Toward a Science of Character Education:
Frameworks for Identifying and Implementing Effective Practices

Marvin W. Berkowitz
Melinda C. Bier
Center for Character and Citizenship, University of Missouri-St. Louis
Brian McCauley
Wasatch Academy (Utah)
Abstract

A growing body of research on character education offers the opportunity to derive lessons on effective practice. While there is little focused research on the effectiveness of specific practices, reviews of effective programs have been mined for well over a decade to reach conclusions about “what works in character education.” More recent reviews and meta-analyses offer the opportunity for the first review of reviews. This article examines eight reviews and identifies 42 evidence-based practices. However, such a list can be unwieldy by itself, particularly to practitioners who want to select and implement effective character education practices. Hence, a conceptual framework of six foundational character educational principles (PRIMED) is presented and used as an organizational structure for the 42 practices. In addition, a comparison is made of practices that have been shown to support academic achievement and those shown to foster character development, showing substantial overlap in effective academic and character practices.
Wanting to effectively promote the development of character, or anything for that matter, is not equivalent to knowing how to do so. From our experience, most educators are authentically motivated to nurture character in their students, and so, of course, are most parents. Yet they often adopt relatively ineffective, and at times counterproductive, strategies to accomplish that goal (Berkowitz, 2012). The difficulty of “technology transfer” in education is well known, but solving it remains fairly intractable (Colin, 2009). Of course it is impossible to transfer research knowledge to practice until we first identify what research supports as effective practice. This is true in the area of character development as well as more broadly in education and parenting.

To build a science of character education, we must therefore ask, “What particular practices are supported by research as being effective?” In this article, drawing on a vast database of research literature collected from the variety of fields that inform character development in schools, and funded by the SD Bechtel Jr., John Templeton, and Harry Singer Foundations, we will review what is scientifically known about the fostering of character development, especially as it applies to school settings. From previous research reviews, we have concluded that there is very substantial overlap between family processes of character development and school-based processes of character development (Berkowitz, 2012; Berkowitz & Grych, 1998, 2000; Wentzel, 2002). In this review, we will draw on both literatures, but much more heavily on the school-based literature. Our goal here is to provide an updated, comprehensive picture of what works in school-based character education. We hope that our conclusions about effective practices and “frameworks” for effective
implementation will be useful to multiple audiences, including researchers, institutions and organizations that prepare teachers and school leaders, educational policy-makers, funders, and school practitioners.

Defining Character and Character Education

Because others in this collection of articles are focusing on defining the field, we will only briefly discuss what we mean by “character” and “character education.” Elsewhere, we have defined character education as “the intentional attempt in schools to foster the development of students’ psychological characteristics that motivate and enable them to act in ethical, democratic, and socially effective and productive ways” (Berkowitz, Althof & Bier, 2012, p. 72). It is important to note that we have long focused on the interpersonal, especially the moral, aspect of character; i.e., one’s motivation and capacity to do what is ethically right and socially responsible. However, character has been divided into at least four sub-categories: moral, performance, intellectual, civic (Shields, 2011). It is beyond the scope of this paper to detail these complex and at times overlapping categories. We merely will state that here we will try to include as much of each of those “parts” of character as possible, and not limit ourselves to moral character. Hence, for this review, character is the set of psychological characteristics that motivate and enable one to function as a moral agent, to perform optimally, to effectively pursue knowledge and intellectual flourishing, and to be an effective member of society.

What Do We Mean By “Effective” Character Education?
We began the journey over 15 years ago to try to understand what is effective in promoting character in schools. When we began looking at what we called “What Works in Character Education?” (WWCE; Berkowitz & Bier, 2005), we had to grapple with what we would count as evidence of effectiveness. We ultimately settled on a fairly mainstream set of criteria. We felt that going with what was, at least at that time, the “gold standard” of randomized controlled trials (RCTs) would be setting the research design bar too high and that too few studies would meet those rigorous design criteria. That, in fact, turned out to be the case in the WWCE review. This was the strategy adopted by the US Department of Education’s What Works Clearinghouse (WWC; http://ies.ed.gov/ncee/wwc/default.aspx) later on, and they too found relatively few qualifying studies. In fact WWC stopped reviewing character education programs after 2007 and removed its summary review of this topic from the WWC website.

RCTs were also the criterion for the Social and Character Development (SACD) project, which generated very weak results for character education.

One argument against RCTs is that effective character education requires a whole school climate and philosophy that is authentically championed by the principal and embraced by the staff. That is something that is not amenable to be “randomly assigned.” Hence we included various less rigorous research designs, such as many quasi-experimental designs. WWC, in 2015, offered a webinar on how to use such designs to meet their criteria, apparently recognizing that accepting only RCTs was inappropriate. It is beyond the scope of this paper to explicate our inclusion criteria; for more information see Berkowitz and Bier (2007). Jennifer Urban and her colleagues have done school-based evaluation a great service in their recent work articulating the theoretical and practical problems associated with the current, almost
exclusive enthusiasm for RCTs and the policy-driven mandates for evidence-based
programming. They provide a theory-based and intellectually appealing framework,
Evolutionary Evaluation, for designing, aligning and valuing program evaluation appropriately
(Urban, Hargraves, & Trochim, 2014).

Ultimately, in this paper, “effective” means a practice that is supported by scientific
evidence including statistical tests of the significance of the impact. We also include only
studies that measure some aspect of character (widely defined) as an outcome. Many reviews
focus on character implementation but measure only academic outcomes (e.g., Darling-
Hammond, 2002; Yeager & Walton, 2011), and hence are not included in this review of
character education. Instead, those studies will be mentioned in a later section of this paper
that identifies parallels between what is found to be effective in promoting character
development and what is found to be effective in promoting academic achievement. What we
mainly want to know is what promotes character development, rather than “What does
character education, broadly defined, impact?” That is an important question, but not our focus
in this paper.

What We Include in Our Search for “Effective Practices”

There are many choices of how to select and organize research of relevance to such a
review. Ultimately, it is very difficult to find research studies that isolate specific classroom or
school-wide strategies and measure their impact on character outcomes. Hence we have had
to employ a set of tangential approaches. First, we look for those few strategies that have been
extensively studied in isolation. In WWCE (Berkowitz & Bier, 2005) we chose two: moral
dilemma discussion and cooperative learning. Research on other strategies can now be added; e.g., mindfulness and service learning. However, it is well beyond the scope of this review to summarize the growing research on specific strategies or practices (terms that we use interchangeably in this paper), but it would be very helpful in the future for such a compilation to be amassed and disseminated, just as it would be to amass the evidence for what effects specific outcomes. The second approach we have taken is to look at the prevalence of specific strategies across effective programs. In WWCE, we defined programs loosely as multi-faceted approaches to character education with defined practices, and generally well-defined, documented, named and disseminated, although this is not a formal or rigid set of criteria, but rather a guideline. We found that such programs averaged almost eight separate strategies per program. This led us to create a list of effective strategies in WWCE. This is a coarse approximation of effectiveness, because there is no way to disentangle the confounded strategies within a given program, and hence across programs. In this paper, we have chosen to mostly do a review of reviews, in the spirit of John Hattie’s impressive review of hundreds of meta-analyses of research on education effectiveness (Hattie, 2009), but far less systematically and ambitiously than what he was able to accomplish.

In searching for reviews of literature relevant to identifying effective character education practices, we found that there are not that many. Some reviews looked only at academic outcomes (e.g., Yeager & Walton, 2011), some only reviewed programs and not specific strategies (e.g., Public Profit, 2014), etc. There simply is little systematic review of individual pedagogical strategies that are effective in fostering the development of character. Clearly, more research is needed. Nonetheless, with the support of SD Bechtel Jr., John
Templeton, and Harry Singer Foundations we have continued to add to our conclusions from WWCE (Berkowitz & Bier, 2005) in subsequent reviews (Berkowitz, 2011a; Berkowitz & Bier, 2014), and are expanding it further here by including newly identified reviews and reviews of relevant research in related fields, most specifically social-emotional learning and positive psychology.

We have settled on eight sources for this compilation and analysis. Not included are reviews that look only at programs and not specific practices; e.g., Public Profit’s (2014) review of 16 programs that promote non-cognitive skills or Heckman and Kautz’s (2014) review of character programs that are efficacious for life outcomes. Also not included are reviews of character education programs which only report their impact on academic achievement (e.g., Benninga et al., 2003; Yeager & Walton, 2011). The eight sources we included are as follows:

1. We have, for over 15 years, been collecting and filtering individual studies that meet our criteria. That in fact was the basis of the first report on What Works in Character Education (WWCE; Berkowitz & Bier, 2005, 2007). More recently we have, with the support of the Bechtel, Templeton and Singer Foundations, completed the transition from a simple word-processing data base to a web-based database (Character Education Research Clearinghouse, CERCh, https://characterandcitizenship.org/home-cerch). We began WWCE by hoping to broadly look for evidence of effective practice, but found, with a couple of notable exceptions, that most of the qualifying empirical research examined the impact of entire multi-faceted programs and not specific implementation strategies. When we ended our search in 2004, we found evidence for 33 effective programs. Subsequently (Berkowitz, 2011a), we have attempted to expand the findings
from WWCE to include research on parenting impacts on character development as well as the findings of other groups such as the Collaborative for Academic, Social and Emotional Learning (CASEL; www.casel.org).

2. CASEL, in their Safe and Sound review (2005), which was intentionally a review of programs, found 80 programs and identified “22 that are especially strong and effective” (p. i). They have also published a meta-analysis of 213 interventions (Durlak et al., 2011). More recently, they have prepared a set of “guides” with more comprehensive, focused, and up-to-date reviews (e.g., CASEL, 2015).

3. Character.org’s flagship model is the Eleven Principles of Effective Character Education (Beland, 2003), which is a model based on extensive reviews of the research and practice literatures.

4. Lovat et al. (2009), while not reviewing research findings, extensively studied effective schools in Australia and generated a list of best practices.

5. Leming (1997) reviewed effective programs and distilled effective practices from them, much as WWCE did.

6. Lickona has been collecting examples and research for over a quarter of a century which has resulted in many publications, including two seminal books (Lickona, 1991, 2004). His team’s work on effective high schools is used here (Davidson, Lickona & Khmelkov, 2008; Lickona & Davidson, 2005).

7. The US Department of Education published a review of research on educating for grit, tenacity, and perseverance (USDOE, 2013) which identified specific practices.
8. The National School Climate Center (www.schoolclimate.org) has many frameworks for fostering character and social-emotional development through the creation of positive school climates. We use their basic model of four key strategies here.

Effective Character Education Practices

When considering what influences school implementation of character education, it is important to keep in mind that schools do not exist in vacuums, just as classrooms are not islands of practice. Most schools and classrooms conform to established norms, even if those norms prescribe ineffective practices. There are exceptions, of course; some teachers can find ways to deviate from the norms and resist contextual pressures to use ineffective practices (e.g., Berge, 2003; Urban, 2008), and schools can do likewise (e.g., Berkowitz, Pelster, & Johnston, 2012; Johnston, 2012). More commonly, however, educational practice is greatly influenced by forces outside the school (e.g., the school district), and even outside the district (e.g., state or national educational policy, economics, etc.). We will not look beyond the school in this review, as it is beyond our expertise and beyond our scope. Furthermore, when looking at the school, one can differentiate between “whole school” strategies that are implemented at the school level and those that are merely ubiquitous but implemented at the classroom level (e.g., when a program or strategy is delivered in every classroom). In other words, this can be murky and complex. Given the relatively nascent state of the literature, such fine-grained distinctions may not be helpful or even viable, so we will proceed with a broad brush and ask forgiveness for any blurring of lines.
In the search for effective practices, one can start with specific practices, and see what outcomes they appear to cause—as in the case of the reviews of cooperative learning (e.g., Johnson & Johnson, 1987) or service learning (e.g., Billig, 2002). A second approach is to look at effective programs and ask what they impact and what individual strategies they include—as was done in What Works in Character Education (Berkowitz & Bier, 2005). A third approach is to start with specific outcomes and examine what research tells us about the factors causing them—as was done in the USDOE’s report on promoting grit, tenacity, and perseverance (USDOE, 2013).

A fourth approach is to try to identify broad underlying principles of effective character education and use those both as a conceptual framework and a scheme for clustering empirical findings on effective practices. We find this fourth approach to be perhaps the most useful way of making sense of the research on character education effectiveness and will use this approach in the remainder of this article. We think that this approach has the greatest potential for helping the field think broadly and deeply about what effective character education is, in a way that stimulates further discussion and research on this critical question.

Frameworks for Identifying and Implementing Effective Practices

By ‘framework” we mean a conceptual system, a set of ideas, that has links to a research base but is more than just a list of “effective practices.” It is a higher-order way of thinking about discrete effective practices that sets forth general principles—“big ideas”—that in turn enable us to cluster effective practices, provide broad guidance for implementation, and
identify where more research is needed in order to clarify our understanding of what makes for optimally effective character education.

Character.org, the predominant character education organization, has used as its flagship guidelines *The Eleven Principles of Effective Character Education* (11P) since at least 1996 ([www.character.org](http://www.character.org)). CASEL has offered its SAFE criteria for effective practice, encompassing four key principles: Sequenced activities within a coordinate curriculum; Active pedagogy aimed as mastery of SEL skills; Focused component of the school that targets SEL skills; Explicit targeting of specific SEL skills. That National School Climate Center ([www.schoolclimate.org](http://www.schoolclimate.org)) offers many such frameworks for understanding school climate.

A different framework, one focused on meeting basic psychological needs, comes from Self-Determination Theory (SDT; Deci & Ryan, 2002). SDT posits three fundamental human psychological needs – for autonomy, belonging and competence -- and maintains that effective education can happen only when schools target and effectively fulfill these needs. From an educational perspective, this should lead to a consideration of what educational strategies are necessary to promote the fulfillment of these needs. For example, Reeve and Halusic (2009) have articulated the characteristics of an “autonomy-supportive classroom”: “take the students’ perspective, display patience to allow time for learning, nurture inner motivation resources, provide explanatory rationales, rely on non-controlling language, and acknowledge and accept expressions of negative affect” (p. 145).

Still another framework, one we have derived from our ongoing review of the research is called PRIME (Berkowitz, 2009; Berkowitz & Bier, 2014; Berkowitz & Bustamante, 2013), an
acronym for five principles of effective character education: \textit{P}rioritizing character education as central to the school’s (or classroom’s) mission and purpose; promoting positive \textit{R}elationships among all school stakeholders; fostering the internalization of positive values and virtues through \textit{I}ntrinsic motivational strategies; \textit{M}odeling character by adults; emphasizing a pedagogy of \textit{E}mpowerment which gives authentic voice to all stakeholders (see Table 1).

In doing this review, we identified all the effective practices in all the sources we examined and then made a master list of them. We found we could categorize almost all of these evidence-based strategies into one of the five concepts of PRIME. We added a sixth category (Developmental Pedagogy) to incorporate the rest of the strategies that did not easily fit PRIME; in effect changing PRIME to PRIMED.

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\item \textbf{Prioritization}. Character education needs to be an authentic priority in the school. This includes being central to seminal statements such as mission and vision statements. It also includes leadership that has both the capacity and competency to lead a school to effective implementation as well as the inclination to do so. It also requires an investment in the professional development of all key stakeholders (Berkowitz & Bier, 2005; Darling-Hammond, 2002). A shared language and set of values that are explicit and, ideally, consensual should undergird and frame the initiative. Schools and classrooms need to intentionally foster the development of climates that feel safe to
students, that care for and include all, and that strive for justice in discipline and the distribution of resources.

The prioritization strategies identified in this research review are grouped into five subcategories: (1) rhetorical emphasis; (2) allocation of resources; (3) school and classroom climate; (4) school-wide structures; (5) leadership (See Table 2).

2. **Relationships.** The strategic and intentional nurturing of relationships is foundational for effective practice. School structures and schedules that are dedicated to relationship building must be intentionally implemented to support the formation of such relationships. All stakeholders and their interrelationships should be included in this relational focus. Schools should connect to and leverage non-school community members and organizations. This includes parent involvement, but also includes local government, local business, law enforcement, community organizations, etc. (Darling-Hammond, 2002). The relationship-supportive strategies identified in this review are clustered into two sub-categories: (1) within school; (2) beyond school.

3. **Intrinsic Motivation (Internalization).** Strategies should be selected for their power to lead to the authentic internalization of the specific values and virtues that the initiative is designed to foster, as well as authentic personal commitment to the social-emotional competencies being targeted. Ultimately, strategies that support intrinsic motivation, the development of a pro-social identity, and virtue should be identified and selected for implementation. Internalization strategies identified in this review are clustered into three subcategories: (1) behavior management strategies; (2) strategies for self-growth; (3); opportunities to serve others.
4. **Role models.** All adults who exist in the school environment need to model what they want students to be and do. Students need to also be exposed to other role models, especially including exemplars and covering all aspects of good character – performance, civic, intellectual, civic and moral character. Such models can be older students, community members, historical figures, and fictional characters in literature. There were no sub-categories of modeling.

5. **Pedagogy of Empowerment.** Schools need to flatten their governance structures and honor the voices of all stakeholders by sharing power and institutionalizing structures and practices that are more democratic and less authoritarian and hierarchical. In essence, this is a matter of respect for personhood and meeting the fundamental autonomy needs of all school members, while also serving citizenship development in a democratic society (Althof & Berkowitz, 2006). There were no sub-categories of empowerment.

6. **Developmental pedagogy.** Students’ needs should be understood and met, particularly through the strategies implemented. These include challenge, autonomy, belonging, competence, and relevance. The developmental strategies identified in this review are grouped into three sub-categories: (1) direct teaching of character; (2) Expectations for student development; (3) Opportunities to practice and master new competencies.

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Implementation Strategies

As noted above, there is little empirical guidance for specific isolated effective pedagogical strategies. The most specific lists come from non-systematic (i.e., no formal search and review protocols) or quasi-empirical reviews (i.e., combining research-supported practices with non-research-based practices) (e.g., Beland, 2003; Berkowitz, 2011a; Lickona & Davidson, 2005; Darling-Hammond, 2002) or from extrapolations from empirical data (e.g., reaching conclusions about effectiveness by being present in broader effective programs; Berkowitz & Bier, 2005). These types of reviews therefore will serve as the basis for our conclusions. The reviews have been synthesized and a list of all supported implementation strategies have both generated the above listed six principles and supported the organization of the specific strategies within the six principles and their sub-categories, which is how they will be presented here (see Table 2). The sub-categories do not represent a theory of the nature of the six principles; rather they are the best conceptual clustering of specific implementation strategies determined to align with a specific principle.

Prioritization

Prioritization is about focusing authentically on nurturing the development of character both in students and in the school (or classroom) as an organization. It is an organizational analogy to the idea of individual noble purpose (Damon, 2008). There are five interrelated ways to manifest the priority of character education in a school, which we depict as five sub-categories of the principle of prioritization in Table 2:
1. **Rhetoric.** Perhaps the easiest way to prioritize character education and development is through the language of the school. Having a shared or common language is often recognized and implemented in schools to varying degrees. This is most typically a set of core values, virtues, social-emotional competencies, or character strengths, as suggested in the first principle of the Character.org *Eleven Principles of Effective Character Education* ([www.character.org](http://www.character.org)). Beyond the Eleven Principles, it was also emphasized in four other reviews included in this report. Often however, such words are, in actual practice, merely “words on a wall” and have little impact on the actual functioning of the school. Effective practice includes wide understanding of the words, operational definitions, behavioral anchoring, and even rubrics (Johnston, 2012). Then the words are used widely and incorporated throughout school functioning; e.g., discipline, academic curricula.

2. **Allocation of Resources.** It is far easier to proclaim prioritization of character than it is to actually allocate resources accordingly. We identified three strategies for prioritization through the allocation of resources. (1) CASEL reported that the allocation of resources by school leadership was essential to the effective promotion of social-emotional competencies in students ([www.casel.org](http://www.casel.org)). (2) One specific place to allocate resources is to the professional development of staff in ways that support the competency to engage in effective character education. Berkowitz and Bier (2005) reported that all 33 effective character education programs had at least optional professional development, and this was also found to be supportive of the development of GRIT (USDOE, 2013). (3) One specific way to support staff professional development
and effective implementation is to intentionally foster a learning community, or, as Lickona and Davidson (2005) call it, a Professional Ethical Learning Community.

3. **School Climate.** The National School Climate Center ([www.schoolclimate.org](http://www.schoolclimate.org)) has articulated and emphasized the importance of a sociological perspective on character education; i.e., seeing character development as a product of the social organization of the classroom and/or school. It has also reviewed the research on the impact of school climate on both academics and social-emotional and character development (Thapa, et al., 2012). While various aspects of school climate are discussed, this review revealed five specific strategies of relevance. (1) Six of the eight reviews highlighted the need for a clear school-wide culture or focus on character education. (2) Trust in teachers supports effective character education. (3) An environment that is psychologically and physically safe, and is perceived as such by school members, was identified by CASEL (2015). (4) The National School Climate Center, Character.org, and Lickona all have identified the promotion of caring schools and classrooms as supportive of character development and social-emotional competencies. (5) Lastly, assessing school climate is part of Character.org’s final principle of effective character education and is a centerpiece for the National School Climate Center’s work.

4. **Structural Prioritization.** Schools can be restructured in ways that increase the presence and prioritization of character education. Oftentimes best intentions are not realized because no specific structures are created to support and/or sustain such intentions. Research supports five different ways of structuring for character education. (1) Character.org emphasizes making character education comprehensive, so that it...
impacts all aspects of development (Principle 2) and is integrated in all aspects of the school (Principle 3). (2) Having clear rules that are widely known was reported by CASEL. (3) Lovat et al. (2009) noted that schools collaborating for character education was an effective strategy. (4) Lovat et al. also identified making character and character education visible and salient through displays and awards. (5) Assessing character and giving students feedback on their behavior was identified by the USDOE (2013).

5. **Leadership.** Leadership is the one area of practice that was not identified in any of the reviews, but is still included here. In the literature on academic success, school leadership is found to be critical (e.g., Leithwood, Harris & Hopkins, 2008; Marzano, Waters, & McNulty, 2001). The same sentiments tend to be echoed in the role of schools in character development (Berkowitz, 2011b); however little research has been done to examine the role of school leadership in promoting character development. There are case studies (e.g., Berkowitz, Pelster & Johnston, 2012; Johnston, 2012), but very little scientific research (an exception is Marshall, Caldwell, & Foster, 2011) to support this. Recently a team at the Center for Character and Citizenship has examined the characteristics of effective character education principals and linked those to the use of effective practices and to school climate (Frugo, Johnston, McCauley, & Navarro, 2016). The Leadership Academy in Character Education (LACE) in St. Louis, led by the first author, has spawned more National Schools of Character than any single entire state in the US. For these reasons, we include leadership as a prioritization strategy; however, more research is needed on this topic. Berkowitz (2011b) has suggested that leaders need to understand character, character development and character education,
be instructional leaders for it, model good character, and empower all stakeholders in the school to share in the responsibility of effectively fostering character and social-emotional development in students. Finally, it is important to note that, while this discussion focuses on formal leadership (i.e., individuals in positions defined as leadership roles) which is the ideal locus for institutional change, leadership in character education can potentially come from other stakeholders including students, teachers, support staff, and parents.

Relationships

Relationships are foundational to good schools and the promotion of character and social-emotional development. It is worth noting that relationships will not happen widely, but rather selectively, if they are not a strategic goal of the school, and hence strategically built into school processes, policies, and structures. While we are mainly interested in building relationships within the school, the review did reveal one common strategy that goes beyond the boundaries of the school, and that is included in this report, hence generating two sub-categories of this principle: Within School; and Beyond School.

1. **Within School Relationship Strategies.** Because relationships are so foundational, this review revealed five different approaches to promoting positive relationships within the school. (1) Both CASEL and the National School Climate Center simply recommend the promotion of healthy relationships. (2) There should be an emphasis on pedagogical strategies that require peer interaction; e.g., cooperative learning, class meetings, peer tutoring, moral
dilemma discussion, etc. What Works in Character Education, CASEL, Leming,
and Lickona all highlight this strategy. It is worth noting that both of the
specifically studied strategies identified in WWCE (cooperative learning and
moral dilemma discussions) are peer interactive strategies. Moral dilemma
discussions are a special case as they are designed for a single specific outcome;
the development of moral reasoning capacities (moral critical thinking), which,
while studied more extensively than almost any other specific strategy,
onetheless tends to be underemphasized in much of the character education
literature. Moral dilemma discussions could also be listed under the “D” of
PRIMED (Developmental Pedagogy) as they are designed to nurture the long-
term development of moral critical thinking capacities. (3) The use of an
effective peer conflict resolution program was identified by CASEL and Lickona as
an effective practice. (4) WWCE identified teachers’ nurturing relationships with
and attitudes toward students as effective in promoting character and social-
emotional development. (5) Both CASEL and Lovat et al. specifically pointed to
nurturing the development of relationship skills. This strategy could have been
placed in more than one category; e.g., it is a social-emotional competency and
hence could have been subsumed within the final principle. However, given the
centrality of relationships and its mention in two reviews, it is included
separately and under the principle of relationships.
2. **Beyond School.** One of the more commonly reported strategies is the promotion of school to family and school to community relationships. This was specifically identified in four of the reviews.

**Intrinsic Motivation (Internalization of Character)**

Ultimately, the goal of character education is for children and adolescents to become good people, to develop into and act effectively as agents for good in the world. Hence this is as much about *being* people of character as it is about *acting* good. Both are essential. This is where so many schools go awry – by relying on strategies that shape behavior, but are not equally effective in nurturing the inner character that is the source of virtuous behavior.

The goal of authentic character education should be the internalization of values and virtues that motivate and guide one’s behavior, along with the social-emotional competencies to enact those internalized characteristics. Character.org echoes Lickona (2004) and others in defining character as having a cognitive (knowledge, reasoning) component, an affective/motivational component, and a behavioral component. It is the affective/motivational component that requires internalization that in turn leads to intrinsic motivation to act out of those values and virtues. The promotion of such intrinsic motivation requires a specific set of strategies (Streight, 2015). We have clustered the strategies for promoting intrinsic motivation into three sub-categories: management of student behavior; promotion of personal growth; service to others.

1. **Management of student behavior.** One of the great challenges of schooling is to help students behave in ways that are safe, pro-social, and conducive to learning. The range
of options is wide (e.g., Deci, Koestner, & Ryan, 1999). Doing so in order to promote intrinsic motivation, however, has been linked to a specific set of practices. Four strategies for managing behavior were found in this review. (1) Developmental discipline (Watson, 2003) was identified by What Works in Character Education and Lovat et al. (2009). How undesirable behavior is understood and responded to should align with the practices of developmental discipline. It should be done to promote rather than undermine relationships. It should be construed and approached as an opportunity to nurture the long-term positive development of the child, including to enhance and practice healthy SEL competencies. It should be done in ways that empower the child to take responsibility for his/her actions and to repair the damage those actions caused. It should rely on ensuring that students understand why their behavior is inappropriate and how it has impacted others and particularly their emotions. (2) The use of induction to foster empathy was identified by WWCE and CASEL. (3) Praising effort and not ability was identified by the USDOE study of GRIT. (4) The promotion of reflection (especially about morality and character) was identified by four reviews.

2. **Promotion of personal growth.** Another way to foster the internalization of character strengths and increasing the intrinsic motivation to be a moral agent is to specifically target strategies that promote personal growth. It should be noted that this cluster overlaps with the “D” in PRIMED (Developmental Pedagogy) but the examples used here seem particularly related to fostering intrinsic motivation. (1) Having a challenging and meaningful academic curriculum aligns with the frequent finding in both the parenting
(Berkowitz & Grych, 1998) and education (e.g., Wentzel, 2002) literatures that scaffolded high expectations are highly successful in promoting both character and learning. Character.org, Lovat et al. (2009), and the USDOE identified a challenging and meaningful/relevant curriculum as an effective strategy. (2) Providing opportunities to redo one’s efforts, both academic and behavioral, was identified by the USDOE and Lickona. (3) Helping students identify and set goals for themselves was identified by the USDOE review. This can include reflecting on one’s ideal self (future self, possible self) and crafting a plan to move towards it. This includes Darling-Hammond’s (2002) identification of “personalization” as one of the principles of what works in academically successful small high schools, which, in turn, aligns with the widely found conclusion that high expectations for both academics and development are necessary for effective development (Berkowitz & Grych, 2000; Darling-Hammond, 2002).

3. **Service to others.** There should be many opportunities for all students to serve others. This can be done through formal roles in the school, such as student government. It can be done through peer relationships, such as peer tutoring or teaching advisory class lessons. Two strategies were identified. (1) Providing opportunities for moral action was one of the most frequently identified strategies, with five reviews identifying it. (2) Two reviews (What Works in Character Education and Lickona and Davidson) specifically identified serving others through community service or service learning. Service learning is one of the few strategies that has also been well-researched in isolation (e.g., Billig, 2002).

**Modeling**
In the parenting literature, it is well established that parents need to not only use parenting strategies that foster specific character outcomes, but they need also to model those outcomes (Berkowitz & Grych, 1998). This is true as well for educators, but it is often a difficult pill to swallow (Berkowitz, 2012). Nonetheless, this review found many examples of evidence for the necessity for educators to “walk the character talk.” All of them clustered into two strategies, and were hence not clustered into superordinate sub-categories.

1. **Role modeling/Mentoring.** Students should be provided with ample models of character. This most centrally includes the adults in the school (and oftentimes older students as well). Five reviews identified role modeling and mentoring as an effective practice in fostering the development of character and social-emotional competencies.

2. **Studying role models.** Students can also learn from role models beyond the school, such as figures in society and history, and figures in literature, but individuals in the local community too. The Giraffe Project (www.giraffe.org) is an excellent example of a specific curriculum for using heroes to foster character development. Lickona and Davidson identified this as an “effective practice.”

**Pedagogy of Empowerment**

Hierarchical and authoritarian school practices should be transformed to incorporate appropriate opportunities for student voice (Althof & Berkowitz, 2006; Berkowitz, 2012; Darling-Hammond, 2002). This also aligns with the autonomy-supportive classroom model of Self-Determination Theory (Ryan & Deci, 2013). There were four specific strategies identified in this review that support the promotion of empowerment, but they did not generate
superordinate sub-categories. (1) General empowerment and collaboration was identified by What Works in Character Education, CASEL, and the USDOE. (2) More specifically, shared leadership was identified by Character.org and Lovat et al. (2009). (3) Creating democratic classrooms was a practice identified by Lickona. (4) Finally, the USDOE also identified being fair to and respectful of students.

**Developmental Pedagogy**

After sorting all the evidence-based strategies for promoting the development of character and social-emotional competencies into the five principles of PRIME, six strategies remained. These have been clustered under the rubric of Developmental Pedagogy, because all seem to focus on the direct promotion of positive development. Hence this review has generated a sixth principle for the PRIME model and turning it into PRIMED. In turn, the six strategies have been clustered into three sub-categories: Teaching character; Expectations for growth; Practice.

1. **Teaching Character.** There are three strategies aligned with teaching character and social-emotional development. (1) The direct and targeted teaching of character was identified by WWCE, Lovat et al., Lickona and Davidson, and the National School Climate Center. (2) In parallel, the direct teaching of social-emotional competencies was identified by WWCE, CASEL, Lickona and Davidson, and the National School Climate Center. (3) Providing opportunities for students to practice and master these competencies, often through role-playing, was specifically identified by the USDOE, CASEL, and Leming.
2. **Expectations for Growth/Development.** There were two strategies identified that target the promotion of general development or growth. (1) In alignment with much research on both parenting and education, four reviews (WWCE, CASEL, Lovat et al., Lickona) identified setting high expectations (for academics and/or character). (2) The USDOE reported that mental contrasting effectively promotes persistence. Mental Contrasting (Oettingen, 2000) in combination with Implementation Intention (Gollwitzer, 1999) is a strategy developed and tested under the name MCII (Oettingen & Gollwitzer, 2009) and commercialized under the name WOOP that asks students to compare the idea of a desired future state with obstacles that they envision might impede their progress toward that state and to construct if-then scenarios for how they might overcome each obstacle (Duckworth, 2011).

3. **Practice.** The use of the specific developmental strategy of practicing desired competencies and strengths, including the particular use of role-playing, was identified by three reviews: CASEL, Leming, and USDOE.

**Parallels to Findings on Practices that Promote Academic Success**

As noted at the outset, the selection of reviews for this paper excluded those for which the sole dependent variable was academic achievement or other measures of academic success. Nonetheless, it is interesting to look at the contrast of what such reviews (which are far more plentiful than those focusing on character and/or social-emotional outcomes) report as effective evidence-based practices. It is beyond the scope of this paper to review all such summary analyses. Rather, for the sake of this intellectual exercise, four reviews were selected. Hattie’s *Visible Learning* project (Hattie, 2009; Hattie & Yates, 2014) is the most comprehensive...
review of reviews and well beyond summarizing briefly; however, selected findings from that project will be included here. Specifically, those that correspond to the findings in this review will be incorporated. Marzano (2003) has, like Hattie, reviewed massive amounts of research to distill best practices in school success. Benninga et al. (2003) looked at aspects of schools that applied for recognition of academic excellence and identified character education practices that correlated with academic success. Darling-Hammond (2002) looked for the characteristics of small high schools that led to academic success.

Of the 42 practices identified as supportive of character and social-emotional development, 30 were specifically identified in one or more of the four academic outcome reviews included in this comparison (11 of those 30 were cited in more than one of the four academic outcome reviews). Perhaps more importantly, each of the six key principles of PRIMED was cited at least once, as were every one of the sub-categories of all of the six principles. In other words, the entire overall model of PRIMED including its sub-categories were represented in this review of effective practices for academic success, even though only four sources were incorporated here.

The 12 character education strategies that were not represented in the academic outcome literature reviewed here include two broad types of strategies: (1) those that could logically apply to academic outcome research; and (2) those that are particular to character outcome research and would not be expected to be identified in academic success reviews or studies. The six strategies that could apply to academic outcome research that were not cited in the academic outcome reviews are: (1) assessing school culture; (2) creating a caring climate in classrooms and schools; (3) schools working together; (4) developmental discipline; (5)
teaching goal setting; (6) mental contrasting. Of these six, only developmental discipline was identified by more than one of the eight character outcome reviews; i.e., these were low frequency implementation strategies in the set of character education reviews. Furthermore, while they may apply to academic success, strategies such as creating a caring climate or developmental discipline are not typically invoked in academic school improvement theories or interventions.

A clear example of how such strategies can be found to relate to academic outcomes if they are studied for academic impact is the work of Bryk and Schneider (2002) finding that the relational trust among teachers strongly predicts student academic achievement. Such research, along with the rapidly growing literature demonstrating the impact of character education broadly (Benninga et al., 2003), social-emotional learning in particular (Durlak et al., 2011), and performance character (also mislabeled as “soft-skills” and “non-cognitive skills”; e.g., Duckworth, 2016; Tough, 2012), all suggest the need for more research on the relation of character education to academic outcomes.

The six strategies that are particular to character education that were unsurprisingly not cited in the four academic outcome reviews because they are by definition linked to character development are: (1) leadership allocation of resources to character education; (2) a comprehensive approach to character education; (3) use of induction and focus on empathy in behavior management; (4) studying others as moral role models; (5) integrating character education into the academic curriculum; (6) use of school displays about character and character awards. Of these, only curricular integration was identified by more than one of the
eight character outcome reviews. Again, these are relatively low frequency strategies in the literature on evidence-based character education.

Conclusions

Ultimately, the success of attempts to promote the development of character and social-emotional competencies in students will rest on the ability to identify and then effectively implement evidence-based practices. This paper is the next step in an ongoing project to identify and disseminate such practices, which began with the Templeton-funded What Works in Character Education project (Berkowitz & Bier, 2005), and has continued with the establishment of the Character Education Resource Clearinghouse (CERCh), with the support of the Bechtel, Templeton and Singer Foundations. We have attempted to update our sources and in this project to utilize a set of eight review projects to identify research-based practices. We have organized them around six broad principles of effective practice (PRIMED): (1) authentically prioritizing character education in schools; (2) strategically and intentionally promoting positive relationships among all school stakeholders; (3) nurturing the internalization of character strengths/values/virtues resulting in intrinsic motivation; (4) modeling character and social-emotional competencies; (5) empowering all stakeholders to be co-owners and co-authors of the initiative; (6) employing a developmental pedagogy. This has led to a list of 42 character education implementation strategies which have research evidence to support their effectiveness specifically in promoting character and social-emotional development.

It may be useful to also look at indicators of prevalence of inclusion of a practice in reviews of research as a proxy for degree of impact on character development. Without meta-
analyses and other effect size analyses, it is impossible to directly measure relative impact of
the strategies, but looking at frequency of identification may be an index of impact. Of course,
this is a coarse metric, as frequency could also be a product of popularity not born of
effectiveness, so we do this analysis with that cautionary thought in mind. At the macro level
(PRIMED principles), Prioritization has both the most total mentions (26) and the most specific
strategies (15) of the six principles. Intrinsic Motivation/Internalization is second in both
mentions (22) and strategies (9). Third is Developmental Pedagogy with 18 mentions and 6
strategies. Relationships had 14 mentions and was tied with Developmental Pedagogy with 6
strategies. Empowerment had 7 mentions and 4 strategies, and Modeling has 6 mentions and 2
strategies.

Another way to look at prevalence of inclusion in reviews is to look at the micro-level of
specific strategies. Seventeen of the 42 strategies were identified by only one of the eight
reviews (as noted, leadership was included in this report even though it was not specifically
mentioned by any of the eight reviews). Ten more were identified by two of the reviews. Of
the 14 practices that were mentioned by more than two of the eight reviews, only having a
school-wide culture of character or school-wide focus on character was mentioned by as many
as six reviews. There were five mentions each for only three of the practices: (1) have a set of
core values and/or shared language, (2) providing opportunities for moral action, and (3) adults
and/or older students acting as role models and/or mentors. Five more practices were
identified by four of the eight reviews: (1) family and/or community involvement; (2) teaching
about character; (3) teaching social-emotional competencies (SEL); (4) having high
expectations. Five more practices were each mentioned by three of the reviews: (1)
professional development; (2) use of peer interactive strategies; (3) having a challenging, meaningful, relevant curriculum; (4) empowering and collaborating with others; (5) use of role-play and practice.

Interestingly, but not surprisingly, a brief review of major synopses of the research on effective (for academic outcomes) schools shows appreciable overlap in the strategies supported for both academic outcomes and character and social-emotional outcomes. Furthermore, the 14 most identified implementation strategies in the character outcome reviews were all cited in at least one of the academic outcome reviews. In other words, as we have long opined when introducing character education to educators, “good character education is good education.”

What is needed is more systematic research on specific strategies and meta-analyses of the studies included in the various reviews. While there is substantial research on a very small set of individual strategies (e.g., service learning, moral dilemma discussion, cooperative learning), most of the strategies are only studied as part of multi-faceted character education initiatives. This was a challenge 15 years ago when we began the WWCE project and remains so today. In essence, we are extrapolating from confounded data and often cannot be confident that we have identified the “active ingredients” in character education. A parallel interest would be in discovering which specific practices impact which specific character outcomes, another missing piece in this puzzle. Both of these gaps are further complicated by the fact that the only formal meta-analysis in the set of reviews is the Durlak et al. (2011) study, which was only part of the CASEL database and which did not systematically study specific strategies. Other reviews varied in their systematicity, but we had to use what was available.
Currently we have begun a procedure for doing systematic reviews of the character education literature, in parallel to what is done in medical research. This is complex and expensive to do and we have been fortunate thus far to be funded by the Templeton, Bechtel and Singer foundations.

Our recent experience conducting collaborative and transparent systematic reviews has led us to the conclusion that real progress in the development of a rigorous and robust knowledge base for the field of character education would be greatly accelerated by philanthropic and government agency support for (1) individual studies of character strategies and programs as projects such as the Character Lab and PACE are doing (albeit with different approaches) but also (2) the development of a field building tool. We have conceptualized this as the “Character Development Systematic Review and Data Repository” (SRDR). The SRDR is an on-line tool for the systematic cataloguing of scientific research that is searchable, public, expandable, and able to generate integrative conclusions about practice. A tool such as this would allow individual researchers and research teams from the various fields of research that now inform school-based character development to synergistically build the knowledgebase in the way that medicine and healthcare have done. This would be accomplished through guided and filtered access for scientists to add to the database. The CCC has adapted, directly from the healthcare field, the SRDR at the Brown University Evidence-based Practice Center (EPC). While having access to this technology is a huge step forward, it alone will not build a knowledge base. That requires the support and participation of a consortium of both funders and researchers. More of this type of research needs to be done to generate conclusions for which we can be more confident.
Nonetheless, this review offers a framework for choosing implementation strategies and designing a comprehensive initiative to promote the development of character and social-emotional competencies. Those engaging in such an endeavor would be well-served to clearly identify their outcome goals and then to select strategies from this report that align with those goals. In particular, taking a comprehensive approach which includes all of the six PRIMED principles and relying on strategies that have been identified in multiple reviews as effective practices would be a good strategy for those attempting to design and implement an effective character and social-emotional development initiative.
References


Table 1
Six Principles of the PRIMED Model

**PRIORITIZATION:** Prioritization of Character and Social Emotional Development in School

**RELATIONSHIPS:** Strategic and Intentional Promotion of Healthy Relationships Among all School Stakeholders

**INTRINSIC MOTIVATION:** Promotion of the Internalization of Core Values/Virtues Through Intrinsic Motivational Strategies

**MODELING:** All Adults and Older Students Model Core Values/Virtues and Social-Emotional Competencies

**EMPOWERMENT:** Schools Empower All Stakeholders as Co-owners and Co-Authors of the Character Education Initiative and the School in General

**DEVELOPMENTAL PEDAGOGY:** Schools Intentionally Foster the Development of Student Character and Social-Emotional Competence and Utilize Methods that are Developmental in Purpose
<table>
<thead>
<tr>
<th>PRIMED Principle</th>
<th>Sub-Category</th>
<th>Implementation Strategy</th>
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<tbody>
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<td><strong>PRIORITIZATION</strong></td>
<td>Rhetoric</td>
<td>Core values/Shared goals/Common language</td>
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<td>Resources</td>
<td>Leadership allocation of resources to character educ</td>
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<td></td>
<td>Intentionally creating a learning community</td>
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<td>Climate</td>
<td>Investing in professional development for char educ</td>
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<td>Structures</td>
<td>Safe environment</td>
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<td></td>
<td>Assess school culture/climate</td>
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<td>Trust in teachers</td>
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<td>School-wide character education culture/focus</td>
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<td>Caring classroom/school climate</td>
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<td><strong>RELATIONSHIPS</strong></td>
<td>Within school</td>
<td>Comprehensive approach to character education</td>
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<td>Assessment and feedback for character/SEL</td>
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<td>Teaching relationship skills</td>
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<td>Relationships with families and/or community</td>
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<td>Induction/Empathy</td>
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<td>Practice</td>
<td>Role playing/practice</td>
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