

Appendix N



# Washington Social Emotional Learning Standards

Annotated Bibliography  
Evidence Basis for SEL

JUNE 2018

Elizabeth Nolan | Mara Schanfield | Nick Yoder, PhD

MAKING RESEARCH RELEVANT



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## Introduction

In 2017, the Washington State Legislature charged the Office of Superintendent of Public Instruction (OSPI) to convene a workgroup to build upon the work of the Washington Social Emotional Learning Benchmarks Workgroup (2016) to identify and articulate developmental indicators for each grade level for each social emotional learning (SEL) benchmark. To support the development of the SEL indicators, OSPI requested that the American Institutes for Research (AIR) conduct an initial scan of relevant literature (theoretical and empirical) related to each of the Washington State K–12 Social Emotional Learning Standards to look at each competency through a developmental lens and identify any relevant gaps in the literature.

A strong basis of evidence supports the development of social and emotional competencies throughout the lifespan (Jones & Kahn, 2017). Many of these competencies are interrelated in human development, yet conceptually distinct in the literature (Jones et al., 2017). As human development is dynamic and bidirectional, researchers highlight that social, emotional, and behavioral competencies develop simultaneously. Development comprises an ongoing change process whereby individuals are shaped by their social contexts, and those contexts also are shaped by individuals and their interactions (Lerner, 2006).

Research on social and emotional development is complex and nonlinear, and therefore it is difficult to assign a concrete definition of a developmental competency to a specific grade or age. Most research consulted for this literature review defined social and emotional competencies within broad developmental periods—for example, middle childhood and adolescence—rather than by grade level.<sup>1</sup> This is expected because developmental literature concerns children across settings, not just in school. Although some researchers distinguish subperiods in adolescence, such as early (ages 12–14) and middle adolescence (ages 15–18), most researchers refer to adolescence as a single period. Therefore, articles are categorized as belonging to one of two developmental periods: middle childhood or adolescence. These two periods roughly align with the age range for students in Grades K–12 (6–18 years old). These periods are labeled “elementary grades” and “secondary grades” for the purpose of this review. In some instances, but not all, researchers distinguish growth within each developmental period.

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<sup>1</sup> This scan includes developmental periods that span from kindergarten to Grade 12 (ages 6–18) because this is the focus of the SELI Workgroup; however, we want to recognize the important contributions and well-researched areas of early childhood social, emotional, and behavioral development that are not included in this scan.

Most researchers also agree that development, although individual in nature, is shaped by social contexts (Lerner et al., 2016). Children are exposed to different social interactions on a daily basis, which they continuously learn from, mimic, and later express themselves. Development also is shaped by culture: different cultures value different norms and behaviors, meaning that what is considered adaptive in one culture may not be considered adaptive in another (Rubin & Menzer, 2010; Spencer, Dupree, & Hartmann, 1997). This has implications for how educators and researchers define social and emotional competencies.

It is important to note that not all aspects of social and emotional competencies are well understood—theoretically, empirically, or practically. For example, social engagement remains an understudied aspect of SEL, especially in middle childhood. However, inferences can be drawn from related fields of study, such as community psychology and youth development. Because understanding of social and emotional competencies draws on existing knowledge from a number of fields, extensive mismatch exists between frameworks and the terms defining social and emotional competencies (Berg et al., 2017), creating a layer of difficulty in conducting a comprehensive review. Research is still emerging about the best ways to reconcile these disparate terms and concepts (Jones, n.d.). With that in mind, though, developing SEL-related state standards is not an impossible task: several states have developed K–12 SEL standards already (e.g., Gordon, Ji, Mulhall, Shaw, & Weissberg, 2011). Careful attention must be paid to terminology when developing SEL standards to reflect alignment with the existing literature base.

The select literature in this document takes into account the complexities of social and emotional development. AIR focused on literature pertinent to the way in which OSPI had defined SEL standards. Although not a comprehensive or systematic review of all related literature, this initial scan provides the SEL Implementation (SELI) Workgroup an introduction to the literature. In the future, this annotated bibliography can be further elaborated. With additional time, AIR staff can identify literature related to each benchmark and assist the SELI Workgroup in aligning benchmarks in accordance with the literature.

## Methodology

AIR staff began by reviewing a repository of seminal articles previously collected by AIR on child development, social and emotional learning, and brain development, containing approximately 500 articles. To supplement this set of articles and provide greater focus for searching concrete behavioral competencies, AIR staff conducted targeted searches using online databases,

limiting searches to articles published in the past 20 years. Search terms were created by using combinations of the standard name and definition. In some areas, the searches were informed by the underlying benchmarks of the standard; however, there were instances in which the benchmarks did not align with the definition of the standards in the literature.<sup>2</sup> We then reviewed articles for appropriate fit with the standards and grade bands, and selected articles for inclusion. Following that, AIR staff wrote summaries of each article’s major argument(s), identified alignment with the standard, and defined how specific skills look along a developmental trajectory.

The annotated bibliography provides relevant research for the developmental periods of middle childhood (ages 6–11) and adolescence (ages 12–18). Some articles cover both middle childhood and adolescence, so, in these cases, the articles are categorized to the lower grade band while including information about the other. For the purposes of this document, “elementary grades” refers to kindergarten through sixth grade. These grades approximate the developmental period known as middle childhood, defined as ages 6–11. “Secondary grades” refers to Grades 7–12, approximating the period of adolescence, defined as ages 12–18. AIR’s mapping of grade bands to levels, ages, and developmental periods is displayed in Table 1.

**Table 1. AIR’s Mapping of Grade Bands, Ages, and Developmental Periods**

<b>Educational Level</b>	<b>Grade Band</b>	<b>Ages</b>	<b>Developmental Period</b>
Elementary	K–6	6–11	<i>Middle childhood</i>
Secondary	7–12	12–18	<i>Adolescence</i>

<sup>2</sup> In the next iteration of this work, AIR staff can identify literature for benchmarks that more closely match the definition of the term in the developmental literature.

## Standard 1: Self-Awareness

*Individual has the ability to identify and name one's emotions and their influence on behavior.*

### Elementary Grades

**Saarni, C. (1999). *The development of emotional competence*. New York, NY: Guilford Press.**

This book offers key insights into how children's development of emotional competence proceeds from infancy to early adolescence. The author defines emotional competence as being skilled in social transactions in which emotions are involved. The concept can be complex because emotional competence as a construct represents a host of developmental theories. Beginning in preschool, children communicate about emotions to others, which helps them develop emotional awareness. As children mature, they begin to evaluate themselves and their emotions. In middle childhood, children become aware of conflicting emotions, especially with regard to the same person. In adolescence, children become aware of emotional cycles (e.g., feeling upset, then feeling embarrassed for feeling upset). Emotional and social development are deeply intertwined: any interaction that causes an emotional response is embedded into the social and cultural context where the interaction takes place. To be meaningful, emotional competence must be considered with respect to an individual's cultural context.

**Eccles, J. S. (1999). *The development of children ages 6 to 14*. *The Future of Children*, 9(2), 30–44.**

This article examines a series of developmental changes that characterize middle childhood and adolescence. Eccles outlines the developmental conflict to be resolved at each developmental period. In middle childhood, children are learning to be competent and productive—cognitively, emotionally, and behaviorally—but may struggle with feelings of inferiority and trying to perform well. In adolescence, children are figuring out who they are and are developing their identities; however, they may become confused about their future roles. Self-awareness is a key skill that develops in middle childhood. Children form beliefs about how to learn, for example, and then experience strategies in classrooms that confirm or update their beliefs. Children become better able to retrieve information, reflect on that information, and integrate it to solve novel problems. To do this successfully, children in middle childhood must reflect on their emotions and behaviors and make a plan to act similarly or differently in the future (moving into self-management).



**Reese, E., Yan, C., Jack, F., & Hayne, H. (2009). Emerging identities: Narrative and self from early childhood to early adolescence. In K. C. McLean & M. Pasupathi (Eds.), *Narrative development in adolescence: Creating the storied self*. Boston, MA: Springer.**

In this chapter, the authors argue that the origins of self-awareness and creation of a narrative of oneself begin in early childhood and have foundations in parent–child interactions. As children mature, their ability to tell stories about themselves and their identities matures as well. Older children recall earlier parent–child memories as they begin to formulate their identities. Toward the upper band of middle childhood and into early adolescence, children begin to be able to make meaning out of events in their lives and integrate these situations into their identity formation. These processes set the stage for self-concept and self-awareness.

### **Secondary Grades**

**Hessler, D. M., & Katz, L. F. (2010). Brief report: Associations between emotional competence and adolescent risky behavior. *Journal of Adolescence*, 33, 241–246.**

This study looks at the connection between behavior and emotions: specifically, the association between risky behavior, self- or emotional awareness, and self-regulation. According to the authors, emotional awareness (knowledge about one’s feelings) precedes emotional regulation. To measure emotional regulation as a single construct, the researchers used a five-item scale, which asked adolescents to rate the difficulty they experienced in managing emotions such as anger and sadness. The findings suggest that children’s emotional competence could decrease risky behavior in adolescence. The authors also find that emotional competence skills developed earlier, in middle childhood, influence adolescent behavior. Specifically, children who did not develop adequate emotional awareness and regulation were more likely to turn to substance abuse and other externalizing behaviors as a coping mechanism, demonstrating the important connection between self-awareness and self-management.

**Eccles, J. S. (2009). Who am I and what am I going to do with my life? Personal and collective identities as motivators of action. *Educational Psychologist*, 44(2), 78–89.**

In adolescence especially, children begin to develop a set of beliefs about themselves and start to think about who they would like to become in the future—in essence, they begin to form their personal identities. These reflection skills are informed by two processes, both of which are social in nature. First, every child grows up in a cultural and social context and is exposed to a different set of behavioral norms based on their culture. Their reactions to the behaviors they witness shape their awareness and identity. Second, as children mature, they are better able to select their social contexts—including peer groups and social activities—which further modify their beliefs about themselves and their related behaviors.

## Standard 2: Self-Management

*Individual develops and demonstrates the ability to regulate emotions, thoughts, and behaviors in contexts with people different than oneself.*

### Elementary Grades

**Zelazo, P. D. (2015). Executive function: Reflection, iterative reprocessing, complexity, and the developing brain. *Developmental Review*, 38, 55–68.**

This article describes the development of executive function in early to middle childhood. Executive function includes cognitive flexibility, working memory, and inhibitory control, and the process starts early in childhood. Executive function promotes self-management, including the ability to regulate one's own emotions and behaviors, and helps children do so in a variety of contexts by considering others' perspectives. It also includes inhibitory control, or the ability to suppress attention that enables us to plan, stay focused on our plan, and manage our own behavior toward that goal. The author presents a model of how the brain reflects on and reprocesses information prior to generating a behavioral response. In early childhood, executive function abilities undergo a rapid transformation, and, in the preschool years, children acquire basic skills in reflection. In later years, children use their baseline executive function skills repetitively, incorporating their increasing levels of reflection to reprocess their executive function abilities. The author claims it is possible to strengthen the executive function in the brain by targeting the abilities of reflection and response.

**Davidson, M. C., Amso, D., Anderson, L. C., & Diamond, A. (2006). Development of cognitive control and executive functions from 4 to 13 years: Evidence from manipulations of memory, inhibition, and task switching. *Neuropsychologia*, 44(11), 2037–2078.**

This study examined three key components of executive function in early and middle childhood: working memory, inhibitory control or controlling impulses, and task switching. The authors provide subjects with a series of tasks that they must complete to measure their executive functions. The authors find that, after the age of 6, children are better able to hold multiple thoughts in their minds at once and use clues from their contexts to make decisions about their behaviors. However, these skills do not fully mature until young adulthood, meaning it is more difficult for younger children to control their impulses and regulate behavior. Cognitive flexibility, or the ability to switch between tasks, was found to be not fully mature at age 13; the authors concluded this skill does not mature until adulthood. Older children—those entering the adolescent years—and adults are more likely to control their impulses on tasks to preserve

their accuracy of completion, but this is far less prevalent in younger children. The study demonstrates that inhibition presides over attention and behaviors.

**Murray, D. W., Rosanbalm, K., Christopoulos, C., & Hamoudi, A. (2015). *Self-regulation and toxic stress: Foundations for understanding self-regulation from an applied developmental perspective* (OPRE Report #2015-21). Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research and Evaluation.**

This article focuses on the cognitive, emotional, and behavioral domains of self-regulation, with an eye toward contextual factors. Self-regulation is defined as managing thoughts and emotions to produce goal-directed behaviors, including organizing, controlling impulses, and solving problems. Self-regulation is malleable, or changeable, across the lifespan, and can be taught at any age, if appropriately modeled. Although manageable stress can strengthen self-regulation or coping skills, extreme stress can have a toxic effect if it overwhelms children's skills or the support that is available to them.

## Secondary Grades

**Steinberg, L. (2005). Cognitive and affective development in adolescence. *Trends in Cognitive Sciences*, 9(2), 69–74.**

This article discusses the neurological mechanisms that promote, and disrupt, self-management in adolescents. During adolescence, the author defines the major cognitive development task as becoming more self-directed and self-regulating. Due to ongoing changes and maturation in the brain, adolescents typically experience a period of increased vulnerability and adjustment. Existing research indicates that the onset of puberty occurs before an adolescent's frontal lobe is completely developed, meaning a need for self-control arises before the adolescent brain is physiologically ready to self-regulate. Specifically, in early adolescence, puberty increases a desire for novel sensations and rewards, which leads to heightened vulnerability to risk taking. Thus, self-management skills may be more difficult for adolescents to enact because they are subject to physiological changes they cannot control.

**Gestsdottir, S., & Lerner, R. M. (2008). Positive development in adolescence: The development and role of intentional self-regulation. *Human Development*, 51, 202–224.**

The authors posit that the fundamental challenge of adolescence is adapting to physical, contextual, and social changes. Navigating these transitions requires self-regulation, a term for skills that enable one to monitor and control thoughts, emotions, and behaviors. Interactions between individuals and their contexts are bidirectional: that is, individuals influence their contexts, and contexts help individuals develop. The authors explain that certain self-regulation

skills appear in toddlers (e.g., delayed gratification) and develop throughout childhood (e.g., executive function). Higher-order self-regulation capacities, such as goal-driven behavior, are mostly acquired during adolescence.

**Duckworth, A., Kim, B., & Tsukayama, E. (2013). Life stress impairs self-control in early adolescence. *Frontiers in Psychology, 3*(608), 1–12.**

This study examines how the occurrence of negative life events affects self-control—the tendency to regulate impulses and resist immediate rewards—in early adolescence through three studies. Using longitudinal data from three large samples, the researchers found that negative life events reported by the child or his or her mother led to small, measurable impacts on self-control. The findings suggest further support for the notion that stress can impair self-control skills in adolescence. In the discussion, the authors discuss the hypothesized implications for self-control in terms of two models of self-control: hot (impulsive, trigger-prone responses) and cool (flexible, slow, strategic responses). As stress levels increase, the “hot” system is more likely to dominate individual processing because the environment has become less stable.

## Standard 3: Self-Efficacy

*Individual has the ability to motivate oneself, persevere, and see oneself as capable.*

### Elementary Grades

**Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (2003). Self-efficacy beliefs as shapers of children’s aspirations and career trajectories. *Child Development, 72*(1), 187–206.**

This empirical study tested how children’s career aspirations and pathways are affected by children’s—and their parents’—perceived self-efficacy, defined as the belief that individuals can achieve outcomes they define for themselves through action and agency. The authors discuss how self-efficacy beliefs emerge in childhood through a conceptual model. In the model, family socioeconomic status influences parents’ perceived self-efficacy as well as their academic aspirations, which then influence children’s perceived social, academic, and self-regulatory efficacy as well as their academic and career aspirations. The authors suggest that academic self-efficacy has the greatest impact on aspirations: children can believe from a young age in their abilities, due to influences from their parents. To test the model, researchers administered a battery of measures. Results indicate support for the conceptual model, suggesting that children’s beliefs about their own efficacy is influenced mainly by parents’ beliefs and influenced indirectly by family socioeconomic status.

Schectman, N., DeBarger, A. H., Dornsife, A. H., Rosier, S., & Yarnall, L. (2013). *Promoting grit, tenacity, and perseverance: Critical factors for success in the 21st century*. Menlo Park, CA: Center for Technology in Learning, SRI International. Retrieved from <http://pgbovine.net/OET-Draft-Grit-Report-2-17-13.pdf>

This technical report summarizes literature on the concepts of perseverance, grit, and tenacity as three key “noncognitive” skills that can help students reach their long-term goals. The combination of being challenged and interested offers the greatest opportunity for cognitive engagement and perseverance at any age. Perseverance grows when students have the opportunity to act in service of worthwhile goals. According to the research, students' age and stage of development affect how they understand a worthy goal, and thus impact their ability to persevere. Younger students may respond better to shorter term goals in alignment with brain development. When students see that their effort will be worthwhile in that what they are being asked to do is challenging and interesting, they are more likely to persevere.

## Secondary Grades

Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child Development, 78*(1), 246–263.

In contrast to earlier developmental periods, adolescence is marked by shifting societal demands, conflicting role demands, increasingly complex social relations, and new educational expectations/environment, in addition to physical changes. The ways in which adolescents navigate these changes, and the skills they have at their disposal to do so, can predict later outcomes. Put another way, adolescents’ ability to see themselves as capable is dictated by social contexts as well as individual beliefs. The authors posit that adolescents’ beliefs about intelligence—whether it is fixed or malleable—can affect their response to academic challenges. Students who believe that intelligence is malleable understand that intellectual ability can always grow—in other words, they are more likely to see themselves as capable and able to persevere.

Crone, E. A., & Dahl, R. E. (2012). Understanding adolescence as a period of social-affective engagement and goal flexibility. *Nature Reviews Neuroscience, 13*, 636–650.

Through a meta-analysis, the authors review a series of functional magnetic resonance imaging (fMRI) studies to investigate complex developmental processes in adolescence. Recent

evidence suggests that adolescents' brains change in ways that cause them to seek out external stimuli and to increase their ability for social reasoning. Beginning in early adolescence, or around age 12, structural brain changes lead children to seek novelty and new sensations, and they are more motivated when they receive attention and admiration from their peers. The authors find that these brain changes peak in mid-adolescence or around age 15, and, to a lesser degree, influence children as they become adults. With this evidence, the authors posit a conceptual model that shows adolescence as a period of great learning and flexibility, where adolescents have a large capacity for adjusting their goals, motivations, and priorities.

**Dweck, C. S., & Master, A. (2008). Self-theories motivate self-regulated learning. In D. H. Schunk & B. J. Zimmerman (Eds.), *Motivation and self-regulated learning: Theory, research, and applications* (pp. 31–51). New York, NY: Erlbaum.**

In this chapter, the authors argue that students use learning strategies because they believe these strategies will help them overcome obstacles in their learning, but that many students do not hold such theories about their intelligence and perseverance. Instead, many students hold a fixed view of intelligence that discourages them from taking charge of their learning and goals and dissuades them from seeing themselves as capable. When students adopt a different view of intelligence, namely that intelligence can change and grow, they update their prior beliefs and can orient themselves toward a belief in their own self-efficacy.

## Standard 4: Social Awareness

*Individual has the ability to take the perspective of and empathize with others from diverse backgrounds and cultures.*

### Elementary

**Chen, X., & French, D. C. (2008). Children's social competence in cultural context. *Annual Review of Psychology*, 59(1), 591–616.**

In this literature review, the authors concentrate on how cultural values and norms influence social competence, defined as the ability to attain success in social situations. Success is conceptualized as active participation in social situations and appropriate social behaviors. Social competence contains two components: (1) social initiative is the tendency to initiate social interactions, and (2) behavioral control is the regulation of one's emotions and behaviors. The authors note that different societies place different values on social initiative and behavioral control in children and adolescents, which affect the interpretation and evaluation

of specific aspects of social functioning, including sociability, shyness-inhibition, cooperation-compliance, and aggression-defiance. A number of international comparative studies are reviewed about each concept, and the examples are useful for thinking about specific populations that schools and districts serve. For instance, with regard to peer relationships, North American children moving from middle childhood to adolescence are more likely to have larger groups of friends, and intense “clique” friendships tend to decline. However, in more collectivistic societies (e.g., Arabic, Chinese, Indonesian, Israeli, and Latino), children may be more likely to identify with a single group of friends, maintain fierce loyalty to that group, and face greater pressure to conform to group norms.

**Mah, V. K., & Ford-Jones, E. L. (2012). Spotlight on middle childhood: Rejuvenating the “forgotten years.” *Paediatrics and Child Health*, 17(2), 81–83.**

In this article, the authors discuss how in middle childhood, children shift from an inward view of the world to an outward view. Children become more aware of their own feelings, realizing that they are distinct from others. At this age range, children begin to consider the feelings of others. The ability to do so requires a certain level of intelligence, communication, insight, empathy, altruism, and morality. Forming this prosocial behavior of considering another’s point of view is partially dependent on parent modeling as well as genetics. Children also begin to understand stereotypes during this developmental period. Thus, how one comes to view and interact with the world as adults is largely established during middle childhood.

**Halberstadt, A. G., Denham, S. A., & Dunsmore, J. C. (2002). Affective social competence. *Social Development*, 10(1), 79–119.**

The authors describe the theory supporting affective social competence, a model that is comprised of three dynamic competencies: sending affective (emotion) messages, receiving affective messages, and experiencing affect. To have this competence, children should be aware of and able to identify affect in oneself and in others; be able to interact within a complex, changing social context; and manage and regulate emotions and accompanying behavior. The authors emphasize that the ability of children to integrate these skills is a product of children’s socialization patterns as well as their past, present, and future relationships. This article also contains a useful table that summarizes and compares prior theories of social competence.

**McKown, C., & Weinstein, R. S. (2003). The development and consequences of stereotype consciousness in middle childhood. *Child Development*, 74(2), 498–515.**

This study looked at age-related changes in children's conception of stereotypes, children's responses to stereotype threat conditions, and how these conceptions and responses affect their cognitive outputs. Stereotype consciousness is an awareness that others endorse preconceived notions about particular groups of people. Stereotype threat is when individuals fear their performance will be judged by existing stereotypes, which then impacts their own performance negatively. The study finds that the ability to infer an individual's stereotype increases dramatically during ages 6–10, or throughout middle childhood. However, neither age nor awareness of other's stereotypes predicts response to stereotype conditions: African American and Latino children were more likely to be aware of broadly held stereotypes than White and Asian children. This suggests that "academically stigmatized ethnic groups" also are more susceptible to stereotype threat.

### **Middle/High School**

**Blakemore, S.-J., & Mills, K. L. (2014). Is adolescence a sensitive period for sociocultural processing? *Annual Review of Psychology*, 65(1), 187–207.**

In this review article, the authors explore the functional and structural changes that occur in the brain during adolescence. During this developmental period, adolescents must navigate more complex, intimate relationships, while the parts of the brain that control social cognitive processes continue to develop. The changes in social environment that occur during adolescence might interact with increasing executive functions and heightened social sensitivity to influence a number of adolescent behaviors. For example, the authors write that although the reward-seeking area of the brain undergoes changes during adolescence, children also are more influenced by social and contextual cues from their peers. In other words, they may be more likely to engage in what adults perceive as risky decision making because (1) they underestimate levels of risk and (2) anticipate the social rewards (e.g., attention) from their peers will be high.

**Choudhury, S., Blakemore, S.-J., & Charman, T. (2006). Social cognitive development during adolescence. *Social Cognitive and Affective Neuroscience*. 1(3), 165–174.**

Social relationships are particularly important during adolescence. In recent years, new technology has enabled more studies of the adolescent brain; these studies have shown that the brain undergoes major structural changes during adolescence. The changes that take place in the brain overall affect social cognition, or information processing with regard to social situations. Using an experiment, the researchers examined the development of emotional perspective taking during adolescence. The findings suggest that the ability to take perspectives



in adolescence matures greatly as the brain undergoes structural changes. For example, the authors speculate that preadolescents have immature cognition related to perspective taking relative to adolescents and adults. Adolescents' skills for assessing emotions in others' faces is enhanced, and they are better able to take perspectives of others but lack the inferential skills of adults with regard to perspective taking.

## Standard 5: Social Management

*Individual has the ability to make safe and constructive choices about personal behavior and social interactions.*

### Elementary Grades

**Hay, D. F., Payne, A., & Chadwick, A. (2004). Peer relations in childhood. *Journal of Child Psychology and Psychiatry*, 45(1), 84–108.**

The authors present a developmental model that describes normal peer relations and highlights processes that underlie the emergence of problems with peers in childhood. They theorize that six processes contribute to children's harmonious interactions with their peers: (1) joint attention, or seeking out attention and responding to attention bids from another person, through both verbal and nonverbal means; (2) emotional regulation, or controlling negative feelings in response to momentary frustration; (3) inhibitory control, or limiting one's behavioral response to novel challenges; (4) imitation, or matching another's behavior; (5) causal understanding (e.g., understanding how another's intentions affect that person's behavior); and (6) language. Children's relationships with their peers begin in the first years of life. By the age of 3, children have clear preferences for certain peers. Social skills that facilitate peer relationships consolidate in the preschool years. In middle childhood, relationships mature as peer groups become more structured; however, children who were rejected by peers in earlier developmental periods may face difficulty in navigating more complex social interactions later in childhood.

**Ladd, G. W. (1999). Peer relationships and social competence during early and middle childhood. *Annual Review of Psychology*, 50(1), 333–359.**

This literature review examines major research trends in the study of children's social competence and peer relationships since the 1970s. Through systematic investigations, many researchers have been able to better understand how children develop their social competence and relationships with one another. Social competence is defined as the view that children are

differentially skilled and bring different levels of skills to social tasks. Social competence can encompass constructs such as friendship, peer acceptance, and behaviors with peers.

Certain behavioral patterns (e.g., aggression, withdrawal) increase children’s risk for peer rejection or loss of friendship. However, age, sociocultural context, and gender affect whether children truly experience such outcomes. Social competence also is an outcome of early family socialization, making it important to understand parenting perspectives when assessing child competence and ability to form relationships.

**Laursen, B., Finkelstein, B. D., & Betts, N. T. (2001). A developmental meta-analysis of peer conflict resolution. *Developmental Review*, 21(4), 423–449.**

The authors conduct a series of meta-analyses to examine how conflict resolution—the ability to amicably resolve disputes—looks across the lifespan, especially in childhood and young adulthood. Negotiation, coercion, and disengagement are investigated as skills in particular. In this review, negotiation refers to compromise, where both sides make concessions; behaviors may include sharing, taking turns, or discussing to resolve differences. Coercion refers to using assertive tactics, such as verbal commands, denials, or physical aggression, to get the other person to submit to demands. Disengagement is dropping the conflict without achieving a resolution, such as by walking away or ignoring. In early and middle childhood, children are more likely to employ coercion strategies, and have difficulty disengaging. The preferred strategy in adolescence is negotiation, although adolescents also may use coercion and disengagement in equal measure. As children enter young adulthood, toward the end of high school, they exhibit increased levels of negotiation and more nuanced negotiation tactics.

## Secondary Grades

**Kilford, E. J., Garrett, E., & Blakemore, S-J. (2016). The development of social cognition in adolescence: An integrated perspective. *Neuroscience & Biobehavioral Reviews*, 70, 106–120.**

The researchers introduce the concept of the “social brain,” the network of neural circuits that enables us to manage social interactions. Successful transition to adulthood requires the rapid refinement and integration of new cognitive information and physiological neural circuits. Many adolescent behaviors, such as peer influence and sensitivity to social exclusion, involve dynamic interactions between these physiological and cognitive systems. Generally, adolescents are more likely to increase their exploration behaviors, especially with regard to exploring new social interaction; seek novelty or new situational challenges; and change their emotional states quickly or to an exaggerated extent. The authors note that it is expected there will be substantial variation in individuals based on each person’s brain development. Because

interactions vary across individuals, contexts, and stages of development, there is a need for further study to identify the best methods for adolescents to manage their behavior.

**Guerra, N. G., & Bradshaw, C. P. (2008). Linking the prevention of problem behaviors and positive youth development: Core competencies for positive youth development and risk prevention. *New Directions for Child and Adolescent Development*, 122, 1–17.**

This chapter reviews developmental literature on the links between positive youth development and risk prevention. The authors first define competence as effectively adapting to a given environment; it also can be defined as mastery within a developmental stage as determined by age-appropriate and cultural contexts. The authors posit that healthy adjustment in adolescence is linked to five competencies: (1) a positive sense of self (defining oneself through decisions and judgments in a given social context); (2) self-control (regulating emotions and behaviors, and expressed as setting and pursuing goals); (3) decision-making skills (attending to relevant context cues to generate multiple solutions, which requires abstract reasoning skills); (4) a moral system of belief (internalized beliefs about how people in a social context should treat each other, which requires perspective taking and empathy); and (5) prosocial connectedness (a psychological sense of belonging to a range of social contexts and groups, measured by a desire to participate and engage).

## Standard 6: Social Engagement

*Individual has the ability to consider others and a desire to contribute to the well-being of school and community.*

### Elementary Grades

**Metzger, A., Alvis, L. M., Oosterhoff, B., Babskie, E., Syvertsen, A., & Wray-Lake, L. (2018). The intersection of emotional and sociocognitive competencies with civic engagement in middle childhood and adolescence. *Journal of Youth and Adolescence*, first online.**

Using data from a geographically and racially diverse sample, the authors studied how emotional and social competencies—including empathy, emotional regulation, prosocial reasoning, and future orientation—relate to civic engagement, such as volunteering behavior and social responsibility values. The authors found that empathy and future orientation strongly predicted civic engagement. This study demonstrates that youth who can envision their future selves, and who are more empathetic toward others, are more likely to act in the interest of others.

**Wray-Lake, L., & Syvertsen, A. K. (2011). The developmental roots of social responsibility in childhood and adolescence. *New Directions for Child and Adolescent Development*, 134, 11–25.**

The authors define social responsibility as a value orientation rooted in interpersonal relationships and moral principles of care and justice; social responsibility motivates individuals' prosocial and civic behaviors. In this literature review, the authors summarize behaviors, perspectives, and developments that precede children's social responsibility values. In other words, some social, emotional, and behavioral competencies are foundational to building a sense of social responsibility. For example, as children mature in middle childhood, they become less egocentric and develop empathy as they interact with those who are both similar to and different from themselves. However, empathy intersects with emotional regulation: children who are too empathetic may cause themselves internal distress, so they must be able to adapt their emotions to navigate social relationships and their responsibility to others. In adolescence, children explore views about the world and their relationships with others, leading to self-concept and the integration of a personal identity, which may include social responsibility values.

## Secondary Grades

**Guillaume, C., Jagers, R. J., & Rivas-Drake, D. (2015). Middle school as a developmental niche for civic engagement. *American Journal of Community Psychology*, 56, 321–331.**

The study investigated how youth's beliefs about school connectedness, school climate, and their academic strengths informed their civic engagement behaviors, defined as behaviors related to involvement in the local community and society. The findings suggest that students' feelings of connectedness to school are significantly positively associated with civic engagement. In other words, when students feel they are valued as part of their school community, they are more likely to feel a sense of personal responsibility (e.g., they display prosocial behaviors and attitudes, and act to promote the common good).

**Watts, R. J., Williams, N. C., & Jagers, R. J. (2003). Sociopolitical development. *American Journal of Community Psychology*, 31(1–2), 185–194.**

This article discusses sociopolitical development, a process the authors describe as growth in knowledge, skills, emotional competence, and capacity for action in social and political systems. The theoretical framework developed in the article describes a process of how young people, in particular, come to understand social inequity. A five-stage model is proposed, which is not tied

to age but begins in adolescence: acritical, adaptive, precritical, critical, and liberation. In the acritical stage, youth are unaware of the social order, and see the world as just and fair. In the adaptive stage, youth begin to acknowledge asymmetry in how different groups are treated but take actions to maintain a positive sense of self. Youth become concerned about inequality and treatment of social groups in the precritical stage. As they learn more, youth in the critical stage may conclude that the asymmetry they see in the world is unfair, and some youth seek to change these circumstances. At the liberation stage, youth are actively involved in social action to change the social inequality. The article has important implications for understanding how adolescents acknowledge responsibility to community and society, and how they can move toward engagement.

**Sherrod, L. (2007). Civic engagement as an expression of positive youth development. In R. K. Silbereisen & R. M. Lerner (Eds.), *Approaches to positive youth development* (pp. 59–74). Thousand Oaks, CA: SAGE.**

This chapter broadly discusses the bidirectional, dynamic nature of positive youth development in the context of civic engagement. The authors argue that children accumulate assets through their interaction with civic engagement, while engagement also helps build assets in children. By accumulating assets, children are more likely to engage positively with their schools, communities, and society. Sherrod cites the assets according to the “6 C’s” model: connection, character, caring, competence, confidence, and contribution (adapted from Lerner, 2007). Connection is the feeling of safety, structure, and belonging; confidence refers to a sense of self-worth and mastery; competence is the ability to act effectively in school and during social interactions; character is being able to take responsibility and connect one’s actions to principles and values; contribution is active participation to make a difference; and caring is sympathy and empathy for others. The 6 C’s model demonstrates the interconnection of multiple social and emotional competencies needed to enact civic responsibility and behavior.

## Appendix A. References

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