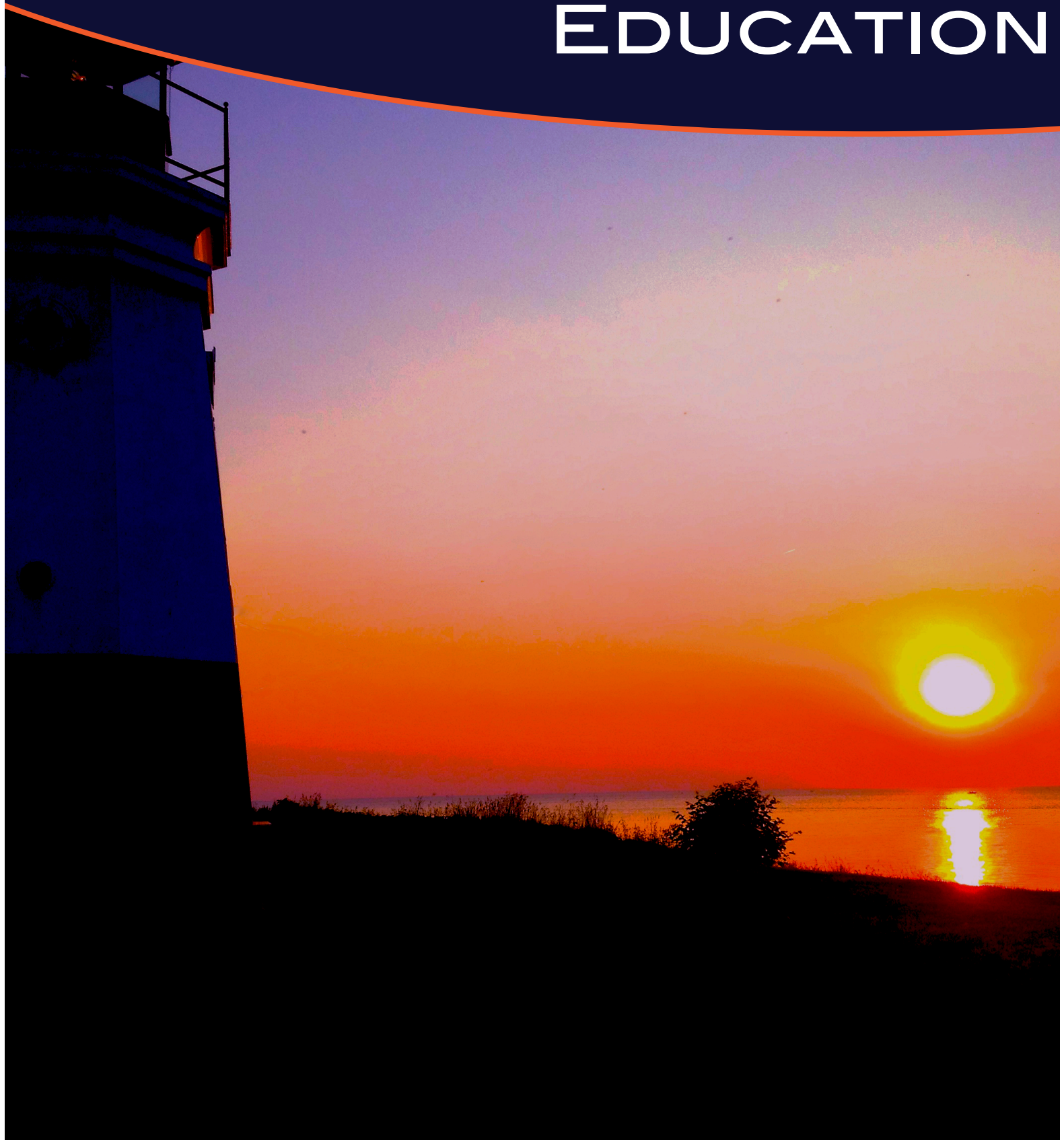


# LEADERSHIP AND RESEARCH IN EDUCATION



Leadership and Research in Education:  
The Journal of the  
Ohio Council of Professors of  
Educational Administration (OCPEA)



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Editors:

Jennifer L. Martin, The University of Mount Union

Kathleen G. Winterman, Xavier University

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# *Leadership and Research in Education:*

## *The Journal of the Ohio Council of Professors of Educational Administration (OCPEA)*



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*Leadership and Research in Education: The Journal of the OCPEA* is a refereed online journal published twice yearly since the inaugural edition in 2014 for the Ohio Council of Professors of Educational Administration (OCPEA). The journal will be listed in the Current Index to Journals in Education (CIJE), and will be catalogued in the Education Resources Information Center (ERIC) database.

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*Leadership and Research in Education: The Journal of the OCPEA* accepts original manuscripts detailing issues facing teachers, administrators, schools, including empirically based pieces, policy analysis, and theoretical contributions. Submissions must include a one hundred word abstract and five key words. Send one electronic copy of the manuscript to the editor using MS Word as well as a signed letter by the author(s) authorizing permission to publish the manuscript. Additionally, a separate cover page must be included containing the article title, author name(s), professional title(s), highest degree(s) obtained, institutional affiliation(s), email address(es), telephone and FAX numbers. Only the article title should appear on the subsequent pages to facilitate a triple-blind reviewing of the manuscript. Submissions should be approximately 15-20 pages including references. Submissions must align to the standards of the *APA Manual* (6<sup>th</sup> ed.). Submissions must be double-spaced, 12 point Times New Roman font with one inch margins on all sides, each page numbered.

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We seek manuscripts that identify the political issues and public policies that impact education and actions that seek to dismantle structures that negatively impact education in general and students specifically.

### **Policy Analysis**

We seek analysis of policies impacting students, teachers, educational leaders, schools in general, and higher education. How have policy proposals at the state or national level, such as the introduction and adoption of national and state standards, affected curriculum, instruction, or assessment of leadership preparation and administrative credential programs?

### **Preparing Educational Leaders**

We seek manuscripts that detail effective resources and practices that are useful to faculty members in the preparation of school leaders.

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We seek manuscripts on issues related to diversity impacting schools and school leaders, such as strategies to dismantle hegemonic practices, recruit and retain under-represented populations in schools and universities, promoting democratic schools, and effective practices for closing the achievement gap.

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For more information, contact OCPEA Journal Senior Co-Editor, Jennifer Martin at [martinjl@mountunion.edu](mailto:martinjl@mountunion.edu)

***Leadership and Research in Education:***

***The Journal of the  
Ohio Council of Professors of  
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## **A Note from the Editors**

**Jennifer L. Martin, Senior Co-editor**  
The University of Mount Union

**Steve McCafferty, President OCPEA**  
College of Mount St. Joseph

*If your actions inspire others to dream more, learn more, do more and become more,  
you are a leader—John Quincy Adams*

Welcome to the inaugural edition of *Leadership and Research in Education: The Journal of the Ohio Council of Professors of Educational Administration* (OCPEA). The history of our journal, at the time of this writing, is a short one. In 2010, OCPEA leaders returned from the NCPEA conference in Portland, Oregon committed to starting an Ohio e-journal to publish the work of leaders and researchers in the institutions of higher learning in Ohio and beyond. This commitment grew out of the platform afforded by NCPEA inviting state affiliates to publish e-journals on a national level. We were on our way; however, we lost our leaders to retirement and new and distant opportunities. These setbacks were rectified in 2013 during our fall conference when a young professor, relatively new to OCPEA, declared that she would take leadership of our e-journal. She did. As we prepare to publish our first edition, Jennifer Martin, of The University of Mount Union, has led as senior co-editor of *Leadership and Research in Education: The Journal of the Ohio Council of Professors of Educational Administration*. Kathy Winterman of Xavier University served as co-editor for our inaugural edition. Supporting this groundbreaking endeavor was our able and diverse Board of Editors and a strong panel of reviewers. Suffice it to say that this groundbreaking journey was both professionally and intellectually stimulating. We are proud that our journal marks the third state affiliate journal for NCPEA. The collegial work and growth that produced this publication foreshadows our continued success both for the journal and OCPEA in general.

*Leadership and Research in Education: The Journal of the Ohio Council of Professors of Educational Administration* (OCPEA) is peer reviewed by members of the Ohio Council of Professors of Educational Leadership (OCPEA) and their colleagues. OCPEA is honored to bring forth this important and timely publication and hope not only to enlighten readers with our work, but also to inspire aspiring practitioners, graduate students, novice and seasoned faculty members to write for our journal. Part of our mission is to mentor beginning scholars through the writing and publishing process. We would appreciate if our readers would pass on our mission, vision, and call for papers to graduate

students and junior faculty as well as to colleagues who are already experts in their fields.

OCPEA is pleased to present an eclectic mix of research and theoretical articles in this inaugural edition that are both timely and thought provoking for scholars and practitioners alike in the fields of education, curriculum and instruction, and educational leadership. To wit, the manuscripts in this edition detail many of the current controversies in the field of education as we currently experience them. Our first manuscript, “Ecological Identity in Education: Subverting the Neoliberal Self,” unpacks and problematizes the neoliberal ideology that is overtaking the field of education as we know it. This manuscript sets the stage for the next piece, “Apple Pie and Ebonics: Language Diversity and Preparation for a Multicultural World,” which situates some of the problems within our current educational milieu as examples of cultural mismatch: when teachers are ill prepared for the linguistic diversity of their students. This manuscript details how teachers can honor and respect cultural differences in their students and thus avoid such mismatches; to wit, data from the U. S. Department of Education’s Office of Civil Rights released this year illustrate how racism and structural inequalities impact schools today, which speaks to the timeliness of this piece. Our third manuscript, “A Meta-Analysis of Supplemental Educational Services in Ohio: Implications for the Reauthorization of ESEA” examines the Supplemental Educational Services (SES) policy under No Child Left Behind, which requires underperforming Title I schools to offer academic tutoring to eligible students; the findings of this piece have great implications for practice: greater effects were found on students who receive services in reading and students in elementary and middle schools. Our fourth manuscript, “The Construction of Simulations as an Instructional Activity for Graduate Students in an Education Leadership Program,” provides practical tools for professors working in educational leadership programs to engage their students in the honing of their leadership skills. Finally, our fifth manuscript, “Debunking the Myths of Dyslexia,” examines dyslexia not from a deficit model, but from a point of view that seeks to better inform teachers in order to truly meet the needs of their students through professional development opportunities. In sum, all five manuscripts provide theoretical and practical solutions for issues faced by educators and educational leaders today.

We would like to acknowledge the many who have helped to shepherd *Leadership and Research in Education: The Journal of the Ohio Council of Professors of Educational Administration* (OCPEA) into a living entity. First, we thank our authors for submitting their work. Second, we thank our board of editors who worked tirelessly to create the policies and procedures took the idea of an NCPEA journal for the state of Ohio to fruition. Third, we wish to express gratitude to our esteemed panel of reviewers. Each manuscript goes through an extensive three-person peer review panel, and we are quite proud of the

mentoring that has resulted as a part of this process. Fourth, we give a special thanks to the Board of OCPEA who has supported the vision and mission of *Leadership and Research in Education: The Journal of the Ohio Council of Professors of Educational Administration* (OCPEA). The support and guidance of the board throughout the painstaking process of creating this inaugural edition has been inestimable. To all individuals previously mentioned, we honor your time, your work, and your passion. Finally, to Jim Berry, Ted Creighton, and Brad Bizzell of NCPEA Publications, OCPEA is indebted to you for your direction and support.

On behalf of the board of *Leadership and Research in Education: The Journal of the Ohio Council of Professors of Educational Administration*, the OCPEA board, and the general membership of OCPEA, we collectively thank the readers of this publication. We hope the information provided will guide readers toward a deeper understanding of the many facets of the fields of education, curriculum and instruction, and educational leadership. OCPEA hopes to continue to provide readers with insightful and reflective research.

# **Ecological Identity in Education: Subverting the Neoliberal Self**

**Lisa Kretz**  
*University of Evansville*

## **Abstract**

The neoliberal ideology that is hijacking educational institutions entails an atomistic, individualistic, and Western vision of self. Students are understood as competitive, economic, homogenous entities. Interpreted as information stockpiles, students collect the data necessary for the regurgitation that enables assuming their role in the marketplace. Alternatively, the ecological conception of self is relational, cooperative, embraces community relations, and reflects the insights of ecology. Students are recognized as diverse in terms of their particular learning needs, interests, strengths, and relevant personal history. The vision of the self that serves as the foundation to neoliberal shifts in education is, I argue, unhealthy, epistemically untenable, and problematically contradictory. Nurturing students' ecological selfhood is one way to subvert the neoliberal conceptualization of self and its attendant ideological constructions and assumptions.

*Keywords:* ecological self, neoliberalism, education, identity, pedagogy

*When the definition of self- changes, the meaning of self-interest and self-serving motivations changes accordingly (Brewer 1991,p. 476).*

## **Introduction**

Neoliberal ideology is being used to hijack educational institutions, and it is widely recognized that a number of serious problems result. William Pinar (2012) calls the trajectory of educational paradigms in the West “school deform,” where historical amnesia is achieved through standardized testing which lacks relevant content and context, where political passivity is cultivated by students being taught to regurgitate rather than to think critically, and where cultural standardization is manifest through a one-size-fits-all curriculum that ignores the need to respect cultural diversity. In what follows I address how deeply formative the vision of self projected onto students is. I highlight self-construction as a site for resistance and nurturing alternatives. In particular, I juxtapose how neoliberal and ecological visions of self shape ways of being and seeing.<sup>1</sup> I begin by looking at neoliberal ideology and exploring the vision of self that

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<sup>1</sup> My characterizations of the neoliberal self and ecological self would better be characterized as neoliberal selves and ecological selves given the diversity within each of these concepts, but for the sake of increasing the ease and flow of reading I've used the terminology of the ecological self and neoliberal self. These are complex terms and although I take the characteristics I outline to be essential elements, these terms are neither reducible to the elements I outline nor are all elements of conceptualizing ecological and neoliberal selves addressed. However, important elements of the constellation of terms that surround each are addressed through my characterization.

grounds it. The neoliberal self is characterized as atomistic, individualistic, competitive, economic, and Western.<sup>2</sup> I then explore an alternative approach to constructing the self, namely an ecological conceptualization of the self. The ecological self is envisioned as relational, reflective of community relations, cooperative, and it reveals a world seen through the clarifying lens of ecology.

I bring the above insights to bear on conceptualizations of students in academic institutions. On the neoliberal model of selfhood students are imagined to be homogeneous, competitive, individual, economic entities. On this view, student development occurs best when students are interpreted as information stockpiles, collecting the data necessary for the regurgitation that facilitates assuming their role in the marketplace. Alternatively, on an ecological model of selfhood, students are treated as cooperative members of ecological communities, and are taken to be diverse in terms of their particular learning needs, interests, strengths, and relevant personal history. On this view student development occurs best through nurturing the liberating growth of uniquely situated individuals in learning communities. The vision of the self that serves as the foundation to neoliberal shifts in education is, I argue, unhealthy, epistemically untenable, and problematically contradictory. Nurturing students' ecological selfhood is postulated as one way to subvert the neoliberal conceptualization of self and its attendant ideological constructions and assumptions.

## **The Neoliberalization of Education**

### **Neoliberalism**

To begin, I situate my analysis of the neoliberal self in David Harvey's account of neoliberalism. Neoliberalism is a theory that imagines human well-being is best achieved through an institutional framework characterized by strong private property rights, free markets, and free trade—such an approach is meant to liberate individual entrepreneurial freedoms and skills (Harvey, 2007a). The neoliberal subject best exemplifies their human capacities through private ownership and competition in a context where there is minimal intervention in economic trade. Priority is, therefore, given to economics to construct and manifest key elements of the ideal human life and ideal self-construct. Neoliberalism has become a hegemonic mode of discourse embedded into the basic, common-sense, ways the world is interpreted, lived in, and understood (Harvey, 2007a). Its ideology is so pervasive it is often not perceived as an ideology. Adequate analysis therefore requires consciously recognizing neoliberalism as ideology and specifically as Western ideology.

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<sup>2</sup> When I speak of these characteristics I am referring to them in excessive amounts and to the exclusion of reflection and celebration of other ways of conceptualizing the self. More literally I am referring to a hyper-atomistic, hyper-individualistic, hyper-competitive, hyper-economic, and hyper-Western conceptualization of self. Such aspects need not be inherently problematic, for example healthy senses of individuation are possible. Rather, my worry is that when such characteristics are taken to either stand for the whole or overshadow or undervalue other aspects of self we face the problems outlined in what follows.

Worrisomely, relations and values on the neoliberal paradigm are often reduced to market relations and economic values. Given the emphasis on contractual relations in the marketplace, market exchange operates as an ethic in itself, which replaces previously held ethical beliefs and guides human action (Harvey, 2007a). Neoliberalism attempts to bring all human action into the purview of the market and maintains that the social good is maximized through capitalizing on the reach and frequency of market transactions (Harvey, 2007a). This highly reductive approach undermines the import of developing rich and thoughtful engagement with various other domains of human life, such as social, ethical, and political domains. As such, it is an impoverished account.

The reach of neoliberal ideology is extensive, penetrating a diversity of realms, including the private realm. Neoliberalization has affected various institutional frameworks and powers such as: the division of labor, social relations, welfare provisions, technologies, ways of life and thought, reproductive activities, and at a basic level attachment to the land and habits of the heart (Harvey, 2007a). In other words, neoliberalism not only casts its shadow on broadly construed political, economic, and social relations—it also stretches its dark tendrils into the very core of individuals. Two domains that have suffered greatly as a result of neoliberal agendas and ontologies are those of education and the non-human environment. As with any reductive analysis, complex relationships, values and beliefs are forced to fit the existing criteria of sense-making or else are rendered irrelevant. On the neoliberal paradigm if something is deemed economically irrelevant it is not acknowledged as worth attending to. The application of this theory of social-political-economic practices has had dire ramifications for the welfare of most humans, the health and functioning of the environment, and for Western educational practices (Clover, 2002; Harvey, 2007b; Hirsch & Henderson, 2011). Economic cost-benefit analysis tends to externalize ecological inputs and harms, resulting in consumption with abandon of the “resources” that underwrite life on this planet. So too, the economic cost-benefit analysis of education tends to externalize student and teacher inputs and harms, resulting in consumption with abandon of the “resources” that underwrite the meaningful education of a critically thinking populous. The “resources” are only recognized in so far as they can be used to achieve economic ends. The intrinsic worth of existing relations of support and a history of various community members growing in synergistic, complementary, relation are ignored in an effort to make money. In so doing what is required for a healthy future is destroyed. It is from within this social-political-economic climate that many educators are facing the challenge of education. I will now turn to the vision of the human self that is created and maintained by neoliberal ideology. This deformity of the human self is projected onto humans, and, for the purposes of this paper, onto students in particular.

### **Self-Construct: Atomistic, Individualistic, Competitive, Economic, Western**

Through addressing the conceptualization of the self-underwriting neoliberalism, we are better placed to identify problematic notions of human nature and the ideal form of life being advocated for humans. Freya Mathews (1991) provides a concise historical account of how atomistic, individualistic metaphysics have functioned in Western philosophic thought. Mathews argues that the world has been viewed since classical times in the Western tradition as composed of discrete individual substances; logically

and mutually independent individual objects are taken to be bound in a causal web (Mathews, 1991).<sup>3</sup> The view of the individual as atomistic came into fullness in the liberal tradition (Mathews, 1991). For example, in Locke's political philosophy men live as equal, and separate units in a state of nature and the body politic is an aggregate of consenting individuals (Mathews, 1991). On Locke's view social atomism is a presupposition of political thought, with supreme value invested in the isolated individual whose sacred and inalienable rights limit others from impinging on them and their property (Mathews, 1991).<sup>4</sup> A political theory rooted first and foremost in atomistically construed individuals encourages a particular and limited vision of ideal social, ethical, and political relations (Rowe, 2012). An atomistic ontology lends itself to views of selves as isolated entities in antagonistic relations where competition rather than connection is presumed. Individual humans, like individual atoms, compete for space (Mathews, 1991).

An atomistic construal of the self (independent, isolated, impenetrable) remains crucial to neoliberal conceptualizations of the self, in which freedom of the individual remains central. Harvey highlights how founding fathers of neoliberal thought adopted the political ideal of individual freedom as fundamental, but misrepresented individual freedoms as the sort of thing achievable through freedom of the market and of trade (Harvey, 2007a). The "freedoms" embodied by the neoliberal state reproduce the interests of private property owners, businesses, and multinational corporations (Harvey, 2007). This restrictive set of interests fails to reflect the fertile, relational, emotional, dimensions of selfhood so crucial to human thriving. Individual interests are reduced to acquisition of property (Rowe, 2012). On this paradigm we are encouraged to identify as economic selves, vying for existence in the competitive world of corporate capitalism. Individuals are encouraged to adopt the subjectivity of economic entrepreneurs, and the social and economic are constituted as binary opposites (Davies & Bansel, 2007). Selves are construed as rationally only interested in their selfish goals, and the key goals identified are consumption and accumulation (Durning, 1992). As Martha Nussbaum so eloquently puts it, "Distracted by the pursuit of wealth, we increasingly ask our schools to turn out useful profit-makers rather than thoughtful citizens" (Nussbaum 2010, 141-42). Students are conceptualized as consumers rather than citizens (Pinar, 2012). As James Carey (1992) puts it, "Economic man became the whole man, the only man [*sic*]" (qtd. in Pinar, 2012, p. 10).

Neoliberal ideology and the attendant envisioning of the self must be recognized as Western constructs if one wishes to remedy the silencing that occurs via dominant discourse. Ideals touted as universal are often in fact limited to Western cultural assumptions regarding "individualism, industrialization, economic growth, free markets, and institutionalized education"; these are then taken to be "foundations upon which social and education policies are built in national and regional contexts. . . ." (McKenzie, 2012, p. 167). Madhu Suri Esteva and Gustavo Prakash (1998) contend this is so marked that the underlying assumptions of "economic globalization, human rights, and

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<sup>3</sup> While Mathews draws on various examples, including the work of Thomas Hobbes, Sir Isaac Newton and René Descartes, I will be focusing on her comments regarding John Locke below.

<sup>4</sup> For an analysis of how gender problematically functions in Locke's account see Carole Pateman (1988).

individualism are working together to further a ‘western recolonization’ of the majority of the rest of the world (qtd. in McKenzie, 2012, p. 167). In terms of selfhood it is useful to recognize, for example, the wisdom contained in diverse Indigenous self-concepts in relation to nature (Glazebrook, 2011; Whyte, 2014). Another example can be derived from African conceptualizations of self that invert the individualism of predominant Western notions of self. Worries about Wade Noble’s oversimplification of a European ethos and an African ethos aside, his account of the extended self found in African self-concept calls attention to this inversion. Noble’s notion of an extended self is meant to reflect that at the heart of the African self-concept is the “we” rather than the “I” (Noble, 1976, p. 20). The self is taken to come into being, and is only possible, through the ontologically prior community. These are just two of a plethora of alternatives to the neoliberal construct of self.

Mark Olssen and Michael Peters (2005) outline core principles of neoliberalism, which include viewing individuals as economically self-interested subjects; individuals are construed as rational utility maximizers. The predominance of rational actor theory supports a view of self that is consistent with the neoliberal method of categorizing, and thereby reifying, a particular conceptualization of selves and relations. Yochai Benkler (2011) argues that if we are educated and socialized to think in terms of universal selfishness, and if we habituate and internalize this conception of humans, we will then tend to interpret the information we encounter to fit our existing assumptions. It is for this reason I opened this paper with a quotation from Marilyn Brewer that highlights how a shift in self-definition changes the meanings of self-interest and self-serving motivations (1991). As will be seen shortly, an ecological perception of the self generates community interests and community-serving motivations. Benkler amasses evidence contrary to the underlying assumptions of rational actor theory (that we are solely calculating, rational, self-interested, actors) showing humans to be caring, decent, and kind (2011). This suggests a more benevolent model of who we are as human beings (2011).

Contrary to the neoliberal envisioning of the self, evidence continues to build showing that reducing humans to merely rational actors is not an apt description of humans. Challenges to instrumental metaphors of humans as rational economic calculators continue to develop (Jasper, 1998, p. 398). Peggy Thoits (1989) hypothesizes that the growing interest in emotions in sociology “is likely due to the recognition that humans are not motivated solely by rational-economic concerns. Emotional attachments to others and affective commitments (e.g. desires, attitudes, values, moral beliefs) influence a significant portion of human behavior. . .” (p. 317). One conceptualization of self that I contend can generate more room for diverse dimensions of selfhood is the ecological self.

### **An Ecological Shift in Education**

#### **Self-Construct: Relational, Reflects Community Relations, Cooperative, Ecological Relational, Reflects Community Relations, Cooperative, Ecological**

With his proposal of the ecological self, Norwegian philosopher and environmental activist Arne Naess fundamentally questions Western historical notions of the human self. There is an historical trend in Western philosophy to assume the



separation and superiority of some human beings over and above nature. This is evident in traditions of Greek humanism, the Great Chain of Being in the metaphysics of traditional Christian monotheism, and Cartesian dualism (Taylor, 1986). Naess attempts to remedy this division by initiating discussion about human self-concept and how nature ought to fit into it. Naess (1987) introduced the concept of the ecological self, which is meant to acknowledge that humans' self-constitutive relations are not limited to those with other humans; therefore, all humans necessarily have ecological aspects of selfhood. Humans are constituted, in part, by nature. The relevant question then becomes whether humans consciously acknowledge their ecological selfhood or not. There are multiple interpretations regarding what represents an ecological self, but the concept gained a foothold in Western environmental philosophy because of Naess. Naess' account is a holistic view where humans identify strongly with nature; as such, he presents an ethical orientation that emphasizes interdependence, relationship, and concern for the community in which we are embedded as opposed to an overemphasis on individual rights and independence (Cheney 1987; Naess 1985).

Ecofeminists have developed critiques of, and enhancements to, conceptualizations of ecological selfhood. In what follows I align myself with the work of Val Plumwood. Karen Warren (2000) contends that "one's views about capitalism and the role of market remedies for environmental destruction probably will (and logically should) differ depending on whether one views humans as individual, rational, self-interested pleasure maximizers, or as ecological selves who are co-members of an intrinsically valuable biotic community" (p. 87). Cooperation, as opposed to competition, is essential for healthy relating. Val Plumwood (2002) notes "liberalism assumes at the individual level, the atomistic, autonomous, self-contained self with no essential ties to others and no imaginable motive for cooperating with other atoms," while alternatively, for cooperation, one requires "a relational self, not an atomistic or self-enclosed one, and a matching economic vision of interdependence" (p. 78).<sup>5</sup> Relational selves are conceived as gaining their existence from complex webs of relations, not in spite of them.

Chris Cuomo (2005) highlights that ecological and feminist ontologies generally "take identity and selfhood to be fundamentally relational" (p. 203). Ecofeminists stress connection and the importance of relationships and interdependence (2005). Joan Tronto (1993) argues convincingly that dependency is a "natural part of the human experience," and she critiques liberal models for their limited view of dependence (p. 163). Strong, necessary, life-sustaining dependency can be readily traced to all facets of human life when one is sensitive to how (inter)dependent humans are, and the ways in which we are continuous with others (Kretz, 2009). At the most fundamental level of basic survival humans inescapably depend on a life-supporting environment directly for sustenance. Dependency, interdependency, connectedness and continuity ground human existence.

Plumwood (1993) advocates a feminist relational view of the self. This is contrasted with an account of self as distinct, autonomous, and hyper-separated by sharply defined ego boundaries that work to support theories based on enlightened self-interest and the instrumental treatment of others (1993). When one is hyper-separated

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<sup>5</sup> Although liberal visions of the self are referred to above, the critique offered applies equally well to the neoliberal self as I have outlined it.

from an other the other is not encountered as akin, the other is taken to lack “essential (as opposed to accidental) relations to others, and its ends have no non-eliminable reference to or overlap with the welfare or desire of others” (1993, p. 144). If the ends of others are perceived at all, they are perceived as accidental and contingent; they are seen in terms of enlightened or rational self-interest (1993).

A model of self in which the self is conceptualized as an isolated, atomistic, and self-contained individual—which Plumwood (2002) calls the separative self—leads to unethical and irrational forms of “rationality.” It is an irrational form of “rationality” because the individual is inevitably harmed insofar as the separative self fails to take into account its interdependency. It is unethical because such “rationalizing” is defined in terms of “a calculus of maximizing self-interest;” the “rational” person is taken to pursue prudential-egoist “virtues” in opposition to ethical altruistic ones (2002, p. 33). Moreover, construing selves as hyper-separative gives a misleading account of the world, which omits and/or impoverishes the most significant dimensions of social experience (Plumwood, 1993). A more representative account of the world acknowledges significant dimensions of social experience, including treating individuals as having interdependent interests and needs (Plumwood, 1993).

Healthy human relationships with non-human others are essential to well-being. A social-political-economic view of the self that fails to recognize this is premised on a falsehood. Humans are embedded and embodied in ways that necessitate addressing the varied relations had with non-human others (Kretz, 2009; Suzuki & McConnell, 1997). I argue elsewhere that we benefit from exploring dimensions of open continuities, namely the variety of instances in which boundaries between self and other blur and reveal diverse moral relationships and obligations (2009, p. 121). Through openness to the existing continuities with human and ecological others the plethora of ways we are connected and constituted can be addressed and reflected in self-concept.

Innovative teacher-learners are already addressing ecological identity in classrooms. Notably, environmental educator Mitchell Thomashow (1996) takes ecological selfhood to be essential to his pedagogical approach. Thomashow invites his students to consider how their own actions, values, and ideals are framed by their perceptions of nature. Ecological identity work utilizes direct experiences of nature to frame personal, professional, political, and spiritual decisions/choices/actions/inquiry (1996). For Thomashow, at root ecological identity refers to how we extend our sense of self in relationship to nature and how it is manifest in personality, values, actions and sense of self (1996). Attentive to context, Thomashow wisely builds in diversity, noting that ecological identification must address unique cognitive, intuitive, and affective capacities and perceptions of ecological relations (1996). A defensible articulation of the ecological self requires care in attending to how oppression functions. Ecological selfhood varies based on culture, geographical location, socioeconomic status, age, educational experience, gender and so on (Wilson, 2011).

Thomashow gives a variety of exercises meant to awaken awareness of ecological identity with adult learners and is explicit that ecological identity always emerges in particular social-political contexts (1996, p. 105). Some examples include recalling memories of childhood places, recollecting perceptions of disturbed places, generating an environmental tree as a portrait of ecological identity, participating in meditative hikes, journaling, cataloguing personal property, creating a community network map, drawing a

power flow chart, and making a political genogram.<sup>6</sup> Thomashow maintains that as an approach to environmental studies ecological identity work can be utilized with students at any level, in any setting. Ecological identity work is an educational process that integrates personal growth *and* citizenship. It involves reflective environmental practice and collective introspection to awaken ecological citizenship, personal awareness to help promote responsibility, and mindfulness so as to expand understandings of human/nature interactions. To this end it requires reflective practice that deals with real-world problems.

To complement philosophical analysis, ecological selfhood can be explored from an explicitly psychological perspective. In writing about early childhood education, Ruth Wilson discusses the ecological self as “an individual’s connections with and attitudes toward the natural environment...our individual ecological identities are determined by how we extend our sense of self in relationship to the world of nature” (1996, p. 121). Wilson worries that the unique affinity children have with nature usually decreases as children get older, especially in Western culture (1996). Ecological identity, or the lack thereof, has an impact on psychological health and ability to achieve self-realization and self-actualization. Research indicates that experiencing nature plays a crucial role in shaping personalities and achieving self-actualization. In particular Wilson appeals to the work of Robert Young and Rick Crandall (1984) who explored the relationship between wilderness use and self-actualization. Using Abraham Maslow’s conceptualization of self-actualization, wherein self-actualizers develop positive human capacities to the fullest and thereby experience a more enriched and fully functioning life, the actualization levels of wilderness users were compared with the general public (1984). They found “significant differences ( $p < .03$ ) between the self-actualization scores of wilderness users and nonusers,” confirming the hypothesis that “wilderness users as a group are more self-actualized than nonusers” (1984, p. 156). Although they took the study as a whole to indicate that an overall positive relationship between the two is weak (though not non-existent) they recommended further study that attends to motivations for using wilderness, hypothesizing the difference between wilderness used by escapists vs. those looking to commune with nature might help clarify meaningful relationships between wilderness use and self-actualization (1984). More recently psychologists Susan Clayton and Susan Opatow (2003) write that ecopsychology “represents a therapeutic orientation which holds that humans need to rediscover their ties to the natural world in order to experience full mental health” (p. 7). Concern about increasingly limited exposure to nature, and its impact on selfhood, is likewise reflected in the work of Richard Louv (2008).

Louv (2008) coined the term “nature deficit disorder”; it identifies the costs of alienation from nature such as diminished use of the senses, difficulties with attention, and higher rates of physical and emotional illness. Decreases in exposure to nature are even more worrisome given the data regarding how crucial early childhood positive experiences of nature are for generating adults that care and act on nature’s behalf.<sup>7</sup> Joya

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<sup>6</sup> For those interested in examples pertaining to young learners see, for example, the work of Rita Wilson.

<sup>7</sup> To quote Wilson: “Frequent, positive experiences in the out-of-doors during childhood can promote positive attitudes towards the natural environment. Such attitudes help individuals view the natural world as something good, desirable, and refreshing (Chawla & Hart 1985; Tanner, 1980). As research indicates, without such experiences children tend to develop a wide range of fearful response to and misconceptions about the natural world. One study, for example, found

Palmer et al. (1999) found that consistently across the UK, Canada, and Australia that experiences of nature/outdoors were a central factor in establishing concern for the environment. Concern for the environment reflects a sense of connection with, and moral responsibility to, members of ecological communities.

Above I have focused specifically on neoliberal and ecological conceptualizations of the self. Ecological selfhood highlights the environmental connection, cooperation and community that is present but ignored or denied by neoliberal accounts. The conception of self that grounds the vision of neoliberalism discussed at the outset is thereby exposed as being premised on a falsity. The belief in the atomistic individual is predicated on a denial of the fundamental connectivity, dependence, and support required for even the most simplified, rudimentary existence of a self.

### **Neoliberalism, Education, Identity**

There is no shortage of worries regarding how neoliberal agendas shape education. To build on existing critique, I will address the vision of self projected onto students. It is a vision that shapes students through cultivating particular traits while minimizing or atrophying others. Neoliberalism moves education in the direction of conceptualizing students as competitive, economic individuals, who are homogenous receptacles for stockpiling information. After articulating these problematic manifestations of the neoliberalization of education through highlighting the underlying conceptualization of self at work, I turn to what an eco-imaginary of the self might offer.

#### **Students as Competitive Economic Individuals**

Ken Robinson (2013) notes that current, dominant, formal, Western, educational systems were conceived in the economic circumstances of the industrial revolution—driven by an economic imperative. Thus, they are modeled on the interests of industrialism—schools are organized on factory lines (ringing bells, separate facilities, specialized into subjects), and students are organized by batches according to age. Mechanisms of control serve to discipline the minds and bodies of students so as to generate docile workers (Foucault, 1995).<sup>8</sup> Schools modeled after the assembly-line factory are being remodeled after the contemporary corporation; both the “organization and culture of the school are linked to the economy and structured by ‘business thinking’” (Pinar, 2012, p. 37). Business remains a crucial driver of education. David Hirsch and Joseph Henderson contend that educational institutions reflecting neoliberalism value learning “primarily in terms of its contribution to economic growth” (2011, p. 171). Schools are being converted into businesses where the goal of instruction is generating skills for the corporate sector, and the bottom line is the maximization of profits (Pinar, 2012). Students learn how to process information rather than how to raise

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that urban students tend to view wildland areas as places to be feared and that they felt uncomfortable (i.e., incompetent, anxious, and disgusted) around natural elements (plants, animals, dirt, etc.) typical of wildland areas (Bixler, Carlisle, Hammitt, & Floyd, 1994)” (1996, p. 121).

<sup>8</sup> When one has internalized dominant power structures, and monitors oneself accordingly, the exercise of those structures over time can become invisible even to oneself (Foucault, 1995).

questions and how to think critically about what they are being told to process (Pinar, 2012).

Here the student is often reduced to an economic self, a being who is either a contributor to economic growth (thereby indicating a successful education and version of self) or a failure (Lynch, 2006, p. 1). Their wants, needs, and interests are reduced to economic competition, consumption, and accumulation. Teaching in ways that re-instantiate the industrial-economic conceptualization of the self serves to shape students to fit this mold. Rather than conceptualizing students as possessive individuals “associated with capital accumulation, or the rationalistic self-interested hedonist associated with economics” students could be seen for the “actually existing, culturally variegated, historically sedimented” human beings they are—people for whom questions of academic knowledge and self-knowledge cannot be separate (Pinar, 2012, p. 57).

### **Homogenous Students**

Students are identified as homogeneous in terms of capacities for reaching identical learning goals at the same age regardless of the particularities of their lived context. Schools and students organized along economic lines lead to standardized curricula and testing, which Robinson notes is essentially about conformity (Robinson 2013). David Gruenewald and Bob Manteaw (2007) call into question neoliberal trends toward standardized testing wherein higher scores in fragmented content areas are taken to be indicative of learning. High-stakes standardized testing continues to be pushed in spite of evidence that standardized testing does not improve student achievement and narrows the curriculum (Hursch & Henderson, 2011). Nor is it an honest reflection of student performance. In one report it is estimated that that as many as one in five public middle and elementary schools have altered tests results (Dewan 2010, 1, qtd. in Pinar, 2012). Pinar (2012) takes standardized testing to “foreclose originality, creativity, and independence of mind” (p. 30). Robinson (2013) contends we should be moving in the opposite direction of standardized testing and curricula if divergent thinking (which is an essential capacity for creativity) is a key goal. Divergent thinking involves the ability to see many possible answers and interpretations of questions; it is to think laterally as opposed to in linear and convergent ways (2013). Divergent thinking is inherently creative and unique, and thus not generalizable in the ways required for standardized testing.

Linear and convergent thinking is secured by the narrow set of interests and goals permissible on the neoliberal model of self. The ecologically and psychologically destructive discourse of neoliberalism is dominating economic, environmental, and educational decision-making and generating limited conceptual resources for imagining alternatives (Hursch & Henderson, 2011). Robinson’s research helpfully illustrates this concern. In testing divergent thinking in a longitudinal study Robinson (2013) found the capacity for divergent thinking decreases with age, showing a) we have the capacity for it and b) that the capacity for it deteriorates with age through schooling on the above model. Rather than encouraging the creative thought of teacher-learners in conversation with their peers, rather than inquiring about and developing the unique capacities of each student who brings a distinctive constellation of talents and capacities to the learning

community, neoliberalism seeks to snuff out such creativity so as to generate homogenous individuals with limited creative, divergent, thought.

### **Students as Information Stockpiles**

Dominant educational paradigms highlight the importance of finding “the” answer as opposed to thinking of various interpretations of questions and answers (Robinson, 2013). Neoliberalism represents education as an input-output system, which is reduced to an economic production function (Olssen & Peters, 2005). Michael Bonnet (2006) critiques forms of environmental education that generate pre-specified outcomes to be achieved by students and schools—implying a systematic action policy by “knowers” which is then imposed on those who do not yet know. Such an approach assumes that relevant knowledge is generated by subject experts and is consistent with the status quo regarding the existing moral/social/political structure of society. This sort of approach renders constructivist notions of education unnecessary, reducing education to simplistic transmission-based learning theories. “Content” dissemination is thereby taken to replace the importance of teaching (Kelsey, 2003). A didactic, as opposed to a dialectical/dialogical, model of education is presumed. This method of conceptualizing education incorrectly suggests that learning is passive and that knowledge acquisition happens with little effort on the part of the learner (Kelsey 2003). This is the banking model of education Paulo Freire (2012) warns against. It turns students into “receptacles” to be “filled” by the teacher; education thereby becomes an act of “depositing.” Such a view of education lacks creativity and negates knowledge as a process of inquiry (2012). Students as storing houses for stockpiled information are taken to be “educated” if they can regurgitate the right data when prompted by a standardized test.

### **Ecology, Education, Identity**

#### **Students as Cooperative, Ecologically Connected, Community Members**

Calling into question the existing economic system—through, for example, ecological identification that demands reorientation to ecological health as a goal *rather than, and recognized as being in conflict with*, perpetual economic growth—is often taken to be failure on the neoliberal model where a passive, uncritical, worker is taken to be ideal. The very self that survives and thrives in neoliberal constructions of the world is the one that privileges atomistic, individualistic, rationalistic, and economic ways of being. Success within the neoliberal paradigm is premised on a version of self, which either ignores or denigrates the value of a life of essential connection, dependence, and support. As such, developing ecological selfhood works to subvert and make evident the fundamental flaws in the business model of education given that it is relationship, cooperation, and connectivity that underwrite ethically defensible orientations to work, education, and healthy self-concept. Competitive relations of antagonism, which are often adopted in the industrial/business model, can thereby be recognized as unhealthy and unsustainable. Pursing “rationality,” when narrowly defined as egoistically maximizing self-interest, is identified as irrational and unethical on the ecological view of

self—it is in direct opposition to self-health and the altruistic virtues which ought to be habituated (Plumwood, 2002). The health generative virtues nurtured by ecological selfhood are replaced with neoliberal “virtues” of selfish individualism, competitiveness, and the economic reduction of crucial domains of human life. Neoliberalism is a view that omits and/or impoverishes the most important dimensions of social experience and therefore requires correction (Plumwood, 1993).

### **Students as Diverse**

Contrary to the standardized “one size fits all” model, ecological selfhood is recognized as varying based on cultural, social, geographical, and so on, factors. Self-concept is not limited to Westernized imaginaries. As such, what is revealed for each student will vary every term, and each group will generate a novel dynamic, which supports particular foci and areas of growth. Developing student ecological selfhood will be responsive to the particular dimensions of race, class, sex, physical ability, etc., of each student.<sup>9</sup> Each student and group will find their own way into conceptualizing their relationships with environments. The neoliberal Western vision of self can be subverted through attending to the varied ways into selfhood tabled by diverse others. Through teacher-learner dialogue all are put in a position to learn newly. Given that developing ecological selfhood is process-based it is perpetually open to revision. Because ecological identity work grows contextually and organically in synergistic configurations of particular individuals, groups, locales and political climates, it cannot be standardized. By its very instantiation, it calls into question the viability of standardized curricula organized along economic lines.

Jessica Hayes-Conroy and Robert Vanderbeck (2005) recognize the paradox of ecological identity work. Namely that, ideally, ecological identity will need to be identified and simultaneously need to be open to radical questioning given the critical thinking being encouraged (2005). The contours of ecological identity need to be gestured at, but at the same time they cannot be required to remain static. Developing reflective capacity is at the core of ecological identity work and involves the exercise of mindful, introspective deliberation (Thomashow, 1996). The wider ramifications of personal and collective action are seriously considered (Thomashow, 1996). Given its process-driven nature there is no point at which success is “achieved,” or where “the answer” (singular) is found. Fruitfully pursuing ecological citizenship includes perpetually nurturing the virtues of creativity, imagination, patience, skill, foresight, analysis, and ethical thoughtfulness (Thomashow, 1996). Each combination of students will afford opportunities for unique class dynamics, personal and shared reflection, as well as ways of making sense of one’s self-concept in relation to the environment.

### **Liberating Growth Model**

In contrast to the banking style model, constructivist learning theories demonstrate the active role of the learner working to construct knowledge, thereby highlighting the importance of the contextual nature of learning (Kelsey, 2003, p. 423).

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<sup>9</sup> This list is not uncontentious, nor is it complete. Rather, it is a snapshot of evolving terms meant to demarcate relevant concepts for self-formation.

The notion of there being one right answer to one right question in subjects that have historically grown and developed over time, subjects that we continually wish to improve upon, is overtly wrong-headed. I argue elsewhere that students are empowered when tools for rigorous and clear, open-minded, open-hearted, analysis are explored and applied, “Students are empowered when they are encouraged to believe in their current capacity and future ability as critical thinkers and participants in shaping the world” (2012, p. 22). The neoliberal paradigm as manifest in Western education, and described above, works directly against such critical thinking.

Ecological identity work requires introspection, mindfulness, personal awareness, reflection, and responsible environmental citizenship (Thomashow, 1996). Because it is process-driven and context sensitive there is an open invitation to imagine creative solutions beyond existing paradigms. Along these lines, Darlene Clover (2002) recommends focusing on a liberatory platform of Freirian *conscientização* (critical consciousness) and becoming engaged as educator-activists (p. 318). *Conscientização*, when applied to ecological education, involves recognizing, respecting and nurturing ecological knowledge (Clover, 2002). *Conscientização* requires attending to how existing political, social and economic structures and forces both contribute to environmental problems and undermine active citizenship (Clover, 2002). Developing *conscientização* encompasses both critically understanding one’s society and culture and comprehending our capacities to actively change the situation (Clover, 2002). Ecological identity work helps to expose how neoliberalism shapes, constrains, limits and perpetuates particular ways of imaging oneself in relation to the world, thereby supporting *conscientização*.

Broadly speaking, collaboration and imagination are being minimized as students are “educated” to take their competitive place in the economy and perform without questioning the larger paradigms being kept in place. Public education “has devolved into vocational preparation for participation in the economy” (Pinar, 2012, p. 27). So long as neoliberal ideology shapes the contours of educational institutions and self-concept the associated limitations will be engrained through indoctrination via regurgitation and habituation. In contrast, liberating education requires reflection and inspiration of consciousness of oneself and one’s creative power to alter the world (Freire, 2012). The development of ecological selfhood is one manifestation of critical consciousness. Insofar as ethical exemplars, action strategies, and communities of support are identified, light is shed on available generative powers for positively altering the world.

### **The Neoliberal Self-Contradiction**

Sadly, and bafflingly, on the neoliberal approach to education students participate in systems that undermine the possibility for further future generations of students. Thus, we are faced with the self-contradictory nature of neoliberal identities. The individualistic, atomistic, economic, rationalistic, self-construct that grounds neoliberalism is itself destructive of future possibilities for selfhood, given that it fails to recognize, reflect, and respect essential, ecological, community connection. It is a literal contradiction, espousing a vision of selfhood that destroys future possibilities for there being a self. A neoliberal concept of self requires ways of being that are serving to make impossible the continuation of human selves as well as a myriad of non-human selves; it



fails to recognize robust dimensions of ecological selfhood. This failure is evidenced by current levels of human generated ecological destruction (IPCC, 2014). In so far as human health is taken to require the continuation of our species, the neoliberal vision of self presents a pressing threat to such health.

### **The Pedagogical is Political**

Insofar as teachers have autonomy in their work this facilitates opportunities for subversive, resistant, and creative responses to the neoliberal paradigm (Gruenewald & Manteaw, 2007). The pedagogical is political. This is inevitable. Even attempting “neutrality” is political in that it is supported by a particular, contestable, epistemology of education. Clover (2002) contends that pedagogy and politics must be intertwined; pedagogical choices implement political objectives. The question is then *which* political objectives do educators wish to adopt to do justice to the quality of education owed to students and to manifest integrity with regard to facilitating genuine learning? We teach, but to what end? Proactive approaches rooted in ecological, ethical, understandings are needed from those who are looked to as authorities regarding knowledge. Ecological identity work supports a move away from individual achievement as the sole focus of assessment and toward responsibility for making education relevant to students through connecting it to improving the quality of community life (Gruenewald, 2005, p. 275, as cited in Gruenewald & Manteaw, 2007).

Alternative theories and practices required for effective environmental education must include how socio-political-economic ideological forces proactively shape student thought and self-concept. Given that students do not consent to such social shaping it is crucial, as educators, to provide students with the tools to identify and work against unwanted social shaping. Pedagogical transparency will be essential and reconceptualising the self ecologically must only occur if the students themselves, of their own volition, deem such a shift in their self-concept to be merited and desirable. Only through a). identifying the sources and forces pushing in the direction of atomistic, individualistic, rationalistic (narrowly defined), competitive entrepreneurial self-construction, and b). recognizing it as an unnecessary, preventable, and unhealthy construction of humans and their relations to others (including non-human others and systems), can alternatives be freely chosen.

### **Conclusion**

The vision of the self that serves as the foundation to neoliberal shifts in education is unhealthy, in that it is premised of a vision of self where humans are atomistic, individualistic, competitive, economic, Western entities. Such a view fails to reflect relational elements of selfhood, which requires attending to and reflecting deep connection, community relations, the need for cooperation, and ecological dimensions of self. Ecological identity plays a crucial role in the self-health of humans and it also facilitates the thriving of wider ecosystems and their innumerable members. The neoliberal vision of self is epistemically untenable in that it fails to reflect the actual connections humans have with nature, substituting a hyper-seperative calculating self-interested self for the ethical, emotional, complex human self. The neoliberal vision of

self not only gives an impoverished account of human capacities, it undermines the possibility of future selves through grounding ecological destruction. The neoliberal self is contradictory in that such a vision of self destroys the possibility for future human selves. It is a vision of selves that proactively generates the absence of selves.

Insofar as the ecological self problematizes the neoliberal self it provides an indispensable point of departure for developing critique. Reconceptualizing along the lines of ecological selfhood helps to expose, destabilize, and undermine underlying assumptions of neoliberalism through showing them to be unsustainable and unhealthy conjectures rather than “matters of fact.” Reflective ecological identity work leads to an ongoing process of critical thinking and engaging with the world in ways that proactively shape and reflect ecological values. Educators are especially well positioned to facilitate ecological identity work wherein ecological selfhood can be used to provide one healthy alternative to neoliberal selfhood, and such a move need not be limited explicitly to ecological educators. Any educative practice involves adopting a working concept of the self; I am making the case that health requires recognition of ecological dimensions of the self.<sup>10</sup>

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<sup>10</sup> There are multiple, additional, layered, notions of self that could be beneficially analyzed—for a very short series of examples consider animalistic, emotional, social, political, familial, and spiritual dimensions of selfhood. I am not making the case that the ecological self is the *sole* counter to the neoliberal self, rather I am exploring one option among many others which simultaneously need tending to. It is additionally important to note that, given Western historical notions of hyper-separative individual selves, we must be careful to articulate the importance of analysis at varying community levels. Critical pedagogy demands attending to self-construct while simultaneously recognizing the limitations of focus on the self.

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# **A Meta-Analysis of Supplemental Educational Services in Ohio: Implications for the Reauthorization of ESEA**

**Jane A. Beese**  
*Youngstown State University*

## **Abstract**

The Supplemental Educational Services (SES) policy, under No Child Left Behind, requires underperforming Title I schools to offer academic tutoring to eligible students. A meta-analysis of findings from 44 external evaluations of district operated SES programs in Ohio showed that scores increased on the academic performance of at-risk students. When compared with an average annual gain in effect size from nationally normed tests, SES participants fell 0.69 standard deviations below. The subgroup analysis demonstrated greater effects in students who received services in reading and students in elementary and middle schools.

*Keywords:* Supplemental educational services (SES), No Child Left Behind (NCLB), Meta-analysis, subgroup analysis

## **Introduction**

Prior to 2002, Title I programs required certain operational conditions and limited spending, but had no quality requirements. In fact, the federal government that provided the financial support for these programs did not audit the spending to ensure that the money was being used on compensatory instruction. The passage of NCLB changed all of that. For the first time, schools lost total autonomy when it came to expending Title I money. Specifically, if students in Title I schools were not meeting their state's educational standards, then the school had to make afterschool tutoring available to those students (using the Title I funds for this required expenditure). The Supplemental Educational Services (SES) policy was placed into the No Child Left Behind (NCLB) legislation as an option for parents and their children who were trapped in failing schools. The SES provision requires that perennially underperforming Title I schools that fail to meet adequate yearly progress (AYP) benchmarks for three consecutive years offer free academic tutoring to eligible students. The SES school option became a new legal requirement as of 2002 and by law must be monitored.

The U.S. Department of Education (2009) defines SES as “additional academic instruction designed to increase the academic achievement of students in schools in the second year of improvement, corrective action, or restructuring” and stipulates that these services must be offered outside the regular school day (p. 1). The SES school option has afforded students in failing schools access to tutors where they can get assistance in reading and math. Students who come from low-income families attending Title I schools, whether or not they performed at levels of proficiency, are eligible for SES. Each year, more than half a million children participate in SES (Ed.gov, 2013).

More than a decade later, the effects of SES programs on student academic achievement remain unknown. Legislation that will determine the fate of SES programs is currently pending. In order to make good decisions for our schools and children, we must fully understand the effects of the educational initiatives we have instituted before they are reformed yet again or abandoned. The first section of this paper recounts research on the effects of tutoring programs on student achievement will be reviewed. Next, a meta-analysis is used investigate the relationship between SES and student achievement gains. The final section considers findings within the context of empirical norms for student growth and suggestions for future research.

### **Review of the Literature**

Past research provides evidence that tutoring programs can have positive effects on student performance. A meta-analysis by Cohen, Kulik, and Kulik (1982) found tutoring programs had a small effect on student performance in reading (0.21) and a large effect in math (0.60). A meta-analysis of volunteer tutoring programs conducted by Ritter, Barnett, Denny, and Albin (2009) found similar effect sizes for tutoring programs in reading (0.30) and math (0.27). These findings may have served as the theoretical framework for the SES policy.

Since the administration of SES, additional findings have been reported on the effects of tutoring. Berger et al. (2011) used a student fixed-effect approach that controlled for time-invariant student characteristics to study student achievement gains associated with SES participation relative to nonparticipation. The results indicated whether students experienced statistically significant achievement gains during periods of SES participation compared with periods of nonparticipation. Standardized z-scores were used to represent the differences in students' annual achievement gains. The effect between SES participation and achievement gains was statistically significant for mathematics (0.08 standard deviations) and reading (0.04 standard deviations), relative to nonparticipation. A Chicago Public Schools' (CPS) study of SES programs concluded that students receiving a minimum of 40 hours of tutoring had larger gains in reading and math skills than students who did not receive services (Ryan & Fatani, 2005). Findings were substantiated in research conducted in another CPS study (2007) and by Harding, Harrison-Jones, and Rebach (2012).

The effect of SES programs on student achievement may differ from other tutoring programs. SES is funded through the redirection of Title I monies. NCLB requires districts to set aside 20% of their Title I allocation for school choice transportation and SES. Schools are required to spend a minimum of 5% of the total set aside on SES. Schools may be resistant to spending these monies on such instruction because of the redirection of funds from already existing programs and the uncompensated increase in administrative work. Because SES is imposed on the district by federal requirements without the commitment of the schools, some of the conditions and circumstances of the programs could affect the delivery of such tutoring. Research on tutoring programs tends to show positive benefits when qualified tutors provide tutoring services in one to one or small group settings for a minimum of 40 hours (Morris, Tyner, & Perney, 2000; Ryan & Fattani, 2005; Slavin, Lake, Davis, & Madden, 2011).

Several researchers have suggested the effectiveness of tutoring programs might vary by grade levels and subject area. Cooper, Charlton, Valentine, and Muhlenbruck (2000) studied the effects of summer school and documented greater benefits for students in early elementary and secondary grades. Research by Lou et al. (1996), Erlbaum, Vaughn, Hughes, and Moody (2000), and Lauer et al. (2006) observed the largest effects in elementary and high school students. A study by Chappell, Nunnery, Pribesh, and Hager (2010) investigated 400 provider effects related to student achievement in a sample of 140,000 students and found a small effect in reading (0.17) and no effect in math. The purpose of this study is to provide a meta-analysis of a series of unpublished evaluations of tutoring programs in Ohio. The data-based results can add to the body of knowledge on educational reform to better understand the effectiveness of SES programs on student achievement in reading and math and provide information for future policy.

### **Method**

With any policy change, it is important to monitor the impact of change and to evaluate the value of new programs. To determine the effects of SES programs on student achievement in math and reading, the researcher performed a meta-analysis. Meta-analysis is a statistical synthesis of the results from individual studies on the same topic that is used to calculate a summary of the effects of a program or policy of interest (Cohen, 1988; Glass, 1976; Lipsey & Wilson, 2001). The benefits of meta-analysis include improved precision and greater power (Deeks, Higgins, & Altman, 2008, p. 3). Where individual studies may be too small to detect statistical differences, the chance of detecting an effect increases when studies are combined, and the accuracy of the evaluation of an intervention is enhanced when based on more information. Meta-analysis provides a means to investigate “why the effects may be larger in some studies and smaller in others” (Denson & Seltzer, 2011, p. 3).

The researcher was part of an ongoing statewide evaluation project that investigated SES programs in Ohio. From 2006 to 2012, the Ohio Department of Education randomly selected and assigned district providers for evaluation. The providers represented in the evaluations varied in student to tutor ratio, number of hours tutored, instructional methods, delivery, years of operation, and structure but were considered representative of the programs in Ohio. Although the study population was limited to district and school providers, researchers have found few demographic or academic differences between students served by district providers and students served by private tutoring services (Berger et al., 2011). Research has found similar achievement gains associated with district providers and outside providers (Berger et al., 2011). National studies have characterized SES students as coming from low-income families, high poverty schools, and within the lower rankings on state assessments (U.S. Department of Education, 2005). This analysis is limited to evaluations of programs in Ohio and therefore limits the range of generalizations that can be made.

### **Data Collection**

Full-text copies of the Ohio SES program evaluations that emphasized systematic data collection procedures and sound data analysis practices were obtained. Each year,



the Ohio Department of Education randomly assigned SES providers for evaluation. The meta-analysis was limited to evaluations with single-subject designs (one-group pre-test post-test without random assignment). The researchers extracted data about student performance and added a comparison of reading and mathematics and a comparison between grade levels. The data included provider's names, evaluation year, number of SES participants, subject area tutored, and the statistical data needed for the meta-analysis. There were 4,408 students who participated in SES that constitute the study population (see Appendix A for a list of evaluations and sample sizes). SES providers were required to administer a pre- and post-assessment aligned with state content standards that were used to evaluate program effectiveness. The data that came from the administration of those assessments were used in the meta-analytic procedures and included means, standard deviations, *t*-test statistics, and effect sizes. For the evaluations that reported means and standard deviations, the effect size was calculated. For less reported studies, the effect size was calculated from summary statistics *t*-tests (Glass, 1976; Hedges & Olkin, 1985).

An effect size provides a standardized measure of the magnitude of study outcomes and allows us to compare effect sizes across studies that have used different scales of measurement (Field, 2005; Hattie, 2009). Hedges's *g* was selected as the primary index because it corrects for bias due to small sample size (Hedges & Olkin, 1985). This study examines change within students, and the observed effects will be larger than between group studies because individual differences are held constant. Therefore, Cohen's magnitude of effect is not labeled. The Comprehensive Meta-Analysis version 2.0 statistical software program was used to compute statistics.

## Results

In this section we first describe the effects of SES on the children who received tutoring and the effects of tutoring programs on student achievement related to the subject area children were tutored and compared effect sizes between grade levels. In 43 of the 45 evaluations, the examination of the performance of students who received SES had improved when compared to their pretreatment performance. In two studies, there was a negative impact post treatment. Of the evaluations reported, 36 demonstrated statistically significant differences following participation in SES. The evaluations included no control groups or comparison groups; in other words, the "effects" that are being studied are the gains from pre- to post-assessment. This is a serious limitation because there is no way to determine whether the effects were due to the tutoring or to other efforts in the schools. Therefore, the discussion will include comparisons to empirical benchmarks (Hill, Bloom, Black, & Lipsey, 2008). The primary goals were to determine whether SES is an effective intervention in increasing student achievement and also to determine whether the effect differs among subjects tutored and by grade level.

### Summary Effect

**Random effects model.** Based on the random effects model, the relationship between SES and student achievement had an effect size of 0.81 and the standard error of effect size was 0.07. The 95% confidence interval lower boundary is 0.67 and the upper

boundary is 0.95. The null is not included in the parameters of the confidence interval, and the  $p$  value is  $< 0.001$ , which is statistically significant and indicates SES treatment has a true effect on student achievement.

**Test of heterogeneity.** Heterogeneity was examined to determine whether or not the dispersion of effects was due to random sampling error or to differences in effect size. There was some expectation that the true effects of SES treatment would vary due to the difference in program delivery. The  $p$  value is  $< 0.001$ . Therefore, we reject the null hypothesis that all studies share a common effect size and accept the alternative that the true effect is not the same and can be attributed to real differences in effect size from one evaluation to the next.

The results were significant. This indicates that 8% of the variance is due to random sampling error, and 92% of the variance is because of the true differences from study to study. Tau, the standard deviation of the true effect sizes, is 0.42 (Borenstein, Hedges, Higgins, & Rothstein, 2009). If we replace the observed effect sizes with the true effect sizes, the standard deviation of the true effect sizes will be 0.42 and the variance of those effect sizes would be Tau-squared, which is 0.18. The standard error and variance of Tau-squared tells us the accuracy of the estimate of Tau-squared. The standard error = 0.06 and the variance = 0.00. Residual weights were investigated, and none of the studies fell outside the parameters of 1.96. This indicates that the effects found in the individual studies are similar and can provide a combined estimate.

**Fail-safe N.** The Fail-safe  $N$  was calculated to assess the potential for publication bias. The Fail-safe  $N$  was 137 studies. Therefore, there would have to be 137 additional negative studies to render a significant meta-analysis insignificant. Because that number exceeds the critical number, no file drawer problem exists. It must be noted that none of the samples in this study have been published and in effect this study is the Fail-safe  $N$ .

## Subgroup Analyses

To assess the relationship between study-level covariates and effect size, a meta-analysis was used to compare the mean effect for reading versus the math subgroups of studies and the summary effect versus grade levels. An effect was computed for each group to determine if effect size was related to the subject area or grade level. A random effects model was selected because variation among the studies was established. The true effect probably varies from study to study because among the studies differences exist in the instructional methods used in tutoring students, the level of expertise of the teachers, the details of the protocol, or other factors. The data were pooled to yield the within group estimates of  $\tau^2$  and this common estimate was applied to all studies. According to Borenstein et al. (2009), “the increased accuracy that we get by pooling more studies is likely to exceed any real differences between groups in the true value of  $\tau^2$ ” (p. 163). The formula for a random effects model with a pooled estimate of  $\tau^2$  was used (Borenstein et al., 2009, p. 179).

**Math and reading subgroups.** There were 28 reading evaluations and 17 math evaluations. Based on the random effects model, at 95% significance level, the effect size for math was 0.68, and the standard error of effect size was 0.11 with a confidence interval of 0.46 to 0.90. The effect size for reading was 0.90, and the standard error of effect size was 0.09 with a confidence interval of 0.72 to 1.07. The variances are 0.01 for

both subgroups. The difference between the two group's effect size is 0.22. These results indicate that SES treatment had a large effect on reading achievement and a medium effect on math achievement.

**Comparing the effects.** A Z-test was used to compare the two mean effects. For the random effects analysis, the two-tailed  $p$  value corresponding to  $Z_{\text{Diff}} = 7.50$  is 0.001 and the  $p$  value for  $Q_{\text{between}} = 2.23$  with  $df = 1$  is  $< 0.13$ . These numbers tell us that the mean effect is not the same for the math studies as for the reading studies. There are true differences in effect between the math and reading studies.

The  $I^2$  statistic for math is 91.50 with a  $p$  value  $< 0.001$ . Approximately 9% of the variance was within math studies, and 91% of the variance was between studies. The  $I^2$  statistic for reading is 92.35 with a  $p$  value  $< 0.001$ . Approximately 7% of the variance was within reading studies, and 93% of the variance was between studies. Tau is 0.44 for math and 0.42 for reading. Tau<sup>2</sup> is 0.19 for math and 0.17 for reading. The standard error is 0.10 for math and 0.08 for reading with a variance of 0.01 for both. These results indicate that the effects found in the reading studies, and the effects found in the math studies are similar and can provide combined estimates for each group.

The statistical analysis for the student change appears larger in reading than in math. Therefore, the treatment effect may be higher for reading than in math. Based on the random effects model, the average effect size value related to the SES treatment effect on reading was 0.90, and the average effect size related to math was 0.68. An effect size of 0.90 in reading means that the mean score of students who participated in an SES program ranked in the 82<sup>nd</sup> percentile and an effect size of 0.68 in math means that the mean score of participants ranked in the 75<sup>th</sup> percentile. Students tutored in reading scored, on average, 0.22 standard deviations higher than those tutored in math.

**Grade levels.** Grade level information was available for 34 evaluations. There were 24 elementary, 8 middle school, and 2 high school evaluations. The evaluations were divided into three categories: elementary (K-5), middle (6-8), and high school (9-12). There was a large discrepancy in the sample sizes between the grade levels elementary 3,404, middle 189, high school 27.

Based on the random effects model, at 95% significance level, the effect size for elementary school was 1.92, the standard error was 0.17, and the variance was 0.03 with a confidence interval of 1.62 to 2.30; the effect size for middle school was 1.25, the standard error was 0.33, and the variance was 0.11 with a confidence interval of 0.61 to 1.92; the effect size for high school was 0.19, the standard error was 0.70, and the variance was 0.48 with a confidence interval of -1.19 to 1.58. The difference between the elementary and middle school groups effect size is 0.67. The findings for high school were not statistically significant. The statistical test was limited by the small sample size,  $n=2$ , (where a larger sample size would have ensured a more representative distribution of the population) and may have contributed to a Type II error.

**Comparing the effects.** A Z-test was used to compare the mean effects for the three groups. For the random effects model, the two-tailed  $p$  value corresponding to  $Z_{\text{Diff}} = 11.48$  is 0.001 and the  $p$  value for  $Q_{\text{between}} = 8.14$  with  $df = 2$  is less than 0.02. This tells us that the mean effect is not the same between grade levels.

The  $I^2$  statistic for elementary school is 89.02 with a  $p$  value  $< 0.001$ . Approximately 11% of the variance was within elementary studies, and 89% of the variance was between studies. The  $I^2$  statistic for middle school is 76.84 with a  $p$  value  $<$

0.001. Approximately 23% of the variance was within middle school studies, and 77% of the variance was between studies. Tau is 0.70 for elementary and 0.96 for middle school. Tau<sup>2</sup> is 0.50 for elementary and 0.95 for middle school. The standard error is 0.23 for elementary and 0.71 for middle with a variance of 0.05 for elementary and 0.50 for middle school.

Based on the random effects model, the average effect size related to elementary school was 1.88 and for middle school was 0.94. This indicates a large effect on student achievement at the elementary and middle school levels. SES had little to no effect on student performance at the high school level. The findings of this research are consistent with Lauer et al. (2006) and Grossman, Walker, and Raley (2001). An effect size of 1.88 for elementary students means that the score of the average student who participated in an SES program ranked in the 97<sup>th</sup> percentile and an effect size of 0.94 for middle school students means that the score of the average student ranked in the 83<sup>rd</sup> percentile.

Overall meta-analyses revealed that SES treatment had a true effect on student achievement. A large effect on student achievement in reading and a medium effect on student achievement in math was found. SES treatment on elementary, middle, and high school students resulted in large effects for both elementary and middle school students. No effect on high school students was found.

## Discussion

The results of this study may suggest several implications related to SES outcomes and future policy. SES programs may have positive effects on reading and math achievement in at-risk students. According to the random effects model, the relationship between SES and student achievement has an effect size of 0.81. The findings of this research are consistent with the results of studies on the effects of tutoring including Cohen et al. (1982), Lauer et al. (2006), and studies related to SES including Borman, Rachuba, Fairchild, & Kaplan (2003), Ryan and Fatani (2005), CPS (2007), Berger et al. (2011), and Harding et al. (2012). However, without a control or comparison group, the effects of normal academic growth and school efforts are not controlled for and therefore the effects are inflated. While SES treatment appears to have a substantial effect on student achievement, to be certain, we must eliminate the normal growth that would occur during the academic year for this population of students.

Published benchmarks from Bloom, Hill, Black, and Lipsey's *Performance Trajectories and Performance Gaps as Achievement Effect-Size Benchmarks for Educational Interventions* were used to understand the effects of SES on student growth compared with the natural growth in academic achievement (2008). Comparisons show average annual growth tends to be similar across subject areas with a range of 0.02 to 0.38 difference between reading and math. The SES treatment effects appear higher than average annual growth for transition grade 2-3 with an effect size of 0.60 through transition grade 11-12 with an effect size of 0.06 in reading and for transition grade 3-4 with an effect size of 0.52 through transition grade 11-12 with an effect size of 0.01 in math (Bloom et al., 2008, p.16). Bloom et al. supports the findings of this study where higher SES treatment effects were found in reading than in math with a difference of 0.22 between subjects. The research-based learning strategies and instructional practices in

reading may be a contributing factor in the effectiveness of SES programming. More research may be needed on effective instructional practices in math tutoring.

Statistical analysis indicates that the average student change is larger for elementary school than for middle school. Students tutored in the elementary grades, on average, scored 0.94 standard deviations higher than those tutored in middle school. Annual gains on standardized achievement tests vary substantially across grades with larger annual gains in the early elementary grades followed by gradually declining gains in later grades (Bloom et al., 2008). The effect of SES on student achievement declines as students move up in grade level however, it is important to interpret an intervention's effect within the context of expectations for the grades being treated (Bloom et al, 2008). Consequently, comparisons were made between the SES treatment effects by grade level and published average annual growth trends. For example, the SES treatment effect for elementary students ( $es = 1.88$ ) relative to normal academic growth for the grade 1-2 transition in math ( $es = 1.03$ ) compared to the effect for middle school students ( $es = 0.94$ ) relative to normal academic growth for the grade 7-8 transition in math ( $es = 0.32$ ) represents proportionally similar improvements ( $es = 0.85$  compared to ( $es = 0.62$ ) (Bloom et al., 2008). These findings demonstrate similar growth between average students without SES treatment and at-risk students with SES treatment. SES programs might be one way to support academic growth in at-risk students and assist efforts to close the achievement gap.

A limitation of this study was that data did not distinguish between regular academic growth and SES treatment. Hill, Bloom, Black, and Lipsey (2008) demonstrated that the average student change on standardized achievement tests from kindergarten to the first grade was about 1.5 standard deviation units in the absence of an intervention. When compared with the summary effect of the meta-analysis ( $es = 0.81$ ) SES participants fell 0.69 standard deviations below the average annual gain in effect size from nationally normed tests. While it might be sensible to expect less change among at-risk students, it is difficult to quantify how much less, and also difficult to figure out how this mean might be affected by the highly aligned nature of tests in this case.

Schools with higher concentrations of at-risk students typically display poorer academic performance than schools with fewer numbers of these students (U.S. Department of Education, 2006). Students "at-risk" refers to the percentages of minority, economically disadvantaged, and English Language Learner (ELL) students within a school (Kannapel & Clements, 2005). To fully understand the effects of SES on student outcomes, we must understand how these factors impact average school performance. Bloom et al. (2008) reasoned "researchers should tailor their effect size benchmarks to the contexts they are studying whenever possible" (p. 19). The achievement gap between minority and non-minority students is a widely recognized area for concern in the United States. On average, black fourth graders score 0.83 standard deviation lower in reading and 0.99 standard deviation lower in math than white fourth graders, with the difference decreasing slightly as students move up in grade level. A similar pattern exists between Hispanic and White students. The SES treatment effect for reading was 0.90 and signified a substantive change relative to the academic gap in effect size estimates between minority and non-minority students. The SES treatment effect for math was 0.68 and constituted a smaller change relative to the minority achievement gap. These comparisons support substantial growth in reading achievement for students who

participate in SES program when compared with the performance trajectories for at-risk students who did not participate in the SES program.

Socio-economic status is the most widely recognized indicator of student risk. Researchers have continued to report large discrepancies between the achievement of high and low poverty students (Murnane, Willet, Bub, & McCartney, 2006; Reardon & Robinson, 2007). On average students eligible for free or reduced-price lunch score 0.74 standard deviation lower in reading and 0.85 in math than fourth grade students who are not eligible, with the difference decreasing slightly as students move up in grade level (Bloom et al, 2008). The effect size for SES was 0.90 for reading and 0.68 in math; both imply a substantive change relative to the academic gap in effect size estimates between students who are and are not eligible for a free or reduced-price lunch.

This study addressed significant issues about policy toward tutoring programs that can help to improve learning in at-risk populations. Without a comparison group, we can only infer what the actual effectiveness of SES might be, but we cannot be certain. Gains may be attributed to other factors, such as new technology, professional development, new curriculum, or changes in instructional practice. Chatterji, Kwon, and Sng (2006) argued that the program effects of SES are observed only in assessments that are aligned with the SES curriculum and that these effects are confounded by other efforts simultaneously being implemented (p. 30). Many researchers debate the overall effect of SES on student achievement declaring it negligible compared to other methods of reform (Chappell et al., 2010; Hattie, 2009). There is a continuing need to implement SES programs while further research is used to determine its effectiveness.

The relative effectiveness of these programs under many conditions or across many features should be considered. While this study looked at math and reading differences as well as grade level, it did not consider the size of the schools or districts, the levels of initial achievement performance for the districts, or racial/ethnic or socioeconomic status differences. Investigating specific variables associated with SES effectiveness may pinpoint viable strategies that can be introduced into the regular classroom and serve to inform the design and development of future programs and policy.

Legislation proposes the elimination of SES for students in failing public schools. The Department of Education's blueprint for the reauthorization of ESEA, released in March 2010, recommends that chronically low-performing schools should no longer be required to fund SES but instead should be required to implement "data-driven interventions," which could include "expanded learning time, supplemental education services, public school choice, or other strategies" (U.S. Department of Education, 2010, p. 10). Educators should address policy makers about the potential use of tutoring programs for increased student achievement.

We find ourselves on the brink of yet another phase of reform. But what lessons can we take away from the efforts educators toiled over under NCLB? While the data may suggest SES programs increase reading and math achievement in at-risk students when compared with normative expectations for academic growth in economically disadvantaged and minority subgroups, we cannot be certain without a control group. The effect of SES on reading was greater than in math so instructional strategies for math may be a topic for enhancement. The magnitude of the effect is still up for debate. Finally, evaluation requirements for educational programs should be more robust and include measures for comparison.

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## Appendix

Study	<i>N</i>	Subject	Grade	<i>t</i>	Dir. of effect	<i>p</i>	ES
Toledo (2007) [1]	358	Reading	Elementary	19.455	+	0.00	1.03
Toledo (2008) [1]	353	Reading	Elementary	24.150	+	0.00	1.29
Toledo (2009) [1]	664	Reading	Elementary	34.249	+	0.00	1.33
Akron Digital Acad (2009) [1]	11	Reading	Middle	1.453	+	0.17	0.44
International Acad. (2009) [1]	73	Reading	--	8.096	+	0.00	0.95
Ravenna (2010)	92	Reading	Elementary	14.370	+	0.00	1.50
Akron Digital Acad. (2010) [1]	9	Reading	--	2.075	+	0.06	0.69
Columbus (2010)	150	Reading	Middle	4.428	+	0.00	0.36
Mt. Healthy (2010)	26	Reading	Elementary	4.821	+	0.00	0.95
Timberline (2010)	17	Reading	Elementary	3.645	+	0.00	0.88
Cincinnati (2010) [1]	17	Reading	--	4.546	+	0.00	1.10
Springfield (2010)	69	Reading	--	1.520	+	0.13	0.18
Toledo (2010)	202	Reading	Elementary	13.579	+	0.00	0.96
Canal Winchester (2011)	10	Reading	Elementary	6.042	+	0.00	1.91
Cincinnati (2011)	62	Reading	Elementary	2.305	+	0.02	0.29
Columbus (2011)	72	Reading	Middle	6.299	+	0.00	0.74
Elida (2011)	5	Reading	Elementary	4.180	+	0.01	1.87
Hamilton (2011) [1]	20	Reading	Elementary	4.750	+	0.00	1.06
Maple Hts. (2011) [1]	20	Reading	Elementary	3.681	+	0.00	0.82
Maple (2011)	9	Reading	Elementary	0.456	-	0.66	-0.15
Mt. Healthy (2011)	11	Reading	Elementary	4.352	+	0.00	1.31
Timberline (2011)	22	Reading	Elementary	29.042	+	0.00	6.19
Northwest (2011) [1]	83	Reading	Elementary	8.167	+	0.00	0.90
Orville (2011) [1]	63	Reading	Middle	11.653	+	0.00	1.47
Ravenna (2011) [1]	49	Reading	Elementary	10.023	+	0.00	1.43
Springfield (2011)	202	Reading	--	5.015	+	0.00	0.35
Toledo (2011)	329	Reading	Elementary	14.952	+	0.00	0.82
Zanesville (2011) [1]	42	Reading	High School	2.247	+	0.03	0.35
Toledo (2007) [2]	340	Math	Elementary	9.950	+	0.00	0.54
Toledo (2008) [2]	238	Math	Elementary	22.450	+	0.00	1.46
Toledo (2009) [2]	102	Math	Elementary	13.796	+	0.00	1.37
Akron Digital Acad. (2009) [2]	23	Math	Middle	1.531	+	0.14	0.32
International Acad. (2009) [2]	65	Math	--	1.597	+	0.11	0.20
Akron Digital Acad. (2010) [2]	22	Math	Middle	1.446	+	0.16	0.31
Cincinnati (2010) [2]	17	Math	--	3.847	+	0.00	0.93
Akron Digital Acad. (2011) [2]	16	Math	High School	2.224	+	0.04	0.56
Hamilton (2011) [2]	23	Math	Elementary	4.898	+	0.00	1.02
Maple Hts. (2011) [2]	22	Math	Elementary	3.620	+	0.00	0.77
Northwest (2011) [2]	86	Math	Elementary	7.138	+	0.00	0.77
Orville (2011) [2]	63	Math	Middle	10.843	+	0.00	1.37
Ravenna (2011) [2]	49	Math	Elementary	3.379	+	0.00	0.48
Zanesville (2011) [2]	49	Math	--	4.384	+	0.00	0.63
Cincinnati (2011) [2]	62	Math	Elementary	1.173	+	0.24	0.15
Toledo (2010) [2]	159	Math	Elementary	12.512	+	0.00	0.99
Columbus (2010) [2]	32	Math	Middle	0.500	-	0.62	-0.09

**Apple Pie and Ebonics:  
Language Diversity and Preparation for a Multicultural World**

**Jennifer L. Martin**  
*The University of Mount Union*

**Tabitha Martin**  
*The University of Akron*

**Mandy Capel**  
*The University of Mount Union*

*Language, also, far more dubiously, is meant to define the other--and, in this case, the other is refusing to be defined by a language that has never been able to recognize him—*  
James Baldwin

**Abstract**

All three of us, the authors, are white and do not speak Ebonics, (or African American Language, AAL). How the misperceptions of AAL impact our students inspired our interest in the subject. The title of this piece refers to the ubiquity of AAL, historically, culturally, as an influential cultural wellspring. Although AAL continues to influence Standard English (SE) and popular culture, many do not understand and therefore do not acknowledge it as a legitimate variety of English, but as a deviation of SE. We, as teachers and educational leaders, must work to change these myths, for the well being of our students and our society.

*Keywords:* Ebonics, African American language, multicultural education, culturally responsive pedagogy, language diversity, cultural mismatch

**Introduction**

Understanding and navigating diversity is the key to success in our increasingly global and technological workforce, which has serious implications for our educational institutions and for the leaders within said institutions. The proliferation of text-based communication technologies and increasing dependence on intercultural communication both nationally, and internationally point to language as a key area of educational importance. As the U.S. loses its status as the main cultural influence on the world stage, our educational systems are shortchanging many of our students who are attempting to prepare for this new multicultural world. By continuing to teach from a privileged, hegemonic worldview, we are leaving out a wide swath of students from true preparation for success. Access to language resources, as well as the discourses of power, through

multicultural education, is crucial in preparing our students, poised to enter this changing workforce, to successfully navigate the global economy.

As teachers and educational leaders, we must prepare our students to work with increasingly diverse populations in a social and political climate that is increasingly hostile to these endeavors and to forces that are resistant to global change. Although the pre-K-12 student population in the U.S. is becoming increasingly diverse, the teaching force is increasingly hegemonic. According to the National Center for Education Information (2011), 84% of the teaching force in the U.S. is white. Without explicit training about—or at least recognition of—the cultural differences between teachers and students and how they can impact teachers’ attitudes toward diverse student populations (and the languages they bring to school), this culture gap will continue to contribute what is known as the achievement gap.

As teachers and educational leaders, we must recognize that we are doing our students a disservice by not recognizing their languages and cultures. The cultural mismatch between a large portion of the student population and the majority of teachers greatly contributes to the achievement gap, leaving students without access to the discourses of power (Carter & Welner, 2013). The achievement/opportunity gap could realistically be considered a cultural and linguistic gap.

Although we have academic theories, court cases, and resolutions addressing the importance of culturally responsive educational and linguistic practices, the implementation of said practices is far from universal. It seems that a real change will only come about in this area through grassroots, educator-led action. There are many outside (corporate, governmental, societally-ingrained) influences that are working to maintain the status quo—keeping as many students as possible outside of the realm of privilege—that we cannot expect change to come from “above.”

By recognizing the need for multicultural education and encouraging our students to use home languages as a vehicle to learn the power code, teachers are becoming a grassroots force for change in our all-too-hegemonic school systems. Teachers are leading the charge to educate students about the idea that strength comes not from our similarities, but our differences, particularly through their classroom literacy practices. Cultural assumptions play out particularly through language use, and this is especially true in the classroom. Most teachers feel it is their job to prepare students for success in a “standardized” world, where non-standard language will most likely hinder workplace success. But allowing for diversity in language practices in the classroom helps students understand different ways of seeing the world and can only strengthen the ability of our students to succeed in an increasingly diverse workplace. By helping students consciously address differences in language use, we can help them not only in their own success but also to become language activists as well.

### **Theoretical Framework**

According to James Banks (1998), multicultural education encompasses five dimensions: content integration, knowledge construction, equity pedagogy, prejudice reduction, and an empowering school culture and social structure. All of these aspects are necessary to promote a multicultural school or space. The theoretical framework that informs the multicultural goal, and, in fact, this analysis, is best described as an

intersection between culturally responsive pedagogy (CRP), Funds of Knowledge (FoK), and critical literacy. All of these bodies of knowledge are essential in embracing the language diversity of students, which is an essential element of multicultural education. According to Ladson-Billings (2009), culturally responsive pedagogy (CRP), involves: academic achievement, socio-political consciousness, and cultural competence. Because CRP seeks to identify, problematize, and ultimately transform institutions and society with the goal of ending all forms of oppression, culturally responsive teachers must not only possess the will to end oppression but the *knowledge* to inform their choices and actions. Howard (2006) defines “responsiveness” as dealing with “. . . our capacity as teachers to know and connect with the actual lived experience, personhood, and learning modalities of the students who are in our classroom” (p. 131). Thus, culturally responsive educators take the time needed to learn the experiences, individuality, and learning styles of all of their students in order to better reach them. Additionally, as Milner (2013) argues, CRP demands that teachers “ensure students’ racial backgrounds and interests are not ignored or overlooked in what is required and expected to be covered” (p. 39).

Rodriguez (2013) defines Funds of Knowledge (FoK) as an accumulation of historically developed cultural truths and bodies of knowledge and skill that promote the functioning, development, and well being of individuals and households. This framework reveals inherently culturally responsive practices and dispels the widely held belief that low-income and non-dominant students do not possess home knowledge leading to academic success. FoK is a revolt against the deficit model of education that disproportionately places non-dominant students into special education or alternative programs with heightened disciplinary structures. It encourages questioning of hegemonic teaching and learning traditions in favor of co-creating curriculum and pedagogy utilizing home languages and knowledges by creating “new ways of engaging proactively with critical, voiced involvement at every stage of teaching and learning” (Rodriguez, 2013, p. 108).

The field of critical literacy relates directly to CRP and FoK in that it seeks to investigate and validate marginalized student voices and advocates for the validation of these voices within schools. According to Delpit (1988), non-mainstream students must be “let it on the secret” and be given access to the “power code.” Critical literacy seeks to explain how language and literacy (re)produce subject positions. As Friere (1970) inspires us, literacy can empower when people are encouraged to question the world around them with the goal of advancing social justice. According to Charity Hudley and Mallinson (2011), “. . . by providing all students with situations in which they are encouraged to practice expressing themselves in their home varieties as well as in standardized English, students will develop their linguistic versatility” (p. 87). As critical literacy implores, knowledge consumption alone is inadequate for our students; instead, they must have the opportunity to be critical of their curriculum, to deconstruct and reconstruct it (Freire, 1998), and in fact take an active part in developing it. Freire’s concept of a “humanizing pedagogy” allows for the expression of students using their home languages (1970). In essence, students become co-creators of knowledge through the problem-posing method of local struggles and the development of critical consciousness (Freire, 1970).

## The Problem

In the U.S., the high school graduation rate is under 70%, the achievement gap has remained relatively stagnant since 1988, and socioeconomic factors greatly affect student outcomes (Carter & Welner, 2013). What Linda Darling-Hammond calls “cultural mismatch,” or the gap between students and teachers in terms of their racial, cultural, ethnic, social, and linguistic identities, readily influences student disconnection from school. Students who speak non-standard forms of English often may feel that their language is devalued in school and thus are more inclined to drop out, losing confidence in schools that make them feel devalued (Charity Hudley & Mallinson, 2011). According to Salazar (2013), a “humanizing pedagogy” is needed. Humanizing pedagogies are “additive,” as opposed to focusing on deficits. Such approaches utilize students’ prior knowledge and connect prior knowledge to new learning, thereby legitimizing students’ home languages and cultures; students are viewed as experts in their particular culture and language. The teachers’ role is to impart “insider knowledge” that is necessary to succeed in the academic world.

However, cultural mismatches stemming from language variation between students and teachers contribute to misunderstandings that harm students. For example, differences in intonation when asking questions, responding to questions, and in everyday interactions, may be viewed as a lack of interest and enthusiasm, disrespect, or even lack of ability and can account for the larger percentages of students of color receiving behavioral referrals and referrals for special education services from white teachers (and standard English speakers) than their white counterparts (Charity Hudley & Mallinson, 2011). Schools with higher populations of non-dominant or minority students refer more students for special education services; this mislabeling affects African American children twice as much as white children (Carter & Welner, 2013; Smitherman, 2006).

Additionally, teacher perceptions can do much to perpetuate negative self-fulfilling prophecies in the classroom. As Howard (2013) argues, “. . . teacher perceptions tend to have a negative effect on Black males more than any other group. . . . they are often viewed as having characteristics more consistent with academic disengagement (lazy, non thinkers, hostile in class, discipline problems) than showing behavioral congruence with academic success” (p. 68). Black males also tend to be victims of “racial microaggressions” (Howard, 2013) such as low expectations, deficit thinking, heightened surveillance, and stiffer discipline penalties.

In sum, the assertion of cultural identity in speech is a salient issue for many students that some hegemonic teachers are unaware of; this lack of (multi)cultural understanding and awareness may lead to the silencing of some and the mislabeling of others. Some educators rate African American English speaking students as less intelligent, confident, and successful (Charity Hudley & Mallinson, 2011). This misperception can lead to differential expectations in behavior, prejudice, and less tolerance for perceived misbehavior. Thus, students who speak in non-standard English may be predisposed to receive more behavior referrals and suspensions, as well as more referrals for special education services, such as speech pathology.

## So What Do We Call It? It's a Matter of Terminology

Black English (BE), Ebonics, African American English (AAE), African American Language (AAL), African American Vernacular (AAV) are just some of the scholarly terms used to describe the dialect patterns brought from home for many African-American children (thought not necessarily limited to this specific set of individuals: Godley & Minnici, 2008). The problems in defining an agreed-upon term are contentious at best. Every time one uses a term it has the potential to be disparaged; as each new and improved version is coined, some way is found to condemn or taint it. Many educators, as well as students themselves, often refer to any non-standard language use as “slang,” and do not recognize the common grammatical patterns of AAL as a distinct rule-governed dialect (Godley & Mannici, 2008). In an attempt to draw attention to the cultural aspects of AAL, and combat the negativity associated with it, terms have been coined such as “Soul talk,” “black talk,” and “heritage language.” But until attitudes about the language itself change, agreement on what to call it will continue to be impossible. And this typifies why it is difficult to engage with this issue: because of the negative connotations and misunderstandings surrounding the issue of language and dialect use, many non-scholars are reluctant to acknowledge or do not possess enough linguistic information to engage with any part of the issue (Godley & Minnici, 2008).

### Background of AAL: The King Case, 1979

AAL was brought into the national spotlight in the 1979 court case, *Martin Luther King Junior Elementary School Children v. Ann Arbor School District Board*, where suit was brought against the Ann Arbor School District by the parents of African American students in a predominantly white school (ironically named for Dr. Martin Luther King, Jr.). The contention was that these students in particular, and AAL-speaking children in general, were being systematically placed in special education programs and were generally seen by their teachers as uneducable because of their perceived lack of language skills.

Geneva Smitherman, a University of Michigan professor, linguist, and consultant for the plaintiffs in the case, notes that the case was the “first test of the applicability of 1703(f), the language provision of the 1974 Equal Educational Opportunity Act, to Black English speakers” (1999, p. 132). The case was also a crucible for the notion that the language African American children acquire before they go to school constitutes a “home language” that is different enough from Standard English (SE) that it can be a barrier to their educational achievement. On July 12, 1979, the court found that the Ann Arbor School District violated the students’ right to equal educational opportunity. The institutional response to Black English was found to be the main barrier (Smitherman, 1999). Smitherman (1999) continues:

The trial proceedings established that the school district had failed to recognize the existence and legitimacy of the children’s language, Black English. This failure of the teachers to recognize the language as legitimate and the corresponding negative attitudes toward the children’s language led to negative expectations of the children which turned into self-fulfilling prophecies. One critical consequence was that the children were not being taught to read. (p. 135)

By not understanding the language these students brought with them to school, (AAL), because it did not conform to their Standard English (SE) expectations, these teachers were “writing off” the students as ignorant or uneducable. Instead of attempting to bridge the language divide, teachers were robbing the students of the education that they came to school to attain and cutting off students when they most needed to be reached.

### **Background of AAL: Oakland, CA, 1996**

The “Ebonics Issue” was revisited in the mainstream media in 1996, when the Oakland, California School Board, in an effort to address the achievement gap between their white and black students, focused on the issue of language. Smitherman (1999) again honed in on the situation, “Oakland’s contention was that the students’ dismal levels of educational achievement were attributable, in great measure, to the significant linguistic mismatch between the home and school communication systems. To reduce this mismatch and its consequent impact on literacy and academic performance, Oakland proposed to implement a bilingual/bicultural language pedagogy” (p. 150). This pedagogy, influenced by a number of leading scholars on the subject of AAL, emphasized that students whose home language was not Standard English should be able to use their home languages in school, while teachers helped to form a linguistic bridge toward the use of Standard English.

The resulting media firestorm, instead of focusing on how best to help these students learn, instead took off on the use of the word Ebonics (Ebony + phonics or “black sounds”) as a descriptor for AAL, and led many to believe that the Board called for teachers to teach Ebonics to students, when the intent of the resolution was to acknowledge that Ebonics was these students’ first language (they therefore already knew how to speak it). This skewed media take-away only highlighted the controversy surrounding the issue of AAL home languages, increased racial tensions, and effectively fractured the already-small community of those focused on the role of home languages as a barrier to educational success. Now, twenty years later, scholars who are interested in multicultural Englishes are isolated pockets, speaking different theoretical languages, using different terms about the same issues, while fighting an uphill battle against a privileged idea of what constitutes “proper” English.

While these cases highlight the linguistic differences between AAL and Standard English, their best use is to draw attention to the fact that Ebonics is a legitimate—not a “broken” or “lazy”—variety of English. There are features of AAL (both grammatical and rhetorical) that, without specific knowledge of, white teachers will be likely to negatively misinterpret, the results of which can have longstanding consequences not only in the communication between these teachers and their students, but on the esteem and engagement of the students themselves. The language breakdown, then, becomes a gateway into the disengagement of students from the school environment, giving them the impression that school is not for them.

### **Addressing the Cultural and Linguistic Mismatch**

We know that when white teachers, however well intentioned, avoid addressing topics pertaining to race, it only serves to “stifle” the voices of students of color (Sue,



Torino, Capodilupo, Rivera, & Lin, 2009). Even as teachers attempt to treat all of their students equally, they can unknowingly overlook the disparities in cultural capital between standard and non-standard speaking students, undervaluing the languages that some students bring with them to the classroom (Goldenberg, 2014). Because many white teachers, as members of the dominant discourse community, have been culturally influenced to profess that race makes no difference (colorblind ideology), many do not naturally realize that, in fact, it does. Instead of ignoring these differences in an effort to treat students “the same no matter what their color,” we need to overtly acknowledge that cultural differences exist and that they can have an effect on how learning and teaching happens and should happen. As Delpit (1988) maintains, “it is impossible to create a model for the good teacher without taking issues of culture and community context into account” (p. 291). The assertion, “I do not see color,” is a culturally irresponsible position to take and does not serve our students well. Educational leaders must insist that teachers recognize cultural capital and to use the concept in their teaching in ways that contribute to the learning of all students (Goldenberg, 2014).

Colorblind and colormute ideologies condemn any words or language that may relate, signify, or give meaning to race; in reality, they perpetuate racism, the myth of meritocracy, and denials of institutional or structural inequality. According to Charity Hudley and Mallinson (2011), “Most people would find it difficult to accept a message, even an indirect message, that they have to suppress part of their linguistic identity to operate within mainstream culture. African Americans, with their specific social and cultural history, often live this reality every day” (p. 74). Teachers who have not been trained in critical literacy practices, and/or are a part of the hegemonic majority and have not questioned issues of power and authority and their impact on literacy and students, may not feel they are doing anything wrong when they perceive home languages to be deficient and deem them as subordinate, something to be disciplined, corrected, altered. In fact, this type of disciplinary knowledge, a “pedagogy of telling” (Sizer, 1984), deems knowledge as a direct transfer from teacher to student, with no exchange, no inter-play, no struggle for common ground, no joint knowledge construction.

Even those teachers who are questioning their hegemonic worldviews and training struggle with their own internalization of the dominant cultural assumptions and how to “pedagogically utilize it in the classroom in ways that enhance student learning” (Goldenberg, 2014, p.117). According to Brock, Parks, and Moore (2004), teachers possessing dominant ideologies must find ways to assist students to attain multiple literacies by utilizing both their home literacies as well as the literacy practices of the dominant culture; because, as Goldenberg (2014) argues, “regardless of White teachers’ backgrounds and potential passion for social justice, students are critical of the dominant school culture that teachers are inherently members of” (p. 120). Goldenberg (2014) explicitly acknowledges that the process of monitoring one’s own affinity with the dominant culture is difficult, and providing more training for educators to examine their own attitudes about culture and diversity is crucial to facilitate change (Diller, 2004). Pre-service teachers must be given the opportunity to question their attitudes and be exposed to the ideas of multicultural education. Educators must have a “safe space” in which to learn how to help their students who are unlike them culturally before they are faced with it in the classroom: the information, vocabulary, and the opportunity to discuss stereotypes and cultural attributes, enough so as to be able to get over any initial

uncomfortable feelings that will probably arise in our current environment of professed colorblindness. The inclusion of critical pedagogical practices is crucial for effective teacher preparation programs and professional development for current educators, and one way to address potential cultural mismatch based upon language (Godley & Minnici, 2008).

And while organizations like the National Council of Teachers of English (NCTE), the Conference on College Composition and Communication (CCCC), and the Linguistic Society of America (LSA) have drafted and passed multiple resolutions on the importance of teachers addressing differences in multicultural home languages that students bring to class, and the research documenting the great need for this work to be done continues to be published, the disconnect between theory and practice continues, to the detriment of students. Widespread effort must be made to educate teachers and educational leaders from the beginning of their careers about the impact that culture has on language and learning and the need to take it into consideration when working with students not well versed in Standard English. According to Smitherman (2000), “Language is the foundation stone of education and the medium of instruction in all subjects and disciplines throughout schooling. It is critical that teachers have an understanding of and appreciation for the language students bring to school” (p. 119). Recognizing the existence and value of students’ home languages is a relatively simple place “where teachers can identify students’ cultural capital inside the classroom” (Goldenberg, 2014, p.122). By acknowledging and engaging language differences, we can truly begin to educate all of our students.

The linguistic differences between AAL and Standard English are not so great as to be insurmountable (though they can be complex), but without the acknowledgement of the systematic, rule-governed nature of AAL (and therefore its acknowledgment as a legitimate variety of English), combined with the recognition of the cultural differences (and consequent learning implications) between white middle-class teachers and their students who do not share the same subject position, the language barrier appears to be the problem, not the symptom of larger ones. Recognizing the differences in the language and culture that their students bring from home (whether it is an English variety or not) and how these differences will affect the expectations that both the teacher and students will have in the classroom is an important first step. And when teachers can give as much leeway and respectful assistance to students who are coming from cultures where their language is a non-standard variety of English as they (presumably) would do to an ESL student, then we might start to see significant changes in the “achievement gap.” Some teachers, though, have begun to implement changes in their own thoughts, attitudes, and practices being spread by word-of-mouth that may yet save the day.

When language and cultural differences are taken into consideration, both teachers and students can find psychologically healthy “middle ground” on which to build a true education. More often than not, students know that they are coming into foreign territory at school. When teachers can recognize it, as well, and acknowledge the culturally influenced language constructions that students bring with them into the classroom, those constructions can be used, respected, and built upon.

## Case Study: Dr. Arthur Palacas, University of Akron

The University of Akron Professor Dr. Arthur Palacas has been working to combat language discrimination since the mid-1970s. With an undergraduate degree from Harvard in Linguistics and Applied Math and a doctorate in Linguistics from Indiana University, Dr. Palacas first became acquainted with language diversity, specifically with what at the time was deemed “Black English,” in the late 1960s through the work of William Labov. When he began teaching at The University of Akron, an urban, open enrollment institution, in 1976, every full-time faculty member in English was required to teach freshman composition. He noticed that groups of students whose English was not Standard, such as Black students and Appalachian students, had more academic difficulty, higher dropout rates, and lower graduation rates. Because of his linguistics training and familiarity with English varieties, he was able to recognize many of the consistent grammatical constructions in his nonstandard-speaking students’ language. This reinvigorated and informed his previous study in nonstandard dialects. He then started giving workshops about language difference for teachers in local K-12 schools; he felt that his knowledge could translate into culturally responsive literacy practices in K-12 schools.

Although Dr. Palacas enjoyed the experience, the knowledge imparted in the workshops did not transform into the culturally responsive classroom practices he hoped for. So in 1993, Dr. Palacas took his linguistic understanding into his own composition classroom, creating a unique curriculum with the backing of the director of composition to specifically address the needs of AAL-speaking students within the composition requirement: “African American Language and Culture: College Composition.” His curriculum was devoted to the discussion of the interaction of language and culture issues: editorials on Ebonics cases were debated; students discussed the power of naming, and current slang terms, what they mean, and when it is appropriate to use them; students wrote papers about these contested spaces, such as what it means to be a person of a certain race or ethnicity. Their final paper was an ethnographic approach to examining attitudes toward Ebonics—the students would go out into the community and interview people. The course was transformational for many students, particularly for Black students who had previously expressed shame at using their home language in an academic context. As one student indicated, “My grandmother always said it was a language, not just mistakes.” This student was finally able to acknowledge that her grandmother was correct, once she learned about the rule-governed nature of Ebonics.

Dr. Palacas argues that without a radical transformation within the community of teachers, especially in the areas of language and writing, the negative effects on native AAL speakers’ overall learning and feelings of worth will continue to contribute to their disengagement from school life. This leads all too often to a population of students who are not ready for the work world in many ways. With no acknowledgement in the larger society of the value of diverse forms of English and their legitimacy, language discrimination continues to have a negative effect on the ability of many to attain and/or maintain good jobs. This then becomes a vicious cycle of pushing out segments of the population from the mainstream, leading to even more ghettoization and segregation, and accelerating linguistic differences in multicultural Englishes.

Unfortunately, the future of his specialized composition course is in doubt; often sections get cancelled because of low enrollment because advisors do not realize the important role that these classes fill for students who, many times, are already starting college “behind.” There are colleges and departments within the university that do not accept the course as fulfilling the University’s writing requirement, although Dr. Palacas gained state approval for his course as legitimate first-year composition replacements. While he is often able to change minds about the course once he can personally address individual professors and administrators, he continues to struggle to affect a larger change—to educate administrators of the goals and achievements of the course—even within his own university. At the same time, his goal is still to institute a policy that will affect the whole educational system so that teachers who come out of our schools of education really understand that AAL is truly a language. Then teachers can use that understanding to teach with sympathetic and empathetic attention for their non-dominant English speaking students.

While many in the field of education can acknowledge the importance of language and the role that language prejudice plays in the achievement gap, it is more difficult to educate educators as to the legitimacy of multicultural English dialects, like AAL. This is where Dr. Palacas’ work as a linguist most especially runs into trouble with administrators. It is not so difficult to get a consensus that language is an important part of multicultural education, and even the acknowledgement that language and culture are connected is becoming more widespread. The strongest resistance usually comes from the attempt to demonstrate that Ebonics has a long lineage that only partly shares its history with American English, and in fact has some of its linguistic roots in West African language structures. Like Dr. Palacas’ student who was amazed that her grandmother was right about their “heritage language,” once students can be affirmed in this deep, personal, and powerful way—through their home language—their relationship with the icons of hegemonic power (i.e. teachers) can change in a dramatic and positive way.

Delpit (2002) expresses this idea that even when educators have children’s best interests at heart, if we continue to demean students via their mother tongue, we only continue to maintain the status quo:

Despite any good intentions, if we cannot understand and even celebrate the wonders of the language these children bring with them to school—the language forged on African soil, tempered by two hundred years of love, laughter, and survival in the harshest of conditions—then we have little hope of convincing them that we hold their best interests at heart. . . . We must make them feel welcomed and invited by allowing their interests, culture, and history into the classroom. (pp. 47-8)

As Dr. Palacas teaches everyone he talks to about Ebonics, “language and culture are inextricably intertwined”; a person’s language *carries* her culture, and because language is embedded in the mind and heart, to demean a person’s language is to demean her.

### **Conclusions and Recommendations**

If we truly want to help our students succeed, we “must take the responsibility to teach, to provide for students who do not already possess them, the additional codes of

power” (Delpit, 1988, p. 293). We must follow in the footsteps of “scholars who have engaged in this groundbreaking work [and who] have laid a blueprint—no matter how rough—for teachers to better engage students” (Goldenberg, 2014, p. 132), like Dr. Palacas. An important first step is recognizing that language and learning are culturally influenced; we must take this into account when interacting with our students who are coming from all walks of life, all ages and levels of educational background, from all socioeconomic walks of life, all ethnicities, nationalities, and colors.

As Rose (2012) makes clear, students depend on us, as educators, to create the conditions to succeed, “teaching is more than transmitting a body of knowledge and set of skills but also involves providing entry to the knowledge and skill . . . necessary for fuller participation in learning” (p. 161). Teachers can make the difference both for non-dominant students by promoting an atmosphere where they can succeed and standard speakers by helping them recognize their own culturally influenced language assumptions. We have seen how AAL speaking students are too often held back by the attitudes and preconceptions of their teachers to their language. It is our job, then, as shepherds of the written word for our students, to help instead of hinder them in as many ways as we are able, to give them the best possible chance at succeeding when others around them are expecting their failure.

Brock (2004) can pinpoint where we need to go:

Our goal is to emphasize that we, as educators, must (1) identify our own assumptions about students who speak varieties of English that may differ from our own, and (2) exercise caution when we interpret the varieties of languages that our children speak. . . . [and] realize that our job should be about helping children to learn the discourse of power, in addition to the varieties of language that they speak. (p. 28)

In order to best help our students achieve the success that they deserve both in and beyond school, we first need to examine our socially-influenced assumptions about varieties of English that do not match our own. When we can recognize that any unexamined, culturally influenced beliefs about language will get in the way of the best education we can give our students, we can adjust our ways of thinking about our students who do not come to school speaking Standard English. Then, “moving from theory to practice in actually utilizing students’ cultural capital in the classroom” will be a significant step in helping to close the achievement/opportunity gap (Goldenberg, 2014, p. 125). Only then will we be more equipped to give students the best platform from which to engage with the world.

In order to make these changes in the education system, we must educate both teachers and leaders of the importance of embracing linguistic diversity; however, in the field of education, many aspiring and practicing leaders attain their training and worldview from the restrictive assemblage of literature within the field of educational leadership (Hess, 2013) and not within the diverse field of multicultural studies. Hess claims that we must have “cage-busting” leaders seeking understanding about school culture development from the literature outside the realm of school leadership. Since most of the literature in the field of school leadership is based on the problem-solving methodology, Hess’s interpretation seems desirable and wise when swirling with the complexity of how to increase cultural competence. Learning outside of the field of education can help teachers and leaders to broaden their horizons, increase their

readership from other disciplines, and engage in critical inquiry in the field of multicultural studies.

Problem-solving methodology in school leadership literature takes the learner through a strategic set of steps in order to resolve a dilemma and offer solutions, but this approach does not always work when the problem is complex and ever changing. Although the phases vary across fields of literature in other disciplines, similarity rests in the idea of a *problem* moving to a *solution* and strategic form throughout the process. Fortunately, the field of education can renew its commitment to educating culturally competent teachers and leaders by pushing past the limits of utilizing the standardized problem-solving approach.

One way that teachers and educational leaders can embrace this type of artistry and grow the cultural competence in their environment is by accepting the challenge to become a public intellectual. Giroux (1988) would seemingly agree that this notion of intellectual labor helps with issues of oppression and cultural understanding. The concept of public intellectualism for cultural competency necessitates personnel to embrace ambiguity, become outsiders to dominant ideas, be advocates for social justice in theory and practice, remain transparent, and become open minded in developing their cultural knowledge. Through some of these components, teachers and educational leaders can move beyond their inheritance of ideas, biases, and understandings and begin to understand the dynamics of difference in the classroom.

This movement is a more sophisticated map than the identification of a problem and its corresponding solution. Strategic planning, usually, works with the problem-solving methodology; yet, when it comes to working with overcoming cultural incompetence, a more fluid and artistic methodology is needed. Although public intellectualism is not a methodology, it is a good start to an artistic approach of valuing diversity, understanding dynamics of difference in the workplace, and developing cultural knowledge and competency.

Confronting one's own culturally influenced beliefs and assumptions about other cultures and languages is difficult, but that alone is truly inadequate. By learning about the rule-governed, systematic grammar of other varieties of English, we all can recognize the history, beauty, legacy, and legitimacy of them. The key to building student confidence with standard forms of literacy is by valuing their native linguistic forms, whether they represent non-traditional dialects, informal English, African American Language, or non-standard oral and written forms of expression. Because "it is in school that negative language attitudes are reinscribed and reaffirmed," that is also where "education about language diversity has to start early on—with *all* children" (Smitherman, 2006, p.138). Students' cultures must be reflected in the classroom; teachers must seek literature reflecting a variety of diverse perspectives. This way students from all backgrounds can begin to experience the beauty of different forms of language and cultures, and a bridge can be built from students' home languages to the standard forms that they will need as they go out into the world.

We must value students' cultures and work together with our youth to determine how to teach and write our lives. We must, as Elkins and Luke (1999) suggest, not expect all of our students to be fully literate in Standard English when they arrive at our schools, but, instead, all teachers of all subjects must work with students and with their home cultures and languages to develop collaborative literacy practices that engage

students in critical literacy. By showing students that their culture is valued and that they as language users are appreciated instead of being demeaned, teachers can give non-dominant students a reason to engage with standardized dialect. As Delpit (2002) points out, by respecting students we gain their trust and only then will they be able to open up enough to embrace a new code.

In sum, teachers must be prepared to teach students who are racially, ethnically, religiously, and linguistically different from them, in order to prepare both teachers and their students for the workforce in this global economy, for, as Nieto argues (2013), “. . . how young people in our increasingly diverse population are treated says a great deal about our values as a nation” (p. 106). If we do not value diversity, the U.S. will shrink from the global stage with rapidity. The assimilationist myth, where student success is only possible if students leave their languages and cultures at the school door in exchange for “The American Dream,” does not take into account the structural exclusion minority students will experience even after they are “assimilated” (Banks, 2013).

It is our job as teachers and educational leaders to help our students attain the knowledge and skills necessary for success in a knowledge-based global economy. Banks (2013) argues that what is necessary in today’s schools is “transformative citizenship education” which includes: challenging mainstream knowledge for the purpose of improving the human condition, recognizing and valuing diversity and social/community activism with the goal of producing a multicultural democracy, and developing cosmopolitan values. According to Appiah (2006), cosmopolitanism is a universal trait of humankind and an ethic that is both binding and commonsensical. Appiah views cosmopolitanism as a “rethink” of how we view the world and a moralistic interpretation of shared values (good and bad). However, this ethic of understanding and enacting in the cosmopolitan world requires a particular type of charge to its inhabitants. Although intended for all, cosmopolitans require sophisticated intelligence, critical and creative thinking skills, caring dispositions for self and others, and the need to look beyond tribal entities. While many students from non-dominant cultural backgrounds will have a critical view of the dominant cultural system, they need help expressing those ideas in a useful way. And teachers must learn how to critically view their own cultural assumptions and help students’ learn how to address the problems that result. We believe wholeheartedly that critical pedagogical approaches to literacy instruction can help us all: students, teachers, educational leaders, to understand how language can reproduce or challenge existing social power structures that can serve to disempower non-dominant or marginalized communities (Godley & Mannici, 2008).

Darling-Hammond (2013) argues that to meet the demands of the 21<sup>st</sup> century, we must establish equitable schools in order to prepare our students for this knowledge-based, global, and multicultural world economy. In order to do this, we must view diversity as a strength and not as a deficit to be eliminated through cultural homogenization (Apple, 2013). We must develop and nurture all students with the intention of embracing the ideal of global citizenship, and it begins with language.

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# **Debunking the Myths of Dyslexia**

**Christine Thorwarth**  
*Xavier University*

## **Abstract**

Dyslexia is a specific learning disability, which affects reading in as many as one in five people. Many children go without proper interventions because of ineffective teaching strategies, and common myths associated with this disability. The purpose of this study was to test how deeply ingrained some myths might be, and decipher where educators are receiving information. The information was used to show any weaknesses in the knowledge base of the educators and decide on proper professional development opportunities. It is up to educators to become knowledgeable to debunk the myths of dyslexia.

*Keywords:* dyslexia, reading, myths, disability, intervention

## **Introduction**

Dyslexia is defined as a specific learning disability that affects language processing in an individual. Individuals with dyslexia can have anywhere from low average to above average intelligence (Shaywitz & Shaywitz, 2004). Even though, intelligence is not affected by this disability, it hinders the ability of learning to read accurately and fluently in one in five children. These children can learn to read, but many myths about the condition have persisted throughout the years causing proper assessment and teaching methods to be delayed in many (Wadlington & Wadlington, 2005). Educators need to be aware of the signs of dyslexia and receive support to help children with dyslexia learn to read.

There are many misconceptions about dyslexia even though it has been researched at length for many years now (Shaywitz & Shaywitz, 2004). Some popular myths include children with dyslexia see letters and numbers backwards, it is a visual problem, they will always be poor readers, and it is because of home environment (Wadlington & Wadlington, 2005). Educators also hold many of the myths to be true, and many children will go through their school careers without receiving proper instruction. All of these misconceptions about dyslexia can be remedied with ongoing support, professional development, and training for educators and those entering the teaching field (Carvalhais & Silva, 2010).

The prevalence of these misconceptions has caused undue stress to children and adults with dyslexia. Many have social and emotional issues that stem from school experiences. They are frustrated with their perceived lack of ability. Some become depressed and have issues with low self-esteem (Wadlington, Elliot, & Kirylo, 2008). This issue has been exposed within children's books, which are successfully being used in some classrooms to help all students become aware and gain compassion for those who struggle (Altieri, 2006). The emotional side effects that can come with dyslexia can be

contained with proper guidance, assessments and interventions with best practices from knowledgeable educators.

People who struggle with dyslexia have many talents and gifts, because they had to learn how to survive the school system using creative outlets (Wadlington & Wadlington, 2005). There are many highly skilled people diagnosed with dyslexia who struggled through school. They were told by educators that they would not be as successful as they are today. Some people who proved those educators wrong are Henry Winkler, who went on to act in the sitcom of the 1970s, *Happy Days*. He also writes popular children's books. The characters have learning issues to help others who are struggling have something they can relate to ("Dyslexia workarounds: Creativity without a lot of reading" 2013). John Irving, who has also been diagnosed with dyslexia, is a best-selling author (*The Cider House Rules*) and award winning screenwriter. Charles Schwab is now a wonderfully successful financier, and he has documented his struggles with dyslexia. Dr. Delos M. Cosgrove interviewed that he received Ds in foreign languages, and struggled with taking tests. He is chairman of thoracic and cardiovascular surgery at the Cleveland Clinic. Ben Foss, who is the founder of Headstrong Nation and inventor of the Intel Reader, has been featured on many media outlets for his work in the field of improving the lives of those with dyslexia (Foss, 2013). There are many more examples of people with dyslexia going to great lengths to become successful in their chosen fields. All of them struggled with reading and writing and had to find ways to work around their disability (Shaywitz, 2003).

The myths of dyslexia need to be debunked as a whole in order to educate these children properly. They have many gifts to offer society, and are struggling to find their voice in the school system. Educators need to have opportunities to learn about this disability that effects between 17% and 20% of the population in order to harness those talents and put them to good use within their communities (Shaywitz & Shaywitz, 2004). The purpose of this study is to test how deeply ingrained some of these myths might still be, and decipher where educators are receiving information about dyslexia. This will help decide how better to serve this population and the best means of communicating with educators on best practices. Participants will be tested on their knowledge of this disability, and surveyed as to where they have received training, if any, on best practices. This disability should not be a lifelong sentence for these students. It is up to educators to become knowledgeable to debunk the myths of dyslexia.

## **Literature Review**

Dyslexia is defined as an unexpected delay in reading in an otherwise healthy child/ adult who has received a proper education. It affects many children with estimated percentages ranging from 5% to 17%, depending on what study is referenced (Shaywitz & Shaywitz, 2004). This is the most common disorder, which is diagnosed in those children who are struggling to read, to account for about 80% of learning disabilities (Shaywitz & Shaywitz, 2004). This disorder is found to be genetic in nature, and runs strongly in families. One does not grow out of dyslexia; it is a life-long struggle for many. It affects males and females equally; with no regard for race, economic status, motivation, intellectual ability, spoken language or culture. Like many other disorders, dyslexia appears on a continuum from very mild to profound, manifesting itself

differently in individuals. Because of this, diagnosing dyslexia has become unclear to many professionals and can seem like an arbitrary task. Even though, many studies have been done throughout the years, there seems to be many misconceptions about dyslexia that still exist among educators (Wadlington & Wadlington, 2005).

There are some common themes in reading issues among children and adults with dyslexia. It affects the phonological processes in a person, where they do not process the sounds of language efficiently and accurately. Reading is typically slow and laborious. Many types of reading errors persist such as not using the rules of phonics to sound out unknown words, guessing at words, and substituting or omitting letters and sounds. They may also substitute words that may mean the same, such as saying, “pony” instead of “horse.” Omitting small function words; such as *and*, *the*, or *have*; is commonplace. People with dyslexia comprehend text read orally to them better than reading it themselves because of these issues (Shaywitz & Shaywitz, 2004).

Dyslexia has many signs and symptoms and contributes to many other difficulties other than reading. Many children with dyslexia struggled with delayed speech, and continue to have immature speech patterns well into elementary school. These irregular speech patterns are typically sound substitutions, omissions, and reversals. They might have trouble with word retrieval, and can never seem to find the right word. Most children will also have difficulty with handwriting, and spelling as well. The process is slow, laborious, inefficient, and sometimes illegible. Children will have letter and number reversals in their writing well past seven or eight years of age. Dyslexia may also affect math abilities, such as automatic retrieval of addition or multiplication facts. They will continue to rely on their fingers or some other method, no matter how much practice is needed with the facts. Many also have attention difficulties, poor memory skills, poor social skills and are disorganized (Shaywitz & Shaywitz, 2004).

Even though, there is a body of concepts in which dyslexia can hinder, there are also many strengths people with dyslexia possess (Wadlington, & Wadlington, 2005). Many have high success in areas such as architecture, engineering, the arts, medicine, entrepreneurship and law. Dyslexia seems to give people the ability to understand higher concepts even if the elementary ones give them difficulty.

Because of the fact that many of these children seem capable of learning to read with ease, the reason behind their difficulties escapes detection for most professionals. All too often, educators do not recognize the signs of dyslexia, and are inadequately prepared to teach these students (Wadlington & Wadlington, 2005). Assessments and interventions are not put in place in a timely fashion when dealing these issues. Professionals hesitate to put a label on the difficulties and put into effect a “wait and see” approach. For children with dyslexia, this approach takes valuable time away from interventions that would be effective. These students fall further behind their peers (Wadlington & Wadlington, 2005).

Educators, themselves, may not be totally at fault for this phenomenon. Many studies have been done to show that incoming teachers are not prepared to teach reading after receiving licensure (Washburn, Joshi, & Cantrell, 2011). Teachers need to have explicit training in assessing and instructing the areas of phonemic awareness, phonics, fluency, comprehension, and vocabulary. These areas have been identified by the National Reading Panel as the domains needed in order to become a proficient reader (Cunningham, Perry, Stanovich, & Stanovich, 2004). Reading interventions can start as

early as when the child enters school, if teachers are able to establish a lack of knowledge in the areas of phonemic awareness, alphabetic knowledge and vocabulary (Arrow & McLachlan, 2011). Because of the fact that teachers are not being trained in teaching reading to any learner, it has been suggested that teacher preparation courses do an even poorer job with informing incoming teachers of the signs and proper interventions needed for struggling readers (Washburn, Joshi, & Cantrell, 2011).

Some issues that may prohibit proper instruction received from teacher training programs are that state standards and curriculum for educating teachers is broad and sometimes not very specific. Much is left up to the interpretation of the universities and other professionals (Cheesman, Hougen, & Smartt, 2010). The universities are charged with designing their own programs around vague standards. The licensure exams themselves do not test the same subject matter, and most are not aligned with research-based content. The National Assessment of Educational Progress, continually tests that around one-third of all 4<sup>th</sup> grade students are reading below basic grade level (Liptack, 2012). Though not all of these students may be dyslexic, this indicates that all teachers, not just special education teachers, are in need of proper, consistent instruction through the teacher training programs to reach these struggling students. Many graduates know that they are not ready to teach reading as they leave the institution, and feel that they need more professional development with the literacy domains (Cheesman, Hougen, & Smartt, 2010; Cunningham, Perry, Stanovich, & Stanovich, 2004 ).

Teachers' knowledge of the reading and literacy domains have been studied to see if they are being properly prepared to explicitly and implicitly teach reading. All students can benefit from proper instruction in the areas of phonemic awareness, phonics, fluency, comprehension, and vocabulary (Washburn, Joshi, & Cantrell, 2011). Children with dyslexia need more explicit direction in these areas than their non-struggling peers. A knowledgeable teacher is beneficial to this process. A study of teachers K-3, the prime years for teaching reading and literacy, yielded some surprising results; 20% of teachers were not able to correctly identify phonemes in any word presented within the survey, and many teachers could not identify irregular words (Cunningham, Perry, Stanovich, & Stanovich, 2004). Another study showed that after an examination of 223 first-year teachers, only 18% could correctly identify the differences of phonemic awareness and phonics (Budin, Mather, & Cheesman, 2010). This is particularly troublesome since phonemic awareness is crucial to the success of readers as it is used to help segment and correspond graphemes, or written units, to the spoken sounds, or phonemes (Sprenger-Charolles & Siegel, 2013). The beginning concepts of phonemic awareness and phonics are critical to learning to read properly and are the beginning steps in the process. Many teachers are not proficient in these areas, and are not aware that they lack these skills (Washburn, Joshi, & Cantrell, 2011). Every year that a struggling student is in the classroom with a teacher who is not skilled in these areas, the gap widens between where they are at and where they need to be, as compared to their non-struggling peers (Damer, 2010). That is concerning.

Another caveat to teaching research-based instruction and providing professional development is that many teachers perceive they know more about reading instruction than they actually do (Swerling, Brucker & Alfano, 2005). Those teachers are less likely to participate in further instruction and development seminars. This can be troubling since educators need ongoing support no matter what level they perceive their own

abilities if they are to stay informed of best practices. It was found that teachers with much more experience and training with the reading domains were indeed more proficient than their lesser trained colleagues (Cunningham, Perry, Stanovich, & Stanovich, 2004). This is good news, and shows that requiring specific training and licensure for reading instruction may be needed in order to ensure that teachers are proficient in the literacy domains (Swerling, & Coyne, 2010).

What this means for children with dyslexia is that not only are teachers not prepared to teach any struggling reader, but they are also not instructed about the special needs of dyslexics. Many children are being accused of not being motivated, not trying, lacking focus and so on (Shaywitz & Shaywitz, 2004). They lose confidence and frustration sets in. Many feel they are inadequate and will never be successful (Wadlington & Wadlington, 2005). Educators will see the “Matthew Effect” take place, where students who are not successful readers early on will read less and in turn, repress any future growth that may have been achieved (Nicholson & Dymock, 2011). Teachers may see a student as lower skilled, and not hold them to the same expectations as those students in a class who are higher-level readers (Woodcock, & Vialle, 2011). This does nothing but hinder learning in the case of a dyslexic student. Structured, multi-sensory instruction in basic language areas is essential to the success of these students, as well as accommodations such as extra time, shorter assignments, and specific seating arrangements (Shaywitz, 2003). Children with dyslexia need to have teachers, which are positive influences and know how to handle their specific disability in order to succeed (Wadlington, Elliot, & Kirylo, 2008). These students have great strengths, which can be used to be successful. Teachers should be educated on how to teach a dyslexic student properly, so their strengths are not lost within the obvious weaknesses.

One obstacle to having qualified teachers to help dyslexic children is there are many misconceptions about dyslexia still, even though there has been an abundance of literature written on the topic (Wadlington & Wadlington, 2005). Some of these misconceptions include that dyslexia causes one to see letters and numbers backwards, word reversals are common, dyslexia does not run in families, individuals have the same symptoms with no variance between them, and even if a child is able to pronounce the words correctly that comprehension of the text will be exhibited (Wadlington & Wadlington, 2005). Once dyslexia is suspected, many treatments that claim to aid or “cure” this disability are suggested by educators; such as colored overlays, vision therapy, and strict diets; which have been shown ineffective in many studies. Many parents are sent to medical professionals to seek out medical intervention by suggestion of educators, which may help with attention issues, but not the underlying reading processing issues (Shaywitz, 2003). A good observation that came from a study was most educators do recognize dyslexia as a real disability, which was not the case some years ago (Wadlington & Wadlington, 2005).

Many teachers are willing to participate in workshops and seminars to aid them in teaching students who are struggling to read (Carvalho, & Silva, 2010). Dyslexia is not covered in many teacher training programs, so information must be sought elsewhere. One way to educate teachers on the struggles of a child with dyslexia is to be included in a dyslexia simulation where they are put through experiences that helped them identify with how these children feel in the classroom (Wadlington, Elliot, & Kirylo, 2008).

Teachers who have been a part of this experience found it beneficial, and they recommended that every educator should have a similar seminar offered.

Educators want to be able to help students who struggle, and be part of the solution. There are many research-based assessments and interventions that help children and adults alike in learning to read accurately and fluently which are not being used with those who need it most (Shaywitz & Shaywitz, 2004). Too many myths are still out in the field of education about what dyslexia is and its signs. This is disheartening considering how much research has been done throughout the past few decades and how many children this disability affects. This research is not being communicated to the people who need to understand it most. Teachers need to be afforded the opportunity to learn the facts about dyslexia and the best practices of teaching reading in order to properly teach every student in the classroom, not just the struggling ones.

### **Significance of Study**

The data collected will be analyzed for any discrepancies in knowledge of dyslexia and where those discrepancies may be. Prior studies have shown a lack of knowledge by educators on the topic of dyslexia and effective teaching methods for struggling readers. These studies have shown many misconceptions still exist today, even though the body of peer-reviewed research has been published. There are well documented research based strategies that are effective with teaching struggling readers, especially those who are diagnosed as dyslexic, which are not being utilized for the benefit of the student. Data collection will be done in one school district in Northern Kentucky to ascertain knowledge base of the district with active involvement on the research topic. An advocate is on staff and has provided many opportunities for professional development. The study will show whether misconceptions exist, as consistent with prior studies, or if the extra effort of the district has been effective. If misconceptions still exist, as determined by the study, there will need to be a discussion on the best ways to provide the needed information to the educators so they can support students who are dyslexic in the classroom.

### **Methodology**

The study is an investigation of the beliefs of dyslexia among educators. The purpose of this study is to test how deeply ingrained some of these myths might still be, and decipher where educators are receiving information about dyslexia. The main research question to be answered is: do educators have misconceptions of the specific learning disability, dyslexia? Where have they received their information? Is there a difference in the knowledge of dyslexia among elementary, middle, and high school educators? Lastly, is there a difference in knowledge when years' experience is reviewed?

### **Participant Selection and Demographics**

This research study was a quantitative review on the beliefs of dyslexia of educators in a Northern Kentucky public school district. This included general educators,



special educators, reading specialists, and speech and language pathologists within the district, grades K-12. This district was chosen for having an advocate for dyslexia on staff. This professional has provided many opportunities to learn about dyslexia, and it has been questioned whether the educators have been taking advantage of the extra professional development by the researcher. The district was contacted to receive proper approval for the administration of the research study via an email to the assistant superintendent.

## Instrument

Data for this study were collected via an online survey. The link was sent to participants through email, along with instructions and informed consent. The survey was completed anonymously and data were filtered using type of certification, years of service and grades taught for analysis.

The survey consisted of the following sections and items within each section:  
**1<sup>st</sup> Section: Demographic Information.** Male/ Female; Grade taught: K-5, 6-8, 9-12; Type of certifications: General educator, special educator, reading specialist, speech pathologist; Experience: 0-5 years, 5-10 years, 10-15 years, over 15 years.

**2<sup>nd</sup> Section: Dyslexia beliefs.** Rate your comfort level for working with a child with dyslexia: Not at all, slightly comfortable, moderately comfortable, very comfortable, or extremely comfortable.

Rate, each statement as strongly disagree, disagree, neutral, agree, or strongly agree

1.) Dyslexia is a learning disability that affects language processing.	14.) Most students with dyslexia are in special education.
2.) Dyslexia is a visual issue.	15.) Students with dyslexia have the same symptoms to the same degree of severity.
3.) Children with dyslexia see letters and numbers backwards.	16.) Colored overlays are a proper researched-base intervention for dyslexia.
4.) Dyslexia causes problems with word retrieval (finding the right words to say).	17.) It is possible to grow out of dyslexia.
5.) Dyslexia causes social issues, such as immaturity.	18.) Vision therapy is a proper researched-base intervention for dyslexia.
6.) Dyslexia is genetic, and runs strongly in family.	19.) Students with dyslexia may have poor organizational skills.
7.) Dyslexia can cause speech delays.	20.) Students with dyslexia may have short attention spans.

8.) Dyslexia can cause issue with math concepts.	21.) Students with dyslexia need structured, multi-sensory instruction in basic language areas.
9.) People with dyslexia have a low intelligence.	22.) Students with dyslexia lack phonemic awareness skills.
10.) Dyslexia can cause issues with spelling and handwriting.	23.) Students with dyslexia lack comprehension skills when read to orally.
11.) The symptoms of dyslexia can be lessened with proper diet and exercise.	24.) Giving extra time, shorter assignments, and specific seating arrangements are proper accommodations to give to students with dyslexia.
12.) Children with dyslexia can have strengths in music, science, and technical fields.	25.) Children with dyslexia are able to manage symptoms through medication.
13.) One cause of dyslexia is a poor home environment.	

**3<sup>rd</sup> Section: Training on dyslexia.** Where have you received training on dyslexia issues, check all that apply: Undergraduate courses, Graduate courses, Seminars, Professional development for school districts, Online class, Journal articles, Other.

### **Procedures for Gathering Data and Informed Consent**

Participants were selected by sending an email to known teachers within the district. An email was sent to 2-3 general educators from elementary schools, a middle school, and a high school. It was also sent to 1-2 special educators also from elementary schools, a middle school, and a high school. The educators were randomly selected from the directory on the district’s website. It was requested to complete the survey as well provide email addresses to colleagues who might be willing to complete the survey as well. The participants were notified of the known risks for participating in this study, and also notified of the contact information of the research and the researcher advisor, if any concerns should arise. The email read as follows, “I am conducting a research study about dyslexia beliefs and educators within the district. The purpose is to ascertain any misconceptions about dyslexia, if any, and to decide on the best way for educators to receive any new information about the topic. I am asking for your help by completing this online survey. It should only take between 15-20 minutes of your time. The survey will remain anonymous, and you will be provided contact information at the end should you wish to review the results of the study or withdraw your consent of participation. There will not be any compensation provided for participation, and the minimal risk is loss of your time. If you feel like you would like the opportunity to participate, please click on the link provided below. If you know of any educators who might be willing to

participate, please reply back to this email with contact information. If you do not have the time to complete the survey, but know of some educators who might be willing, it would be appreciated for their contact information. Thank you for your time.”

Analysis of the information was completed through the SPSS program. Correlation tests was done to analyze and interpret any data received through the survey with regards to the continuous variables of comfort level and dyslexia beliefs. Correlation was chosen as the method for analysis in order to see the strength of any relationship within those particular variables. There were additional analysis done though an ANOVA test, which show if any variability between groups exist with the data collected. The researcher related the following variables: type of certification and dyslexia beliefs; grades taught and dyslexia beliefs; and finally, years’ experience and dyslexia beliefs.

### Analysis

There were 26 total respondents to the on-line survey. The demographics of the respondents are as follows:

Table 1  
Demographics of Survey Respondents

Gender			Type of Certification		
Male	3	11.5%	General Educator	6	23.1%
Female	23	88.5%	Special Educator	18	69.2%
			Reading Specialist	0	0.0%
			Speech and Language Pathologist	2	7.7%
Grade			Years’ Experience		
K-5	18	69.2%	0-5 years	3	11.5%
9-12	8	30.8%	5-10 years	7	26.9%
			10-15 years	8	30.8%
			> 15 years	8	20.8%

There are considerably more female respondents than male. In addition, about two-thirds are currently teaching at the elementary level. About two-thirds of respondents are special educators. There seemed to be more of a spread of experience between all respondents with the average having taught for about 7.7 years at the time of the survey.

The next question dealt with how comfortable the respondent was while working with children with dyslexia. The average of 3.7 shows that most respondents feel moderately to very comfortable working with children with dyslexia. According to the standard deviation of 1.1, the majority of respondents are slightly or very comfortable working with children with dyslexia.

The next part of the survey was rating statements about dyslexia by a scale from strongly disagree to strongly agree. Please refer to the previous “Instrument” section for exact survey. The results were as follows:

- 1.) According to the standard deviation of 0.9, as well as the percentages, the majority of respondents agree or strongly agree with the statement.
- 2.) There is a higher standard deviation for this question (1.2), which shows that there is more of a spread of answers for this statement, with an average of neutral to the statement.
- 3.) The average shows that most respondents are neutral when answering this statement, with the standard deviation of 1.1 showing the answers were somewhat spread out with how the respondents agree with the statement.
- 4.) Most respondents agree to strongly agree with the statement, but the standard deviation of 1.0 shows some discrepancies with their answers as to degree of how much they agreed with the statement.
- 5.) The average shows that most respondents fell in the neutral position, though the standard deviation (1.0) shows the vast majority disagree to agree with this statement so there were some discrepancies shown here as well.
- 6.) The standard deviation of 1.1 shows another statement in which the respondents show a high degree of difference of answers for the statement. The average shows that most respondents remain neutral to agreeing with the statement.
- 7.) Most respondents agree with the statement, with a lower standard deviation of 0.8, as compared to previous statements.
- 8.) Most respondents agree with the statement, with a low standard deviation (0.8).
- 9.) Most respondents disagree to strongly disagree with the statement, with a very low standard deviation of 0.4 as compared to previous statements.
- 10.) Most respondents agree to strongly agree (almost two-thirds strongly agree) with the statement, with a lower standard deviation of 0.6.
- 11.) Most respondents disagree to strongly disagree with the statement, with a lower standard deviation (0.8) as compared to previous statements.
- 12.) Most respondents agree to strongly agree with the statement, with some discrepancies showing in the standard deviation of 0.9.
- 13.) Most respondents strongly disagree with this statement, as also shown in the standard deviation (0.5) with not much variance in the answers.
- 14.) A simple majority disagree with the statement, while the standard deviation of 0.9 shows some variance of answers.
- 15.) Most respondents disagree to strongly disagree with this statement, with also a low standard deviation of 0.6.
- 16.) This statement had a higher degree of deviation within the answers as shown by the standard deviation of 1.0. The average showed that most were neutral about this statement.
- 17.) Most respondents disagree with this statement, with relatively low discrepancies shown with the standard deviation of 0.8.
- 18.) The statement had a higher than usual standard deviation (1.1), with most respondents disagreeing to being neutral.
- 19.) Most respondents are neutral to this statement with a slightly elevated standard deviation of 0.9 as compared to the others.

- 20.) Most respondents are in the neutral to agree range, with a standard deviation of 0.8.
- 21.) Most respondents agree to strongly agree with this statement with a low standard deviation (0.6).
- 22.) Most respondents are neutral with a standard deviation of 0.6, which shows discrepancies with this statement.
- 23.) Most respondents disagree with this statement, with an elevated standard deviation (1.0) due a couple respondents' answers skewing the data as compared to the majority of answers to the statement.
- 24.) Most respondents are neutral to this statement, with an elevated standard deviation of 1.0.
- 25.) Most respondents disagree with the statement, with a standard deviation (0.7).

The third part of the survey involved where the respondents received an education or training on issues of dyslexia. The survey results were as follows: 30.8% received training in undergraduate courses, 23.1% in graduate courses, 42.3% in seminars, 65.4% had professional development opportunities provided by a school district, 3.9% in online classes, 34.6% read information in published journal articles, and 34.6% selected the category of "other" as their educational training on dyslexia. Most respondents have been educated on issues of dyslexia with professional development and seminars. Less than one-third of respondents were educated about dyslexia within their teacher training programs.

After gathering the above data, the SPSS program was used to further evaluate the information. The average of each scaled response from questions 6 through 30 was found to find the value titled "Dyslexia Beliefs," with 5 being a strong knowledge base and 1 being a weak knowledge base of dyslexia.

The relationship between comfort level for working with a child with dyslexia and dyslexia beliefs was investigated using the Pearson product-movement correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality and homoscedasticity. There was a moderate, positive correlation between the two variables,  $r=.449$ ,  $n=26$ ,  $p=0.021$ , with the more comfortable the educator is, the more knowledgeable they are on the subject of dyslexia.

ANOVA tests were also done to investigate relationships between types of certification and dyslexia beliefs, as well as years' experience and dyslexia beliefs. A one-way between-groups analysis of variance was conducted to explore the impact of certification on dyslexia beliefs, as measured by the Life Orientation Test (LOT). Participants were divided into three groups according to the certification (Group 1: General Educator, Group 2: Special Educator, Group 3 Speech and Language Pathologist). There was not a statistical significant difference at the  $p<.05$  level on LOT scores for the three certification groups:  $F(2, 23) = .151$ ,  $p=.860$ .

A one-way between-groups analysis of variance was conducted to explore the impact of years' experience on dyslexia beliefs, as measured by the Life Orientation Test (LOT). Participants were divided into four groups according to the certification (Group 1: 0-5 years, Group 2: 5-10 years, Group 3: 10-15 years, Group 4: >15 years). There was a statistical significant difference for a pilot study level at the  $p<.05$  level on LOT scores for the four experience groups:  $F(3, 22) = 2.896$ ,  $p=.058$ .

Because of only having two groups reporting in the survey for grade level taught (K-5, and 9-12), a proper ANOVA is not able to be done as previously expected. A T-test is able to be performed to test for differences in these variables. An independent-samples t-test was conducted to compare dyslexia beliefs to grade level taught (K-5, 9-12). There was a significant difference in scores for grade level K-5 ( $M=3.9489$ ,  $SD=.41041$ ) and grade level 9-12 ( $M=3.5$ ,  $SD=.37218$ ;  $t(26) = 2.643$ ,  $p=.014$ , two-tailed). The magnitude of the differences in the means (mean difference = .44889, 95% CI: .09841 to .79936) was very large (eta squared = .2242).

### **Limitations of Study**

Some limitations posed by this study included the smaller sample size. This sample size might not be a true representation of the population of educators within this school district. The scale is restrictive in a qualitative study, and respondents choose the one that is a close match to their perceptions. The statement itself might be confusing to the respondent, and because of the online nature of the survey, there is not any clarification of the statement available to them. There is not any feedback to the surveyor on what those misconceptions may be. There could be a lack of depth in human perceptions on a scale so one could be missing some valuable information as to how to further inform educators on issues of dyslexia. Because of more elementary leveled respondents, some results may be skewed based on the types of training received within their teacher preparation programs. This is also not based on any one teacher-training program, so it may be difficult to pin point universities that may be doing an exceptional job on educating incoming teachers versus those who are not.

### **Summary**

Statements with the highest standard deviation show much confusion about the symptoms of dyslexia. These included that dyslexia is a visual issue, that they see numbers and letters backwards, dyslexics can have social issues such as immaturity, it causes problems with word retrieval, that it is genetic, colored overlays and vision therapy are proper research-based interventions, dyslexics lack phonemic awareness, and lack oral comprehension skills. Some of these statements, such as lacking phonemic awareness and having oral comprehension skills, are some of the major symptoms of dyslexia. Dyslexia being seen as a visual issue and that dyslexics see numbers and letters backwards are still persistent myths within the education system that need eradicating. The lack of teacher preparation on the issues of dyslexia is shown with how many teachers are educated in undergraduate or graduate studies on the topic. Less than 30% of the opportunities to receive training happened in either undergraduate or graduate studies. This shows that there is a lack of understanding with newly trained teachers, and much of the education received is through the school districts or on their own time, which might have been done years into the respondent's career when students in their classes could have benefitted from having a knowledgeable teacher. This is an area that can be improved upon within the universities and their teacher preparation programs. Because 15-20% of the population have dyslexia, these teachers are most likely to see a student very early in their career, if not the first year, that needs proper researched-based

interventions. It is surprising that 65% of the teachers surveyed have had professional development on the topic of dyslexia within the district. This district has an advocate, who has been specially trained on dyslexia, on staff. She has been very active in trying to make seminars available to those teachers and educators wanting. This figure shows that the majority of teachers have participated in these opportunities at some level.

Based on the correlation test for how comfortable the teacher is working with a child with dyslexia, and their actual knowledge of the disorder, this shows a moderate, positive relationship. It does make sense that the more one understands about dyslexia, the more comfortable that person would be working with such a child. This further illustrates that universities and professional development programs at schools need to provide more opportunities to educators to be trained, so each educator feels comfortable with themselves and their knowledge base on how to effectively help these children.

The ANOVA tests completed on types of certificates and dyslexia beliefs did not show a significant difference within the types of certification (general education, special education, and speech and language pathology). This shows that no one group had more knowledge of dyslexia than the other. Because all groups work in tandem with students, they all need to have knowledge of this disability. All certificates should have some professional development opportunities since children with dyslexia are serviced in all three disciplines because of the nature of the disability.

Another ANOVA test completed between years of service and dyslexia beliefs did show a significant difference between the groups (< 5 years, 5-10 years, 10-15 years, and > 15 years). This fact shows that throughout the 30 years of research completed; some educators are not receiving the vast amount of knowledge acquired, depending on how long they have been in the field of education. Further studies should be done to show where these discrepancies lie so that situation can be remedied.

The T-test completed on level grade taught (K-5, 9-12) and dyslexia beliefs did show a difference though. Elementary level teachers are being exposed to this knowledge more than their high school level colleagues are. This is promising for the younger students, as they may receive proper interventions while they are developing reading skills. As they continue their school career though, these same students may not receive the accommodations (or possibly modifications) needed to have equal access to the same curriculum as their non-disabled peers because of this difference in dyslexia knowledge.

## **Conclusion**

Teachers and administrators alike should work together to educate themselves about dyslexia. There is a definite need to get the research into the hands of those who would utilize it most, as shown in this study. Educators need to be involved in pre- and in- service development specific to dyslexia since this affects so many people and is still very misunderstood. Some resources on the most current research for interested parties are as follows: The Yale Center for Dyslexia (<http://www.dyslexia.yale.edu/>), International Dyslexia Association (<http://interdys.org/>), and The National Center for Learning Disabilities (<http://www.nclld.org/>).

Teacher preparation programs at universities need to do a better job of educating all teachers, not just elementary level teachers, about dyslexia. Teachers need this

information before starting in their own classroom to be effective with these types of students. School districts can also meet the challenge by providing more professional development seminars or journal articles to the teachers who have already been in the field for many years to provide this knowledge and better serve this population. With 1 out of every 5 students having some degree of dyslexia, these needs are not being met and myths about this affliction persist despite the mountain of research which has been done over the past 30 years (Shaywitz, 2003).



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# **The Construction of Simulations as an Instructional Activity for Graduate Students in an Education Leadership Program**

**Nancy A. Staub**  
*The University of Toledo*

**Marlena Bravender**  
*Saginaw Valley State University*

## **Abstract**

Leading, facilitating, and making decisions is central to school leadership positions. Decision-making simulations provide graduate students a vehicle for increasing their practice and fine-tuning leadership skills with guided support from college faculty. This action research study uses a case study method to reveal the perspectives of school practitioners when reviewing decision-making simulations constructed by graduate students in a principal preparation program. The findings from the study are used to shape the instructors' own growth in designing instructional activities that provide relevancy and meaning to graduate student coursework.

*Keywords:* simulations, decision-making, principal preparation

## **Introduction**

University preparation programs are frequently criticized for failing to link theoretical concepts to practical application (Bottoms & O'Neil, 2001) in the training of principals. In the 2011 revised Educational Leadership Constituent Council (ELCC) standards it is stated that "The preparation of school leaders requires overt connections and bridging experiences between research and practice" (NCATE, 2011, p. 6). The ELCC makes it clear that the job of preparation programs is to develop in candidates a set of knowledge and skills that are demonstrated, practiced, and assessed during the graduate student's college experience. The development of leadership skills, practiced, and assessed within courses should occur continuously in a student's academic program. The culminating internship at the conclusion of a student's program should not be the first time leadership skills are performed.

The professor desired to develop and implement instructional activities into her courses that would simulate real life situations a principal faces in a school setting. The instructional activities needed to embody the principles of authentic learning that she had come to know in her responsibilities as an instructional leader for the school district. Making learning relevant was one of those principles. In addition, the researcher knew that a learner's ability to reflect on his learning, talk about it, and come up with new ways of thinking about it leads to the development of deep knowledge (Newman, & Wehlage, 1993). The professor sought to design instructional activities using technology that would put students in the driver's seat. In order to accomplish this goal, the professor sought a partnership with the secondary researcher for her expertise in educational technology.

## Conceptual Framework

Meaningful instruction links the learning in the classroom to aspects of the world in which the student will participate (Hunter, 1994). This study was conceptualized using the authors' framework for learning and simulations. The uses of simulations in a variety of instructional settings have been found to engage and motivate learners (Ebner & Druckman, 2012). Common themes link the theoretical concept with a practical application in the simulation. Although the student's experience in the simulation is brief, the participant can role-play a real life situation in order to make meaningful connections. When students were asked to create their own text-based simulation Ebner and Druckman (2012) found that students experienced enhanced short-term learning, deeper understanding of the concepts presented, long-term retention of the concepts, and higher degrees of motivation and engagement among participants.

Numerous models of decision-making provide steps to inform and guide a leader in a variety of contexts. The Orient, Observe, Decide, Act (OODA) model developed by a Navy pilot is a linear process that includes four-stages of action (Boyd, 1976). It begins with observations of the problem, gathering feedback from varied sources, and the unfolding circumstances and interactions within the environment. The second stage is an orientation of the problem in the context of culture, experience, and new information. All of the information is analyzed and then synthesized toward a solution. Once the decision is made in the third stage, the decision is implemented at stage four. School leaders make numerous decisions within a day that range in magnitude and priority. Depending on the initial assessment of the problem a leader chooses a process that has been internalized from practice and can be applied to a given situation. Simulations can mirror different decision-making models allowing the participant to become familiar with a given situation and the potential outcomes of using this decision-making process.

## Technology Tool

The accessibility of technology offers the ability to present a school environment that places the student in a scenario requiring decisions and consequences. *SimWriter Simplicity*, a software tool offering a template design and scaffolding for decision-making provides the technology needed for simulations. In addition, online accessibility of the software allows users to work from home or in a small group setting.

The simulations used in this study were text-based. *SimWriter Simplicity* allows any developer to write and display a scenario, house resource documents, provide pathways to decision points, and list outcome options. Any decision option selected by a user leads to an action or reaction in the scenario stemming from the option chosen. Each option can result in a new dilemma and consequently more decision-making choices. The number of times a set of options is connected to a new dilemma is dependent on the level of complexity of the initial issue presented in the scenario.

## Previous Experiences

A pilot study by the researchers in 2012 examined the perceptions of graduate students in an educational leadership program in two summer courses. The graduate

students constructed online, content-related decision-making simulations as a course requirement. A pre and post survey was administered to students to determine their perception of the course and the development of online simulations as transferrable skills to their jobs as future principals. Findings indicated students liked creating the simulations and connected this experience with job-like skills. As an instructional strategy, simulations might become a vehicle for allowing the trial and error practice of leadership skills using real life examples and decision-making strategies (Staub & Bravender, 2012). The researchers still questioned if the construction of simulations yielded sufficient results as an instructional strategy.

In 2013, the researchers repeated the same instructional activity using a peer apprenticeship model. Students created simulations and decision trees leading to solutions of the same problem using the *SimWriter Simplicity* tool. This time, however, a second group of students taking the same course were asked to use the previously constructed simulations as part of their course experience. Both groups of students responded to a case study as a pre and post course assessment of leadership behaviors. Findings from this study indicated that students who constructed their simulations appeared to demonstrate more individual leadership behaviors when responding to the same case study (Staub & Bravender, 2014).

Following the implementation of the instructional activities in 2013, the researchers questioned the extent to which the simulations mirrored the experiences of school leaders. In both experiences, graduate students were engaged in school problems and making decisions regarding the problem. Was the problem relevant for today's schools? Were the decisions appropriate? As these students were not yet principals, they may or may not have been using the most logical actions and appropriate sequences of a school leader. The researchers needed a way to validate that the simulations, as an instructional activity, could provide a relevant context for decision-making for future principals.

## **Methodology**

The research question for this study was, can the development of simulations as an instructional activity for graduate students in education leadership programs provide relevant context for decision-making as it relates to the job of principal?

This action research study used a case study model to examine the perspectives of experienced practitioners in the field. The practitioners analyzed text-based, online simulations constructed by graduate students enrolled in an educational leadership preparation program. The design was derived from the findings of two previous experiences working with graduate students as they used or created leadership simulations (Staub & Bravender, 2012, 2014). The researchers reviewed the previous study findings and determined validation from practitioners was needed to assess the relevancy of simulations as an instructional activity.

Once the study was designed, there was a call to superintendents and principals to participate in a workshop. The design required participants to review specific materials prior to the workshop. On the day of the workshop, two debriefing sessions were held as well as an evaluation and analysis session of student constructed, online decision-making simulations.

## Call for Participation

Initially, an invitation to participate was sent to selected superintendents and principals in either role. In the email invitation, the prospective participants were asked if they would be interested in examining simulations that would ultimately be used to help future principals think through decisions they may experience in their roles as school leaders. Participants were told that in order to create a simulation, as close to real life as possible to benefit future principals, the simulations would need to be evaluated and revised. If they chose to participate they would be given pre-workshop materials, lunch, and a small stipend. Two former superintendents joined the team as well as one former and one current school principal.

## Pre-workshop activities

After acceptance, the participants were provided access to two 30-minute online simulations and an article to read. The article discussed virtual worlds and how simulations have been progressing as an important development tool for programs (Guthrie, Phelps, & Downey, 2011). The simulations initially provided to the participants were developed by educational professionals with the assistance of a team using an advanced version of software called *SimWriter Professional*. One simulation revolved around the role of a new superintendent in the first month of the job. The other simulation explored the decision-making process in coaching a hesitant teacher.

## The Workshop Day

The workshop day was divided into three sections: 1. Initial reflection and discussion, 2. Simulation evaluation and revision, 3. Final debriefing. The researchers began by describing their two previous experiences with educational leadership graduate students constructing simulations. This provided the practitioners with an understanding of some classroom activities using simulations and specific ways they have been used in leader preparation courses. A second topic included in the reflection session was the practitioners' experience using the simulations and the article they read in preparation for the workshop.

The simulation evaluation and revision session split the practitioners into role alike groups. Superintendents were paired together in one group, and principals were in the second group. Each group was given a handout with the expected outcomes. They were to complete the evaluation of at least one simulation, and if time allowed, they could move onto a second simulation. The evaluation process included two components. The first was to review the simulation and determine the realistic nature of the simulation and make revisions for improvement. The second part was to evaluate and revise each of the decision points. This particular task was designed to assess if the experiences and decisions were scaffolded and presented in a realistic context. The workshop concluded with a final debriefing session to evaluate the workday and the processes used to analyze simulations in order to shape simulation work in the future.

Time was spent explaining the setting of the scenarios from which the groups could choose. They had choices that involved leaders and food allergies, teachers avoiding directed tasks, community relations, as well as exploring changes to district

schedules. A corresponding packet was provided with each simulation that included the website for the actual simulation. It also included a printed version of the simulation decision-making tree and all of the content that could be encountered while moving through the simulation.

Step one of the simulation evaluation and revision phase was for each team to critique a simulation scenario. Groups were directed to first walk through the simulation to get an idea of what was designed. Each group proceeded a second time through the same simulation using a more critical eye and an experienced practitioner perspective. They were asked to take a look at the scenario written for the simulation and consider some of the following questions. Did this seem like a realistic problem faced by school principals? Was additional information needed to make the simulation more realistic? Would artifacts be useful in helping the student think about the school and the decisions that will need to be made? If yes, what would those artifacts look like? Was there one set of decision points that reflect recognized leadership practices?

Step two tasked the groups with revising the scenarios as needed. They were to take time to improve the simulation with edits and additions from their experiences as principals and superintendents. They could look for artifacts from the Internet or from their schools that would add more detail to the simulation experience.

In order to understand step three, the revision process, definitions of major terms were provided. The groups were to determine if the catalysts presented are realistic. Each group was asked to revise the catalysts and decision options as needed.

Pathway (P)- The steps in the process that are sequenced.

Catalyst (C)- The interruption to the pathway where a new decision will have to be made.

Decision Options (D)- Three to four choices presented after a catalyst has been presented. Each choice is awarded a good (G), mediocre (M), or bad (B) score, which is not viewed by the participant until the end of the simulation.

Feedback (F)- The outcome of each of the decision options presented.

The groups were to determine if any one pathway reflected leadership practices and/or effective leadership skills. If not, the groups were told to create a new pathway that did reflect leadership practices. In addition, each group was requested to take notes as they worked in order to provide feedback of the process they were using to evaluate the simulation and improve future workshop sessions.

## **Findings**

The workshop included two debriefing sessions (Initial reflection and discussion and the Final debriefing) as well as the evaluation of student created simulations. The debriefing sessions were video taped so that they could be reviewed and analyzed for any themes proposed by the practitioners. The researchers also took notes during the workshop. The initial debriefing session allowed the groups to explore the use of simulations prior to the actual process of evaluating simulations for realism. The second session allowed practitioners to reflect on the decision-making ability of the graduate students who were responsible for constructing the online simulations. The findings from each piece of the workshop provided further insight into the decision-making processes of school leaders.

## **Initial Reflection and Discussion**

The initial reflection and discussion session lasted about one hour. Upon review of the video and notes taken by the researchers, it was clear that all of the practitioners deemed the use of simulations in a leadership preparation program as a valuable tool. One participant noted, “I think they’re awesome because there is no way in an internship students can get exposed to a multitude of these experiences.” Another practitioner noted that it would be extremely beneficial to use real life scenarios that are derived from headlines in the news. It was expressed by three practitioners that if done accurately, simulations might assist graduate students in developing the decision-making skills needed prior to employment in those often-ambiguous leadership roles.

The practitioners expressed that an effective tool for intercollegiate collaboration would be to build some repository of created simulations. They were unsure of who should own, or house, these simulations in a repository, but all participants agreed that one should be created and shared with universities. Professors could access the simulations and align them to appropriate course material.

One other key segment of the initial reflection and discussion section was connected to student internship experiences. All of the participants were aware of current internship requirements and practices in educational leader preparation programs. Every participant felt that the simulations would be a valuable accompaniment to the internship process. The simulations might present a safe place to “practice” real life situations prior to exposure rather than talking about what one might do in a situation later. One participant stated, “Just the process of making a decision and then looking at what the consequences can be is the key, is the heart of the simulation to me, because until you actually have to take responsibility for a decision and then see how it plays out, you don’t quite get the same experience as when you’re just talking about something.” Another participant noted that simulations could be an effective tool to help the student understand the vast amount of scenarios an educational leader might face in a single day, let alone an entire school year.

## **Simulation Evaluation and Revision**

The groups were prompted to discuss the roles of leaders as they moved through the decision-making steps in the online simulations. This portion of the workshop was also recorded on video for later review. One example of the process occurred when a group was tasked with analyzing the role of a principal who had to make decisions related to peanut allergies. The group noted that some the decisions presented seemed rash, and they were made too quickly without enough information. Other decisions incorporated too much information from stakeholders and complicated some of the decision points. One group of participants explored a simulation about a teacher hesitant to follow an IEP. What stood out to this group was how the students assigned job responsibilities to a particular leader. The practitioners specifically pointed to a special education director who might be more or less involved in this IEP process depending on the type of district where the director was employed. Practitioners recorded notes throughout all the simulations particularly when there was confusion about the choices the leader had to make. A common theme among the practitioners’



notes was that the solutions presented to a given problem were often short-term solutions when the issue called for a focus on a long-term solution.

Frequently the practitioners noted that decisions deemed “bad” by the leadership students who created the simulations were often considered the “good” decision by the practitioners. One participant noted that, “often the answer our group felt was the best was listed in the simulation as the worst choice the simulation user could make at that given time.” This process prompted some practitioners to keep the actual decisions provided by the graduate students who created the simulations and simply reorder the list of decision options within a created scenario. In other cases, the practitioners may have gone back to add more detail to the tasks leading up to the decision point.

One key item that came up when looking at the relevancy of the simulations was to revisit the internship requirement. In the initial reflection and discussion the practitioners talked about this connection as being quite important. Once the practitioners were able to run through all of the simulations created by graduate students they discussed whether these simulations could function as a tool to foster mentoring during the internship rather than prior to the internship.

### Final Debriefing

Key topics were derived from the final debriefing session after all groups had completed the evaluation and revision component. The group of practitioners came up with a list of topics they felt should be covered if a simulation repository was developed. Those topics are listed in Table 1 below.

Table 1  
Topics of Importance Expressed as Possible Future Scenarios

*Meeting with Union President	Crisis Management	Testing Procedures
MEAP/ Test Scores	School Closure	Not following an Individual Education Plan (IEP)
Board Meeting Preparation	Fighting	Response to Intervention
*Dealing with the Press	Cyber bullying	Bring Your Own Device
*Parents	Athletics	Consistency of policy
*Curriculum & Instructional Teams	Cheer leading/Band	Student Recognition
Safety	Secretary Role	Residency
*PTO	Dress Code	Special Education & Inclusion
*Boosters	Drugs & Staff	Child Protective Services
*BLT Meeting	Drugs & Students	Stranger Danger
Budget Development	In House Tragedy	Rogue Teacher
Technology Planning	Grade Appeal	Understanding Culture
	Law Enforcement	Community Stakeholders
	Custody	

\*Initial principal contact meetings

They were categorized as general topics of importance. The practitioners also flagged

stakeholder groups as initial contacts where a principal would need to treat the situation differently when approaching the group for the first time. The practitioners viewed the level of difficulty and location of a problem as playing a central role in how graduate students should approach a simulation. The level of difficulty should be addressed at the beginning of the simulation with more detailed background of the problem. It was expressed that locations for the online simulations should be in a variety of educational settings like urban, rural, suburban, virtual, elementary, middle, and secondary levels.

In addition to all of the content-focused suggestions for improvement, the team of practitioners suggested that a template be developed for future educational leadership simulations. This would be especially helpful when creating a large repository of simulations so that the simulations would have a consistent look and feel.

The team of practitioners expressed that the simulations should include an audio and video component instead of it being all text-based. Audio would provide tone of voice, which could make a difference in decision-making during higher stress situations such as crisis management or even dealing with parent-teacher organizations. Preference for use of video or animated avatars was unanimous. Written text from the video or the avatar should be displayed on the screen at the same time in order to benefit both visual and auditory learners. One criticism from the practitioners was that the naming of characters after celebrities or using a humorous connection is a distraction to the simulation. While the humorous character, e.g. Mrs. Cheeseburger can provide levity; it most likely distracts the user from the actual task at hand. The recommendation was to focus on the traits of the characters and keep the name and look of each character in the simulation quite bland.

The simulations themselves offered feedback to the user in various ways. One simulation offered feedback slides following each decision point as the user moved through the simulation. One simulation only provided feedback in the end. Another option for providing feedback in the design of one simulation occurred only when the user selected an incorrect response. In this case the user was informed of the reason the choice was not appropriate. If the user made a good choice, he or she moved on to the next set of issues/decisions in the simulation. All student created simulations had a feedback slide at the end reporting cumulative scores matched to each of the learning outcomes.

The amount of feedback came up numerous times in the final debriefing stage. After much discussion, the practitioners concluded that the frequency of feedback was much more important than the amount of feedback in a simulation specifically created for a future principal. The practitioners all agreed that feedback should come with every single decision within the simulation no matter how correct or incorrect the decision might have been. In addition, the practitioners felt that a cumulative feedback slide at the end was an important part of the process.

### **Action Plan**

The debriefing sessions were rich experiences for both the researchers and the practitioners at the workshop. It was clear that the construction of simulations was perceived as a valuable experience for students but needed refinement. The practitioners identified priority topics for simulations that can now be matched to course content and used as a bank of choices for students before beginning their work. Simulations might

be embedded in coursework or in conjunction with internship or peer apprenticeship models. As noted numerous times, the idea of having a simulation repository needs to be explored and as recommended by the practitioners, categorized in some way. The practitioners' experience and recommendations led the researchers to further develop their work with simulations.

### **Classroom Instructional Activity**

The process of students constructing their own scenarios and determining the decisions that need to be made engaged students at a deep level of learning. This supports the goal of the professor to provide students with instructional activities that are relevant to the tasks expected of a principal in the first year. What became clear for the researchers in the workshop was that the scenarios students selected to develop might not be considered high priority items in the principal's job given the multitude of responsibilities. Students also did not appear to have sufficient background to recognize all of the aspects of an issue that may impact the decision-making around their selected scenario. To address these concerns, a topic bank can be provided to students to focus on priority issues of a principal. The assignment can be scaffolded using smaller chunks of data. For example, instead of a template for decision-making that includes multiple options, the template could minimize the options so students can focus in on some of the more obvious paths in making a decision. Once the simulation is completed, guided inquiry can lead the student to think more deeply about the problem and investigate what actual principals would do in this same situation.

### **Use in Educational Leadership Programs**

A common question that surfaced in the study was how would simulations benefit a principal preparation program? Criticisms of university principal preparation programs indicate that there is a weak connection between theory and practice (Bottoms & O'Neil, 2001). The practitioners involved in this workshop had a positive view that the process of building or experiencing a simulation would be extremely valuable to future educational leaders.

The clear difference between the expert and what the novice was able to bring to the same decision-making process was evident. As leading, facilitating, and making decisions (ELCC, 2011) are central to administrative positions and school leadership, this study revealed potential limitations novices would bring to the principal role their first year on the job. Consensus among the practitioners indicated that allowing students to go through the process of creating a simulation was a richer experience than just walking through the simulation itself. It makes sense to design a structure for the instructional activity of constructing simulations.

In preparation for the assignment, students should be exposed to: resource documents describing simulations, a group discussion about suitable scenarios, leadership standards (ELCC and/or state level leadership standards), and guest principals describing their own work. Debriefing sessions must be a mandatory component. The instructor should provide at least two sessions. One after reading through the materials and being exposed to a sample simulation and the second session occurs after the simulation is completed. Following the instructor's discussion with the student, the

student meets with a practicing principal. This step allows for contextualization of the simulation with the varying activities principals experience in a given day. Lastly, connecting the simulations to leadership standards reinforces the priority given to them by the ELCC for leadership preparation programs. Students not only understand the leadership standards, but they work through the decision-making process with those standards in mind. It additionally helps the instructor to connect the simulation to the overall course design and outcomes.

### **Integrate with Internship Experiences**

The usefulness of simulations in other disciplines is evident, but more research on the role of decision-making specifically in educational institutions should be amassed. A peer apprenticeship model provides graduate students in a leadership preparation program internship experiences that are enhanced by peer interactions and faculty mentoring (Staub & Bravender, 2014). Key questions from the practitioners were raised as to how the experience of participating in simulations might be used in conjunction with internship and apprenticeship processes. A recommendation is to include completed simulations as a component of the principal internship in order to reduce the actual number of hours a student spends in the internship. This is certainly important, as graduate students are working professionals with limited amounts of time available to participate in daily principal, decision-making tasks.

However, it was also clear that more information should be examined as to which groups within the university could provide the most ideal contextualization for the simulations. The practitioners presented questions about the complexity involved in the many decision-making processes by an educational leader. Is this a place to incorporate community and content partners? Could universities have these simulations validated by outside stakeholders to make a more authentic real-world situation for the participant? Simulations might provide more realistic experiences if they followed a timeline that a principal would follow in a school year. With further study, these questions could be explored.

### **Intercollegiate Benefits**

The pool of practitioners was a limitation in this research study. Although their extensive leadership backgrounds and level of feedback were quite detailed, this study could benefit from a larger number of practitioners in the future. A question about the placement of simulations within a leadership preparation program was raised a number of times. Could simulations replace standard performance assessments? Looking at the suggestions from the practitioners it is clear that the simulations must be categorized in some way. There are endless possibilities, but what would be most helpful to professors at universities? Levels could be associated with types of simulations students would use such as dividing them into big picture vs. detail situations. They could be arranged by standards connected to end-of-course assessments versus end-of-program assessments.

The researchers reviewed all of the suggested topics from the practitioners, suggestions on how to classify simulations, and what theoretical classifications seemed to appear most important. This resulted in the researchers developing the Simulation Classification Model (SCM) noted in Table 2 below.

Table 2  
Simulation Classification Model (SCM)

	Level of Leadership			
	Best practice	Scenario	Catalyst	Adaptive
Category	Culture/Vision	Culture/Vision	Culture/Vision	Culture/Vision
	Ethics/Law	Ethics/Law	Ethics/Law	Ethics/Law
	School	School	School	School
	Improvement Management	Improvement Management	Improvement Management	Improvement Management

It was determined that the list of possible future scenarios provided by the practitioners at the simulation workshop could be separated into the four categories of Culture/Vision, Ethics/Law, School Improvement, and Management. When considering that the practitioners expressed that level of detail, or difficulty needed to be acknowledged, it was determined that four levels of leadership could be used. Those levels were identified as Best Practice, Scenario, Catalyst, and Adaptive. Best practice being represented as accepted protocols and procedures for areas identified in the ELCC standards. Scenario is the context of the situation at a given school. The catalyst is the issue that drives the need for decision-making. Adaptive representing integrated experiences using analysis, synthesis, and evaluation to use as adaptive solutions to problems.

### Conclusion

The development and use of simulations provide benefits to graduate students in a leadership program. Novices are exposed to potential job scenarios and opportunities to practice solutions to the situations presented. The on-demand thinking ability that so often comes with the job of principal prior to employment is enhanced. It is clear that accessibility to technology and online simulations is a way to present internship experiences that are similar to school environments, placing the candidate in a scenario requiring decisions and consequences. Online access allows users to work from home or in a small group setting. Having the perspectives of school practitioners to review decisions made by novices in the online simulations was extremely worthwhile. They provided insight into the possible gaps in the decision-making processes of novice leaders.

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