifying existing videos and resources. The group also agreed to develop case studies and articles. The sample exemplars from the alignments were used to structure the case studies.

The workgroup met in October, 2018 and January 2019. A resource list was compiled of products illustrating each of the competency areas. It was decided that the areas needed to be defined better through sub competencies. The group agreed that the ECPC would identify exemplars of practice to demonstrate the core cross disciplinary early childhood competency areas for professional organizations, Institutions of Higher Education and State Systems of Early Childhood Personnel Development.

The ECPC staff first combined the sub competency areas identified by the workgroup 5 years earlier with the sub competency areas identified through the alignments (Table 8) by identifying similar themes.

Table 8. Combined Cross Disciplinary Early Childhood Personnel Competency Areas and Sub-Areas (* original sub-areas brainstormed from workgroup)

COORDINATION & COLLABORATION	FAMILY CENTERED PRACTICE	INTERVENTION AS INFORMED BY EVIDENCE	PROFESSIONALISM
Effective Communication	Communicating with Families	Knowledge of Typical Child Development & Behavior • Knowledge and	Administrative Leadership
Team ParticipationKnowledge and respect of other	Cultural, Linguistic and Socioeconomic Competency	application of learning theories	Advocacy/Public Awareness
disciplines preparation and skills • Ability to develop	Parent Partnership, Advocacy & Help- Giving	Knowledge of Risk Factors & Atypical Child Development Assessment	Ethics Knowledge of the Field
and implement joint assessment, planning, interventions and evaluation across	Family Involvement in Assessment Family Systems Theory	Communicating & Interpreting Assessment Results	Laws, Policies & Practice Standards • Accountability • Responsibility
disciplines and learning contexts Facilitate Transitions	Parent Education in Child Development & Interventions	IFSP/IEP Practices/interventions • Individualized • Functional Curricula/Future Orientation	Professional Development & Self- Reflection • Orientation to professional service

Able to Provide Resources & Referrals	Interaction BasedUsing learning	
Resources & Referrals	opportunities through	Supervision
Able to be a	activities and routines	Responsibility
Consultant	Accommodations &	Orientation to professional service
Ability to collaborate with	Adaptations	professional service
others in	Maptations	
community	Progress Monitoring	
including EC		
agencies, programs	Service Delivery Models	
and setting	Health and Safety	

The ECPC took the information in Table 8 and defined the sub-areas by competency to be completed. A draft was sent to the cross disciplinary work group for editing and approval. Table 9 contains the final list of approved competencies and sub-areas.

Table 9. Final Cross Disciplinary Early Childhood Personnel Competency Areas and Sub-Areas

COORDINATION &	FAMILY CENTERED	EVIDENCED BASED	PROFESSIONALISM
COLLABORATION	PRACTICE	INTERVENTION	
Coordinates and collaborates with the family and other practitioners from different disciplines and agencies throughout the intervention process • Uses effective communication skills (listening, speaking, writing) with others	Develops partnerships with families, regardless of background or need, to help them advocate and participate in their child's learning • Includes the family in all components of the early childhood intervention process	Implements evidence-based assessment and intervention practices which includes the collection of data to document child and family outcomes • Demonstrates knowledge of typical and atypical child development (including risk factors) throughout the intervention process	Follows laws, policies, advocacy guidelines, code of ethics and practice standards of their discipline • Demonstrates ethical decision making and professional behavior as an early childhood interventionist

- Shares information and resources with others from different disciplines and agencies
- Coordinates the delivery of early intervention services, resources and interventions with practitioners from other disciplines and agencies
- Demonstrates leadership at meetings with others from different disciplines and agencies to implement a team approach to service delivery
- Collaborates with others to assess the child and family, design intervention objectives and learning plans, assign responsibilities for the implementation of the plan and collect progress monitoring date on a child and family learning

- Uses effective communication (listening, speaking, writing) skills with families from different cultural, linguistic and socioeconomic backgrounds
- Provides information to families about early childhood intervention policies, regulations and procedures
- Assesses family strengths, risk factors, concerns, and priorities
- Refers families to needed resources and services to help them meet the needs of their child, their family and themselves
- Provides information and education to families about their child's health and safety needs
- Provides information and education to families about child development

- Uses valid, reliable, nondiscriminatory procedures and instruments during the assessment process for:

 a) identification and eligibility, b) diagnostic evaluation, c) individual program planning, d) documentation of child progress, family outcomes, and program impact
- Uses evidenced based practices when developing the intervention plan (IEP/IFSP) with others including the family
- Demonstrates

 applications of
 evidenced based
 practices during
 interventions with a
 child and family,
 including the use of
 accommodations,
 modifications and
 adaptations of
 developmentally
 appropriate curriculum
- Collects data to monitor child and family progress and document evidence of intervention effectiveness
- Uses evidence-based practices across different service delivery models

- Demonstrates knowledge of the early childhood intervention field and their discipline's practice standards and guidelines
- Demonstrates awareness of other disciplinary practice standards and guidelines in early childhood intervention
- Uses self-reflection and professional development to stay current in evidenced based disciplinary and interdisciplinary practice
- Provides reflective supervision to other ECI staff
- Mentors, teaches and provides feedback to other early childhood interventionists throughout the intervention process
- Uses effective advocacy skills to improve ECI
- Provides disciplinary and interdisciplinary leadership to the field of ECI

 Negotiates with 	Provides	
others from	information and	
different disciplines	education to	
and agencies who	families about early	
have different	childhood	
viewpoints and	assessment,	
opinions to	intervention and	
problem solve and	evaluation	
take actions to		
benefit the child	Provides	
and family	information and	
	education to	
Facilitates	families about early	
transitions from	childhood	
the Part C or 619	intervention	
programs to	service delivery	
another program		
with others and the	Provides	
family	information and	
	education to	
	families about	
	advocacy for	
	themselves, their	
	family and their	
	child	

These competencies will be approved by the workgroup and applied to case studies and used to organize the resources for training each competency.

Appendix A: Source Documents

- AOTA American Occupational Therapy Association. (2015). Standards of practice for occupational therapy. *American Journal of Occupational Therapy*, 69(Suppl. 3), 6913410057.
- AOTA American Occupational Therapy Association. (2014). *Frequently asked questions (FAQ): What is the role of occupational therapy in early intervention?* Bethesda, MD: AOTA Press.
- AOTA American Occupational Therapy Association. (2013). *Occupational therapy practice guidelines* for early childhood: Birth through 5 years. Bethesda, MD: AOTA Press.
- AOTA Arbesman, M., Lieberman, D., & Berlanstein, D. R. (2013). Method for the systematic reviews on occupational therapy and early intervention and early childhood services. *American Journal of Occupational Therapy*, *67*(4), 389-394.
- AOTA Case-Smith, J. (2013). Systematic review of interventions to promote social-emotional development in young children with or at risk for disability. *American Journal of Occupational Therapy*, *67*(4), 395-404.
- AOTA Case-Smith, J., Frolek Clark, G. J., & Schlabach, T. L. (2013). Systematic review of interventions used in occupational therapy to promote motor performance for children ages birth-5 years.

 American Journal of Occupational Therapy, 67(4), 413-424.
- AOTA Frolek Clark, G. J. & Schlabach, T. L. (2013). Systematic review of occupational therapy interventions to improve cognitive development in children ages birth-5 years. *American Journal of Occupational Therapy*, 67(4), 425-430.
- AOTA Howe, T. H., & Wang, T. N. (2013). Systematic review of interventions used in or relevant to occupational therapy for children with feeding difficulties ages birth-5 years. *American Journal of Occupational Therapy*, 67(4), 405-412.
- AOTA American Occupational Therapy Association. (2011). Occupational therapy services in early childhood and school-based settings. *American Journal of Occupational Therapy,65* (Suppl. 6),S46-S54.
- AOTA American Occupational Therapy Association. (2007). Specialized knowledge and skills for occupational therapy practice in the neonatal intensive care unit. *American Journal of Occupational Therapy*, 60(6), 659-668.
- AOTA American Occupational Therapy Association. (2007). Specialized knowledge and skills in feeding, eating, and swallowing for occupational therapy practice. *American Journal of Occupational Therapy, 61*(6), 686-700.
- APTA American Physical Therapy Association. (2009). *Minimum required skills of physical therapist graduates at entry-level*. BOD G11-05-20-49. Available from http://www.apta.org/Educators/Clinical/EducationResources/

toddler educators. Washington, DC: ZERO TO THREE.

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Angeles: Author.

APTA Chiarello, L., & Effgen, S.K. (2006). Updated competencies for physical therapists working in early intervention. *Pediatric Physical Therapy*, 18(2), 148-67. Commission on Accreditation in Physical Therapy Education. (2015). Standards and required **APTA** elements for accreditation of physical therapist education programs. Available from http://www.capteonline.org/AccreditationHandbook/ **APTA** Rapport, M. J., Furze, J., Martin, K., Schriber, J., Dannemiller, L. A., DiBiasio, P. A., & Moerchen, V.A. (2014). Essential competencies in entry-level pediatric physical therapy education. Pediatric Physical Therapy, 26(2), 7-67. **ASHA** American Speech-Language-Hearing Association. (2008). Core knowledge and skills in early intervention speech-language pathology practice [Knowledge and Skills]. Available from www.asha.org/policy **ASHA** American Speech-Language Hearing Association. (2006). Roles, knowledge, and skills: Audiologists providing clinical services to infants and young children birth to 5 years of age [Knowledge and Skills]. Available from www.asha.org/policy. American Speech-Language-Hearing Association. (2008). Roles and responsibilities of speech-**ASHA** language pathologists in early intervention: technical report [Technical Report]. Available from www.asha.org/policy. CEC Council for Exceptional Children. (2014). Initial preparation standards. Available from https://www.cec.sped.org/Standards/Special-Educator-Professional-Preparation-Standards DEC Division of Early Childhood. (2014). Personnel standards for early intervention and early childhood special education, specialty set: Initial early childhood and early intervention special education. Available from http://www.decsped.org/About DEC/Personnel Standards for Early Intervention and Early Childhood Spe cial Education NAEYC National Association for the Education of Young Children. (2009). Standards for early childhood professional preparation. Available from http://www.naeyc.org/files/naeyc/file/positions/ProfPrepStandards09.pdf ZERO TO Dean, A., LeMonie, S., & Mayoral, M. (2016). ZERO TO THREE Critical competencies for infant-

ZERO TO THREE. (2005). Cross-sector core competencies for the prenatal to age 5 field. Los