



The Authentic Athletic-Academic Model: An Interdisciplinary Approach to Educate and Empower Alternative High School Students

LaTreese V. Hall
Florida International University

Abstract

Over the past 50 years, the number of alternative schools for at-risk students have increased exponentially. However, the research concerning the students that attend these institutions has been, at best, unhurried. Even more wanting is the research regarding the development and critical evaluation of educational interventions that can motivate and educate these students. The purpose of this paper is to propose an original, interdisciplinary framework aimed at increasing the positive student outcomes of alternative high school students. Drawing on the insights of sociology, psychology, and athletics, the “Athademic” (Authentic Athletic-Academic) model integrates authentic teaching of academic subjects, athletics, social and emotional learning, and health for a more comprehensive educational approach to improve the student experience and empower youth in alternative educational settings. Future directions of alternative school research are considered.

Keywords: alternative education settings, at-risk youth, sports-based learning,
project-based learning

Alternative high school students represent a population of youth who have not succeeded in traditional school environments and are considered “at risk” of educational failure. Given the major gap in the literature pertaining to alternative students, it appears that this community of high-needs learners is largely ignored.

Moreover, the research on the development and evaluation of educational interventions aimed at empowering and preparing alternative high school students to succeed after graduating from (or otherwise leaving) their alternative schools is particularly wanting. The teaching of alternative school students is often complicated by maladaptive pathological, psychological,

behavioral, emotional, socioeconomic and environmental influences that interact within the lives of students and create a maelstrom of challenges, rendering domain-specific interventions inefficient and inadequate. The compound issues that accompany the education of alternative school youth require an equally composite solution. Accordingly, I have integrated the insights of education, psychology, sociology, and athletics, and propose the “athademic” model of alternative school education – an integrative framework that amalgamates authentic teaching of academic subjects, social and emotional competencies, health education and application within a sports context to holistically approach high school instruction in alternative educational settings (AES), increase academic self-efficacy and positive outcomes for students at risk for school failure.

Literature Review

Alternative Educational Settings

Alternative schools arose largely as a response to the American dropout epidemic in the 1970s and 80s (Donmoyer & Kos, 1993; McGee & Lin, 2017); the students who attend alternative schools (housed in separate facilities) and programs (housed within regular schools) are typically at risk of school failure and delinquency and are often removed from their original school due to truancy, poor grades, physical attacks or fights, verbal disruptive behavior, pregnancy, or similar circumstances and require a school environment other than that of a traditional public school (Carver & Lewis, 2010; Donmoyer & Kos, 1993; Wagner, Newman, Cameto, & Marder, 2003). Carver and Lewis (2010) conducted a survey for the National Center for Education Statistics (NCES) which included 1,806 public school districts that reported

information about the availability of alternative schools and programs for the 2007–08 school year (see Kleiner, Porch, & Farris, 2002 for a similar study conducted seven years earlier). The researchers found that in the 2007-08 school year, 64% of districts reported having at least one alternative school or program for at-risk students that was administered either by the district or by another entity (e.g., regional program, consortium, cooperative, another school district, private entity, or 2- or 4-year postsecondary institution) with 646,500 students enrolled (Carver & Lewis, 2010). However, Lehr, Tan, and Ysseldyke (2009) found that 18 states reported that the number of students served in AES was closer to one million and Schwab, Johnson, Ansley, Houchins, and Varjas (2016) speculated that “...the actual national number is substantially greater” (p. 194).

It seems that the demand for alternative schools is increasing yet the research concerning this population is scarce. In a recent comprehensive literature review of alternative school academic interventions, Schwab and others (2016) found only 18 published studies between 1990 and June 2013 that met their inclusion criteria (conducted in the United States; participants were enrolled in grades 6–12 in an AES; academic interventions were implemented and assessed in an AES; and the research was group experimental, quasi-experimental, single-case, or a mixed methods design). Furthermore, of the districts that administered alternative schools and programs for at-risk students themselves, 33% reported being unable to enroll new students in alternative schools and programs because of staffing or space limitations indicating program growth; yet less than half of the districts (48%) reported having professional development requirements and only 35% of the districts

reported having a database to track students after they leave alternative schools and programs (Carver & Lewis, 2010).

In alternative schools, ethnic minorities and students from low socioeconomic status (SES) neighborhoods are disproportionately overrepresented (Carver & Lewis, 2010; Donmoyer & Kos, 1993) which presents additional challenges. Research has shown that when compared to high-SES children, low-SES children have greater health risks across the lifespan (Blumenshine, Egerter, Barclay, Cubbin, & Braveman, 2010; Braveman, Cubbin, Egerter, Williams, & Pamuk, 2010) as well as lower levels of educational attainment (Schoon, Jones, Cheng, & Maughan, 2012; Von Stumm, 2017) with "...the most adverse levels of health...observed for the least-educated or lowest-income groups" (Braveman et al., 2010, p. S187).

Self-Efficacy

An oft-overlooked construct that is relevant to the outcomes of at-risk students is *self-efficacy*. Individual's beliefs in their ability to produce desired outcomes, or self-efficacy, is a psychological construct grounded in Bandura's (1986) social cognitive theory (SCT) that is suggested to affect the trajectory of individuals' lives. Although it is sometimes confounded with self-esteem which is a personal judgement of one's self-worth, self-efficacy is rather a personal judgment of one's own capabilities (Bandura, 1997). Bandura (1997) argued that self-efficacy impacts

...the courses of action people choose to pursue, how much effort they put forth in given endeavors, how long they will persevere in the face of obstacles and failures, their resilience to

adversity, whether their thought patterns are self-hindering or self-aiding, how much stress and depression they experience in coping with taxing environmental demands, and the level of accomplishments they realize. (p. 3)

An individual's level of self-efficacy is not rigidly affixed; it can vary from one situation to another (e.g., high self-efficacy in science, but low self-efficacy in math) and can be improved. Bandura (1997) asserted that people can develop a strong sense of self-efficacy by overcoming obstacles through mastery experiences, seeing people that they identify with succeed with sustained effort (social modeling), being convinced that they can succeed through social persuasion or by judging their capabilities through an honest evaluation of their physical and emotional states. A Malaysian study revealed that at-risk students indeed had low self-efficacy in math and English (Elias, Mahyuddin, Noordin, Abdullah, & Roslan, 2009). The authors speculated that poor academic achievement was related to student self-efficacy; they called for teachers to learn about the importance of student self-efficacy and actively work to increase student self-efficacy to enhance the trajectory of their lives.

Social and Emotional Learning

In addition to concern about students not graduating at all, the high school dropout epidemic was also accompanied by concern that students who did graduate were not being equipped with the academic, social and emotional skills necessary to function after high school (Donmoyer & Kos, 1993). To foster school and life successes of children and youth, the National Association

of State Boards of Education (NASBE) as well as Collaborative for Academic, Social, and Emotional Learning (CASEL) has recognized the importance of cultivating healthy social-emotional development. Theoretically underpinned by Mayer and Salavoy's as well as Goleman's work on emotional and social intelligence (as cited in Domino, 2013), CASEL (2015) asserted that it is imperative to teach children how to effectively "...manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions" (p. 1). Mismanaged emotions can lead to bullying which has been shown to have deleterious effects like later aggression, delinquency, depression, anxiety, and even suicide; with bully/victims (those who both bully others and are victims themselves) displaying the highest level of problems (Lereya, Samara, & Wolke, 2013). Moreover, unmanaged stress and poor impulse regulation can interfere with learning and contribute to disruptive behaviors (CASEL, 2015). Effective social and emotional learning (SEL) programs foster five key competencies: self-awareness, self-management, social awareness, relationship skills and responsible decision-making, and have been shown to facilitate academic learning as well as other positive outcomes like fewer negative behaviors, more positive attitudes and reduced stress (CASEL, 2015; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Taylor, Oberle, Durlak, & Weissberg, 2017). There are over 200 SEL programs in operation (Taylor et al., 2017) and research suggests that many, if not all of the core competencies of SEL can be integrated with, and taught through literature (Shechtman & Yaman, 2012), technology (Slovák & Fitzpatrick, 2015), contemplative practices (e.g., yoga and meditation; Butzer, Bury, Telles, & Khalsa,

2016), physical education (Ciotto & Gagnon, 2018; Jacobs & Wright, 2014; Lu & Buchanan, 2014; Richards & Levesque-Bristol, 2014) and athletics (Bean, Whitley, & Gould, 2014; Gordon et al., 2016; Samalot-Rivera & Porretta, 2013; Tracy & Erkut, 2002; Van Boekel et al., 2016; Watson & Clocksin, 2013).

Social and emotional competencies are especially useful during the adolescent years. Marked by puberty, this transition from childhood to adulthood is accompanied by physical, social-emotional, and cognitive transformations that can be sources of excitement, anxiety, and confusion (McDevitt & Ormrod, 2016). However, adolescents seem to be more resistant to changing their social-emotional skills than younger children (Durlak, 2011), and programs that target adolescents have not been as effective as programs that target younger children (Heckman, & Kautz, 2013, p. 35). Research suggests that elementary and middle school SEL programs that have been modified for high school students are ineffective and there is a call for more "adult-like" SEL programs that specifically target older adolescents (Yeager, 2017, pp. 74-75).

Authentic Instruction

Authentic instructional practices have been shown to increase at risk students' attendance (Creghan & Adair-Creghan, 2015), lessen the socioeconomic status (SES) achievement gap in mathematics (Holmes & Hwang, 2016) and social studies (Brown et al., 2013; Halvorsen et al., 2012) and increase students' interest in science (Brown et al., 2013). The Glossary of Education Reform (n.d.) describes authentic instruction as a teaching approach used to connect students with real-world issues and applications. Grounded in

social constructivism (Vygotsky, 1978), authentic learning values collaboration and the role of the facilitator as a guide who effectively scaffolds instruction (providing temporary support that lessens until the student can work independently) while learning alongside the student. The social constructivist view of education asserts that students are active agents in their learning and construct knowledge by undertaking relevant, meaningful and pragmatic experiences (Runco & Chand, 1994). Authentic instruction is essentially an umbrella term and includes methods of implementation like inquiry-based learning, problem-based learning (PBL), project-based learning (PjBL), task-based learning and more. Notwithstanding the many terms used and the nuanced differences between them, there is a general consensus about several distinct characteristics of authentic learning. For instruction to be considered “authentic” it must a) involve higher-order thinking like critical thinking, creating, analyzing and evaluating; b) require in-depth and sustained study; c) connect students to the world beyond the classroom; d) entail substantive conversation and social support for student achievement; e) produce a public product; and f) allow multiple interpretations or solutions (Buck Institute for Education; BIE, 2015; Lombardi, 2007; Newmann, King, & Carmichael, 2007; Newmann & Wehlage, 1993; Yew & Schmidt, 2012). Juxtaposed with the traditional approach to education wherein discrete subjects are taught separately by disciplinary teachers, research has shown that authentic instruction can be effectively implemented by interdisciplinary teaching teams where teachers from two or more disciplinary subjects integrate their instruction for a more authentic learning experience (DiCamillo & Bailey, 2016; see also Al Salami, Makela, & de Miranda,

2017; Brown, Lawless, & Boyer, 2013; Hardré et al., 2013; Spintzyk et al., 2016).

Although authentic teaching approaches have been associated with positive outcomes of at-risk students (Brown et al., 2013; Creggan & Adair-Creggan, 2015; Halvorsen et al., 2012; Holmes & Hwang, 2016), there are mixed findings pertaining to the implementation of authentic learning with students who have been placed at risk for school failure due to limited English proficiency. Some research has indicated that inquiry-based learning can improve English language learner’s (ELLs) English writing skills (Pang, 2016) and language development (Zwahlen, 2017), while other research has shown that ELLs do not show statistically significant improvement in achievement if the authentic learning strategy does not tailor the instruction to the student’s level of language proficiency while concurrently focusing on language development and content knowledge (Han, Capraro, & Capraro, 2016). Quite understandably, if the student can not understand what is being said, there is little chance that authentic learning (or virtually any learning approach for that matter) will be effective. It should be noted that effective guidance (e.g. scaffolding) is critically important to the successful implementation of authentic approaches to education (Halvorsen et al., 2012; Kokotsaki, Menzies, & Wiggins, 2016; Lazonder & Harmsen, 2016; Svihla & Reeve, 2016).

Athletics

The popularity and prevalence of sports in the United States is undeniable: over 50 million youth between the ages of 6 and 17 participate in sports each year (American Sports Data, Inc., 2004). The NBA recently signed a 9-year \$24 billion

television deal (Prada, 2018); and The NCAA (2009) reported that between 1971 and 2007, female participation in collegiate sports increased 456% and female participation in high school athletics increased 904%. Participation in athletics has an inherently social influence. It has been argued that sport is a social *phenomenon*, social *event* as well as social *institution* (Kaplan, Tekinay, & Uğurlu, 2013). Furthermore, for many children and adolescents, participation and proficiency in sports determines social status (Chase & Machida, 2011; Shakib, Veliz, Dunbar, & Sabo, 2011), and is perceived as a means of social mobility (Snyder & Spreitzer, 1990), particularly for African American youth who some suggest that athletics has become part of their racial identity whereby being African American is stereotypically perceived as an asset (Harrison, Azzarito, & Burden, 2004). Participation in athletics has the potential to build social and emotional skills (Bean et al., 2014; Broh, 2002; Eime, Young, Harvey, Charity, & Payne, 2013; Gordon, Jacobs, & Wright, 2016; Samalot-Rivera & Porretta, 2013; Van Boekel et al., 2016) and is associated with positive psychological outcomes (Eime et al., 2013;

Fredricks & Eccles, 2006; Tracy & Erkut, 2002), educational attainment (Broh, 2002; Fredricks & Eccles, 2006; Shifrer, Pearson, Muller, & Wilkinson, 2015; Snyder & Spreitzer, 1990) as well as fitness and health benefits (Eime et al., 2013).

Integrative Approach: The Athedemic Model

The athedemic model (Authentic Athletic-Academic model; See Figure 1.) draws on the insights of psychology, sociology, education and athletics for a more comprehensive approach to alternative secondary education with the purpose of increasing positive student outcomes. This authentic integrative model is a) situated within a pervading athletic context, b) implemented through authentic interdisciplinary projects, c) integrates sustained authentic SEL, health education and practice aimed at preparing students for tasks relevant to the project through transferable life skills, and d) underscores the deliberate and sustained strengthening of student self-efficacy. A brief discussion of the model components and their respective theoretical rationales follows. ↑

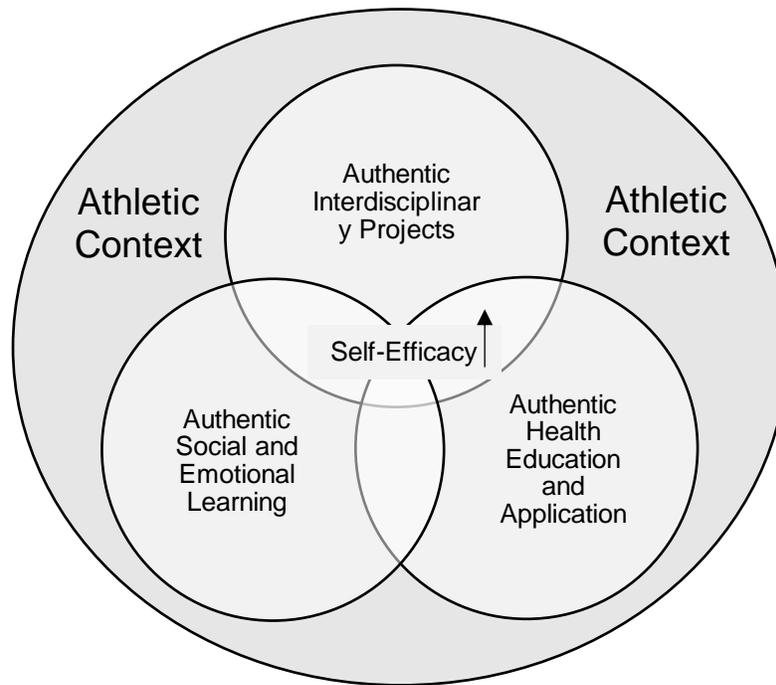


Figure 1. The Athedemic Model. The integrated components of the model situated within the athletic context.

Athletic Context

Research has linked participation in athletics with improved social and emotional skills (Bean et al., 2014; Broh, 2002; Eime et al., 2013; Gordon et al., 2016; Samalot-Rivera & Porretta, 2013; Van Boekel et al., 2016), educational attainment (Broh, 2002; Fredricks & Eccles, 2006; Shifrer et al., 2015; Snyder & Spreitzer, 1990), and fitness and health benefits (Eime et al., 2013). Moreover, research has suggested that when alternative schools make students feel psychologically, emotionally and physically safe; foster a sense of community; embed student culture throughout the school; and employ flexible behavioral supports the students engage more both academically and within the school community (O’Gorman, Salmon, & Murphy, 2016). I posit that effective cultivation of the athletic environment and collective “team”

subculture of the athedemic model can accomplish this. Drawing on Tajfel and Turner’s (1979) social identity theory which asserted that people naturally identify with, and place others into social groups (i.e., “us” vs. “them,” or “in-group” vs. “out-group”), the athedemic model attempts to position all students in the in-group. Regardless of athletic abilities or proficiencies, every student is referred to as an athlete of the school team and is viewed as a teammate of a cohesive team. Coaches consistently cultivate a team culture through teambuilding exercises, fostering students’ identity within the collective social group. For instance, students might meet in a common area each morning for a brief pep rally and *huddle* (i.e., a gathering in a circle to plan, motivate or celebrate – popular in many team sports). Analogous to a traditional school’s morning meeting and

announcements delivered in a student's "homeroom," this huddle is meant to inform students while concurrently developing the shared team identity. To conclude this morning pep rally, the students might observe a common practice of team sports and "break" the huddle with a motivating word or chant yelled in unison (e.g., "Respect! Responsibility! Hard work! Dedication!"), proceeding into each school day encouraged and motivated. Furthermore, the roles of the teachers, principals, directors, and other support staff are informed by the social constructivist view of the teacher as a supportive facilitator and guide who "coaches" and scaffolds students to higher levels of knowledge and performance (Vygotsky, 1978); thus, students refer to these stakeholders as "coach" (e.g. "Coach Smith") to reinforce the notion that teachers are there to support students in their learning.

Authentic Interdisciplinary Projects

Research has found that authentic instructional practices (e.g., PBL, PjBL, inquiry-based learning) can increase positive student outcomes for at-risk students (Brown et al., 2013; Creghan & Adair-Creghan, 2015; Halvorsen et al., 2012; Holmes & Hwang, 2016). Additionally, studies have demonstrated that academic subjects can effectively be taught by interdisciplinary teaching teams (DiCamillo & Bailey, 2016; see also Al Salami, Makela, & de Miranda, 2017; Brown, Lawless, & Boyer, 2013; Hardré et al., 2013; Spintzyk et al., 2016). Accordingly, the proposed athademic model utilizes interdisciplinary projects to educate alternative high school students. Multifaceted, authentic projects sustained over an extended period (i.e. several weeks to several months) are ideal and offer numerous opportunities to integrate academic subjects, SEL, health and

physical education. Prior to the start of the school year and during regular planning periods, interdisciplinary teaching teams meet to outline the long term and immediate details of each project.

Teacher effectiveness is critical when implementing authentic teaching approaches (Halvorsen et al., 2012; Kokotsaki et al., 2016; Lazonder & Harmsen, 2016; Svihla & Reeve, 2016), thus, teacher teams participate in regular professional development to foster adequacy and self-efficacy in authentic teaching. Additionally, virtually every aspect of the athademic model is meant to utilize authentic practices to engage and teach students, so it is necessary for teacher teams to collaborate with experts who can offer support and resources with unfamiliar content. Teachers collaborate with doctoral students at local universities, professionals, or local experts by inviting them to present information within their scope of expertise and relevant to the project or to act as an authentic audience and listen to students' presentations and provide feedback.

Authentic Social and Emotional Learning

CASEL (2015) suggests that students learn a set of five key competencies as a part of effective SEL instruction: self-awareness, self-management, social awareness, relationship skills and responsible decision-making. Teaching these competencies are particularly important for the success of alternative school students (Phillips, 2013). Because these competencies can be effectively taught through yoga, physical education, and athletics (e.g., Butzer et al., 2016, Ciotto & Gagnon, 2018; Jacobs & Wright, 2014; Lu & Buchanan, 2014; Van Boekel et al., 2016; Watson & Clocksin, 2013) and there has recently been a call for more age-appropriate approaches to SEL

with late adolescents (Yeager, 2017, pp. 74-75), the athedemic model might be an adequate response to this call. The authentic, sports-rich nature of the model provides multiple avenues to impart SEL competencies in the form of transferable life skills. Peer collaboration is a requisite for authentic learning methodologies and the inherent social nature of sports affords opportunities to address the *social awareness* and *relationship skills* competencies outlined by CASEL (Bean et al., 2014; Samalot-Rivera & Porretta, 2013; Van Boekel et al., 2016). Furthermore, knowledgeable coaches (and teacher-coaches) can foster CASEL's core competencies and help students enhance their *self-awareness* by teaching them to recognizing their strengths and by increasing their self-confidence and self-efficacy through sport and academic successes (Bean et al., 2014). Sports also allows for teaching self-discipline, impulse control, and self-motivation (Bean et al., 2014; Samalot-Rivera & Porretta, 2013), which constitutes CASEL's *self-management* competency. Moreover, *responsible decision-making*, another key competency, can be enhanced by teaching students how to identify problems, analyze solutions, evaluate and reflect – all higher-order thinking processes and indicative of “gold standard project-based learning;” also applicable to the process whereby athletes review film of their performance to improve (BIE, 2015; Nimmerichter et al., 2016).

Authentic Health Education and Application

When compared to children from high-SES communities, children who grow up in low-SES neighborhoods have greater health risks across the lifespan with the most harmful levels observed in the lowest income groups (Blumenshine et al., 2010;

Braveman et al., 2010). Alternative schools often have a disproportionately large number of students from these impoverished communities. To address this critical issue, the athedemic model underscores the importance of health that is authentically learned and applied in multiple domains (e.g., physical, psychological, and nutritional). The athletic context offers ample opportunity to impart authentic physical health and education. For instance, students engage in daily physical training to address cardiovascular/aerobic fitness, muscular endurance and strength, and flexibility while learning about the respective underlying processes. Psychological health and wellness is addressed within the context of sports psychology. For example, students learn about psychological concepts and processes in class and attend individual/small group counseling sessions in the context of sports psychology to decrease cultural stigma associated with mental health assistance. Nutrition education is authentically implemented and applied by having students complete and analyze nutritional journals; assist with the planning, budgeting, purchasing, and preparation of school meals.

Self-Efficacy

Bandura (1997) argued that, among other things, self-efficacy impacts the life choices people make, how hard and how long they work to accomplish their goals, whether they think optimistically or pessimistically about situations, how they overcome adversity, and the amount of adverse psychological effects in response to hardship and distress. In other words, self-efficacy, in many ways, can affect the trajectory of an individual's life. Consequently, it is paramount that teachers understand the impact of self-efficacy and consistently strive to improve the self-

efficacy of their students. Bandura (1997) asserted that self-efficacy can be strengthened by overcoming obstacles through mastery experiences, seeing people that they identify with succeed with sustained effort, being convinced that they can succeed through social persuasion or by judging their capabilities through an honest evaluation of their physical and emotional states. Therefore, the athedemic model emphasizes the importance of actively finding and creating opportunities to strengthen self-efficacy in all areas. Teachers can arrange for students to successfully complete obstacle and confidence courses, escape rooms, and other mentally or physically challenging experiences. They can also identify when students effectively overcome adversity in all domains (e.g., academic, socio-emotional, physical, etc.), even if the student views the triumph as insignificant (e.g., facing an intimidating team in competition, even if the outcome of the tournament was ultimately unsuccessful, or handling a frustrating situation without violence). Because self-efficacy can be enhanced when individuals see someone with whom they identify succeed and by being convinced that they can succeed through social persuasion (Bandura, 1997), administrators can arrange for successful people (athletes and non-athletes) who have overcome being labeled “at-risk” to speak to the students and convince them that they, too, can overcome their present circumstances with sustained effort. Self-efficacy is often referred to as the “I think I can” attitude and educators should encourage their students to adopt this type of optimistic thinking.

Recommendations and Suggestions for Further Study

Implementation of the athedemic model calls for interdisciplinary teacher

teams to strive for *optimum* integration, however, optimum integration is situation-specific and depends on the present needs of the students as well as situational appropriateness. Donmoyer and Kos (1993) accurately noted, “...research can never tell us what to do,” they added, “Teacher artistry will always be required to adjust and shape researcher’s findings...to fit the idiosyncratic students in a particular classroom” (p. 38). The effective implementation of the athedemic model requires a copious amount of intuition and optimum timing to find or create (and capitalize on) teachable moments at every opportunity.

The athedemic model is intended to be used as a guiding framework for a comprehensive approach to educate and empower alternative high school students. As such, future research could fully develop, implement and evaluate this program in alternative schools. Additionally, future research might evaluate the effectiveness of this model within AES or traditional settings in different geographical regions (e.g., Northeastern, Midwestern, Southern, Western), locations (e.g., urban, suburban, rural) or with different populations (e.g., single-gender and mixed-gender groups, students of color, high-SES, gifted and talented, students with various disabilities). This paper proposed a holistic model that utilized an encompassing athletic context, however, future studies could implement this framework within the context of different driving interests (e.g., performing arts, fine arts, tourism, cosmetology, barbering, philanthropy, etc.). Lastly, at the time of this paper, this author is not aware of any major longitudinal studies of students in alternative school and is vehemently calling for them. Until well-designed, mixed methods longitudinal research is conducted, we can only speculate about the relationship

between alternative schools and outcomes for at-risk students.

Conclusion

Alternative school students are individuals with multifaceted issues. Disciplinary problems, socioeconomic challenges, maladaptive environmental contexts, emotional and behavioral issues, and general resistance to authority are commonplace. As such, domain-specific programs and interventions provide fragmentary solutions. If students are to succeed in school as well as after leaving their AES, it is imperative that more attention is given to the development, implementation, and evaluation of comprehensive interventions. Drawing on the insights of psychology, sociology and athletics, the athademic model aims to extensively educate alternative high school students in a way that increases positive student outcomes and motivates this population to succeed. Through the implementation of authentic interdisciplinary projects, consistent SEL and deliberate health and physical education – integrated within a ubiquitous athletic context and focused on the deliberate strengthening of self-efficacy– the athademic model might reach this multifaceted demographic. It is my hope for researchers to fully develop, implement, critically evaluate, and disseminate the findings of this hypothetical model that I have proposed as a holistic approach to alternative high school education.

References

- Al Salami, M. K., Makela, C. J., & de Miranda, M. A. (2017). Assessing changes in teachers' attitudes toward interdisciplinary STEM teaching. *International Journal of Technology and Design Education*, 27(1), 63-88. doi:10.1007/s10798-015-9341-0
- American Sports Data, Inc. (2004). A study of organized youth team sport participation in the U.S. Hartsdale, NY: American Sports Data Inc
- Bandura, A. (1986) *Social foundations of thought and action: a social cognitive theory*. Englewood Cliffs, N.J.: Prentice-Hall.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York, NY, US: W H Freeman/Times Books/ Henry Holt & Co.
- Barone, D. M. (2014). *Narrowing the literacy gap: What works in high-poverty schools*. Retrieved from <https://ebookcentral-proquest-com.ezproxy.liberty.edu>
- Bean, E., Whitley, M. A., & Gould, D. (2014). Athlete impressions of a character-based sports program for underserved youth. *Journal of Sport Behavior*, 37(1), 3-23. Retrieved from file:///C:/Users/trees_000/Downloads/Athlete_Impressions_of_a_Char(2).pdf
- Beken, J. A., Williams, J., Combs, J. P., & Slate, J. R. (2009). At-risk students at traditional and academic alternative school settings: Differences in math and English performance indicators. *Florida Journal of Educational Administration and Policy*, 3(1), 49.
- Blumenshine, P., Egerter, S., Barclay, C. J., Cubbin, C., & Braveman, P. A. (2010). Socioeconomic disparities in adverse birth outcomes: A systematic review. *American Journal of Preventive Medicine*, 39(3), 263-272. doi:<https://doi.org/10.1016/j.amepre.2010.05.012>
- Braveman, P. A., Cubbin, C., Egerter, S., Williams, D. R., & Pamuk, E. (2010). Socioeconomic disparities in health in the united states: What the patterns tell us. *American Journal of Public Health*,

- 100(S1), S186-S196.
doi:10.2105/AJPH.2009.166082
- Broh, B. A. (2002). Linking extracurricular programming to academic achievement: Who benefits and why? *Sociology of Education, 75*(1), 69-95.
doi:10.2307/3090254
- Brown, S. W., Lawless, K. A., & Boyer, M. A. (2013). Promoting positive academic dispositions using a web-based PBL environment: The GlobalEd 2 project. *Interdisciplinary Journal of Problem-Based Learning, 7*(1)
doi:10.7771/1541-5015.1389
- Buck Institute for Education (2015). Gold standard PBL: Essential project design elements. Retrieved May 14, 2018 from http://www.bie.org/blog/gold_standard_pbl_essential_project_design_elements
- Butzer, B., Bury, D., Telles, S., & Khalsa, S. B. S. (2016). Implementing yoga within the school curriculum: A scientific rationale for improving social-emotional learning and positive student outcomes. *Journal of Children's Services, 11*(1), 3-24. doi:10.1108/JCS-10-2014-0044
- Carver, P. R., and Lewis, L. (2010). Alternative schools and programs for public school students at risk of educational failure: 2007–08 (NCES 2010–026). U.S. Department of Education, National Center for Education Statistics. Washington, DC: Government Printing Office. Retrieved from <https://nces.ed.gov/pubs2010/2010026.pdf>
- Chase, M. A., & Machida, M. (2011). The role of sport as a social status determinant for children: Thirty years later. *Research Quarterly for Exercise and Sport, 82*(4), 731-739.
doi:10.1080/02701367.2011.10599810
- Ciotto, C. M., & Gagnon, A. G. (2018). Promoting social and emotional learning in physical education. *Journal of Physical Education, Recreation & Dance, 89*(4), 27-33.
doi:10.1080/07303084.2018.1430625
- Collaborative for Academic, Social, and Emotional Learning (2018). *2015 CASEL Guide: Effective Social and Emotional Learning Programs—Middle and High School Edition*. Retrieved May 1, 2018 from <http://secondaryguide.casel.org/>
- Creggan, C., & Adair-Creggan, K. (2015). The positive impact of project-based learning on attendance of an economically disadvantaged student population: A multiyear study. *Interdisciplinary Journal of Problem-Based Learning, 9*(2).
doi:https://doi.org/10.7771/1541-5015.1496
- DiCamillo, L., & Bailey, N. M. (2016). Two teacher educators go to the source: Teaching an interdisciplinary class in an urban charter high school. *The Social Studies, 107*(6), 218-226.
doi:10.1080/00377996.2016.1214904
- Domino, M. (2013). Measuring the impact of an alternative approach to school bullying. *Journal of School Health, 83*(6), 430-437. doi:10.1111/josh.12047
- Donmoyer, R., & Kos, R. (1993). *At-risk Students: Portraits, Policies, Programs, and Practices*. Albany: State University of New York Press.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D. and Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*(1), 405-432. doi:10.1111/j.1467-8624.2010.01564.x
- Eime, R. M., Young, J. A., Harvey, J. T., Charity, M. J., & Payne, W. R. (2013). A

- systematic review of the psychological and social benefits of participation in sport for children and adolescents: Informing development of a conceptual model of health through sport. *The International Journal of Behavioral Nutrition and Physical Activity*, 10(1), 98-98. doi:10.1186/1479-5868-10-98
- Elias, H., Mahyuddin, R., Noordin, N., Abdullah, M. C., & Roslan, S. (2009). Self-efficacy beliefs of at-risk students in Malaysian secondary schools. *The International Journal of Learning: Annual Review*, 16(4), 201-210. doi:10.18848/1447-9494/CGP/v16i04/46251
- Fredricks, J. A., & Eccles, J. S. (2006). Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations. *Developmental Psychology*, 42(4), 698-713. doi:10.1037/0012-1649.42.4.698
- Gordon, B., Jacobs, J. M., & Wright, P. M. (2016). Social and emotional learning through a teaching personal and social responsibility based after-school program for disengaged middle-school boys. *Journal of Teaching in Physical Education*, 35(4), 358-369. doi:10.1123/jtpe.2016-0106
- Halvorsen, A. L., Duke, N. K., Brugar, K. A., Block, M. K., Strachan, S. L., Berka, M. B., & Brown, J. M. (2012). Narrowing the achievement gap in second-grade social studies and content area literacy: The promise of a project-based approach. *Theory and Research in Social Education*, 40(3), 198-229. Retrieved from: <http://dx.doi.org.ezproxy.liberty.edu/10.1080/00933104.2012.705954>
- Han, S., Capraro, R. M., Capraro, M. M. (2016). How science, technology, engineering, and mathematics project-based learning affects high-need students in the U.S. *Learning and Individual Differences*, 51, 157-166. Retrieved from <https://doi.org/10.1016/j.lindif.2016.08.045>
- Hardré, P. L., Ling, C., Shehab, R. L., Nanny, M. A., Nollert, M. U., Refai, H., . . . Wollega, E. D. (2013). Teachers in an interdisciplinary learning community: Engaging, integrating, and strengthening K-12 education. *Journal of Teacher Education*, 64(5), 409-425. doi:10.1177/0022487113496640
- Harrison, J. L., Azzarito, L., & Burden, J. J. (2004). Perceptions of athletic superiority: A view from the other side. *Race Ethnicity and Education*, 7(2), 149-166. doi:10.1080/1361332042000234277
- Heckman, J. J., & Kautz, T. (2013). Fostering and measuring skills: Interventions that improve character and cognition, working paper no. 19656. *National Bureau of Economic Research*, Cambridge, MA. Retrieved May 6, 2018 from <http://www.nber.org/papers/w19656>
- Holmes, V. L., & Hwang, Y. (2016). Exploring the effects of project-based learning in secondary mathematics education. *The Journal of Educational Research*, 109(5), 449-463. Retrieved from: <http://dx.doi.org.ezproxy.liberty.edu/10.1080/00220671.2014.979911>
- Aktami, H., Higde, E., & Özden, B. (2016). Effects of the inquiry-based learning method on students' achievement, science process skills and attitudes towards science: A meta-analysis science. *Journal of Turkish Science Education*, 13(4).
- Jacobs, J., & Wright, P. (2014). Social and emotional learning policies and physical education: Column editor: K. Andrew R. Richards. *Strategies*, 27(6), 42-44. doi:10.1080/08924562.2014.960292

- Jewett, E., & Kuhn, D. (2016). Social science as a tool in developing scientific thinking skills in underserved, low-achieving urban students. *Journal of Experimental Child Psychology, 143*, 154-161. doi: 10.1016/j.jecp.2015.10.019
- Kaplan, Y. Tekinay, D., & Uğurlu, A. (2013). Social status of sport: Sport as a social event, phenomenon and institution. *International Journal of Science Culture and Sport, 1*(4), 64-69. doi:10.14486/IJSCS21
- Kleiner, B., Porch, R., and Farris, E. (2002). Public alternative schools and programs for students at risk of educational failure: 2000–01 (NCES 2002–004). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
- Kokotsaki, D., Menzies, V., & Wiggins, A. (2016). Project-based learning: A review of the literature. *Improving Schools, 19*(3), 267-277. doi:10.1177/1365480216659733
- Lazonder, A. W., & Harmsen, R. (2016). Meta-analysis of inquiry-based learning: Effects of guidance. *Review of Educational Research, 86*(3), 681-718. doi:10.3102/0034654315627366
- Lehr, C. A., Tan, C., & Ysseldyke, J. (2009). Alternative schools: A synthesis of state-level policy and research. *Remedial and Special Education, 30*(1), 19–32. doi:10.1177/0741932508315645
- Lereya, S. T., Samara, M., & Wolke, D. (2013). Parenting behavior and the risk of becoming a victim and a bully/victim: A meta-analysis study. *Child Abuse & Neglect, 37*(12), 1091-1108. doi: 10.1016/j.chiabu.2013.03.001
- Lombardi, M. (2007). Authentic learning for the 21st century: An overview. Retrieved May 8th, 2018 from https://www.researchgate.net/publication/n/220040581_Authentic_Learning_for_the_21st_Century_An_Overview
- Lu, C., & Buchanan, A. (2014). Developing students' emotional well-being in physical education. *Journal of Physical Education, Recreation & Dance, 85*(4), 28-33.
- McDevitt, T., & Ormrod, J. (2016). Child development and education. Upper Saddle River, NJ: Pearson Education, Inc.
- McGee, J. J., & Lin, F. Y. (2017). Providing a supportive alternative education environment for at-risk students *Preventing School Failure: Alternative Education for Children and Youth, 61*(2), 181-187. Retrieved from: <http://dx.doi.org.ezproxy.liberty.edu/10.1080/1045988X.2016.1254082>
- Miller, P. (2016). *Theories of Developmental Psychology* (6th ed.). New York, NY: Worth.
- National Alternative Education Association. (2014). *Exemplary practices 2.0: Standards of quality and program evaluation* (pp. 1-23). Manassas, VA: National Alternative Education Association
- National Association of State Boards of Education (NASBE). (2013, October). *From practice to policy: Social-emotional learning* (Issue Brief Vol. 1, No. 1). Retrieved from <http://www.nasbe.org/education-issue/culture-climate/>
- National Center for Education Statistics (n.d.). *Urban education in America*. Retrieved from <https://nces.ed.gov/surveys/urbaned/>
- National Collegiate Athletic Association. (2009). JVCN sports sponsorship and participation rates report (pp. 203-204). Indianapolis, IN.
- Newmann, F. & Wehlage, G. (1993). Five standards of authentic instruction.

- Educational Leadership*, 50 (7), 8-12.
Retrieved from
<https://eric.ed.gov/?id=EJ461121>
- Newmann, F. M., King, M. B., & Carmichael, D. L. (2007). *Authentic instruction and assessment*. Iowa Department of Education, IA. Retrieved from
[file:///C:/Users/trees_000/Downloads/authentic-instruction-assessment-bluebook\(1\).pdf](file:///C:/Users/trees_000/Downloads/authentic-instruction-assessment-bluebook(1).pdf)
- O'Gorman, E., Salmon, N., & Murphy, C. (2016). Schools as sanctuaries: A systematic review of contextual factors which contribute to student retention in alternative education. *International Journal of Inclusive Education*, 20(5), 536-551.
doi:10.1080/13603116.2015.1095251
- Pang, Y. (2016). Empowering ELL students to improve writing skills through inquiry-based learning. *New England Reading Association Journal*, 51(2), 75-79,126. Retrieved from
<http://ezproxy.liberty.edu/login?url=http://search-proquest-com.ezproxy.liberty.edu/docview/1870911176?accountid=12085>
- Phillips, R. S. (2013). Toward authentic student-centered practices: Voices of alternative school students. *Education and Urban Society*, 45(6), 668-699.
doi:10.1177/0013124511424107
- Prada, M., 2018. NBA to announce 9-year, \$24 billion tv deal. Retrieved April 29, 2018 from
<https://www.sbnation.com/2014/10/5/6916597/nba-new-tv-deal-espn-turner-24-billion>
- Richards, K. A., & Levesque-Bristol, C. (2014). Student learning and motivation in physical education. *Strategies*, 27(2), 43.
- Rodriguez, E. R., Bellanca, J. A., & Esparza, D. R. (2016). *What is it about me you can't teach? Culturally responsive instruction in deeper learning classrooms*. Corwin Press. doi:
<http://dx.doi.org/10.4135/9781506345703>
- Runco, M. A., & Chand, I. (1994). Problem finding, problem solving, and creativity. In M. Runco (Ed.), *Problem finding, problem solving, and creativity*. Norwood, NJ: Ablex Publishing.
- Samalot-Rivera, A., & Porretta, D. (2013). The influence of social skills instruction on sport and game related behaviours of students with emotional or behavioural disorders. *Physical Education & Sport Pedagogy*, 18(2), 117-132.
doi:10.1080/17408989.2011.631004
- Schoon, I., Jones, E., Cheng, H., & Maughan, B. (2012). Family hardship, family instability, and cognitive development. *Journal of Epidemiology and Community Health* (1979-), 66(8), 716-722. doi:10.1136/jech.2010.121228
- Schwab, J. R., Johnson, Z. G., Ansley, B. M., Houchins, D. E., & Varjas, K. (2016). A literature review of alternative school academic interventions for students with and without disabilities. *Preventing School Failure: Alternative Education for Children and Youth*, 60(3), 194-206.
doi:10.1080/1045988X.2015.1067874
- Shakib, S., Veliz, P., Dunbar, M. D., & Sabo, D. (2011). Athletics as a source for social status among youth: Examining variation by gender, race/ethnicity, and socioeconomic status. *Sociology of Sport Journal*, 28(3), 303. Retrieved from
[file:///C:/Users/trees_000/Downloads/ContentServer.asp\(24\).pdf](file:///C:/Users/trees_000/Downloads/ContentServer.asp(24).pdf)
- Shechtman, Z., & Yaman, M. A. (2012). SEL as a component of a literature class to improve relationships, behavior, motivation, and content knowledge. *American Educational Research*

- Journal*, 49(3), 546-567.
doi:10.3102/0002831212441359
- Shifrer, D., Pearson, J., Muller, C., & Wilkinson, L. (2015). College-going benefits of high school sports participation: Race and gender differences over three decades. *Youth & Society*, 47(3), 295-318.
doi:10.1177/0044118X12461656
- Slovák, P., & Fitzpatrick, G. (2015). Teaching and developing social and emotional skills with technology. *ACM Transactions on Computer-Human Interaction (TOCHI)*, 22(4), 1-34.
doi:10.1145/2744195
- Snyder, E. E., & Spreitzer, E. (1990). High school athletic participation as related to college attendance among Black, Hispanic, and White males: A research note. *Youth & Society*, 21(3), 390-398.
doi:10.1177/0044118X90021003005
- Spintzyk, K., Strehlke, F., Ohlberger, S., Gröben, B., & Wegner, C. (2016). An empirical study investigating interdisciplinary teaching of biology and physical education. *Science Educator*, 25(1), 35-42.
- Svihla, V., & Reeve, R. (2016). Facilitating Problem Framing in Project-Based Learning. *Interdisciplinary Journal of Problem-Based Learning*, 10(2). Retrieved from:
<https://doi.org/10.7771/1541-5015.1603>
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin, & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-37). Monterey, CA: Brooks/Cole.
- Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). Promoting positive youth development through school-based social and emotional learning interventions: A meta-analysis of follow-up effects. *Child Development*, 88(4), 1156-1171.
doi:10.1111/cdev.12864
- The Glossary of Education Reform (n.d.). authentic learning. Retrieved May 5, 2018 from
<https://www.edglossary.org/authentic-learning/>
- Tracy, A. J., & Erkut, S. (2002). Gender and race patterns in the pathways from sports participation to self-esteem. *Sociological Perspectives*, 45(4), 445-466.
doi:10.1525/sop.2002.45.4.445
- Van Boekel, M., Bulut, O., Stanke, L., Palma Zamora, J. R., Jang, Y., Kang, Y., & Nickodem, K. (2016). Effects of participation in school sports on academic and social functioning. *Journal of Applied Developmental Psychology*, 46, 31-40. doi: 10.1016/j.appdev.2016.05.002
- Videon, T. M. (2002). Who plays and who benefits: Gender, interscholastic athletics, and academic outcomes. *Sociological Perspectives*, 45, 415-444.
- Von Stumm, S. (2017). Socioeconomic status amplifies the achievement gap throughout compulsory education independent of intelligence. *Intelligence*, 60, 57-62.
doi:10.1016/j.intell.2016.11.006
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* Cambridge, MA.: Harvard University Press.
- Wagner, M., Newman, L., Cameto, R., & Marder, C. (2003). *Going to school: Instructional contexts, programs and participation of secondary students with disabilities*. Menlo Park, CA: SRI International
- Yeager, D. S. (2017). Social and emotional learning programs for adolescents. *Future of Children*, 27(1), 73-94.
- Yew, E. H. J., & Schmidt, H. G. (2012). What students learn in problem-based

learning: A process analysis.

Instructional Science, 40(2), 371-395.

Zwahlen, C. P. (2017). Authentic learning:

Boosting ELL language and academic proficiency development. *The*

International Schools Journal, 36(2), 37-43.

About the Author

LaTreese Hall has an M.A. in Interdisciplinary Studies focused on education and psychology from Liberty University. She will begin doctoral study in Developmental Science at Florida International University in Fall 2019 where she was awarded the competitive FIU Inclusion Fellowship.