



### **ABSTRACT**

This report describes the implementation of the Clayton Implicit Bias Pilot Evaluation Study Fall 2016 funded by an Early Childhood Colorado Partnership (ECCP) Mini-Grant. The process, findings, and follow-up plans are described.

**Sheridan Green & Pedro Mendez**  
**Department of Research and Evaluation**  
**December 2016**



# Final Report to the Early Childhood Colorado Partnership – Fall 2016

## Clayton Early Learning

### Implicit Bias Pilot Evaluation Study: Implementation, Results, and Next Steps



#### Acknowledgements

First things first. This research project was very much aligned with ECCP’s Data Priority area of focus. We were successfully able to use the funding to accomplish key aims of the project while also keeping in line with Clayton values, mission, and strategic objectives. We are extremely grateful for this opportunity. We formally thank the ECCP team and process for selecting this project that has and will continue to provide Clayton with data “food for discussion” around this critical issue. The study, designed by Pedro Mendez with mentorship from Clayton’s Research and Evaluation Department, used an innovative approach enhanced by collaboration. We would like to specifically thank Stephen Von Merz for his consultation on the project, as well as Clayton leaders Rebecca Soden, Chief Program Officer and Charmaine Lewis, Senior Consultant for Learning and Talent. We also dedicate this work to our Clayton boys of color.

#### Study Purpose and Rationale

Clayton values the ability to evaluate and improve our programs by utilizing data collected in a variety of ways. As part of our various initiatives and projects, we collect a variety of data used to inform and evaluate our work. This includes classroom and teacher data that helps us evaluate our successes and challenges. Data not only supports our curriculum enhancement, but allows examination of the culture of our school and needs of children and families. In the process of collecting and sharing data on this topic with instructional teams, we will foster self-awareness, and help them become better teachers and stronger leaders in the community.

Through data sharing, we can ultimately improve outcomes for children of diverse backgrounds by monitoring, understanding, and refining teachers’ personal views and beliefs related to the education needs and predispositions of males of color. Young males of color are often viewed as “them” or “others” rather than “we”. This suggests biases within our community that contribute to a lack of empathy for young men of color (Robert Wood Johnson Foundation, 2015). As professionals serving families with young children we must be able to see the big picture and give every child an opportunity to succeed regardless of culture or personal bias.

- **It was our goal to explore this issues with the instructional teams at Clayton, to develop mechanism for open conversation and growth, and to evaluate any changes experienced with the exploration. Our main project objectives were:**

- Obtain measured data indicating teacher predispositions that may surface when working with children.
- Initiate well-supported collegial conversations around predispositions and give teachers an opportunity to recognize unintended biases and to reflect on these dispositions.

## Intended Outcomes and Evaluation Questions

### Implementation Aims and Questions

- **Aim:** Develop and implement a process for exploration, measurement, and discussion. → **Question:** What activities were conducted to move this learning-project forward?
- **Aim:** Implement an inclusive and collaborative process for study and discussion. → **Question:** What collaborations and methods of inclusion were utilized during implementation?

### Summative Teacher Outcomes

- **Aim:** Describe teacher participants. → **Question:** What were the characteristics of participating teachers?
- **Aim:** Understand the distribution of teachers in preference groups measured by the Implicit Association Test. → **Question:** What proportion of teachers results fall into the different IAT groups representing their frameworks for responding to diversity?
- **Aim:** Understand the anti-bias practices used by teachers in the classroom. → **Question:** What levels of anti-bias practices do teachers self-report in the areas of Raising Self-Awareness, Physical Environment, Pedagogical Environment, and Relationships with Family and Community?
- **Aim:** Understand associations among unintended biases, anti-bias practices and observed quality in the classroom. → **Question:** Were there statistical associations between the assessed IAT group (i.e., reported teacher frameworks for responding to diversity), teachers' scores on self-rated anti-bias practice, and observed classroom quality?
- **Aim:** Improve teachers' self-awareness and reflection. → **Question:** Do teachers show improved self-awareness and reflection? What did they think about their individual and group results?

## Project Results

### What activities were conducted to move this learning-project forward?

Project activities included the following:

- ✓ **Planning:** We developed a work-plan and project timeline with assignments for staff. We engaged school leadership in decision-making around the timing of project activities. We reviewed and selected a cultural competency consultant and support team to carry out the reflective aspects of the project.
- ✓ **Implementation:** We collaboratively developed recruitment materials and process for teachers and used these to invite participation. We recruited teachers and they took part in the assessment process (30 teachers participated, 28 completed the IAT, and members of the

instructional teams were engaged in discussions before and after assessment.) As teachers came into the study area they were greeted by the primary investigator who reviewed a consent form with teacher who expressed interest in the study. The consent form talked about the purpose of the study as well as the test that would be administered and confidentiality.

The assessments conducted with teachers were carried out individually and took approximately 30 minutes each. Teachers completed the classroom *Implicit Association Test* (IAT; Greenwald & Banaji; 1995<sup>1</sup>) and the Chen, Nimmo, and Fraser's (2009) survey<sup>2</sup>, *A Self-Study Guide for Reflecting on Anti-Bias Curriculum Planning and Implementation*.

Once consent was received, teachers completed Chen, Nimmo, and Fraser's survey, which asked about teacher's experiences in the classroom and their awareness of how bias may influence the classroom environment and interactions with children and families. Example survey items:

- Am I aware of my own cultural identity and history? How comfortable am I about who I am?
- Are there dolls and clothing that represent male/female and different ethnicities/skin color?"
- Do I effectively provide opportunities for students to value and explore diversity in themselves and others?
- Do I include families in creating learning environment for all children?

Once teachers finished the survey they then completed the Implicit Association Test (IAT) online assessment of potential areas of implicit bias. Once completed, teachers were given the article, *Understanding Implicit Bias: What Educators Should Know (Staats, 2016)*<sup>3</sup>, to reference. All collected data was identified by ID numbers and were kept in a locked cabinet at Clayton Early Learning.

- ✓ **Preliminary Analysis:** Teachers were provided with summary results of the group-level findings and how they intersected with their individual result on the IAT measure. We also collected some teacher characteristics data such as gender, ethnicity, age, number of years teaching, and level of education. We obtained secondary data of observation quality ratings on the classroom-level CLASS<sup>®</sup> tools and the ERS instruments.
- ✓ **Reflection:** Teachers were provided with two opportunities for discussion and reflection on the findings (one at the time of assessment since results were an immediate download and the second following summarization of the group findings) and teachers and mentor-teachers were included in the decision-making on preferred next steps and reflective meetings (see next steps section). In brief, though, we plan further reflective sessions with our cultural competence consultant to explore together the overall evaluation findings and individual perceptions of the process.
- ✓ **Analysis and Interpretation:** Databases were constructed and statistical analyses were conducted using Microsoft Excel and IBM SPSS to examine the associations among the

---

<sup>1</sup> <https://implicit.harvard.edu/implicit/takeatest.html>

<sup>2</sup> <http://www.antibiasleadersece.com/wp-content/uploads/2015/01/Chen-NimmoFraser-ABE-tool.pdf>

<sup>3</sup> <http://www.aft.org/ae/winter2015-2016/staats>

measured scores and teacher characteristics. From these results, graphs and tables were prepared. Data are secured in password-protected and locked systems.

- ✓ **Reporting:** Preliminary reports were generated for ECCP and another for teachers. The final report was prepared for ECCP.

### **What collaborations and methods of inclusion were utilized during implementation?**

Collaborations among cross-departmental staff enabled the success of this project. As mentioned in the acknowledgement, Clayton leadership was involved in the planning process, school staff were involved in helping schedule the timing of data collection and reflective processes, the research and evaluation department supported all aspects of the project and Stephen Von Merz helped us visualize what the reflective process could be. Most of all, teachers were willing to partner to collect this sensitive information and consider impacts on the children in their classrooms.

### **What were the characteristics of participating teachers?**

Thirty teachers comprised the sample.

- ✓ **Gender.** Twenty-five females (83.3%) and 5 male teachers participated in the assessments.
- ✓ **Ethnicity.** With regard to ethnicity, 16.7% chose no response, 16.7% were Black/African American, 10.0% were Hispanic/Latino (46.7% were White/Caucasian, and 10% reported "Other").
- ✓ **Education.** 6.7% reported an Associate's Degree and 10.0% indicated attending "Some College". Twenty percent held a Master's Degree, while 53.3% reported a Bachelor's Degree.
- ✓ **Age.** Teachers' ages ranged from 24 to 62, although 53.3% of the sample elected to not report their age.
- ✓ **Year of Teaching Experience.** Teachers reported experience ranging from less than one year to 33 years. Ten percent left this item blank, nearly 30% reported 5 years or less, 13.3% reported between 5 and 9 years, and the rest (almost 47%) reported teaching for over 10 years.

### **What proportion of teachers results fall into the different IAT groups representing their frameworks for responding to diversity?**

Chart 1 shows the proportion of teachers self-rating into the categories elicited by the IAT online test. A largest proportions were observed in two categories (i.e., group b: moderate automatic preference for European American compared to African American and group d: little to no automatic preference between African American and European American). None of the teacher fell into the category holding a strong automatic preference for African American compared to European American. It is understood that this may be a function of our sample size and as we engage more teachers across both of our schools in this exploration, we believe we may see a slightly different pattern of findings.

Chart 1. Teacher Frameworks for Responding to Diversity

Percentage	Framework
11%	Strong automatic preference for European American compared to African American
29%	Moderate automatic preference for European American compared to African American
7%	Slight automatic preference for European American compared to African American
29%	Little to no automatic preference between African American and European American.
14%	Slight automatic preference for African American compared to European American
11%	Moderate automatic preference for African American compared to European American
0%	Strong automatic preference for African American compared to European American.

**What levels of anti-bias practices do teachers self-report in the areas of Raising Self-Awareness, Physical Environment, Pedagogical Environment, and Relationships with Family and Community?**

Using the results from *A Self-Study Guide for Reflecting on Anti-Bias Curriculum Planning and Implementation*, we obtained data regarding teachers’ perceptions of their own anti-bias practices in the classroom. We derived a total mean score across the survey, as well as four subscale means reflecting different aspects of teacher practice. Note that scores range from 0 to 4 where 0=low frequency and 4=high frequency of anti-bias activity. Chart 2 shows the total and subscale means and standard deviations.

Chart 2. Teacher Self-reported Anti-Bias Classroom Practices

Scale	n	Min	Max	Mean	SD
<b>Raising Self-Awareness</b>	30	1.57	3.14	2.40	.37
<b>Physical Environment</b>	30	1.40	4.00	2.58	.62
<b>Pedagogical Environment</b>	30	1.87	3.20	2.54	.34
<b>Relationships with Family and Community</b>	30	.88	4.00	2.15	.65
<b>Total SSG Mean Score</b>	30	1.77	3.31	2.43	.38

**Were there statistical associations between the assessed IAT group (i.e., reported teacher frameworks for responding to diversity), teachers’ scores on self-rated anti-bias practice, and observed classroom quality?**

Unexpectedly there were no statistically significant correlations between Teacher IAT ratings, their self-reported classroom anti-bias practices, and classroom quality. We have several potential explanations for this. First, we have a very small sample (lack of power and representativeness) and, thus, will pursue researching this with more teachers to see if this finding stands. Second, we have some concerns, upon reflection, with the measurement tools used (e.g., we believe an observational, more objective measure

of actual classroom practices related to anti-bias will be more accurate than self-report on this construct.) Then, we also know that Clayton teachers are well-trained professionals in the consistent implementation of the Clayton curricula and approaches. We believe this leads to great quality and consistency in practice across classrooms. Teacher reflections supported this idea.

### Do teachers show improved self-awareness and reflection? What did they think about their individual and group results?

The following teacher reflections are provided in the teachers' words and voices for authenticity and respect for their thoughts. Because they are individual's comments, however, **please protect this information** and do not share any direct quotes from this portion of the report beyond the immediate ECCP stakeholders.

Teachers were asked what they thought the results meant and whether their individual or teacher-group results were surprising. Selected reflections:

- Not surprised at all about individual results. Group results are not at all surprising either. I am surprised that there was no one in the strong preference for AA over EA. But I'm not surprised that there were people in the groups on the other side. Interesting.
- Slightly surprised – why: it works on an unconscious level. But what I do in practice is done with intention so I didn't expect that it would show up unconsciously as I was taking the test (IAT).
- Not at all a surprise. Somewhat surprised by group distribution among teachers. I thought I knew there would be preferences for different groups for sure but interesting to see where people feel into the categories. I hoped everyone would have similar preference, as in no preference – interesting to see variability.
- My individual response was a surprise. I guess I expected to be more aligned to my own race. I think people more generally aligned to their own race and that's what we see here (in the distribution). Have you looked at that?
- Not really a surprise, pretty typical response for teachers who work with many different populations.
- Not really, I feel like the test IAT is impossible to get to what you really think about race and diversity. I was happy with my results.
- I think the methods of the IAT would only show some preference to your own group because I think people naturally have preference to their own group.
- Not surprised but irritated. I knew it would happen but didn't want it to happen. Not surprised by group distribution.
- I think the measure of IAT has some limitations of Implicit Bias, Also, it was a self-report of classroom practice. It (Implicit Bias) is such a complex topic and I don't know how we can really measure it.

Teachers were also asked why they thought we did not observe differences across the IAT groups with regard to their self-reported anti-bias practices. Selected reflections:

- Because despite personal bias, teachers are professional educators and try to intentional and aware of all children's needs in the classroom.
- We know racism and bias as adults because racism is learned – our children don't know (to be racist) so we are modeling better for children so they don't learn.

- I think the majority of our teachers at Clayton are culturally aware.
- I'm not surprised because employees at Clayton are very conscious, teachers are pretty sensitive to the consequences of bias.
- Maybe because the bias are hidden. Automatic testing isn't as applicable in practice because the one-on-one relationships override implicit bias.
- I think we all want to think the best of ourselves. When we think about classroom practices, we try to make it equal for all. When we took the IAT, it is more implicit, what is sitting back here.
- Because we're so... Clayton, in general, is so open to background and cultures. Clayton is inclusive in general and we talk about diversity a lot.
- I think it is a good thing (that there wasn't much difference). I think it is because of the field and populations we work with, you are required to put those thoughts aside.
- Training on Touchpoints and Conscious Discipline – helps to put those thoughts aside and to treat others like humans.
- I feel like at Clayton that our staff have the training, teaching, education, and interest in working with various demographics. I know that I will have preference but self-motivation is important to honor the diversity. Preference is not necessarily put in practice because we are professionals who honor families and children.

Other teacher comments related to things we should keep in mind as we continue to explore this topic and become more aware of improving the situation for children of color included:

- A reminder to be careful not to assume white children, though privileged, are OK and don't need anything.
- Encouragement and excitement to keep talking about this topic. (Several indicated this.)
- Continuing to receive articles and books from the research team on this topic to keep it going. Include readings as a part of the ongoing conversations to foster group reflection.
- Open dialogue in a safe space.
- Increase awareness of the results of this study.
- Be willing to be a part of a larger conversation outside of Clayton.
- Continue to try to understand others' views.
- Teachers generally preferred to have group conversations to foster learning and connectivity over the individual sessions, though many teachers indicated they would like the individual support as well (without their mentor-coaches present).
- Explore using additional and different measures to examine implicit bias.

## Barriers and Challenges

We support teachers' cultivation of stronger awareness of their implicit bias to improve the quality and efficacy of their work with families and children. Unfortunately, many people are afraid to look deep inside themselves and reflect on their subconscious self. This is not only a barrier for this project, but also for the field of early childhood. When teachers were approached for the project some were fearful about what the results may say about their character. This may be because of the fear of getting labeled as "racist" by their Clayton community for expressing their subconscious thoughts. Staats (2016) states that implicit bias are our attitudes or stereotypes that function outside our knowledge and can challenged even the most well intended individuals resulting in actions that do not reflect our intentions. What this means is that even the most veteran teachers may find themselves struggling with

their implicit bias. This was difficult for some teachers to understand. This was reflected in our sample size and the need for multiple invitations to be sent out to teachers.

Although the instruments for this evaluation are well established and supported by several researchers, some educators did not feel comfortable with the IAT. They questioned the validity of such a tool. Much like Clark and Zygmunt (2014) found, it was common for participants to disagree with their results and stated that the test only measured reflexes and that it was set up in a way that would make you be biased on purpose. More importantly, some people became very upset with the setup of the IAT. The test places the word bad on top of pictures of a particular group. In this case, African American. Thus making it look as if the test is implying that African American people are bad. This really upset people and turned them away from the test. Examiners explained that this was not the intention of the test. This created more hesitation from participants to be willingly participate. Though individual reflective sessions revealed they would like to keep up the conversations and study of this topic.

### Specific and Global Next Steps

We believe this project is a preliminary step improve cultural competency and open our inner self to learn about the needs of the children and families we serve. Recently, more researchers have begun to look at implicit bias and the impact on society. Yet, there is more to be investigated in particular in early childhood. Research indicates that whether we choose to acknowledge it or not, bias has an impact in the education children receive. For example, one study found that teachers with a negative prejudice attitudes tended to down play the achievement and intelligence of minority students (Bergh, Denessen, Hornstra, Voeten, & Holland, 2010). If we are able to better understand these biases or attitudes we could see more teachers empowering all children. The next step for us here at Clayton Early Learning is to continue our work around bias and the impact it has with the children and families we work with. Leadership and teachers want to keep these conversations going in our own teams and classrooms.

Specifically, we included teacher ideas for next steps and they also shared that they would like to hold more group sessions and individual reflective times with our consultant, preferably without their mentor-teacher present. We also will specifically share these and further results with instructional teams and leadership to help guide next steps. Additionally, results will be shared in existing ongoing meetings intended for sharing data (e.g., Teacher Planning Meetings, Program Committee, Parent Council, and the Clayton Board of Trustees). Many staff in roles other than teachers expressed interest in participating in this evaluation. One of our next steps would be to expand the number of participants to include management, mentor-coaches, and our teachers and staff at the Far North East campus.

Ideally, this project or something similar may be expanded outside our Clayton walls in the community to support other peer learning and self-reflection in this area. Our hope is that with first studying and implanting change in our own campus, it will inspire other schools and systems to take the same steps to research bias, its impact on practice/program implementation and the consequences for children. Children are at the center of our framework and are clearly influenced by more than teachers. We hope to eventually create social change across a child's relationships, experienced environments, and the local and state systems.

## Appendix A. Literature Review and Implications for Clayton Early Learning Families

Clayton currently directly serves 700+ children and families birth to five, the majority of whom are below the federal poverty level and live in Denver. Among our children, over 10% have special needs, 92% are on Medicaid, 40% identify as Hispanic/Latino, 30% as Black or African American and 15% as bi- or multi-racial. Through our two generation dual-language approach, we implement research-based interventions that buffer adversity during these crucial years. Clayton families, and many in the wider community we serve, experience significant challenges such as food insecurity, homelessness, and violence. Poverty is one of the most significant risk factors affecting children's lives and the educational achievement gap. Some research suggests that when primarily White teachers serve children of color, there exists a limited understanding of the impact of culture in the provision of learning strategies and supports (Gottlieb, 2015). Specifically, teachers reported that they do not feel prepared to work with diverse populations, feel uncomfortable with discussing diversity issues, and feel ill prepared to handle challenges of diversity in their setting (Council for Professional Recognition, 2009). To better instruct children of color, we intend to support them to improved acknowledgement of gender and cultural biases and help our teachers become more attuned to their dispositions. By improving cultural competency within our organizations, teachers will be able to deepen their connections with and education supports of families and children.

Educators are charged with the growth and learning of young children to enable them to succeed academically and in life. Yet, in the United States, boys of color may not be getting the support they need to achieve their full potential. This inequity may impact boys negatively and create lasting negative effects (Autor & Wasserman, 2013). Boys of color generally fall behind white children in mathematics and reading and these effects are observed as early as preschool. Four-year-old boys of color, for example, score lower than white students in early reading assessments (U.S. Department of Education, 2015). Typically, formal education determines the type of position a person obtains in the job market. The less educated a person is, the more they face poor employment options with limited pay (Autor & Wasserman, 2013). Following this logic, this lack of earning potential makes it more difficult to provide adequately for one's family. When male children of color fall behind academically, it may be difficult for them to "catch up and keep up" to later maximize employment prospects. We need to appropriately stand up for these children to close these educational gaps and maximize success. To provide a specific example, in his book *The Mind of Boys (2005)*, Gurian described boys needing greater opportunities for kinesthetic learning compared with girls. This differential learning may impact achievement gaps between boys and girls, and may be more pronounced for boys of color.

Additional factors, beyond learning styles, contribute to boys of color not succeeding at levels similar to girls or to white boys. For example, male children of color are more likely to develop in unsafe neighborhoods, live in poverty, and attend under-resourced overcrowded schools. Over time, challenges faced by boys of color lead to lower graduation rates, higher incarceration rates and a greater likelihood of dying from homicide (Robert Wood Johnson Foundation, 2015).

Although interventions such as CCAP, Denver Preschool Program, Adverse Childhood Experiences, and Nurse Home Visitation Program exist, some stakeholders in the community believe their voices are not being heard. Some recent interviews suggest a lack of efficacy or even exploitation within such programming. For example one woman of color said, "They've been studying us for years (Caucasians) and making money off us. What do they have to show for it?" (Personal Interview, 03-09-16). Other

negative contributions may come from media images of young men of color being heavily penalized and judged for actions that would be treated as youthful mistakes for young white men (Robert Wood Johnson Foundation, 2015). Although local school systems have made efforts to become more culturally sensitive and aware, educators' unconscious predispositions may emerge unintentionally. To better assist those families in need, it is crucial that we develop more knowledge and tools to understand ways to support teachers to become aware of their biases that affect the ways in which they instruct young boys of color.

A lack of understanding about the role culture plays in behavior, communication, and learning may lead to inaccurate assumptions about children's abilities to succeed (Zion & Kozleski, 2005). If we are able to increase understanding, our instructional teams can better tailor instruction to the individualized needs of each child. Holding ourselves accountable for these unintentional biases, we will be able to ensure fewer children fall through the cracks.

## Appendix B. References

- Autor, D., & Wasserman, M. (2013). Wayward sons: The emerging gender gap in labor markets and education. *Third Way Report*. Washington D.C.
- Adams III, V.H., Devos, T., River, L.M., Smith, H., & Vega, L.A. (2014). Teaching about implicit prejudices and stereotypes: A pedagogical demonstration. *Teaching of Psychology, 41*, 204-212.
- Battey, D., & Leyva, L.A. (2016). *Making the implicit explicit: A call for exploring implicit racial attitudes in mathematics education*. In Wood, M. B., Turner, E. E., Civil, M., & Eli, J. A. (Eds.). (2016). Proceedings of the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Tucson, AZ: The University of Arizona.
- Bergh, L. V. D., Denessen, E., Hornstra, L., Voeten, M., & Holland, R. W. (2010). The implicit prejudiced attitudes of teachers: Relations to teacher expectations and the ethnic achievement gap. *American Educational Research Journal, 47*, 2, pp. 497-527. DOI: 10.3102/0002831209353594
- Clark, P. & Zygmont, E. (2014). A close encounter with personal bias: Pedagogical implications for teacher education. *The Journal of Negro Education, 83*, 147-161.
- Cooper, L.A., Roter, D., Carson, K., Beach, M.C., Sabin, J., Greenwald, A., et al. (2012). The associations of clinicians' implicit attitudes about race with medical visit communication and patient ratings of interpersonal care. *American Journal of Public Health, 102*, 979-987.
- Council for Professional Recognition (2009). Diversity and Inclusion in Early Care and Education. Washington, DC.
- Denver Children's Affairs (2015). My brother's keeper: Ensuring opportunities for boys and young men of color.
- Fiarman, S.E. (2016, November). Unconscious bias: When good intentions aren't enough. *Educational Leadership, 74*, 10-15. ASCD: Alexandria, VA. Retrieved from: <http://www.ascd.org/publications/educational-leadership/nov16/vol74/num03/toc.aspx>
- Gilliam, W.S., Maupin, A.N., Reyes, C.R., Accavitti, M., & Shic, F. (2016). Do early educators' implicit biases regarding sex and race related to behavior expectations and recommendations of preschool expulsions and suspensions. *A Research Study Brief: Yale Child Study Center*. Retrieved from: [http://ziglercenter.yale.edu/publications/Preschool%20Implicit%20Bias%20Policy%20Brief\\_final\\_9\\_26\\_276766\\_5379.pdf](http://ziglercenter.yale.edu/publications/Preschool%20Implicit%20Bias%20Policy%20Brief_final_9_26_276766_5379.pdf)
- Greenwald, A.G., McGhee, D.E., Schwartz, J.L.K. (1998). Measuring individual differences in implicit cognition: The Implicit Association Test. *Journal of Personality and Social Psychology, 74*, 1464-1480.
- Gottlieb, A., (2015, October 1). Denver schools don't have a lot of black teachers. Here are a few reasons why. [Web log post]. Retrieved from <http://co.chalkbeat.org/2015/10/01/denver-schools-dont-have-a-lot-of-black-teachers-here-are-a-few-reasons-why/#.VuX1J5MrKgQ>.
- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review, 102*, 4-27.

- Guria, M., & Stevens, K. (2005). *The Minds of Boys: Saving our sons from falling behind in school and in life*. San Francisco, CA: Jossey-Bass A Wiley Imprint.
- Lambert, L., (2003). *Leadership Capacity for Lasting School Improvement*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Robert Wood Johnson Foundation (2015). Removing barriers and creating opportunities: Making the case to help young men of color succeed. Princeton, NJ.
- Sarason, I.G., Johnson, J.H., Siegel, J.M. (1978). Assessing the impact of life changes: Development of the Life Experiences Survey. *Journal of Consulting and Clinical Psychology*, 46(5), 932-946. doi: 10.1037/0022-006x.46.5.932
- U.S. Department of Education, National Center for Education Statistics. (2015). *Digest of educational statistics 2013*.
- Zion, S., & Kozleski, E., (2005). *Understanding Culture*. Tempe, AZ: National Institute for Urban School Improvement.