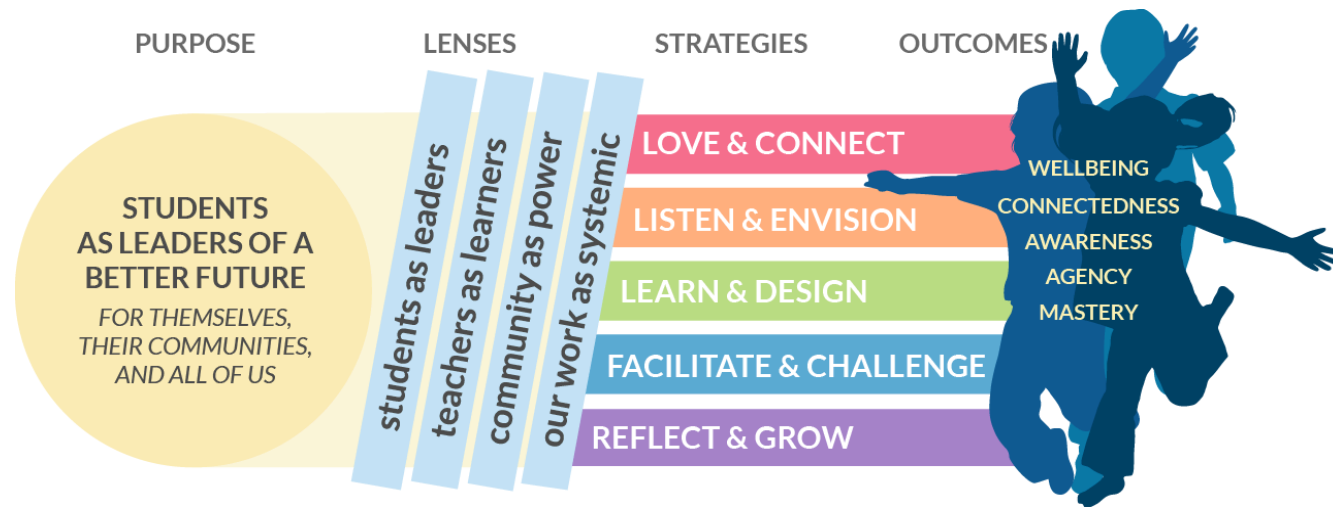


Leadership Framework

TACL Overview



The five outcome families on the Teach For All Teaching as Collective Leadership framework are described briefly below:

- Wellbeing** Students feel secure and loved, empowering them to be themselves, try new things, and make mistakes in ways that foster deeper learning. This includes specific constructs such as physical, psychological, cognitive, and social well-being, sense of belonging, security, and optimism.
- Connectedness** Students seek and value the perspectives and experiences of others as they work collaboratively toward a common good. This includes specific constructs such as empathy, compassion, gratitude, perspective-taking, and global mindedness.
- Awareness** Students are aware of inequity, celebrate their and others' unique strengths and identities as assets for navigating challenges in pursuit of their growing sense of purpose. This includes specific constructs such as sense of identity, social awareness, metacognition, and sense of purpose.
- Agency** Students take independent or collective action toward shared goals to cause positive change in their own life or the lives of others. This includes specific constructs such as self-efficacy, creativity, problem-solving, curiosity, growth mindset, and collaboration.
- Agency** Students attain higher order command of knowledge and skills as a means to create new opportunities and solutions to challenges. This includes specific constructs such as critical thinking, foundational skills, and core knowledge (like literacy, numeracy, history, science).

Constructs

Overarching construct	Construct	Definition	Components		Literature support	PADA mapping	Link to broad TACL Outcome Families	Comments	
Leadership (Main question: what are the constructs that enable students to grow as leaders of a better future?)	Agency	The human capability to influence one's functioning and the course of events by one's actions.			Bandura, 1982, 1989, 2006	Agency	Agency		
			<i>Self-awareness</i>	Being able to interpret effectively one's own underlying emotional and motivational states. This includes skills necessary to recognize and understand personal strengths, weaknesses, behaviours, and development areas, in order to self-improve.	Luft & Inham, 1961 Morin, 2011 Duval & Wicklund, 197		Agency	The "Johari Window", a tool to explore self-awareness, derives its name from its developers, the psychologists, Joe Luft and Harry Ingham.	
			<i>Motivation</i>	Refers to skills necessary to be self-directed learners who go beyond basic mastery of skills and/or curriculum to explore and expand one's own learning and opportunities to gain expertise.	Dweck, 1986 Deci & Ryan, 1985 Wigfield & Eccles, 2000		Agency		
			<i>Self-efficacy</i>	The belief in one's own ability to succeed in achieving an outcome or reaching a goal. It reflects confidence in the ability to exert control over one's own motivation, behavior, and environment.	Bandura, 1982, 1997		Agency	This construct is a component of Growth Mindset as well.	
			<i>Self-management</i>	The ability to successfully regulate one's emotions, thoughts, and behaviors in different situations — effectively managing stress, controlling impulses, and motivating oneself. This also includes the ability to set and work toward personal and academic goals.	Kanfer & Gaelick-Buys, 1991		Agency	This construct has overlaps with Self-Regulation. In other frameworks (e.g., MESH), this is taken to be the same as Self-Regulation or Self-Control.	
		Critical thinking	A complex skill involving a specific way of thinking that is intentional, goal-directed, and reflective. It comprises the mental processes, strategies, and representations that are used to evaluate, make judgments, and learn new concepts.			Kuhn, 1991; 1999 Ennis, 1987 Sternberg, 1986	Proficiency	Mastery Awareness	Critical thinking and metacognition are related. There is an overlap between them but because one is not a complete subset of the other, we can consider them as separate constructs, rather than one being a component of the other.
				<i>Reasoned decision-making</i>	The ability to use various types of reasoning (inductive, deductive, etc.) as appropriate to the situation, to effectively analyse and evaluate evidence, arguments, claims and beliefs in making judgments and decisions.	Sternberg, 1982		Mastery Awareness	
				<i>Reflective</i>	The ability to recognize that certain problems	Kitchener & King,		Mastery	This construct is strongly linked

Overarching construct	Construct	Definition	Components	Literature support	PADA mapping	Link to broad TACL Outcome Families	Comments	
			<i>judgment</i>	cannot be solved by logic alone and must require the consideration of one's beliefs in light of supporting evidence. This involves having a view of knowledge as an outcome of a process of reasonable inquiry and judgments are made based on the current evidence, but are reevaluated when relevant new evidence, perspectives, or tools of inquiry become available.	1990 King & Kitchener, 2004		Awareness	with reflective thinking.
	Metacognition	Refers to higher order thinking that involves active control over the cognitive processes engaged in learning -- or thoughts about one's own thoughts and cognitions.			Flavell, 1979	Awareness <i>(but should be categorized as Proficiency)</i>	Mastery Awareness Agency	This is more properly categorized as a proficiency. Metacognition is a skill.
			<i>Self-regulation</i>	Refers to the self's ability to control its own thoughts, emotions, and actions.	Dinsmore, Alexander, & Loughlin, 2008 Schraw, Crippen, & Hartley, 2006 Bandura, 1991		Awareness Agency	This construct is also identified as Self Control in other frameworks.
			<i>Metacognitive awareness</i>	Refers to what individuals know about their own cognition or about cognition in general. It includes at least three different kinds of metacognitive awareness: declarative, procedural, and conditional knowledge.	Schraw & Dennison, 1994 Schraw, 1998		Mastery Awareness	
			<i>Reflective thinking</i>	The ability to reflect critically on learning experiences and processes in order to inform future progress.	Rodgers, 2002		Mastery Awareness	The concept of reflective thinking is originally introduced by John Dewey into the education literature.
	Growth mindset	Belief that a person's intellect is malleable and capable of changing over time with effort.			Dweck, 1999, 2008	Disposition	Awareness Agency	The Disposition theme is aligned with Attitudes in other frameworks (e.g., PISA).
	Sense of purpose	Refers to a stable and generalized intention to accomplish something that is at once meaningful to the self and of consequence to the world beyond the self.			Damon, Menon, & Cotton Bronk, 2003	Awareness	Agency Awareness Well-being	
			<i>Goal-directedness</i>	Refers to the ability to make decisions based on purpose and understanding of the consequences of such decisions. Goal-directed behaviors are	Liljeholm, 2021 Benard, 1991		Agency Awareness	

Overarching construct	Construct	Definition	Components	Literature support	PADA mapping	Link to broad TACL Outcome Families	Comments
				associated with having reasons for acting, rather than acting through reflex.			
			<i>Sense of self-worth</i>	This encompasses an individual's positive and negative feelings about themselves, their specific beliefs about themselves, and the way that they frame these beliefs.	Baumeister, 1991 Pelham & Swann, 1989		Awareness Well-being
	Global competence	The capacity to examine local, global and intercultural issues, understand and appreciate different perspectives and world views, interact successfully and respectfully with others, and take responsible action toward sustainability and collective well-being.				All PADA overall "Competence" is a combination of knowledge, skills, attitudes and values. Specific mapping for each component is listed below, but the components are not exhaustive.	Mastery Awareness Connectedness This construct overlaps with Global Citizenship as defined in various frameworks (e.g., UNICEF, UNESCO, OECD).
			<i>Flexibility and adaptability</i>	Refers to skills necessary to adapt to varied roles, jobs responsibilities, schedules and contexts. This also includes the ability to work effectively in a climate of ambiguity and changing priorities.	Dennis & Vander Wal, 2010 Williams, 2005		Proficiency
			<i>Intercultural understanding</i>	This refers to respecting cultural differences and work effectively with people from a range of cultural backgrounds, and responding open-mindedly to different ideas and values.	Barret et al., 2014		Awareness Disposition
			<i>Environmental awareness</i>	Refers to skills and knowledge necessary for understanding of the environment and the circumstances and conditions affecting it. This can also include the capability to take individual and collective action towards addressing environmental challenges.	Littleddyke, 2008 Fisman, 2005		Awareness
			<i>Global mindedness</i>	This refers to the sense of world citizenship and inter-connectedness, and responsibility for others in the world. A globally-minded person has concerns for other people in other parts of the world, as well as feelings of moral responsibility to try to improve others' conditions irrespective of distance and cultural differences.	Hett, 1993 Boix, Mansilla, & Gardner, 2007		Awareness Disposition

Overarching construct	Construct	Definition	Components		Literature support	PADA mapping	Link to broad TACL Outcome Families	Comments
			<i>Respect for diversity</i>	Refers to skills necessary to understand, negotiate and balance diverse views and beliefs to reach workable solutions, particularly in multi-cultural environments.	Gay, 2015 Balkin, Scholsser, & Levitt, 2009 Witenberg, 2007		Awareness Proficiency	This is related to "Tolerance".
	Collaboration	The ability to work effectively and respectfully with diverse teams, including the skills necessary to exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal.				Proficiency	Connectedness Awareness Agency	
			<i>Communication skills</i>	Refers to a set of skills that include the ability to articulate thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts.	Greenstein, 2012 Johnson & Johnson, 1994		Connectedness Awareness Agency	
			<i>Teamwork</i>	Refers to skills necessary to be able to work with others towards a common goal. These include the ability to negotiate, follow an agenda, and make group decisions.	Johnson & Johnson, 2005, 2009		Connectedness Awareness Agency	
			<i>Perspective-taking</i>	Being able to identify, acknowledge, and understand the emotions of others, show concern for others, and consider the audience when providing information.	Tomasello & Hamann, 2012 Johnson, 1975		Connectedness Awareness Agency	
	Problem solving	Refers to the broad set of cognitive processes necessary for identifying problems, assessing different options, working towards a solution, and making informed choices when there is no clear or routine solution.			Mayer, 1992, 1998, 2013	Proficiency	Mastery	Components of Problem Solving substantially overlap with components of Critical Thinking.
			<i>Reasoning skills</i>	Refers to the effective use of various types of reasoning (inductive, deductive, etc.) as appropriate to the situation.	Newell, 1993 Sternberg, 1982		Mastery	
			<i>Planning and organization skills</i>	Refers to skills such as general organizing, team administration, planning, time management, coordinating resources and meeting deadlines.	Gauvain & Rogoff, 1989		Mastery	
	Creativity	The ability to use a wide range of creation techniques (such as brainstorming) to create new and worthwhile ideas			Strenberg, 1999, 2006	Proficiency	Mastery Agency	

Overarching construct	Construct	Definition	Components		Literature support	PADA mapping	Link to broad TACL Outcome Families	Comments	
		(both incremental and radical concepts) as well as observable creations (such as artworks and performances). This includes the skills necessary to elaborate, refine, analyse and evaluate their own creations in order to improve and maximize creative efforts.			Csikszentmihályi, 1990 Torrance, 1988 Amabile, 1988, 2011				
			<i>Innovation skills</i>	Refers to the ability to act on creative ideas to make a tangible and useful contribution to the field in which the innovation will occur. This skill is an important component of entrepreneurship.	Drucker, 1998 Amabile, 1988 National Research Council, 2003		Mastery Agency		
			<i>Divergent thinking</i>	Refers to the ability to cross boundaries and make remote associations. This cognitive flexibility is often associated with lateral thinking skills.	De Bono, 1969, 2010 Torrance, 1988		Mastery Agency		
			<i>Resourcefulness</i>	Refers to the ability to overcome obstacles and garner scarce resources in the pursuit of task oriented goals. It involves skills that enable individuals to overcome obstacles that are influential upon their behaviour, making them become more confident, more proactive and more successful in problem solving.	Kim, 1990 Licata, et al., 2003		Mastery Agency		
		Domain knowledge	Refers to a broad set of domain-specific knowledge such as literacy and numeracy, and the skills associated with these domains.			Ball, Paris, & Govinda, 2014 Beehary, 2021 Purpura & Napoli, 2015	Proficiency	Mastery	This does not have to be exhaustive and can just focus on the core domains.
				<i>Literacy</i>	One of the two bedrock foundational skills, and the conceptual and procedural mastery of literacy enables other skills as the child moves through the education system.			Mastery	
				<i>Numeracy</i>	One of the two bedrock foundational skills, and the conceptual and procedural mastery of numeracy enables other skills as the child moves through the education system.			Mastery	
		Social and emotional learning	Refers to a broad set of interpersonal and intrapersonal skills and				Awareness and	Connectedness Awareness Wellbeing	

Overarching construct	Construct	Definition	Components		Literature support	PADA mapping	Link to broad TACL Outcome Families	Comments
		mindsets that are necessary for effective social functioning and emotional management, growth, and well-being.				Disposition overall <i>Specific mapping for each component is listed below, but the components are not exhaustive.</i>		
			<i>Sense of identity</i>	Being able to recognize individual and distinct characteristics that define oneself and using these characteristics in combination when evaluating life decisions.		Awareness	Awareness	Also identified as Self-concept in other frameworks
			<i>Self-discipline</i>	Being able to set goals with tangible and intangible success criteria, balance short and long-term goals, and manage one's workload efficiently. This includes the set of skills necessary to manage one's life in an organized manner to give it meaning and purpose in a changing environment.		Disposition	Awareness	
			<i>Persistence</i>	Being able to work hard, make progress on relevant tasks, and maintain focus despite setbacks or difficulties. This trait is closely linked with "Locus of Control" and "goal-directed action" in the psychology literature.		Disposition	Awareness	Also identified as Grit in other frameworks
			<i>Optimism</i>	The degree to which a person expresses a positive mood and a positive outlook, and the expression of confidence in a future full of positive possibilities.		Disposition	Awareness Wellbeing	Also identified as Positive Attitude in other frameworks. There is support in the literature that this is both an affective and a cognitive construct -- which means it can be taught and learned.
			<i>Social awareness</i>	The ability to take the perspective of and empathize with others from diverse backgrounds and cultures, to understand social and ethical norms for behavior, and to recognize family, school, and community resources and supports.		Awareness	Connectedness Awareness	This construct overlaps with other constructs such as Perspective Taking and Intercultural Understanding.
			<i>Empathy</i>	Refers to the capacity to experience the emotions of another and/or the capacity to comprehend the emotions of another.		Disposition	Connectedness Awareness	Empathy is sometimes classified as a value (or at least an affective trait), but there is literature support in it being a cognitive ability. In the affective trait perspective, there is biological and

Overarching construct	Construct	Definition	Components		Literature support	PADA mapping	Link to broad TACL Outcome Families	Comments
								neurological support as well (e.g., Wu, et al., 2012). However, this perspective precludes malleability and therefore less useful from an educational point of view.
	Values	Refers to enduring and often culturally defined beliefs about what is good or bad, and what is important in life. Values include both the moral code of conduct one uses in daily activities (e.g., being kind, being truthful) and long-term "outcomes" of importance (e.g., getting an education, having a family, contributing to the community) that may not necessarily have a right or wrong valence.				Not in PADA	Connectedness	In contrast to mindsets (ways of thinking), values are more linked with beliefs (feelings related to truth and morality). The focus here should be on values that are malleable or teachable.
			<i>Integrity</i>	Refers to the ability to know, defend and do what is right at all times. Related to other values such as commitment, courage, honesty, transparency, fairness and accountability.	Lickona, 2004 DeRoche & Williams, 2001 Dunn, 2009		Connectedness	
			<i>Responsibility</i>	Refers to the recognition of one's duty to themselves their family, community, nation and the world, and the willingness to act on this sense of duty.	Pala, 2011 Anderson, 2000		Connectedness	Somewhat redundant to "integrity". Changed "trustworthiness" to something also teachable such as "responsibility".
			<i>Tolerance</i>	Refers to the openness towards different points of view, values diversity, and is appreciative of foreign people and cultures.	Witenberg, 2007		Connectedness	This is also a component of the broader global competence construct.
			<i>Respect</i>	Refers to the belief in one's own self-worth and the intrinsic worth of all people.	Pala, 2011 Anderson, 2000		Connectedness	
			<i>Fairness</i>	Refers to the recognition that everyone is fundamentally equal and acting in ways that are intended to be unbiased to everyone.	Pala, 2011 Anderson, 2000		Connectedness	
	Wellbeing	Refers to a broad set of indicators about an individual's state of being. These indicators relate broadly to the individual's "quality of life" from a				Not in PADA	Wellbeing	

Overarching construct	Construct	Definition	Components		Literature support	PADA mapping	Link to broad TACL Outcome Families	Comments
		multi-dimensional perspective.						
			<i>Psychological (intrapersonal)</i>	This relates to factors that enable the conditions for positive and holistic mental health, including having a sense of meaning/purpose as well as positive emotions such as optimism, hope, and overall happiness.	Seligman, 2011 Kern, et al., 2016 Myers, Sweeney & Witmer, 1998 Adams & Benzer, 2000		Wellbeing	Given that cognitive constructs are also psychological in nature, to make this more distinct from "cognitive" well-being, another term would be "affective" well-being.
			<i>Cognitive (intrapersonal)</i>	This relates to factors that enable the conditions for healthy development of cognition, including a sense of curiosity and autonomy.	Pollard & Davidson, 2001 Litman & Jimerson, 2004 Bridges, 2003 Ryan & Deci, 2000		Wellbeing	
			<i>Social (interpersonal)</i>	This relates to factors that enable one's positive development and growth in the community or social group where one is situated. This includes the sense of belonging and connectedness, and feelings of acceptance and trust. It also relates to positive social relationships and freedom from factors that negatively impact these (such as bullying and conflict).	Keyes, 1998 Fuller, 2000 Pollard & Lee, 2003 Seligman, 2011 Deutsch, 1993; Johnson & Johnson, 1982 Craig et al., 2000		Wellbeing	

Bibliography

References

- Abrami, P.C., Bernard, R.M., Borokhovski, E., Wadem, A., Surkes, M.A., Tamim, R., Zhang, D. (2008). Instructional interventions affecting critical thinking skills and dispositions: a stage 1 meta-analysis. *Rev. Educ. Res.* 78:1102–1134
- Anderson, D. R. (2000). Character education: Who is responsible?. *Journal of Instructional Psychology*, 27(3), 139.
- Balkin, R. S., Schlosser, L. Z., & Levitt, D. H. (2009). Religious identity and cultural diversity: Exploring the relationships between religious identity, sexism, homophobia, and multicultural competence. *Journal of Counseling & Development*, 87(4), 420-427.
- Ball, J., Paris, S.G., Govinda, R. (2014). Literacy and Numeracy Skills among Children in Developing Countries. In: Wagner, D.A. (eds) *Learning and Education in Developing Countries: Research and Policy for the Post-2015 UN Development Goals*. Palgrave Pivot, New York.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37, 122-147.
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44, 1175-1184.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W H Freeman/Times Books/ Henry Holt & Co.
- Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science*, 1, 164-180.
- Barrett, M., M. Byram, I. Lázár, P. Mompoin-Gaillard and S. Philippou. (2014). *Developing Intercultural Competence through Education*. Strasbourg: Council of Europe Publishing.
- Beeharry, G. (2021). The pathway to progress on SDG 4 requires the global education architecture to focus on foundational learning and to hold ourselves accountable for achieving it. *International Journal of Educational Development*, 82, 102375.
- Bryant, B. K. (1982). An index of empathy for children and adolescents. *Child development*, 413-425.
- Carver, C. S., & Scheier, M. F. (2014). Dispositional optimism. *Trends in cognitive sciences*, 18(6), 293-299.
- [Chick, N. \(2013\). Metacognition. Vanderbilt University Center for Teaching. Retrieved \[31/03/2021\] from https://cft.vanderbilt.edu/guides-sub-pages/metacognition/](https://cft.vanderbilt.edu/guides-sub-pages/metacognition/)
- Cohen, G. L., & Garcia, J. (2008). Identity, belonging, and achievement: A model, interventions, implications. *Current directions in psychological science*, 17(6), 365-369.
- Csikszentmihályi, M. (1990). The domain of creativity. In M. A. Runco & R. S. Albert (Eds.), *Sage focus editions, Vol. 115. Theories of creativity* (p. 190–212). Sage Publications, Inc.
- Deci, E. L. & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- Dennis, J. P., & Vander Wal, J. S. (2010). The cognitive flexibility inventory: Instrument development and estimates of reliability and validity. *Cognitive therapy and research*, 34(3), 241-253.
- DeRoche, E. F., & Williams, M. M. (2001). *Educating hearts and minds: A comprehensive character education framework*. Corwin Press.
- Dinsmore, D. L., Alexander, P. A., & Loughlin, S. M. (2008). Focusing the conceptual lens on metacognition, self-regulation, and self-regulated learning. *Educational psychology review*, 20(4), 391-409.
- Duckworth, A. (2016). *Grit: The power of passion and perseverance* (Vol. 234). New York, NY: Scribner.
- Dunn, C. P. (2009). Integrity matters. *International Journal of Leadership Studies*, 5(2), 102-125.
- Duval, S., & Wicklund, R. A. (1972). *A Theory of Objective Self Awareness*. New York: Academic Press.
- Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, 41, 1040-1048.
- Dweck, C.S. (1999). *Self-Theories: Their role in motivation, personality and development*. Philadelphia: Taylor and Francis/Psychology Press.

- Dweck, C.S. (2006). *Mindset: How We Can Learn to Fulfill Our Potential*. New York: Ballantine Books.
- Ennis, R.H. (1987). A taxonomy of critical thinking dispositions and abilities. In J. Baron & R. Sternberg (Eds.), *Teaching thinking skills: Theory and practice* (pp. 9-26). New York: W.H. Freeman.
- Fisman, L. (2005). The effects of local learning on environmental awareness in children: An empirical investigation. *The Journal of Environmental Education*, 36(3), 39-50.
- Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry. *American psychologist*, 34(10), 906.
- Gagné M., Deci E. L. (2005). Self-determination theory and work motivation. *J. Organ. Behav.* 26, 331–362.
- Gauvain, M., & Rogoff, B. (1989). Collaborative problem solving and children's planning skills. *Developmental psychology*, 25(1), 139.
- Gay, G. (2013). Teaching to and through cultural diversity. *Curriculum inquiry*, 43(1), 48-70.
- Gordon, T. (1989). *Teaching children self-discipline... at home and at school: New ways for parents and teachers to build self-control, self-esteem, and self-reliance*. Times Books/Henry Holt and Co.
- Greenstein, L. (2012). *Assessing 21st century skills: A guide to evaluating mastery and authentic learning*. Thousand Oaks, CA: Corwin.
- Greif, E. B., & Hogan, R. (1973). The theory and measurement of empathy. *Journal of Counseling Psychology*, 20(3), 280–284.
- Hammond, Z. (2014). *Culturally responsive teaching and the brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students*. Thousand Oaks, CA: Corwin Press.
- Hogan, R. (1969). Development of an empathy scale. *Journal of consulting and clinical psychology*, 33(3), 307.
- Jagers, R., Rivas-Drake, D., & Williams, B. (2019). Transformative Social and Emotional Learning (SEL): Toward SEL in Service of Educational Equity and Excellence, *Educational Psychologist*, 54(3), 162-184, DOI: 10.1080/00461520.2019.1623032
- Johnson, D. W. (1975). Cooperativeness and social perspective taking. *Journal of Personality & Social Psychology*, 31(2), 241-244.
- Johnson, D. W., & Johnson, R. T. (2005). New developments in social interdependence theory. *Psychology Monographs*, 131, 285-358.
- Johnson, D. W., & Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher*, 38, 365-379.
- Johnson, R. T., & Johnson, D. W. (1994). An overview of cooperative learning. In J. S. Thousand, R. A. Villa, & A. I. Nevin (Eds.), *Creativity and collaborative learning: A practical guide to empowering students and teachers* (pp. 31-44). Baltimore, MD: Brookes Press.
- Jones S. M., Bailey R., Kahn J. (2019). The science and practice of social and emotional learning: implications for state policymaking. *State Edu. Stand.* 19, 18–24.
- Jones S. M., Barnes S. P., Bailey R., Doolittle E. J. (2017). Promoting social and emotional competencies in elementary school. *Futur. Child.* 27, 49–72.
- Kahlenberg, R. D., & Potter, H. (2014). *A smarter charter: Finding what works for charter schools and public education*. Teachers College Press.
- Kanfer, F. H., & Gaelick-Buys, L. (1991). Self-management methods. In F. H. Kanfer & A. P. Goldstein (Eds.), *Pergamon general psychology series, Vol. 52. Helping people change: A textbook of methods* (p. 305–360). Pergamon Press.
- King, P. M., & Kitchener, K. S. (2004). Reflective judgment: Theory and research on the development of epistemic assumptions through adulthood. *Educational psychologist*, 39(1), 5-18.
- Kitchener, K. S., & King, P. M. (1990). The Reflective Judgment model: Ten years of research. In M. L. Commons, C. Armon, L. Kohlberg, F. A. Richards, T. A. Grotzer, & J. D. Sinnott (Eds.), *Adult development, Vol. 2. Models and methods in the study of adolescent and adult thought* (p. 63–78). Praeger Publishers.
- Kuhn, D. (1991). *The skills of argument*. New York: Cambridge University Press.
- Kuhn, D. (1999). A developmental model of critical thinking. *Educational Researcher*, 28(2), 16-46.
- Lambooy, L., & Lu, A. (2017). The pursuit of college for all: Ends and means in ‘no excuses’ charter schools. *Theory and Research in Education*, 15(2), 202-229.

- Lickona, T. (2004). *Character matters: How to help our children develop good judgment, integrity, and other essential virtues*. Simon and Schuster.
- Littledyke, M. (2008). Science education for environmental awareness: approaches to integrating cognitive and affective domains. *Environmental education research*, 14(1), 1-17.
- Lufi, D., & Cohen, A. (1987). A scale for measuring persistence in children. *Journal of personality assessment*, 51(2), 178-185.
- Luft, J., & Ingham, H. (1961). The Johari Window: a graphic model of awareness in interpersonal relations. *Human relations training news*, 5(9), 6-7.
- Mayer, R. E. (1998). Cognitive, metacognitive, and motivational aspects of problem solving. *Instructional Science*, 26(1/2), 49-63.
- Mayer, R. E. (2013). Problem solving. In D. Reisberg (Ed.), *The Oxford handbook of cognitive psychology*. New York, NY: Oxford University Press.
- Mayer, R.E. (1992), *Thinking, Problem solving, Cognition* (2nd ed.). New York: Freeman.
- Mischel, W., Zeiss, R., & Zeiss, A. (1974). Internal-external control and persistence: Validation and implications of the Stanford Preschool Internal-External Scale. *Journal of Personality and Social Psychology*, 29(2), 265.
- Morin, A. (2011). Self-recognition, theory-of-mind, and self-awareness: What side are you on?. *Laterality*, 16(3), 367-383.
- Nelsen, J. (2011). *Positive discipline: The classic guide to helping children develop self-discipline, responsibility, cooperation, and problem-solving skills*. Ballantine Books.
- Newell, A. (1993). Reasoning, problem solving, and decision processes: The problem space as a fundamental category. In *The Soar papers (vol. 1) research on integrated intelligence* (pp. 55-80).
- Pala, A. (2011). The need for character education. *International journal of social sciences and humanity studies*, 3(2), 23-32.
- Purpura, D. J., & Napoli, A. R. (2015). Early numeracy and literacy: Untangling the relation between specific components. *Mathematical Thinking and Learning*, 17(2-3), 197-218.
- Rittle-Johnson, B., Loehr, A., and Durkin, K. (2017). Promoting self-explanation to improve mathematics learning: A meta-analysis and instructional design principles. *ZDM Mathematics Education* 49: 559-611.
- Rodgers, C. (2002). Defining reflection: Another look at John Dewey and reflective thinking. *Teachers college record*, 104(4), 842-866.
- Schraw, G. (1998). Promoting general metacognitive awareness. *Instructional science*, 26(1-2), 113-125.
- Schraw, G., & Dennison, R. S. (1994). Assessing metacognitive awareness. *Contemporary educational psychology*, 19(4), 460-475.
- Schraw, G., Crippen, K. J., & Hartley, K. (2006). Promoting self-regulation in science education: Metacognition as part of a broader perspective on learning. *Research in science education*, 36(1-2), 111-139.
- Selman, R. L. (2003). *Promotion of Social Awareness: Powerful Lessons for the Partnership of Developmental Theory and*. Russell Sage Foundation.
- Shotter, J. (1993). *Becoming someone: Identity and belonging* (pp. 5-27). Newbury Park, CA: Sage.
- Sondel, B. (2016). "No excuses" in New Orleans: The silent passivity of neoliberal schooling. In *The Educational Forum* (Vol. 80, No. 2, pp. 171-188). Routledge.
- Sternberg, R. J. (1982). Reasoning, Problem Solving, and Intelligence. In R. J. Sternberg (Ed.), *Handbook of Human Intelligence* (pp. 225-307). New York: Cambridge University Press.
- Sternberg, R. J. (1986). *Critical thinking: Its nature, measurement, and improvement*. Washington, DC.: National Institute of Education.
- Sternberg, R. J. (2006). The nature of creativity. *Creativity research journal*, 18(1), 87.
- Sternberg, R. J. (Ed.). (1999). *Handbook of creativity*. Cambridge University Press.
- Tanner, Kimberly D. (2012). Promoting student metacognition. *CBE—Life Sciences Education*, 11, 113-120.
- Tomasello, M., & Hamann, K. (2012). Collaboration in young children. *Quarterly Journal of Experimental Psychology*, 65(1), 1-12.

- Tomlinson, C. A. (2000). What is differentiated instruction. *Fundamentals of gifted education: Considering multiple perspectives*, 287-300.
- Tomlinson, C. A., & McTighe, J. (2006). *Integrating differentiated instruction & understanding by design: Connecting content and kids*. ASCD.
- Torrance, E. P. (1988). The nature of creativity as manifest in its testing. *The nature of creativity*, 43-75.
- Torres, A. C., & Golann, J. W. (2018). NEPC review: Charter schools and the achievement gap. Boulder, CO: National Education Policy Center. Retrieved October, 31, 2018.
- Vygotsky L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wall, K., & Higgins, S. (2006). Facilitating metacognitive talk: A research and learning tool. *International Journal of Research & Method in Education*, 29(1), 39-53.
- Wegner, D. M., & Giuliano, T. (1982). The forms of social awareness. *Personality, roles, and social behavior*, 165-198.
- Wigfield, A., & Eccles, J. S. (2000). Expectancy–value theory of achievement motivation. *Contemporary educational psychology*, 25(1), 68-81.
- Williams, T. R. (2005). Exploring the impact of study abroad on students' intercultural communication skills: Adaptability and sensitivity. *Journal of studies in international education*, 9(4), 356-371.
- Witenberg, R. T. (2007). The moral dimension of children's and adolescents' conceptualisation of tolerance to human diversity. *Journal of Moral Education*, 36(4), 433-451.
- Wu, N., Li, Z., & Su, Y. (2012). The association between oxytocin receptor gene polymorphism (OXTR) and trait empathy. *Journal of affective disorders*, 138(3), 468-472.
- Zuckerman, M. (2001). Optimism and pessimism: Biological foundations. In E. C. Chang (Ed.), *Optimism & pessimism: Implications for theory, research, and practice* (p. 169–188)
- De Bono, E. (2010). *Lateral thinking: a textbook of creativity*. Penguin UK.
- De Bono, E. (1969). Information processing and new ideas—lateral and vertical thinking. *The Journal of Creative Behavior*, 3(3), 159-171.
- Kim, S. H. (1990). *Essence of creativity: A guide to tackling difficult problems*. Oxford University Press.
- Licata, J.W., Mowen, J.C., Harris, E.G. and Brown, T.J. (2003), On the trait antecedents and outcomes of service worker job resourcefulness: a hierarchical model approach, *Journal of the Academy of Marketing Science*, 31(3), 256-271.
- National Research Council. (2003). *Beyond productivity: Information technology, innovation, and creativity*. National Academies Press.
- Drucker, P. F. (1998). The discipline of innovation. *Harvard business review*, 76(6), 149-157.
- Amabile, T. M. (1988). A model of creativity and innovation in organizations. *Research in organizational behavior*, 10(1), 123-167.
- Amabile, T. (2011). *Componential theory of creativity*. Boston, MA: Harvard Business School.
- Hett, E. J. (1993). *The development of an instrument to measure global-mindedness*. PhD dissertation. University of San Diego.
- Boix Mansilla, V. and H. Gardner (2007), From teaching globalization to nurturing global consciousness, in Suárez-Orozco, M. (ed.) *Learning in the Global Era; International Perspectives on Globalization and Education*, University of California Press, California, pp. 47-66.
- Damon, W., Menon, J., & Cotton Bronk, K. (2003). The development of purpose during adolescence. *Applied developmental science*, 7(3), 119-128.
- Benard, B. (1991). *Fostering resiliency in kids: Protective factors in the family, school and community*. San Francisco: Western Regional Center for Drug Free Schools and Communities, FarWest Laboratory.
- Baumeister, R. F. (1991). *Meanings of life*. New York: Guilford.
- Liljeholm, M. (2021). Agency and goal-directed choice. *Current Opinion in Behavioral Sciences*, 41, 78-84.
- Pelham, B. W., & Swann, W. B. (1989). From self-conceptions to self-worth: on the sources and structure of global self-esteem. *Journal of personality and social psychology*, 57(4), 672.