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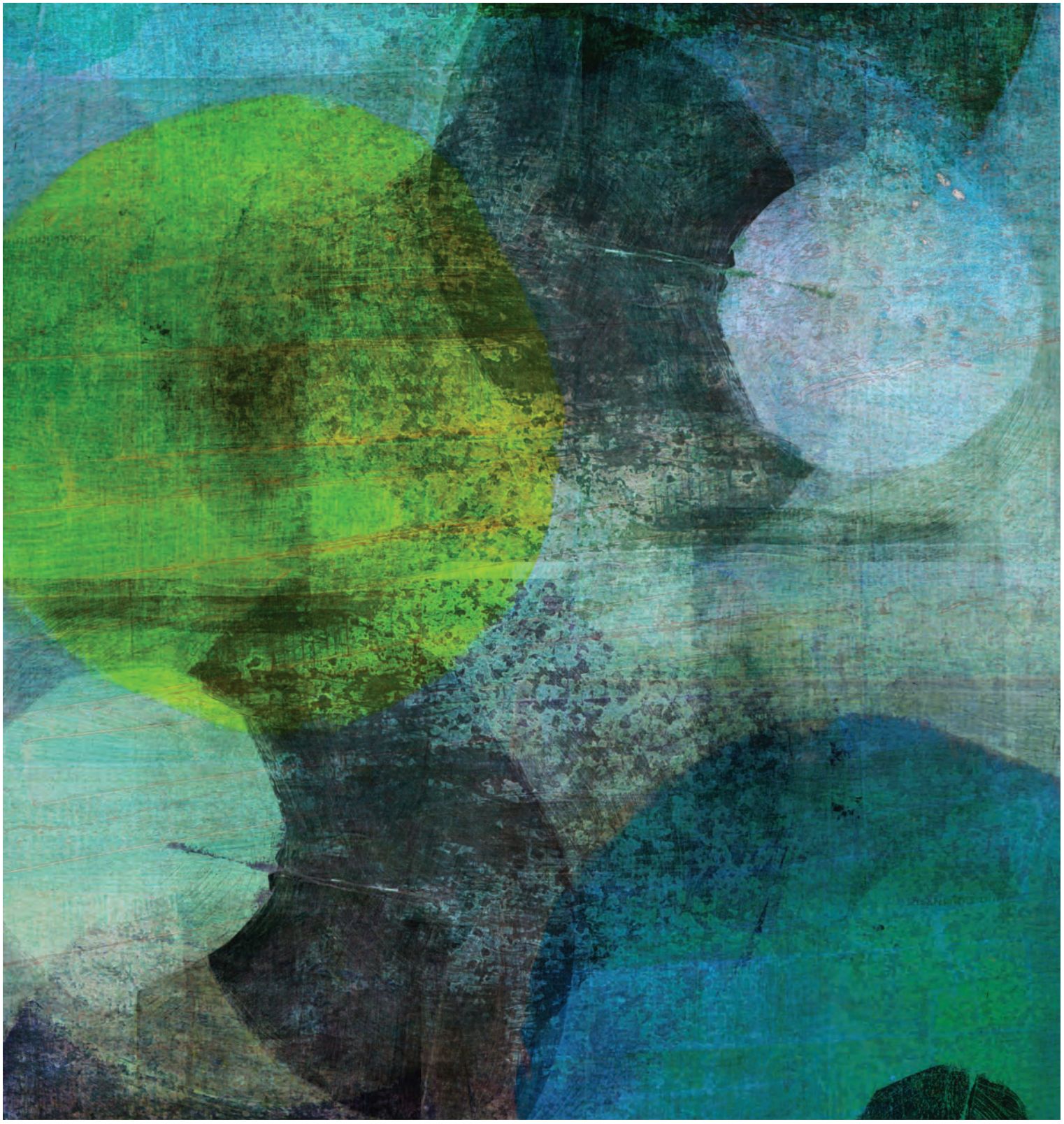

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Middle School Journal

In This Issue | **May 2015** Volume 46 Number 5

Cultural Respect: Beyond Compliance, Pleasantries, and Platitudes

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Middle School Journal leads the way in generating and disseminating the knowledge base of professionals engaged in the education of young adolescents. To that end the Journal publishes vivid descriptions of practice grounded in middle level literature. It also publishes the findings of new research with clearly drawn applications for practice and grounded, conceptual articles related to middle grades policy and practice.

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Living and learning about adolescent lives

The month of May often evokes feelings of jubilation and liberation as many prepare to graduate and advance to successive stages of opportunities. One only needs to look at the school picture taken back in August to witness physical changes, while noting that the cognitive, social, and emotional development are a bit more difficult to capture and articulate. No need to worry—that's what standardized test scores are supposed to illustrate and help us understand, right?

How do we want young adolescents to view and assess themselves—by using a single, decontextualized piece of data or by analyzing results using multiple, varied means? We know that valid, reliable, equitable assessments are essential; however, information from a range of diverse forms of formative and summative assessments should be continually used to guide and inform students and teachers' actions and decisions. Thus, we also know that successful education for ALL demands that we embrace a whole mosaic of images, inputs, and experiences, not just a single "selfie" such as high-stakes tests or "standards" can all too often become.

With the end of the school year upon us, we know that "picture" that emerges from standards and test scores does not look the same for all. For some, it's a bestowal of laurels. For many middle level students, this kind of fervor around standards and testing is a "normal" that has no imaginable alternative. But for those of us who remember school in the 20th century, alternatives do exist—especially at the middle level where identity is so fundamentally shaped.

As revealed so powerfully in the 85-minute 2010 film documentary *Race to Nowhere*, the tyranny of testing has a dark side for some students who don't get high scores and who thus face labels of "failure" or who need "remediation." What carnage lies in the wake of this "big test" drive to sort and categorize young students without regard to the diverse backgrounds, advantages, and disadvantages that permeate the lives of our students far beyond the walls of schools? What have we—as a collective profession—done in the past nine months to raise dignity, possibility, transformation through education, literacy across many domains, and community building among the panoply of diverse learners whose whole lives will be influenced by the year that is just ending?

With the end of the school year upon us, time may finally emerge for intense reflection about practice, standards, impact, and pathways that we as professional educators take to ensure that the bold aspirations of truly ambitious middle level excellence have actual embodiments in the lives of the young adolescents who populate our schools. Just as many family members, students, and community groups have emerged to challenge the hidden "costs" of testing and standards, so must we as professionals consider a wide range of measures and approaches to creating ever-expanding democratic opportunity for all, not just for some. Just as we expect growth from students, so we must model such evolution: we don't simply press the rewind and repeat buttons in an endless loop.

Adrienne Rich, during her famed convocation speech at Douglass College in 1977, said to students, "...you cannot afford to think of being here to receive an education: you will do much better to think of being here to claim one… Responsibility to yourself means refusing to let others do your thinking, talking, and naming for you; it means learning to respect and use your own brains and instincts; hence, grappling with hard work." Hard work—indeed, middle level teachers are intimately familiar with the complex, messy, difficult yet also rewarding, inspirational, and meaningful work of teaching and learning with young adolescents. As advocates of middle level education, we must "claim" these transitional, significant years as ones marked by young adolescents who develop ownership of their actions and thoughts, where young adolescents have opportunity to develop and "claim" their identities as productive, problem-solving, compassionate members of families, peer groups, and communities.

Middle school girls and the "leaky pipeline" to leadership

An examination of how socialized gendered roles influences the college and career aspirations of girls is shared as well as the role of middle level professionals in disrupting the influence of social gendered messages and stigmas.

Mary Shapiro, Diane Grossman, Suzanne Carter, Karyn Martin, Patricia Deyton, & Diane Hammer

The lack of women in top leadership ranks has been well documented and long examined. In 2014, across the Fortune 500 companies, women comprised only 4.6% of Fortune 500 CEOs, held only 16.9% of Board seats, and made up 14.6% of top executive positions (Catalyst, 2014). In government, women made up only 15% of Congress and 12% of governorships. Even in nonprofits, women held only 19% of the CEO positions in the 400 largest charities (Joslyn, 2009).

These numbers are especially surprising when we recall that women have a good running start: in high school, girls academically outperform boys. Girls constitute 55% of students in the top 10% of high school graduating classes, and earn an overall average GPA of 3.42, compared to 3.28 for boys (College Board, 2012). Likewise, in college, women outpace men in enrollment by a ratio of 1.4 to 1 (DiPrete & Buchman, 2013) and earn 55% of college degrees (Wang & Parker, 2011). Today, according to the Council of Graduate Schools, women also outnumber men in most graduate and doctoral programs (Jaschik, 2010). Once in the working world, women's participation seems fairly consistent with the numbers just cited: they comprise 46.9% of the U.S. labor force and 51.5% of middle management (Catalyst, 2014). But while organizations have made efforts to attract, retain, and advance female talent (Galinsky & Backon, 2009), a shift occurs along the path to top positions, resulting in fewer women leaders.

Why do girls perform so well academically yet lose ground as professional women? This diminishing number of women up the leadership hierarchy is often referred to as the "leaky pipeline," and attributed to many factors: external ones such as work environments not conducive to work/life balance, and internal ones such as women's own leadership aspirations (Eagly & Carli, 2007). How early does that "leak" begin? Though much research has focused on college-age and adult women, little quantitative analysis has been done with younger girls. The purpose of our research is to study middle school girls to determine whether limiting factors in relation to career opportunities, expectations, and self-beliefs might emerge as early as 10 to 12 years of age. We also sought to understand how middle school curricula, programs, and educators might be empowered with specific knowledge to counteract or mitigate these factors.

To that end, this research examines what middle schoolers think about careers and what factors may influence their nascent aspirations. We also wanted to know what impact, if any, single-sex environments, here proxied by membership in one organization, the Girl Scouts, might have on young girls' career goals. We found that socialized gendered roles, already evident by middle

school, do influence the career aspirations of young adolescents; and that single-sex environments increase the self-confidence of girls, broaden their career options, and mitigate some of the power of gendered messages.[1]

In this article we first provide an overview of what is known about career development in general and middle schoolers specifically. Then, using online survey responses of more than 1200 middle school boys and girls, we discuss their attitudes toward work, their career goals, and differences in self-efficacy and career aspirations among boys, girls, and Girl Scouts. These findings may quantify and substantiate what many middle school educators see every day in their classrooms. Finally, we offer recommendations for what middle school teachers and counselors can do, or are already doing, to interrupt the impact of social gendered messages and retain young girls in the pipeline to become tomorrow's leaders.

Theories about career development

Two theories provide insight into middle schoolers' career choice development: social role theory and social cognitive career theory (SCCT). Every culture includes gendered expectations for what individuals, based on their sex, are *supposed* to be like (their traits, such as being relationally-oriented or autonomous) and *supposed* to act like (their behaviors, such as being competitive or collaborative). These expectations help define social roles, that is, expectations for "appropriate" gender role behavior, including expectations about careers and family roles. Social role theory (e.g., Diekman & Goodfriend, 2006) explains the pressure that a man or a woman faces to act consistently with those social roles (male doctor, female nurse) and the resulting conflict, discomfort, and confusion when individuals do not conform (female doctor, male nurse). At the same time, however, social role theory acknowledges that these roles are malleable, suggesting that as more women move into nontraditional fields, roles and expectations may also change as a result.

Social cognitive career theory (Lent, Brown & Hackett, 1994) explains career development using personal and environmental factors, as taken in and interpreted by the individual. For example, a middle schooler's career goals start with "personal inputs" such as sex or ethnicity and her "background," which includes factors like parental advice and media messages. She then has "learning experiences" during activities such as clubs, sports, and early jobs; those experiences generate both her level of self-efficacy, that is, the extent to which she believes she can accomplish a goal, and her positive or negative expectations for future outcomes. Together, those feelings of self-efficacy and expectations fuel her career interests, which, if supported, lead to career goals and, ideally, to action that moves her towards achieving her goals (see Figure 1). As choices emerge across time, encouraging influences like coaching and mentoring lead to behavior that aligns with career goals, while barriers like discriminatory actions or limited job opportunities lead to non-aligning behavior.

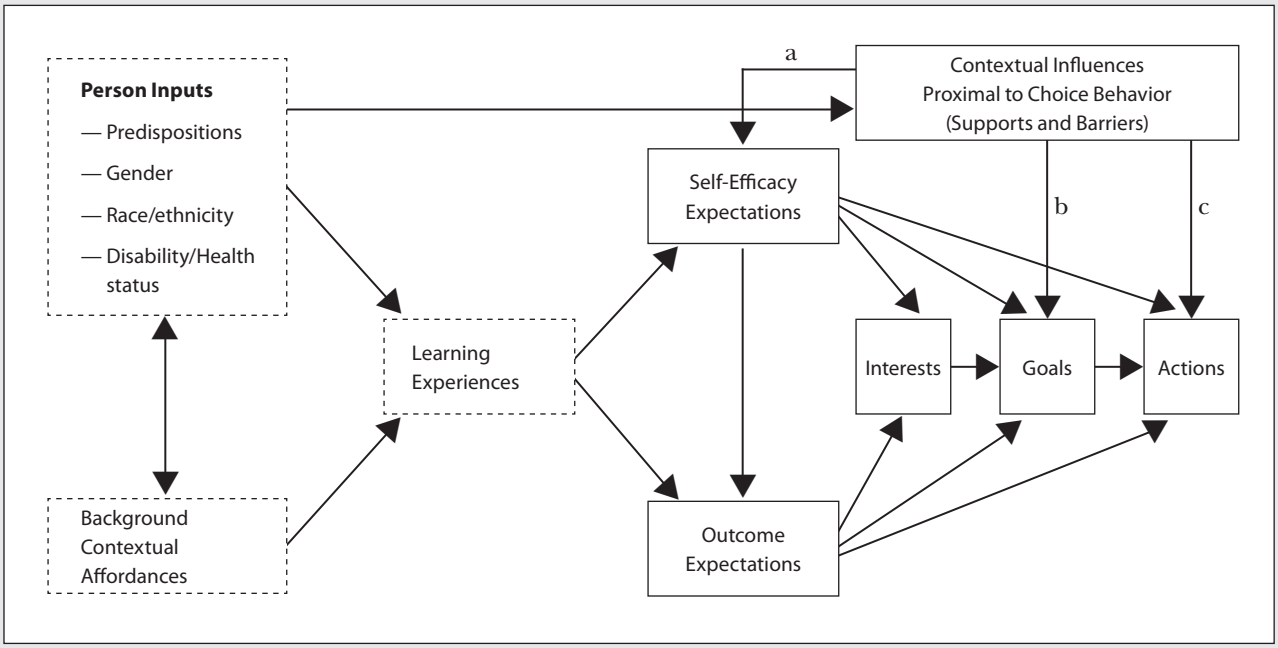
Given this theoretical background, how do social roles intersect with career goal development? Research findings, initially focused on adults, found a significant gendered impact: social gender roles influence what women and men are expected to do, the talents they cultivate, and the occupational paths they pursue. In addition, those gender roles open up different opportunities and constraints as adults move from goals to action (Prentice & Carranza, 2002; Wood & Eagly, 2002). When researchers looked at children, they found that children establish gender role stereotypes as early as age two and an emerging career identity by middle school (Jantzer, Stalides, & Rottinghaus, 2009).

What forces shape those early career aspirations? Watson and McMahon (2005) cite multiple studies on children across the globe from kindergarten through elementary school, which have found that gender has already impacted children's thinking about their future career options. Further, Marlino and Wilson (2003), looking at girls in grades 7 through 12, identified media, family, and the school environment's courses, programs, and educators as strong influencers of girls' attitudes towards careers and future expectations. More than ten years later, these factors, expanded on below, continue to play a major role in gender development.

Media: Children watch movies where only 19% of characters "on the job" are women; they watch television where 27% of the women, compared to 1% of the men,

1 We recognize that there are many different types of single-sex environments, including academic and extra-curricular settings. Though we hypothesize that we would find similar results with other girl-serving organizations, obviously we cannot make any definitive claim to that effect. Future research will examine whether other girl-serving organizations (beyond the Girl Scouts) and whether multiple membership in girl-serving organizations leads to comparable outcomes.

Figure 1 Social cognitive career theory



do housework; and they read books where men are depicted in twice as many careers as women (Hartung, Porfeli & Vondracek, 2005; Watson & McMahon, 2005; Herr, 2007). In G-rated films, men are far more frequently portrayed working—of the 333 speaking characters shown in a job, only 19.5% are female characters. In addition, the *types* of professions shown are heavily gendered; for example, almost all the business owners and military personnel are male, and positions in the medical sciences, executive positions, and law include no females (Smith, Choueiti, & Stern, 2013).

Books: Gibson (1988) makes the somewhat obvious point that, "books are . . . an important way for a culture to transmit its varied social values to its children" (p. 177). As we saw in media messages, male characters dominate in children's literature. McCabe (2011), who studied nearly 6000 children's books published between 1900 and 2000, including winners of the prestigious Caldecott Award, found that males are central characters in 57% of those books and that only 31% feature a central female character. Narahara (1998) studied Caldecott and Newberry award-winning children's picture books and found that male protagonists outnumbered females by a ratio of three to one, and 21 out of 25 books contained images of women wearing aprons.

Parents: Parents may be the most important influence on children's beliefs and attitudes toward gender and careers. Witt (1997) points out that children's earliest exposure to gender roles—"what it means to be male or female"—comes from their parents. She cites research findings that suggest that parents continue to prefer male children and that they treat sons and daughters differently. Whether covert or overt, intentional or unintentional, it appears that parents communicate to children gendered messages about activities, occupations, and beliefs and values. For example, Raley and Bianchi's (2006) research reveals that daughters still do more housework than sons, and an intergenerational study (2001) suggests that mothers play a significant role in influencing children's attitudes toward work and family roles, including their beliefs about how housework should be allocated. The work of Jodl, Michael, Malanchuk, Eccles, and Sameroff (2001) makes clear that parents across all races and ethnicities influence—through both "direct and indirect pathways"—children's academic values, interest in extracurricular activities like sports, and career aspirations.

Educators: By the time a student reaches middle school, she is likely to have spent approximately 7200 hours in an educational institution. Not surprisingly,

then, schools powerfully shape attitudes toward careers. In school, mastery of particular course material like mathematics or science can lead to or away from the self-confidence to pursue certain careers in, for example, STEM. Peer pressure and social dynamics tend to reward both boys and girls to maintain conventional gendered roles (Valian, 1998). Individual teachers provide learning experiences that can foster positive or negative outcome expectations and interests; as with parents, messages from teachers may be explicit or implicit. School counselors can encourage students to remain on an academic path that keeps broader career options open. Schools and educational partners can offer curricula or programs providing positive and encouraging learning experiences tuned to the needs of the next generation of career professionals.

This study uses the framework of SCCT and incorporates findings on social gender roles to explore what might predict career aspirations among middle school girls and boys. Do boys and girls (personal input) have different career interests, aspirations, and goals, and do these differences reflect gendered social roles? What messages (background input) have they heard about careers as they interact with the gendered landscape around them? Has girls' participation in Girl Scouting had any impact on their self-confidence and their career aspirations?

Research method

With the aforementioned questions in mind, we surveyed 1200 middle school boys and girls using the online platform Zoomerang drawing from two groups: Girl Scout members in grades 6–8, and a Zoomerang database of pre-selected adolescents in the same grades from New England, New York, and Pennsylvania. For all respondents, because they were legal minors, parental consent and respondent assent were obtained. The final sample contained 414 boys and 775 girls; of the girls, 475 self-identified as Girl Scouts, and 299 were non-Girl Scouts. These two samples of girls—Girl Scout girls (GSG) and girls who are not Girl Scouts (NGSG)—allowed us to test the impact on career aspirations of participation in a single-sex organization dedicated to serving girls with a focus on leadership development.

Participants in the final sample were in grades six (54%), seven (25%), or eight (21%). The average age of participants was 12.2 years, and they ranged between 10 and 15; they represented urban, suburban, and rural zip codes. The socioeconomic levels of the young adolescents were consistent across all three groups. With regard to ethnicity, the majority reported themselves as Caucasian (82%); the remaining respondents identified as African American (5%), Asian (4%), Native American (1%), and Multiracial (2%), or Other (2%). Additionally, 13.5% of the respondents lived in a single parent household. Each sub-group (boys, GSG, and NGSG) showed similar distributions in age, grade level, ethnicity, household adults, and urban/rural/suburban distribution. Because of this similarity in demographics across the three groups, our analysis was able to isolate membership in Girl Scouts as a factor in explaining differential outcomes.

Findings

What, if any, gendered beliefs do middle schoolers hold?

To determine what gendered attitudes middle schoolers hold, we asked several questions about what they have learned about work either by direct advice or by observation; whether they agree or not with statements about career opportunities for men and women; and what their own future plans are. The results make clear that middle schoolers recognize the challenges of parenting and having a job (see Figure 2), with more girls than boys recognizing this difficulty. Even though 13.2% of our sample came from single-parent households and approximately 25% of mothers did not have outside employment, this finding cuts across all middle schoolers. Further, both boys and girls see gendered differences in their respective futures, with boys more likely than girls to believe that there are some jobs that boys are better at and that boys have more career opportunities. When asked to speculate about their future plans, eight times as many girls than boys anticipated stopping work temporarily to stay home with young children.

Do middle schoolers understand the gendered differences they each face?

To assess how broadly and firmly established messages are regarding which careers are available to men and which to women, we asked a two-pronged question. First, we asked in what careers the boys and girls were most interested. Using a list of occupations from the *Teen Girls* study (Marlino & Wilson, 2003) and modifying them for

Figure 2 Significant differences in gendered messages across boys and NGS girls and GS girls (percentages of group agreeing with each statement)

		Boys	NGS girls	GS girls
What they learned about work from direct advice or from watching working adults?	Even when both parents work, moms take care of the kids.	23.4	27.1	15.3
	It is really hard to have a job and have kids to take care of.	32.1	39.6	
Messages they agree with	There are some jobs that boys are better at than girls	73.0	55.4	
	Boys have more career opportunities than girls	35.1	32.7	23.6
Speculation on their future plans	If I have children, I will stop work until my children begin school, but then go back to work	4.0	29.0	32.0

our younger audience,[2] we offered 20 occupations from which respondents could select. Once they had made that choice, they were asked to, "imagine that you are the opposite sex (if you are a girl, imagine you are a boy); consider which one career you would be most interested in as the other sex." We then compared the top five choices (see Figure 3).

When girls speculate about their top choices as boys, girls accurately anticipate the top three choices the boys made for themselves. In order of preference, girls-as-boys select professional athlete (boys' #2 choice), jobs in STEM (boys' #1 choice), and jobs in business (boys' #3 choice). Girls do not anticipate boys' #4 choice of jobs in the professions and boys' #5 choice of jobs in arts, which are the two career areas that girls show the most interest in (girls' own #1 and #2 choices). When boys speculate about their top choices as if they were girls, they are even more accurate: their top five choices match, in exact sequence, the top choices girls made. In order, boys-as-girls select jobs in arts (girls' top choice), in professions (girls' second choice), jobs in medicine (girls' third choice), jobs in STEM (girls' fourth choice) and business (girls' fifth choice).

Do boys and girls have different, and gendered, career aspirations?

To explore the potential gendered nature in middle schoolers' actual career survey selections, respondents' choices were analyzed through two lenses: choices in

2 For example, "manufacturing" as a career title was modified to "a business that makes or builds products."

Figure 3 Top 5 career choices of boys for boys; of boys "if" they were girls; of girls for girls; of girls "if" they were boys

Top 5 career choices selected by boys:		**Top 5 career choices selected by girls:**	
Boy for himself:	Boy as a girl:	Girl for herself:	Girl as a boy:
1. Job in STEM (scientist, engineer, math)	1. Job in arts (performer, artist, writer, designer)	1. Jobs in the arts (performer, artist, writer, designer)	1. Athlete
2. Athlete	2. Job in professions (lawyer, professor)	2. Job in professions (lawyer, professor)	2. Job in STEM
3. Business	3. Job in medicine (MD, health care)	3. Job in medicine	3. Job in arts (performer, artist, writer, designer)
4. Job in professions (lawyer, professor)	4. Job in STEM	4. Jobs in STEM	4. Job in medicine (MD, health care)
5. Job in the arts (performer, writer, journalist)	5. Business	5. Business	5. Business

female- versus male-dominated jobs;[3] and choices for STEM (science, technology, engineering and math) careers. When asked to select their top career choice, the majority of boys (91%) selected a male-dominated job, and only 8.5% of boys selected a female-dominated one. Conversely, 74% of girls chose a male-dominated job, and 25% chose a female-dominated one. Overall, 80% of the middle schoolers preferred a job that was not female-dominated.

Examining career choices through a STEM lens indicates an additional gendered preference: 26.1% of the boys chose STEM careers, whereas only 12.4% of girls chose a future career in STEM. This result is eerily resonant with current data on women in STEM. Although women in the U.S. fill 48% of all the jobs in the U.S. economy, they hold fewer than 25% of jobs in STEM; they tend not to go into STEM fields even if they have majored in a STEM discipline in college; and they have higher drop-out rates once they are in STEM occupations (Beede et al., 2011).

Do girl-serving organizations (here, Girl Scouts) contribute to self-confidence and career aspirations in girl members?

To explore the possible impact a girl-serving organization may have on girls' confidence and career aspirations, we compared responses across GSG and NGSG regarding confidence, their agreement with gendered messages, and their career choices. We identified confidence as a key factor because, as SCCT theory makes clear, self-efficacy[4] affects individual career interests and career choices. To determine the level of self-confidence of middle school boys, NGSG and GSG, we asked our sample, "Compared to other kids in your grade, how would you rate yourself in the following areas?" Those 21 areas, derived from the *Teen Girls* study (Marlino & Wilson, 2003), include competencies such as speaking in front of a group, solving problems, organizing projects and activities, and getting good grades. Respondents rated themselves on a 5-point Likert scale, from 1 (much worse) to 3 (about the same) to 5 (much better). We then used factor analyses to determine whether any broad underlying factors might explain differences in confidence across those groups. Factor analyses allowed us to ask whether each of the 21 activity-ratings explains differences in self-confidence or whether clusters (factors) of those activity-ratings might function together to do so.

Our factor analyses identified three clusters that explain different aspects of confidence. Clustering these aspects into three larger categories enables one to synthesize the key characteristics related to confidence. Factor analysis identified those three categories, which we named confidence in "being a leader in charge"; confidence in "being a responsible leader" (producing outcomes); and confidence in "building teams". When taken together, these three factors explain overall confidence (see Figure 4).

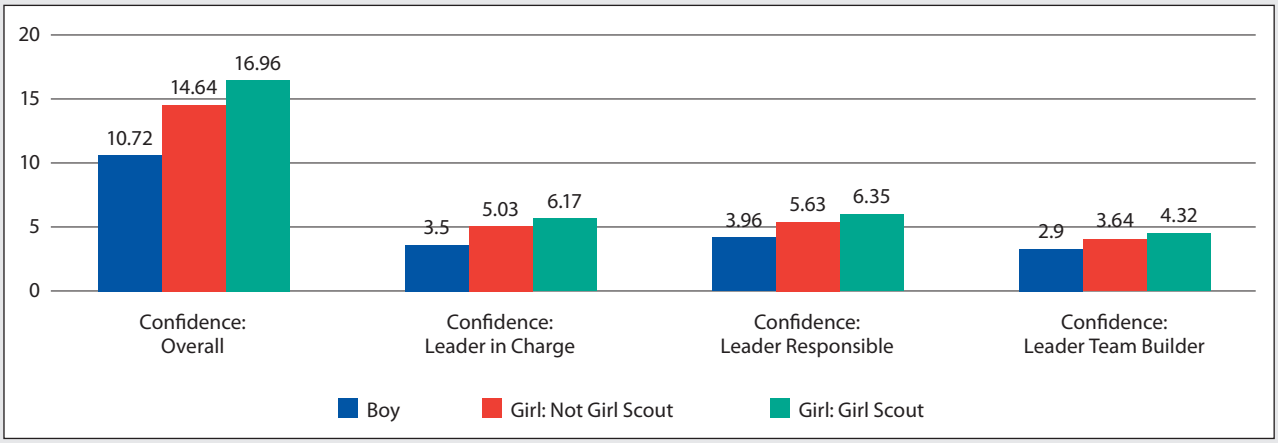
3 We defined career choices as "female dominated" if, according to the Bureau of Labor Statistics, the career was comprised of 65% or more women workers. These careers include, for example, librarian, elementary school teacher, child care worker, and human resource manager.

4 Referred to as 'confidence' in this study.

Figure 4 Activities that comprise each factor contributing to overall confidence

Confidence as Leader in Charge	Confidence as Responsible leader	Confidence as Team building Leader
• Speaking in front of others	• Getting good grades	• Being flexible and adaptable
• Performing in front of others	• Understanding and working with numbers	• Being sensitive to cultural differences
• Speaking about something you care about	• Finishing projects on time	• Being a good listener
• Being a leader	• Writing reports and papers	• Working with others or in a team
• Being in charge of projects	• Solving problems	• Resolving conflicts
• Getting people to agree with you	• Organizing projects and activities	
• Being creative	• Saving money	
• Making decisions		

Figure 5 Confidence mean scores across Boys, NGSG, and GSG



Across all three confidence factors, boys score lowest, NGSG score in the middle, and GSG score highest. Figure 5 shows the mean scores for "Overall Confidence" and each of the factors across the three groups. Boys' raw mean score for "Overall Confidence" is 10.72 compared to NGSG's of 14.64 and GSG's of 16.96. GSG are fully a third higher in "overall confidence" scores than boys.

In comparing responses to questions about what middle schoolers have learned or believe about differences across men and women's careers, Figure 2 discloses two statistically significant differences across boys, NGSG, and GSG. GSG are less likely than boys or NGSG to believe that "boys have more career opportunities than girls". They also show less agreement with the statement that "even when both parents work, moms take care of the kids and the house." Conversely, GSG anticipate stopping work temporarily (versus permanently) to stay home with young children in higher numbers than both boys and NGSG. Interestingly, GSG also hold different career beliefs beyond the gendered ones. GSG, more so than boys and NGSG, more strongly believe that "you can do anything if you work hard at it" and that "work can be fun!" (see Figure 6). GSG also believe more strongly than NGSG that "you should try to work at something you love or are really excited about."

Based on these research findings, it would also appear that participation in Girl Scouting broadens girls' career aspirations to more fully embrace STEM careers. Almost a third more GSG (13.5%) would choose a career in STEM than would NGSG (10.7%). The Girl Scouts in our sample also report a greater interest in male-dominated careers, including business, public service, and government. And, finally, their higher confidence also contributes to their greater interest in medical, professional, and arts fields that require advanced degrees.

Figure 6 Additional significant differences across boys and NGSG and GSG (percentage in agreement with the statement)

		Boys	NGS girls	GS girls
What they learned about work from direct advice or from watching working adults?	Work can be fun!	47.8	50.5	64.7
	You can do anything if you work hard at it.	59.9	61.5	72.7
	You should try to work at something you love or are really excited about		61.9	75.0

Discussion and implications for middle school professionals

These findings demonstrate that middle schoolers are indeed already thinking about future careers, that gendered messages influence their thinking and planning, and that girl-serving organizations, or girl-only "learning experiences," can positively mitigate those messages and broaden girls' career choices.

Before discussing what middle school professionals may do to influence the career choices of their students, it is important to put those choices in a broader context in order to understand why we should be concerned. Today, close to 40% of mothers are either the sole breadwinner or earn as much or more than their working spouse or partner (Boushey & O'Leary, 2009). In 2008, employed women in dual-earner couples contributed an average of 44% of the annual family income, up from 39% just 10 years earlier (Galinsky, Aumann, & Bond, 2011). No one expects this trend to reverse itself, particularly given women's increased education levels and participation in the labor force, families' increased dependence on two incomes (Galinsky et.al, 2011); and the impact of the Great Recession and America's shift away from blue collar labor to a service and knowledge-based industry (Shapiro, et al., 2012). Clearly, all middle schoolers, boys and girls, face a future of increasingly worrisome financial insecurity. Interestingly, one area of agreement across all our respondents was their recognition of this future: 62% of boys and 58% of girls anticipate they will have to support themselves financially in the future.

At the same time, middle school girls express more interest in jobs in female-dominated industries. Dubbed "pink collar" jobs, average salaries are lower in industries dominated by women. Boys' almost exclusive career choices in male-dominated jobs may reflect two gendered dynamics: male-dominated jobs usually confer higher pay and status than those dominated by women (Hartung, et al., 2005; Wilbourne & Kee, 2010) and the greater reluctance of boys to even consider female-dominated jobs reflects society's lower tolerance for men and boys who take on "feminine" careers than for women and girls taking on "masculine" ones (Francis, 2002; Wilbourne & Kee, 2010).

Girls' lower interest in STEM careers also affects their future earning potential. STEM jobs are more immune to economic downturns than other careers, and are expected to grow by 17% by 2018 compared to 9.8% for non-STEM jobs (Beede et al., 2011). It also appears that the wage gap between men and women in STEM careers is less than in other fields (Sharma, 2011). Additionally, STEM careers are seen as higher status with higher pay than other fields, which also keeps STEM professionals in secure and high paying jobs (Rothwell, 2013).

Thus, it is clear that girls and their future families will benefit from an appreciation of a broader range of career options and opportunities. Given this reality and the continued "leaky pipeline," what can middle school professionals do to keep girls in the pipeline towards leadership and in careers that will meet their future financial needs? What can teachers and counselors do to counter the gendered messages that narrow middle school girls' career choices?

Fortunately, middle school professionals have a strong platform from which to act. The middle schoolers in our sample overwhelmingly turned to their teachers and guidance counselors for career advice. Almost 40% of girls and 33% of boys indicated school as their primary source of information about careers, followed by family members (averaging 23%), then internet, television, and magazines. Given the significant impact middle school professionals can have, we propose a three-pronged strategy: add specificity to messaging from parents; increase STEM participation; and link relational thinking to interest in careers.

Our earlier discussion makes clear the importance of both implicit and explicit parental messages (Jodl, et al., 2001). Middle schoolers report that the most frequently perceived career advice from their parents or guardians as "Do whatever makes you happy." Over 75% of GSG, 61% of NGSG, and 59% of boys either received this advice directly or came to this conclusion by observing adults. While it may be encouraging that families value their children's future happiness and no longer seem to be insisting on a specific career path for their children, educators need to supplement this "happy" advice with specificity regarding the reality of the work world, career options, and appropriate pathways from "interest" to "action" (Lent, et al., 1994) to fulfill career aspirations. Many middle schools already do so by providing interactive learning experiences such as career fairs, guest professionals speaking in classrooms, field trips to workplaces, job shadowing, and other ways of exposing their students to a broad career spectrum. Without that information, many young adolescents not only may not know the range of careers open to them but they may not understand the practical steps needed for certain

careers. As a result, many careers that require years of preparation and education may be closed off to them (Kekelis, Wepsic & Heber, 2005).

This work is even more critical when viewed through another survey finding: parental advice may reflect their own gendered expectations. Specifically, middle school girls and boys perceive different levels of support from family members regarding their career aspirations. For example, as noted above, girls are less interested in STEM careers; 10% of all girls would choose a job in STEM, compared with 32% of boys. But perhaps even more interestingly, girls also perceive less support for their interest in STEM careers; 11% of girls versus 23% of boys responded that their parents would support that choice. Both girls and boys are marginally interested in business careers (2.8% and 3.9% respectively), yet again parents are perceived to be less supportive of their daughter's business aspirations (2.3%) versus their sons' (6%). It is difficult to find any explanation other than gendered messaging for this disparity.

In addition to supplementing parental advice, educators can develop knowledge to increase STEM participation. Given the importance STEM careers will have in our future economy, science and mathematics are clearly crucial areas of intervention. Because girls' interest in science is more often sparked by in-school experiences, a greater exposure to "hands on" science needs to occur prior to and during middle school (Maltese & Tai, 2010). Second, seeing female role models is not enough. Women scientists and engineers also need to talk about the gendered barriers they had to overcome. Some teachers may worry that a focus on the challenges may be overly discouraging to students; but research findings suggest that the opposite is the case. In fact, without that discussion, women's success in nontraditional fields may be discounted by girls as "luck." For middle schoolers' "outcome expectations" (Lent, et al., 1994) to be altered, young girls need to attribute those female role models' successes to perseverance and hard, but do-able, work (Weisgram & Bigler, 2007; Frome, Alfeld, Eccles, & Barber, 2006).

Finally, middle school teachers and other educational professionals can help to shape girls' career expectations by focusing on the relational values that girls hold. Business, STEM, and other nontraditional careers may become more appealing to girls once they develop an understanding of how such fields help them to achieve their top goals, which in our sample were, "making the world a better place," and, "helping others." The connection between helping others and STEM careers may be less obvious to girls; the *Teen Girls on Business* study (2002) made clear that girls do not understand connections between their values and business careers. We suspect that other careers may be less appealing to girls for similar reasons (Martin, et al, in review). In this context it is worth pointing out that 27% of the middle school girls would select a job in medicine, where the connection to helping others is clear and direct, as opposed to a career in engineering or the hard sciences where the social impact may be less obvious. Making an explicit connection between science (such as studying water quality) and the beneficial impact on a water-starved community is what van Eijck and Wolff-Michael (2009) describe as "authentic science experiences" and may help girls remain engaged in science by seeing the benefits that result.

Our findings suggest that additional efforts from educators, guidance counselors, and school administrators can make a difference. For teachers, recognizing that middle school boys and girls understand the gendered landscape is vital. Focused discussions about gender, starting with what it is and the multitude of ways it is conveyed, represent a good start. Contesting images that perpetuate gendered career stereotypes and discussing the challenges facing both men and women when moving into careers inconsistent with those stereotypes is another essential conversation. Further, teachers can create and facilitate learning experiences for students to explore how workplace benefits like family leave, that would seem to benefit women, ultimately benefit everyone. These suggestions are consistent with the findings of Johns, Schmader, and Martins (2005) that conversations about gender and gender role expectations help to mitigate the power of those messages; though their work was with college students, it appears reasonable to believe that earlier interventions would not also be as, if not more, effective.

One proven way of keeping girls on the road to leadership and broader career options is to encourage them to take courses that either allow them to explore or prepare for those career interests. Indeed, a first step *out* of the pipeline may involve making curricular choices in middle and high school that may impact college options and, ultimately, career options (Akos, Lambie, Milsom, & Gilber, 2007). Because most middle schoolers have minimal work-related experience, their knowledge of

careers tends to be limited and prone to stereotypes (Jantzer et al., 2009). Therefore, guidance counselors are a critical source of "real" work and career information.

School administrators should know that single-sex experiences matter. The learning experiences in Girl Scouts can serve as a proxy for the leadership and confidence-building that can occur for girls in a single-sex environment that focuses on their needs. However, we would expand beyond thinking of how single-sex learning experiences could benefit girls to include how carving out single-sex space in the curriculum or in the school day could also benefit boys. From our survey, it is alarming to find that boys rated lowest across all factors of self-confidence. Yet, at the same time, boys believe they have more job opportunities than girls. How does this misalignment between low confidence and positive "outcome expectations" play out? If a boy expects that it will be easy to acquire a job, does that convert into less effort in middle school studies? DiPrete and Buchman (2013) explain this misalignment: historically, boys could put less effort into education and still get high-paying jobs in manufacturing and construction. That is no longer the case. Boys, as well as girls, may benefit from single-sex conversations about gender dynamics and how they may limit career choices, the challenges of the workplace, and the need for preparation. Single-sex learning experiences might also provide boys with opportunities for leadership unencumbered by social gendered pressures.

Conclusion

The data, both primary and secondary, included in this article are intended to add to middle school educators' understanding of their students' nascent career interests, and the dampening effect social gendered roles and messages have on the interests of their students, particularly female students. We offer our findings with caution, recognizing that our sample was 82% Caucasian and limited to the Northeastern United States, and that the impact of Girl Scouting may only be somewhat generalizable to other single-sex environments. However, our intention is to stimulate the thinking of educators who are positioned to keep girls in the pipeline to leadership; to offer educators new explanations for the dynamics they witness and help create every day in the classroom; and to provide corroboration and support for the challenging work they are already doing to prepare a diverse pool of future workers and leaders.

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Lest we forget—the open window

In the face of imposed standards, testing, and bureaucracy, John Lounsbury rightfully reminds us to place our primary focus on the needs and interests of young adolescents as a distinguishing mark of middle level education's unique and urgent mission.

John H. Lounsbury

In a marketing manual I came across many years ago, the headline, "Your key to the billion dollar teen market" caught my eye and I immediately read these opening sentences:

> When a young person is between 12 and 18 years old, you have the chance of a lifetime to transform a fickle consumer into a loyal customer. These years form **a window that opens but once**. Never again will you be able to build share of marketing so easily and cost-effectively. If you can deliver the right message to teens, under the right conditions, **when they are forming lifestyle patterns** and brand decisions as a group, you can gain their loyalty. Miss that open window and you will have to spend many more years and many times the money to track down your target audience after they have dispersed into the adult world. (emphasis added)

I was very much taken with this business world's "open window" characterization of a particular reality that occurs in human growth and development at the time of early adolescence (explained in later paragraphs). Although I would change the age range, dropping 18 to 15 or 16, I liked this characterization and often used it and these opening lines in presentations and articles.

The open window concept came back to my mind as I was bemoaning the direction public education has taken in recent years. At the same time, I have been deeply concerned over what I view as the serious decline in the quality of our common life—and wonder if there may be a cause-result relationship in operation here.

Schools and teachers, I believe, have been pushed to give so much time and attention to meeting narrow cognitive goals that they have not capitalized fully on the open window opportunity, and, therefore, they have not impacted students as persons and citizens as significantly as they should have. The great concern about preparing students for *tomorrow*—for high school, college, and career—has, I'm afraid, led to overlooking the fact that students are somebody *today*, and that now while the window is open, they are firming up the attitudes, dispositions, and values that will be the prime determinants of both their success in future schooling and in life itself. The repertoire of cognitive information that they are being pushed to master, pales in significance compared to the life lessons learned from experiences that come under the affective domain. The obsession with standardized test scores, may have made the reduced attention to broader, affective goals understandable, but certainly not acceptable if middle level schools are to fulfill the commitment to educating the whole young adolescent.

The middle school's responsibility

I believe *middle school educators have what is at once an immense privilege and a particularly awesome responsibility—guiding the learning and development of impressionable young adolescents as they come of age.* Read that statement again slowly. Do you agree with it? Do you recognize

the implications it contains? If so, then you will have to support the position that, apart from the prime and given responsibility of teaching selected content and skills, middle school teachers must be about the business of helping students believe in themselves, form their character, discover their interests, nurture their potential, gain a sound perspective on their physical development and related health issues, and develop those universally and critically important humanitarian and social skills—all while daring them to be their best selves, to breathe deeply, and to live well at the moment. Whee! The extent and breadth of such responsibilities is mind-boggling. A passage from an old textbook (Chapman & Counts, 1924) came to mind. These engaging and somewhat quaint lines set forth questions that youth wrestled with in the post-World War I era. They are still germane; in fact, I believe, even more so.

Greeting his pupils the master asked:

What would you learn of me?

And the reply came:

How shall we care for our bodies?

How shall we rear our children?

How shall we work together?

How shall we live with our fellow men?

How shall we play?

For what ends shall we live??

And the teacher pondered these words, and sorrow was in his heart, for the prescribed curriculum touched not these things.

I confess to altering the last line by inserting "the prescribed curriculum" in place of "his own learning." Forgive me, but any way this concept is expressed, the overwhelming and almost impossible task of the middle grades teacher is clear.

Fortunately, Mother Nature provides this open window that gives educators a better than usual chance to influence youth in lasting ways. Young adolescents now reach a level of mental maturity that permits them to be introspective, so the search for self gets underway. They work on developing their philosophies of life and consider seriously the values they will live by. They reject or hold in abeyance the principles and values that they have heretofore accepted rather automatically from family members and other influential adults in their lives. Now, they create their own answers to questions about right and wrong, good and bad, God and man, responsibility, integrity, and other fundamental questions, including the oft-cited one, "Who am I?" For the most part. the values accepted are closely aligned with those they had previously acquired—apples don't fall far from the tree—but now they are their own beliefs or values, not just ones handed down.

> The search for self is on-going as young adolescents work out their philosophies of life and determine the values they will live by.

Therefore…

And here is the clincher, the condition or reality that makes middle level education especially important—arguably the most critical period in the human life cycle. The code, philosophy, the self-concept that young adolescents now craft becomes the one that, with very few exceptions, will direct their behavior from here on out! Young adolescents have, in effect, invented themselves as the kind of persons they will be as adults.

After the window is closed it will never be easy, almost impossible to influence students' values, dispositions, and fundamental beliefs. Knowing this, businesses have exploited the open window, almost shamelessly—think Nike. Education, with far more noble motives, must exploit it fully too.

Schools dare not assume that the critical non-cognitive, behavioral goals will be adequately met simply as by-products of the activities and experiences associated with cognitive-focused instruction. Of course, middle school teachers intuitively do give attention to the affective side of an education, and they should be commended for so doing. But the demand to achieve acceptable scores on standardized tests is so strong and insistent that teachers find it difficult to be the guide and mentor for students that they should and would like to be. Test scores be damned! Their value is ephemeral. These one-shot, one time measures have been imbued with meanings that far exceed their real value. And, furthermore, students' success, in both further education and in their personal lives, is determined more by the acquisition of desirable behavior traits, social skills, and

dispositions, than by the acquisition of particular bodies of information and related skills. Parents, and educators as well, would do well to stop and consider this point.

There always exists in our society, a tension between freedom and obligation, between personal interest and civic duty. This is inevitable in our unique democratic society. However, when a fair balance between these opposites is lost, serious consequences follow. In recent years, that reasonable balance has been lost as selfishness and personal interests have overshadowed the spirit of selfless citizenship with its commitment to advance the common good. Our society has become pock-marked by fractured relationships, between individuals and between groups, by dishonesty, violence, vulgarity, and behaviors once considered totally unacceptable. While there are many reasons for this condition, it is hard not to believe that the public schools, however unwittingly, have played a role in this decline in our common life because students have not been given adequate help and guidance in understanding themselves, knowing and respecting others, becoming self-reliant, and in developing their social conscience. The open window years comprise the best time for these critical matters to be addressed.

And, if so…

Schools, with full faculty involvement, need to consider the merits of the position taken in this article along with reviewing the goals of middle level education (see *This We Believe*, pp.11–12). When doing so, it will become apparent that few if any of these goals can be met through direct instruction and purely intellectual efforts. Middle level educators must rise above the pressure to prepare students for tests and give a priority to guiding the personal, social, and citizenship development of students. The open window opportunity should not slip by unused if middle schools are to provide, "an education that will enhance their healthy growth as lifelong learners, ethical and democratic citizens, and increasingly competent, self-sufficient individuals who are optimistic about their future and prepared to succeed in our ever-changing world" (National Middle School Association, 2010, p. 3).

And finally, as a part of this reconsideration process, faculties should definitely bring to bear the many research findings that collectively conclude: academic achievement, even as measured by test scores, improves when students' social, emotional, moral, and physical development have been fully supported. Believe it, and conduct the teaching-learning enterprise accordingly—for kids' sake, and indeed, for our society's sake.

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Using authentic literature to develop challenging and integrated curriculum

This article acknowledges the difficulties in using authentic literature instead of predictable and linear textbooks, while articulating methods for developing an alternative practice that promises the nurturing of lifelong literacy as a spillover benefit.

Lisa M. Ciecierski & William P. Bintz

Dr. William Alexander, a noted curriculum authority and a central founder of the middle school movement, shared in a presentation in 1963 that teachers must have a goal of stimulating a "love for learning, an attitude of inquiry, a passion for truth and beauty, a questioning of mind" (National Middle School Association, 2010, pp. 3–4). He asserted, "Learning the right answers is not enough. . . beyond answers alone, we must help children ask the right questions, and discover their answers through creative thinking, reasoning, judging, and understanding." (NMSA, 2010, pp. 3–4). Although Alexander was quoting a belief statement from Winnetka Public Schools in Illinois where he was a superintendent, his words remain inspirational today to middle grades teachers across the country—including those of us who read the pages of this journal—and Alexander's ideals have been influential in the development of the Association for Middle Level Education (AMLE) position paper, *This We Believe*.

We know that developing challenging and integrated curriculum so foundational to successful middle school is not easy; it is messy and in and of itself, challenging. What makes it even more challenging is that the Common Core State Standards (CCSS) emphasize that students must be given opportunities to grapple with "works of exceptional craft and thought" (National Governors Association Center for Best Practices and Council of Chief State School Officers, 2010, p. 35). The range of these works must not only extend across genres but also across culture and across time. Both challenges must be accepted.

This article responds to *This We Believe* by describing one attempt to develop challenging and integrated curriculum. It also responds to CCSS by describing how authentic literature can be used with instructional strategies to support learning across the curriculum.

This article shares a brief review of related literature. Next, instructional strategies to use with authentic literature are shared. The article concludes with final thoughts about using authentic literature to develop challenging and integrated curriculum.

Authentic literature's scholarly context

While no single, simple definition for authentic literature exists in the *Literacy Dictionary* (Harris & Hodges, 1995), we know that authentic texts are published for a wide audience beyond schools (i.e., the general public) and includes varied forms such as picture books, novels, and informational text. Much professional literature indicates that when teachers use authentic literature in the classroom, good things happen. For example, when teachers use authentic literature, student motivation,

enthusiasm, and interest increases (Billman, 2002; Broemmel & Rearden, 2006; Chick, 2006; Lindquist, 2002; Soalt, 2005; Zambo, 2005). Students are highly engaged and often extend learning opportunities on their own. Students' vocabulary increases significantly when teachers use authentic literature (Fang & Wei, 2010; Gareis, Allard, & Saindon, 2009). This is due to the fact that authentic literature includes rich language, both figurative and informational. Teachers can use this rich language to help students analyze, among other things, word families, study prefixes, suffixes, and roots; learn synonyms, antonyms, and paraphrases; and explore idioms, collocations, and registers (Gareis, et al., 2009). In short, the language of authentic literature has keen relevance to the everyday language used by young adolescents in the communities where they reside.

In addition, when teachers use authentic literature, students learn content area material more efficiently and effectively. George & Stix (2000) refer to this as helping content area material come alive. Moreover, authentic literature engages students' in higher order thinking skills (George & Stix, 2000; Villano, 2005) and maximizes students' understanding of the specific content being studied (Atkinson, Matusevich, & Huber, 2009; Shelley, 2007; Taliaferro, 2009; Villano, 2005). In sum, when teachers use authentic literature, good things happen not only in language arts, but also across the curriculum.

Authentic literature across the curriculum

When using authentic literature across the curriculum, teachers should consider building a classroom library that includes narrative and informational texts written at various levels that reflect wide interests. Many types of authentic literature can be used as instructional tools in the content areas. Picture books (Albright, 2002; Murphy, 2009), young adult literature (Bean, 2003), and nonfiction trade books (Palmer & Stewart, 1997) all contain multiple rich concepts to assist teachers and young adolescents in building relevance and understanding.

Many examples of authentic literature can be used across the curriculum. Here, several criteria were used to share specific pieces of literature. For example, only newly published literature was considered because the goal was to introduce new literature to the content area classroom. Second, particular attention was paid to award-winning literature. The International Reading Association (IRA), National Council of English Teachers (NCTE), National Council of Social Studies (NCSS), National Council of Teachers of Mathematics (NCTM), and National Science Teachers Association (NSTA) are just a few of many organizations that recognize and honor award-winning literature. Finally, literature that stood out as being outstanding or unique in some way was considered. For instance, some literature is unique in the way it integrates content with the story line, and others are unique in the presentation style or design format. Based on these criteria, three categories of authentic literature emerged: picture books, novels, and nonfiction trade books. Each category discussed in the pages that follow identifies two high-quality, even award winning, pieces of literature, a synopsis of each, instructional strategies linked to the CCSS, and other recommended examples of authentic literature. The CCSS emphasize that students should be

Figure 1 Authentic literature exemplars

Abdul-Jabbar, K. & Obstfeld, R. (2012). *What color is my world: The lost history of African-American inventors.* Somersville, MA: Candlewick Press.

Bartoletti, S.C. (2008). *The boy who dared.* New York: Scholastic.

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Kamkwamba, W., Mealer, B., & Zunon, E. (2012). *The boy who harnessed the wind.* New York: Dial.

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Lewis, J.P. (2012). *National Geographic book of animal poetry: 200 poems with photographs that squeak, soar, and roar.* Des Moines, IA: National Geographic Children's Books.

Novesky, A. (2012). *Georgia in Hawaii: When Georgia O'Keeffe painted what she pleased.* Boston: Harcourt Children's Books.

Park, L.S. (2002). *When my name was Keoko.* Boston: Sandpiper.

Palacio, R.J. (2012). *Wonder.* New York: Alfred A. Knopf.

Rodriguez, R.V. (2006). *Through Georgia's eyes.* New York: Henry Holt & Company.

Sepetys, R. (2011). *Between shades of gray.* New York: Speak.

Smith, L. (2012). *Abe Lincoln's dream.* New York: Roaring Book Press.

Smith, L. (2006). *John, Paul, George, and Ben.* New York: Hyperion.

Van Drannen, W. (2001). *Flipped.* New York: Random House.

Winter, J. (2003). *My name is Georgia: A portrait by Jeanette Winter.* New York: Sandpiper Press.

able to analyze multiple texts connected by theme or topic in order to increase content knowledge as well as compare approaches that authors take. Recommending books to pair with the showcased books may provide ideas for additional resources.

Picture books

Integrating picture books into the content areas is a way to bring texts of various levels and genres into the classroom. With an average of 32 pages in length, picture books captivate visual learners with illustrations on every page or every page spread. Picture books appeal to readers of all ages and, while they are shorter than a novel, many are highly sophisticated due to their compacted language combined with rich aesthetic displays. They bring the content alive and enable a middle level teacher to emphasize concepts, thereby potentially building relevance in multiple ways. According to Murphy (2009), picture books can lead students to a greater understanding of the world around them. Not only are they entertaining and informative, picture books may also captivate those students who are not interested in academic learning in general or the specific content being studied. Picture books provide students an opportunity to connect to the material being studied in a meaningful way (Taliaferro, 2009; Villano, 2005), and they can build curiosity in middle level students, true to the important emphasis on exploratory education that successful middle schools should embrace. The connection-making that picture books create so easily and so profusely may increase diffident or recalcitrant students' motivation to learn, as well.

Picture books may be used by teachers to explore other forms or genres of literature (Murphy, 2009) by demonstrating the way that rich relationships can be built between books. Through these demonstrations, common barriers that interrupt learning may be overcome. Routman (2000) recommends using picture books as an ice breaker to engage students' sensibilities and capture their attention. Picture books also provide a necessary outlet for students to share their feelings and emotions about the topic they are studying. It gives teachers an avenue to engage students in constructing their own meaning of what they are learning through their thinking and their conversations.

Picture books may also be used as "way-in" books (Keene & Zimmermann, 1997). According to Bintz (2011), "way-in books are high-quality, often award-winning texts that provide students a 'way-in' – an unexpected entry into a world of topics they might find interesting to explore" (pp. 34–35). These books are tools for exploration. They give students a way to inquire as well as an opportunity to pose questions and arouse curiosities. Because picture books are short in length but rich in appeal, they may be used as "way-in" books frequently and with great benefits. Here are a few.

What Color is My World? The Lost History of African-American Inventors (Abdul-Jabbar, & Obstfeld, 2012) is unique in its construction and holds multiple instructional opportunities. The story begins with a mother telling her two adolescent twins they will have to use their imagination to appreciate the dilapidated house they have just moved into. While mother goes to get supplies, the twins help a handyman who was hired to help with the renovations. The handyman tells the twins that the house has exquisite craftsmanship and is a culmination of human progress. He shares that it is a "celebration of humankind, the history of America, and the history of African Americans" (Abdul-Jabbar & Obstfeld, 2012, p. 3). Interesting facts about African-American inventors are interwoven throughout the story of the twins working with the handyman. Even though the twins were far from thrilled about the prospect of working with the handyman at the beginning, they convince him to spend more than his allotted time sharing information about the famous inventors.

According to Broemmel and Rearden (2006), books need to be more than just interesting; they also need to have visual features to motivate the student. The format of this book is not only appealing, but it provides teachers with a valuable tool for reading instruction. This mulitgenre book has interesting facts and information interwoven with page flaps, diagrams, and comic-like formats. This format is consistent with the CCSS (National Governors Association Center for Best Practices and Council of Chief State School Officers, 2010) in that students must be able to "integrate and evaluate content presented in diverse formats" (p. 35). Because the type of text is intermixed, readers will need to be cognizant of what type of text solicits what type of reading in order to be read proficiently. Students may make their thinking evident by reflecting on their reading practices while collaborating with fellow students. They may also record their thought processes in an interactive notebook (Lent, 2012; Marcarelli, 2010). Partner reading, where two students read together, is one

more technique that may be used by students to model their reading practices and make their thinking visible, emergent, and exploratory.

The main character of the book, which is told in first person, documents what he learns and thinks in a journal extending on his more than 400 previously composed journal entries documenting his life. Journal writing is an experience often met with mixed emotions. However, the main character writes with great enthusiasm. Using journals as a tool to document learning and thinking in inquiry-based learning is a practice students may embrace after reading this book. When used appropriately, journal writing like this is consistent with CCSS in that students should be able to "write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content" (National Governors Association Center for Best Practices and Council of Chief State School Officers, p. 41). By writing with this premise in mind, students will stretch to interpreting and analyzing the ideas they are studying. Making journal writing part of the instructional routine is consistent with the CCSS in that students should "write routinely over extended time frames and shorter time frames for a range of tasks, purposes, and audiences" (National Governors Association Center for Best Practices and Council of Chief State School Officers, p. 41). Writing can take many forms; this is one recommendation among many of how to integrate writing into the curriculum.

The beauty of this book lies below the surface. The book, told in a format that is creative and innovative, integrates factual information in a unique fashion, and encourages teachers to incorporate writing into their instructional practices. However, it also shows how these African American individuals overcame significant struggles to become successful and resilient. Because middle level students are developing their own identities, they can connect with the individuals in the book as role models who overcame various struggles to achieve what may have seemed impossible. This helps educators to engage their students in respectful conversations about diverse populations and their ability to aspire to greater things and achieve their dreams.

One book that connects nicely with *What Color is My World? The Lost History of African-American Inventors is The Boy Who Harnessed the Wind* (Kamkwamba, Mealer, & Zunon, 2012). This book could be used as a cornerstone book to introduce the concept of inventions using common, everyday materials. In this nonfiction picture book, 14-year-old William Kamkwamba uses junkyard scraps to build a functioning windmill. His creation brought electricity to his Malawi village that had been hit by drought and saved the crops of those in the village. He became known as the local hero who harnessed the wind. This lyrical story introduces the concept of creating with everyday materials and has the potential of integrating science, social studies, math, and language arts instruction.

This lyrical story may introduce the concept of creating with everyday materials and has the potential of instruction integrating science, social studies, math, and language arts.

Another favorite picture book to address the CCSS is *Abe Lincoln's Dream* (Smith, 2012). It is a stellar example of a picture book that may be used for interdisciplinary instruction because it holds the potential for both social studies and language arts instruction. According to Libresco, Balantic, and Kipling (2011), picture books provide young readers with visual images that make social studies concepts more concrete. This notion is beautifully illustrated in this picture book. The book begins by naming various dogs throughout time that would not enter a particular room in the White House because of fear of ghosts. The book centers on the conversation between Quincy, a young girl, and Abraham Lincoln's ghost. Various facts are interwoven through the text and reinforced with intriguing illustrations. Typical to Smith's works is the inclusion of humor. The book is delightful with many opportunities for extensions.

The CCSS communicate the importance of research in classrooms. Lincoln's ghost poses many questions throughout the book. These questions provide opportunities for students to conduct their own research. While specific and detailed answers are not provided in this book, they are present in a variety of other resources. Teachers may choose to have students find the answers to many of the ghost's questions while composing questions of their own, which serves as a crucial foundation for

writing. Researching the answers to these questions would give students the opportunity to employ research skills meaningfully, collaborate with others, and increase their reading of nonfiction text.

The CCSS state that students should "interpret words and phrases as they are used in text" as well as "determine the technical, figurative, and connotative meanings and analyze how specific word choices shape the meaning or tone" (National Governors Association Center for Best Practices and Council of Chief State School Officers, 2010, p. 35). Lane Smith, the author of *Abe Lincoln's Dream*, is a master at communicating a distinguished tone characteristic of his writing. This book is laden with phrases and even jokes that will give students a variety of opportunities to interpret technical, figurative, and connotative meanings. These phrases and jokes truly add to the unique tone of the book. Teachers may choose to reinforce this tone or use this tone to teach voice by connecting *Abe Lincoln's Dream* with *John, Paul, George, and Ben* (2006) also written by Lane Smith.

Novels

Of course young adolescents enjoy reading about other youth (George & Stix, 2000). When students are given the opportunity to read novels in the classroom, they benefit from the instructional opportunities while also enjoying reading about others. Oftentimes, novels feature characters who are about the same age as student readers. This is one characteristic teachers may want to consider before choosing novels to share with their students. Teachers may also want to consider how their students will connect with the characters of the book. Will they find the characters and the plot relevant?

Novels are generally arranged into chapters and are often narrative in nature. This narrative quality does not take away from their instructional value. Actually, the opposite is true. Because novels are written in a variety of genres, the potential for their use as instructional tools is extensive. While reading historical fiction novels, students are able to live through the characters' lives in a vicarious experience. They are far more likely to connect with the identity and emotions of the individuals in novels than they would by trudging through a textbook. Historical fiction novels are not alone in the potential to provide opportunities for interdisciplinary instruction. Science fiction, realistic fiction, fantasy, and many other genres are also worthy contenders.

A favorite novel is *Between Shades of Gray* (Sepetys, 2011). It tells the story of Lithuanians persecuted under Stalin's rule. The story centers on Lina who is a 15-year-old girl with characteristics common to other 15-year-old adolescents. Her life and her world change when she is taken in the middle of the night by Soviet soldiers. She is taken along with her brother and mother by cattle car to Siberia and separated from her father. This harrowing account tells the story of the time she spent while under police arrest.

Figure 2 Novels

Title	CCSS	Instructional Strategies	Paired Texts
Between Shades of Gray (Septeys, 2011)	**CCSS.R.2** Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas. **CCSS.R.9** Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches authors take.	Inquiry Circles	*The Boy Who Dared* (Bartoletti, 2008) *When My Name Was Keoko* (Park, 2002) *Weedflower* (Kadohata, 2006)
Wonder (Palacio, 2012)	**CCSS.R.6** Assess how point of view or purpose shapes the content and style of a text.	Student writing	*because of Mr. Terupt* (Buyea, 2010) *Flipped* (Van Drannen, 2001)

This book is an excellent choice for many reasons. First, Lina is easy to connect to. Although she is sentenced to living in deplorable conditions and to manual labor, her story is also a love story. The question of her love being enough to help her survive is one that is central and one that adolescents can identify with. According to the CCSS, students need to analyze the development of central ideas and themes and summarize supporting details to support their conclusions. *Between Shades of Gray* provides opportunities for this type of analysis.

Books written about this time period are often based on the Holocaust and focus on Jewish people. However, there were many more groups of people affected during this time period. As shared previously, the CCSS state that students need to "analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take" (National Governors Association Center for Best Practices and Council of Chief State School Officers, 2010, p. 35). This book could serve as a starting point for an exploration on other groups of people who were affected and how they were the same and different from the Lithuanians. Exploring actions during the time of the Holocaust and the bombing of Pearl Harbor or making connections to current war-torn regions may help to engage students in understanding that historical moments have resounding relevance in the present.

The Boy Who Dared (Bartoletti, 2008) connects readily to *Between Shades of Gray*. It is the story of Helmuth Hubener who is imprisoned for treason after creating and distributing leaflets communicating the truth about Hitler and his actions. Helmuth learns this information by illegally listening to the BBC news on a shortwave radio and shares the information with his friends. All three boys are imprisoned and put on trial.

This book could be one of several used when creating literature circles to analyze how multiple texts address similar themes while also building knowledge. Wood, Pilonieta, and Blanton (2009) recommend using literature circles to teach and reinforce students' understanding on literacy skills and tasks. A literature circle format could be used for students to learn about themes through multiple texts. Traditionally, each literature circle group would read a different book focusing on the treatment of individuals during the time period of World War II. An alternative may be to implement inquiry circles (Daniels & Harvey, 2009) to acknowledge what we know about the research process, thinking, and collaboration to create a structure that supports students in building knowledge. The inquiry circle groups might consist of groups of four and have each group member read one of the following: *Between Shades of Gray* (Sepetys, 2011), *The Boy Who Dared* (Bartoletti, 2008), *When My Name Was Keoko* (Park, 2002), and *Weedflower* (Kadohata, 2006), where individuals who are Lithuanian, German, Korean, and Japanese-American would be represented. Students can deconstruct their individual novel and bring their analyses to their group meeting. Together, the group can create a Category Map to represent the common themes found in each of the books. They could also extend their learning by researching others affected by the leaders of this time period as well as the underlying and stated reasons for the actions taken. Students may take their newly learned knowledge to create a video highlighting the themes discovered and the knowledge learned.

Another favorite novel is *Wonder* (Palacio, 2012). It is an exquisite novel about a young boy born with an extreme facial deformity. Until his fifth grade year, Auggie Pullman did not attend school because of all of the surgeries he had. His challenge in beginning school at Beecher Prep is to convince the students he is really just like them even if he does have an extraordinary face. The book tells a story of fear, tenacity, friendship, and kindness.

According to the CCSS, students need to assess point of view and how point of view shapes the content and style of the text. Because this book is told in the varying points of view of the characters, students are able to see how many of the characters feel and act toward Auggie. The story is told from the point of view of Auggie, his classmates, his sister, and her boyfriend; the book can serve as a foundation for many talking points. It brings the individual identity and adolescent perceptions to the forefront.

This book illustrates the concept of point of view in a manner that is real and relevant to readers. Students could extend this notion by writing their own point of view accounts on a variety of topics that have differing importance in all subject areas. Since writers need options for writing, and options open windows for interest in writing, teachers can invite students to choose from a variety of short passages and write a short story from another point of view. Other examples of realistic fiction using varying points of view may also be shared and analyzed in the classroom as mentor texts. *Because of Mr. Terupt* (Buyea, 2010) and *Flipped* (Van Drannen, 2001) are just a few among many that may be considered.

Figure 3 Nonfiction

Title	CCSS	Instructional Strategies	Paired Texts
National Geographic Book of Animal Poetry (Lewis, 2012)	**CCSS.W.6** Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.	Informational-based Poem Composition & Digital Publication	*Water Sings Blue* (Coombs, 2012)
Georgia in Hawaii (Novesky, 2012)	**CCSS.R.1.** Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to wupport conclusions drawn from the text.	One Word	*Through Georgia's Eyes* (Rodriguez, 2006) *My Name is Georgia* (Winter, 2003)

Nonfiction

Nonfiction can be a catalyst for learning and curiosity (Johnson & Small, 2008). The term nonfiction is often used interchangeably with the terms *informational text, nonnarative text,* and *nonfiction trade books.* Rather than being sold by textbook publishers, these factual books are sold in book format by booksellers (Atkinson, et al., 2009). While nonfiction text includes biographies, it also includes procedural text as well as other true stories (Duke & Bennett-Armistead, 2003). Appealing to all ages, this genre has made great gains in quality and choice throughout the years.

National Geographic Book of Animal Poetry: 200 Poems with Photographs That Squeak, Soar, and Roar (Lewis, 2012) is a favorite nonfiction piece of literature. It is an amazing book that is sure to capture the interest of many. One of the subjects that students love to read about most is animals. This book is filled with poems written by authors who are well-known as well as new authors, too. The poems are filled with interesting facts and accompanied by real-life photographs.

Students can creatively represent their ideas and knowledge in the content areas in ways other than traditional written and spoken responses (Ciecierski & Bintz, 2012). This book is a good example and may be one to be considered by the teacher to show how a book may be used as a mentor text (Dorfman & Capelli, 2007; Fletcher, 2011; Gallagher, 2011). The goal is for students to refer to an exemplary text to improve themselves as writers, which may be accomplished while students craft their own poems integrating content area material. While there are many other mentor texts teachers may make available to their students as mentor texts, another book in particular that may be considered in conjunction is *Water Sings Blue* (Coombs, 2012). While the format of this book differs from *National Geographic Book of Animal Poetry: 200 Poems with Photographs That Squeak, Soar, and Roar,* it is a wonderful example of integrating facts in a poetic way. Ciecierski and Bintz (2012) provide examples of rhymes connecting to social studies, science, math, and language arts. These examples illustrate the potential of having students craft rhyming text to demonstrate their knowledge in the content areas. The CCSS share the importance of using technology to produce and publish writing. Digitally enhancing and publishing students' creations may be particularly fitting to meet this standard. Furthermore, students may be given the opportunity to collaborate and interact with other students by presenting their finished poems electronically.

One last favorite is *Georgia in Hawaii: When Georgia O'Keefe Painted What She Pleased* (Novesky, 2012). It is a beautifully illustrated book about Georgia O'Keefe and her initial trip to Hawaii. According to the CCSS (National Governors Association Center for Best Practices and Council of Chief State School Officers, 2010), students should be able to "read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text" (p. 35). This book provides great opportunities to make inferences

using both the illustrations and the text. Both invite readers to explore the type of person Georgia O'Keefe was. They may approach this exploration by reading other books about O'Keefe such as *Through Georgia's Eyes* (Rodriguez, 2006) or *My Name is Georgia: A Portrait by Jeanette Winter* (Winter, 2003).

One way students may use their inferences is to participate in a *One Word* learning experience. While students read the story, they should decide on *one word* to describe O'Keefe. This word may change as students read. While reading, they should pay particular attention to the illustrations as they truly have a symbiotic relationship with the text and add meaning to what is written. Once students have chosen their *one word*, they should write it on the front of an index card. On the back of the index card, they should cite textual evidence to support the conclusions they have drawn from the text. They should do this quietly and on their own because it is a secret! Next, the teacher will pair students up. The first person will share her/his word with her/his partner. The partner then has the job to consult the text to provide evidence for why the person may have chosen this word. After the partner has guessed reasons that support this one word, the first person will share her/his actual reasons for choosing the word. The roles are reversed and repeated.

This type of learning experience directly links to the requirements outlined in the CCSS because it engages students in citing evidence to support their response. Students often have a difficult time with the concept of identifying character traits. This learning experience provides the guided support students sometimes need to not only identify character traits but also document the reasons for their choices. It gives students the opportunity to cite evidence from the text and practice making inferences, which can also be a challenge. In addition, students are preparing and participating in conversation and collaboration as they build on each other's ideas while presenting their thinking clearly and persuasively. This practice gives teachers and students opportunities to address speaking and listening anchor standards.

Final thoughts

Authentic literature provides learners with opportunities to grapple with high quality pieces of literature including picture books, novels, and nonfiction texts. These opportunities do more than just provide enjoyment and information. Authentic literature helps create passion for reading. According to Kittle (2013), "passions are peculiar, but passions drive readers to devour books" (p. 19). We hope this article will help teachers and students create new passions for authentic literature because when students have passion to read, they have passion to learn.

With this said, we recognize that increasing students' interests and engagement is not easy; it requires teachers to step forward with bravery as they utilize authentic literatures as an instructional tool that encourages students to learn in ways that are creative and innovative. This is unique because it invites educators to stretch beyond the use of traditional literature, which is more commonly used for instruction. It also invites teachers to consider that this type of instruction may create tension. However, in this instance, tension is a good thing. Short and Burke share that tension is not uncommon in learning because knowledge is tentative (1991). This tension in learning is what keeps us "alert, monitoring possibilities, taking new risks, stretching ourselves and our capabilities" (p. 28). These practices and ways of thinking are a transition from learning only for today to learning for today and for tomorrow.

Gallagher (2009) advises us to "never lose sight that our highest priority is to raise students who become lifelong readers. What our students read in school is important; what they read the rest of their lives is more important" (p. 117). Creating lifelong readers and learners should be our greatest mission. When teachers use authentic literature to teach the Common Core State Standards, they are a step closer to accomplishing this goal.

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Active learning in the middle grades

This article offers examples of developing students' participation as a central tenet of ideal middle level education that is intellectually active, socially active, and physically active.

Susan Edwards

What is active learning and what does it look like in the classroom? If students are participating in active learning, they are playing a more engaged role in the learning process and are not overly reliant on the teacher (Bransford, Brown, & Cocking, 2003; Petress, 2008). One definition of active learning is:

> The process of having students engage in some activity that forces them to reflect upon ideas and how they are using those ideas. Requiring students to regularly assess their own degree of understanding and skill at handling concepts or problems in a particular discipline. The attainment of knowledge by participating or contributing. The process of keeping students mentally, and often physically, active in their learning through activities that involve them in gathering information, thinking, and problem solving (Collins & O'Brien, 2003, p. 5).

Active learning framework

Advocates for active learning in the middle grades agree that the most lasting learning comes through direct experience and interaction with the intellectual, social, and physical environments (Edwards, Kemp, & Page, 2014; Nesin, 2012; NMSA, 2010). The purpose of this article is to propose the following framework to describe and plan for different types of active learning instruction in middle grades classrooms.

Intellectual. Our primary goal in the classroom should work to get students intellectually engaged with the content. We want students to be intellectually active rather than mindlessly and passively receiving information and just accepting the authority's delivery, whether that authority is the teacher or the textbook. Instructional methodologies that involve actively constructing new knowledge through problem-solving, questioning, and inquiry have long been advocated by leaders in the middle school movement (NMSA, 2010). Active learning requires students to intellectually engage with the content using critical thinking or higher levels of thinking such as analysis or synthesis. In order to promote relevance and relationships, active learning strategies require students to go beyond memorization or basic comprehension and understanding, and move toward more active types of thinking such as those at the upper end of Bloom's Taxonomy that require students to apply, analyze, evaluate, and create (Anderson & Krathwohl, 2001).

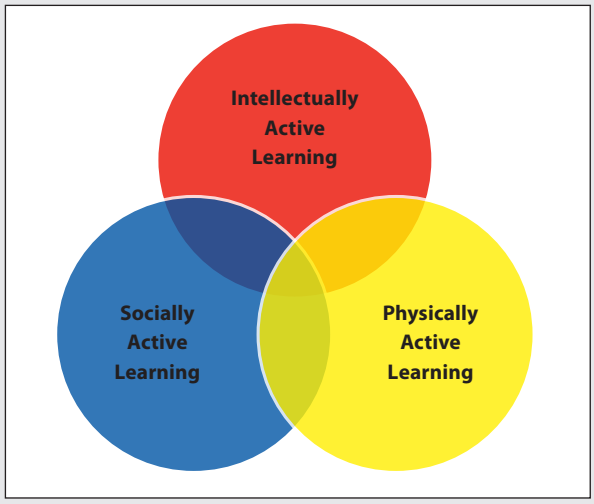
Young adolescents have an intense curiosity about the world around them and are trying to make sense of that world. Instructional strategies that capitalize on that curiosity and require students to actively make sense of the content are ideal for the middle grades. Instruction is most effective when teachers use that curiosity to build on the existing knowledge students bring to the classroom (Nesin, 2012). Active learning strategies such

as problem-solving, higher-level questioning, inquiry, concept maps, synthesizing research for papers or presentations, synthesizing what they have learned for multimedia projects such as Voicethreads, Glogsters, or Prezis, puzzles, brainteasers, and interdisciplinary projects work well for this.

Social. Intellectual involvement alone with content isn't enough in a successful middle school; at the developmentally-sensitive ages of 10–15, young adolescents are peer-oriented and allowing students to work collaboratively is a significant aspect of classrooms that are aligned with the middle school concept (AMLE, 2012). Getting students socially active can be as simple as having partners discuss a question about the content, but can be more involved such as having small groups of students work on a unit project. Small group activities that allow middle level students to work with each other as they learn content are engaging to young adolescents (Nesin, 2012). Small group and whole class discussions are also methods for getting students socially active in their learning (Edwards, 2014).

Physical. Young adolescents are typically active and energetic, and physical movement in the classroom is important as well. Since a lot is happening in their physical development as a result of puberty, students need opportunities to move during lessons. Active learning strategies such as experiential learning, manipulatives, experiments, building models, and hands-on projects engage middle level students (Nesin, 2012). Kim Campbell (2014) shares a wide range of activities she uses in her classroom to get her students involved physically in active learning such as board games and creating videos.

Figure 1 Active learning framework



Certainly, you can be intellectually active at the same time that you are socially active and/or physically active. It is possible for an instructional method to fit in more than one category at the same time. For example, if students are asked to work in small groups to create a project that involves collecting data in a nearby pond and to analyze their data to draw conclusions about the ecosystem, they would be engaged in intellectual, social, and physical active learning simultaneously. But it is also possible for an activity to fit into just one category such as students individually creating a concept map of the chapter they just read.

It is also important to note that the instructional activities selected for a lesson should not only involve

Figure 2 Examples of intellectual, social, and physical active learning strategies

Intellectually Active Learning	Socially Active Learning	Physically Active Learning
Instructional Strategies	*Instructional Strategies*	*Instructional Strategies*
• Concept Maps	• Whole Group Discussions	• Lab experiments
• Inquiry Activities	• Small Group Discussions	• Hands-on projects
• Problem-solving Activities	• Small Group Projects	• Games
• Synthesizing research for presentations or papers		• Building models
• Creating multimedia presentations synthesizing what they have learned		• Manipulatives

active learning, but should be purposeful as well (NMSA, 2010). The goal is not activity for activity's sake or to make the lesson fun. It is not achieved by simply incorporating some games or fun activities into a lesson plan. Clearly, every activity in a lesson should lead to purposeful learning of the lesson objectives and the standard to be met. The goal should be to empower students with critical thinking skills versus just memorizing knowledge. In an active learning approach, students are empowered to uncover information on their own using a variety of resources, to grapple with new information until it makes sense, and to create new ideas using the information they have learned. Students also learn the tools that empower them to be lifelong learners who are capable of discovering and applying new ideas on their own.

Teachers who implement active learning in their classrooms

Research findings support the assertions of this article regarding the importance of active learning as an integral strategy for successful middle level practice. With a focus on nine middle grades teachers who exhibit active learning through multiple approaches in their classrooms located in five middle schools in four different school systems in the southeastern United States, a research study (Edwards, 2015) sought to understand what barriers these teachers had in implementing the AMLE instruction principles and how they overcame those barriers. Data collection included classroom observations, interviews with the teachers, and samples of lesson plans. As a result of the interviews and classroom observations of these teachers we can get a glimpse into what the AMLE active learning principle looks like in practice. Let's take a closer look into the classroom instruction of four of these teachers.

Meet Kadisha Washington, a middle grades mathematics teacher

Kadisha (pseudonyms have been used for all of the teachers and their schools) has been teaching fifth grade mathematics for five years in an urban Title 1 school that has 99% of its students on free or reduced lunch. The school serves primarily African-American students with 99% of the student body identified as African-American and 1% identified as Caucasian or multiracial.

She teaches two mathematics classes per day. Her morning math class has 24 fifth graders of average to below-average ability. Most of the students are functioning below grade level and are missing many pre-requisite skills for her fifth grade curriculum. However, she does have a few students who are right on track with her curriculum and are doing well in her math class. Kadisha also has a remediation math class in the afternoon. This is a school-wide effort to add an intervention period at the end of the day and regroup students based on benchmark tests scores. Kadisha has 12 students in her remediation class, and they are assigned to her because they are struggling in mathematics and have very low benchmark scores.

Kadisha strongly believes in active learning. Here is what she says about the importance of active learning in her mathematics classroom:

> Math class can't be boring. Because I don't like lecture myself, I like to do different things when I'm in class. So I think about my children being myself and when I was in school, somebody just sitting in front of me just talking, talking, talking, it wasn't reaching me. And I realize that you need to be up, you need to be moving, they need that chance to talk about the math, they need to discuss and get frustrated with the math together because that's part of social development anyway. I can't expect them to sit here and be quiet all the time.

Kadisha also believes it is important to utilize multiple learning approaches in her classroom. She believes that everyone does not learn math the same way and regularly implements a variety of strategies including videos, drawing pictures, manipulatives, computer software, games, demonstration, and worksheets.

Solving problems on a Coordinate Plane in Quadrant 1

What This Lesson Might Look Like Using a Passive Learning Approach:

1. A bellringer problem is on the board. Students write the coordinates of 3 points on a coordinate plane individually and then the teacher goes over the answer with the class.
2. The teacher introduces solving problems on the coordinate plane with a Powerpoint and has students copy key vocabulary terms and their definitions in their notebooks.

3. The teacher demonstrates some problems and then has students do an example problem and then explains the correct answer to the class.
4. Students practice 20 problems of varying levels of difficulty in their workbooks.
5. The teacher goes over the answers to the 20 problems and gives the students the opportunity to ask questions.

This lesson plan is an example of a traditional, passive approach to instruction. The students are relying on the teacher as the authority so are limited in their level of intellectual engagement. Since they take notes and complete the worksheet individually, they are not socially active. Nor is there any physical activity built into the lesson for the students. However, this same topic could be taught using active learning strategies as seen in Kadisha's classroom:

How Kadisha Taught this Topic Using Active Learning:

1. The whole class plays an interactive game on the Promethean Board with different students taking turns coming to the board. Rather than simply plotting points, the game questions ask students to think logically such as, "Which direction will the point move if I make the x-coordinate bigger?" (Intellectually, Physically, and Socially Active)
2. Vocabulary in math journals: students come up with their own student-friendly definitions based on explanations from the teacher. (Intellectually Active)
3. Students rotate through stations in small groups:

Station A. Students plot 4 points on a coordinate grid, connect the points and say what geometric figure is formed. What line segments are parallel? What line segments are perpendicular? etc. (Intellectually and Socially Active)

Station B. Students work together to solve word problems on a worksheet. (Intellectually and Socially Active)

Station C. Students explain a path from the school to the town library, using points on a coordinate plane. They can move magnets around on a giant coordinate plane with pictures of town buildings superimposed on the coordinate plane. (Intellectually, Socially, and Physically Active)

Station D. Interactive game on the Promethean board (Intellectually, Socially, and Physically Active)

Kadisha had the students engaged intellectually throughout every activity. She also had them engaged in social activity as they rotated through the stations in small groups and worked together on each of the activities. In addition, she had them engaged in physical activity using the interactive game on the Promethean Board and in two of the learning station activities. Kadisha was able to engage her students in an active learning approach while leading them to mastery of the coordinate plane standard she was charged with teaching.

Meet John Morales, a middle school language arts teacher

John is in his second year of teaching eighth grade language arts at a rural middle school. Southeastern Middle School is a Title 1 school with 71% of the students on free and reduced lunch. The school is approximately 50% African-American and 50% Caucasian, with just a few students identified as Hispanic. John teaches four periods of eighth grade language arts per day and his classes average around 25–30 students.

John believes in using active learning to engage his students. He has observed that students tend to become disengaged when assigned workbook pages, but become more engaged when active learning strategies are used. John also incorporates multiple learning approaches in his classroom. As a former communications major, he especially enjoys bringing technology into his lessons. He enjoys creativity and capitalizes on his creative ability to approach topics from a variety of methods including story-telling, videos that his students star in, videos that his students create, cooperative learning, student journals, audio books, and authentic experiences.

Verbals: Gerunds, Participles, and Infinitives

What This Lesson Might Look Like Using a Passive Learning Approach:

1. The teacher introduces new vocabulary terms.
2. The teacher displays example sentences and asks students to identify different terms. (i.e., "What is the gerund in this sentence?")
3. The students complete a worksheet with 20–25 sentences and identify vocabulary terms within the sentences.
4. The teacher goes over the answers to the worksheet with the whole class.
5. The students are assigned a page in the "grammar book" for homework.

This lesson plan is yet another example of a traditional, passive approach to instruction. The students are relying on the teacher as the authority so are limited in their level of intellectual engagement. Since they take notes and complete the worksheet individually, they are not socially active. Nor is there any physical activity built into the lesson for the students. However, this same topic could be taught using active learning strategies as seen in John's classroom:

How John Taught the Topic Using Active Learning:

1. John introduced vocabulary terms using a Powerpoint.
2. John displayed sentences on the board, related to the vocabulary terms. The students give their answers by holding up fingers, (i.e., hold one finger up if it is a gerund and two fingers up if it is an infinitive).
3. Using a multimedia presentation with videos and pictures of the students, each accompanied with a sentence (i.e., "The sleeping boy was suddenly awakened by this teacher."): Students had to identify verbals in each example, individually in their notebooks. (Intellectually Active)
4. The class discussed the answers. John asked students to change sentences as he called on them. For example, asking a student to change one sentence from passive voice to active voice. (Intellectually Active)
5. The students work in small groups to create their own video with sentences using verbals. (Intellectually, Socially, and Physically Active)

John had the students engaged in intellectual activity throughout the lesson. He also had them engaged in social and physical activity in the group project where the students created their own videos. John was able to engage his students in an active learning approach while leading them to mastery of the standard about verbals that he was responsible for teaching.

Meet Elizabeth Butler, a middle school science teacher

Elizabeth teaches seventh grade science at Reynolds Middle School, a suburban school that serves mostly middle and upper class students, with only 10% of the student body on free or reduced lunch. The school is predominately white (73% of students) with the other 27% of varied ethnicities (African-American, Asian, Hispanic, Native American, and multi-racial). Elizabeth is in her 25th year of teaching and has taught at three very different middle schools. She loves science and endeavors to instill that love of science to her students.

Elizabeth admits that it is more difficult to do active learning now than years ago because the curriculum guides and benchmark testing schedules are so rigid, but she is still committed to it because she believes it is absolutely critical for middle level students to learn. She works hard to obtain the materials and activities to engage her students in meaningful, hands-on projects because she "wants them involved in their learning." Elizabeth believes, "if they're engaged in a lab, that's the only way to see that science concept come to life."

Elizabeth is also committed to using multiple learning approaches in her classroom. In any given lesson you may see the following: labs, lectures, worksheets, note-taking, workbooks, games, videos, inquiry activities, projects, reading from the textbook, etc.

Dichotomous Keys

How Elizabeth Taught the Topic Using Active Learning:

1. Elizabeth asked the students questions about the Order of Classification that they learned yesterday. They referred to the foldables they made in class for the answers.
2. Elizabeth had the students get out a sheet of paper and write the Order of Classification.
3. Elizabeth explained what a dichotomous key is by calling four students up to the front, two boys and two girls. The class divided them up by characteristics (i.e., girls/not girls, pierced ears/not pierced ears) (Intellectually and Physically Active)
4. The students completed a worksheet with pictures of crazy monsters and filled out the corresponding dichotomous key. The class discussed the answers.
5. The students worked in partners and each group was given a baggie of shells. They had to create their own dichotomous key for the shells in the bag. As they finished their keys, they raised their hands and Elizabeth checked behind them. The dichotomous keys were turned in at the end of class. (Intellectually, Socially, and Physically Active)

Elizabeth had the students engaged in intellectual, social, and physical activity by having the students work through actual examples of shells with each other. She continually pushed them in intellectual activity throughout the lesson by using an inquiry approach. In many cases she

scaffolded students with questions rather than just giving explanations. For example, while working on the shell activity a pair of students got stuck and wanted Elizabeth to tell them the next step. One of the students asked, "How are we supposed to split these up next?" Instead of just giving the students an idea of how to proceed, Elizabeth responded by saying, "That is what you are supposed to tell me. You put them into groups by shape already, what are other characteristics of shells?" After some encouragement, the students determined they could separate them by color. Elizabeth was able to engage her students in an active learning approach while staying in line with the district curriculum pacing guide that she is required to follow.

Meet Kristen Miller, a middle school social studies teacher

Kristen is in her 9th year of teaching social studies and is currently teaching eighth grade at a suburban middle school. Grifton Middle School is located close to an army base and therefore serves a transient population of students (46% white, 34% black, 4% multiracial, and 2% Asian). With 52% of the student body receiving free or reduced lunch, the school qualifies as a Title 1 school. Kristen teaches four periods of eighth grade social studies per day to large, heterogeneous classes of more than 30 students.

Kristen believes strongly that it is her job to keep her students engaged in purposeful, active learning and maintains high expectations for her students as she tells them, "I will not give you an activity that will waste your time, but you've got to give me 120% while you're in here."

Kristen uses a variety of instructional approaches in her classroom. She believes, "It's our job to ensure that they understand the concepts that they are supposed to learn in our class, and not everybody learns the same way." She uses a variety of pedagogical techniques including, Powerpoint, games, repetition, projects, hands-on activities, whole group discussions, small group discussions, thinking maps, videos, etc.

Key Issues that Led to the Civil War

What This Lesson Might Look Like Using a Passive Learning Approach:

1. Teacher lectures using a Powerpoint.
2. The students take guided notes.
3. The students read a section in the textbook.
4. The students answer questions at the end of the section.

As with the other passive examples given earlier, this same topic could be taught using active learning strategies as seen in Kristen's classroom:

How Kristen Taught the Topic Using Active Learning:

1. The class played a quiz bowl game using buzzers. Everyone rotated through two teams of five facing each other (for each round of the game a different set of 10 students are at the buzzers). Kristen asked questions found at the understand, apply, and analyze levels of Bloom's Taxonomy and called on the student who buzzed in first. Kristen continually required students to explain their answers and asked additional probing questions of the class regarding the topics. For example, at one point in the game she required the class to expand on a student's definition of the term "campaign." She asked if other students could incorporate the word "battle" into the definition. She stated to the class, "This is where I need you to think. You all are smart and you can rattle off answers. But I need you to make connections. This is where you will go to the next level of smartness." Katherine constantly encourages the students as she pushes them to be intellectually active. (Intellectually, Socially, and Physically Active)
2. The game was interrupted from time to time with two activities: Heads Down Quick Poll (a self-assessment strategy) and repeating the correct answer three times.
3. Students worked with partners on projects where they created newsletters with articles and illustrations. (Intellectually and Socially Active)
4. Homework Brag sheet: List of topics that students must sit down with parents and explain what they know about each. Kristen also sent answer sheets for parents so they could sign off that their student knew the material. (Intellectually and Socially Active)

Kristen had the students engaged in intellectual activity throughout the lesson. For example, she did not have the students play a game just to have fun. She ensured that the students were engaged in higher level thinking by the questions that she asked. She also had them engaged in social activity as they worked on their projects and as they explained what they had learned to their parents. In addition, she had them engaged in physical activity during the game at the beginning of class. Kristen

was able to engage her students in an active learning approach while leading them to mastery of the standard about the Civil War that she is required to teach.

Conclusion

Young adolescents learn through a variety of approaches, and all of those approaches have merit. While this article does not suggest that passive learning approaches should be completely eliminated from middle grades classrooms, it does suggest that they should not be relied on as frequently as they are in many classrooms. Young adolescents need intellectually engaging learning activities, socially engaging learning activities, and physically engaging learning activities. The active learning framework is a way of thinking about planning for instruction that is purposeful and worthwhile for young adolescents. By incorporating carefully selected intellectual, social, and physical activities into the middle grades classroom, teachers can meet the unique developmental needs of young adolescents while teaching the important content these students need to learn to be empowered to think critically about the world around them. Incorporating all three of these into lessons will not only create a better learning environment and different learning opportunities for students, but it will also bring more excitement and enthusiasm into any middle grades classroom.

All of the teachers highlighted in this article were able to meet the standards that they are responsible for teaching. In some cases these were Common Core Standards, and in some cases these were state standards. Through selecting purposeful active learning strategies, they were able to help students achieve the required standards, while at the same time incorporating active learning.

John Dewey describes learning as "something an individual does when he studies. It is an active, personally conducted affair" (1924, p. 390). There is a difference between learning facts and learning to do something with those facts. If we expect students to apply the knowledge they are learning in our classrooms, then we must help them develop the intellectual tools and problem-solving skills necessary to practice doing something with what they are learning (Michael, 2006). Students learn by becoming involved (Astin, 1985). When we involve students in learning activities that require them to be intellectually, socially, and physically engaged, they will retain the content we want them to remember better. Active learning is more likely to achieve meaningful learning, which will empower students throughout their lifetimes.

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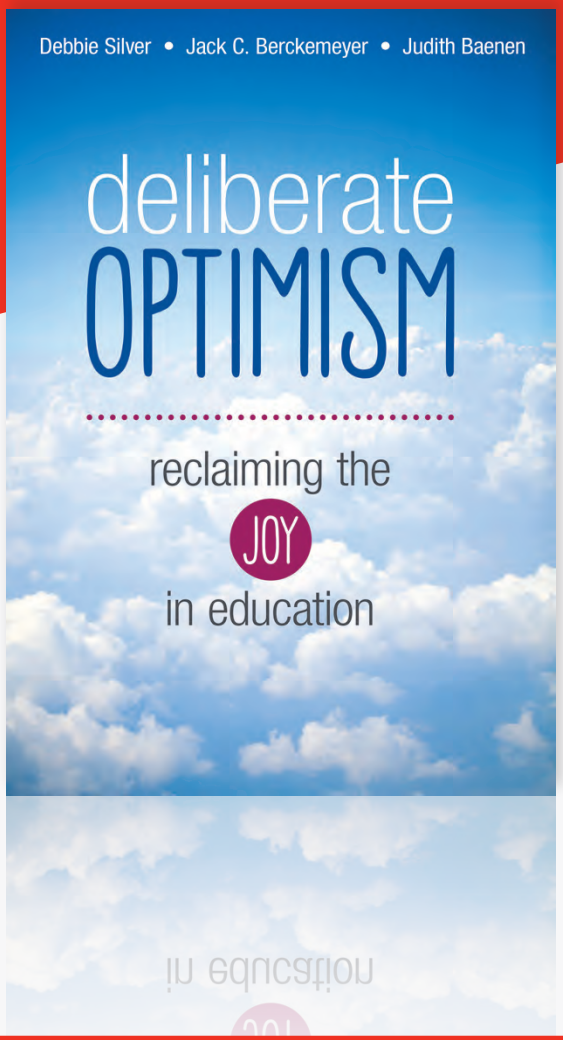

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