

Eugene Davenport's Education for Efficiency

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Philosophical research into the Smith–Hughes Vocational Education Act of 1917 has primarily centered on the arguments of Social Efficiency and Democracy and Education. Yet, there was a philosopher that stood for a middle ground of this debate, Eugene Davenport (1856–1941). He fought against legislation that betrayed his Education for Efficiency philosophy. Davenport wrote books and pamphlets about a national system of vocational education. Davenport and his Education for Efficiency philosophy was significant in the legislative battles for vocational education and represented an agricultural voice in the educational debates of the day.

Keywords: historical, philosophy, educational legislation

Introduction

Historical analyzation of the vocational education arguments has been considered a significant component of Career and Technical Education (CTE) research. Research has centered on the collations between various stakeholders concerned with creating a national system of vocational education within America. A research trend has focused on the debates between *Democracy and Education* and *Social Efficiency* advocates (Fones–Wolf, 1983; Gordon, 2003; Hillison, 1995; Kliebard, 1987, 1999; Smith, 1999). Camp and Doolittle (1999) and Hylsop–Margison (2001) found that CTE was rooted in the *Social Efficiency* philosophy. Furthermore, Dewey's philosophy of *Democracy and Education* has not been instituted in vocational education (Doolittle & Camp, 1999). While *Social Efficiency* and *Democracy and Education* advocates influenced vocational education, an alternative philosophy existed in that era that closely represented the eventual Smith–Hughes Act of 1917. Eugene Davenport's philosophy was widely disseminated and cited as being influential (Stimson & Lathrop, 1942) but has been neglected in historical examinations of vocational education paradigms. Davenport and his *Education for Efficiency* philosophy was credited with helping build a collation for vocational education before the Smith–Hughes Act of 1917.

The movement for vocational education in the late 19th and early 20th centuries has been associated with the philosophy of *Social Efficiency*. Proponents of *Social Efficiency* included Snedden and Prosser, both working under the post of Commissioner of Education for the Massachusetts (Hylsop–Margison, 2001). The tenets of *Social Efficiency* included socioeconomic stratification, social control, and behaviorism (Doolittle & Camp, 1999). *Social Efficiency* proponents also argued for a dual system of education that separated vocational and academic students, but the separation could be temporary to ensure the practicality of curriculum for vocational studies (Snedden, 1915). Snedden argued that liberal, or academic studies, and vocational studies were pedagogically opposed to each other (Prosser, 1913, Snedden, 1910, 1912). Advocates of the *Social Efficiency* espoused that social stratification, the formation of separate table social classes, was an inevitable process of Social Darwinism. *Social Efficiency* advocates have been associated with the tenets of behaviorism. The pedagogy of behaviorism focused on developing workforce skills in students. According to Doolittle and Camp (1999) behaviorism remains a major facet of Career and Technical Education (CTE) even today. The *Social Efficiency* model gained wide–spread support, but also fueled a debate between educationalists of the time.

Opposition to the *Social Efficiency* philosophy originated from educational experts and philosophers. The most famous of these arguments were from John Dewey. He rallied against an education that would create social stratification and the loss of a universally integrated education. Dewey's *Democracy and Education* philosophy argued for an educational system that holistically trained students to be better people and citizens, not more efficient laborers (Doolittle & Camp, 1999; Hyslop–Margison, 2001). Students needed to have an academic education to increase their happiness and civic responsibility while also receiving some vocational education (Dewey, 1917). There would be no separate tracks for students who were academically or vocationally inclined (Kliebard, 1999). Dewey believed that students can learn occupational skills while receiving an education that emphasized their individual capacities.

Persons cannot live without means of subsistence... If an individual is not able to earn his own living... he is a drag or parasite upon the activities of others... There is however, grave danger that in insisting upon this end, existing economic conditions and standards will be accepted as final. A democratic criterion requires us to develop capacity to the point of competency to choose and make its own career. (Dewey, 1966, p. 119)

According to Dewey, the danger of teaching specific vocational skills included the constant evolution of mechanized industry. Students would be learning precise industrial skills that would be irrelevant in a short period time because of new industrial technology. He was also consistently weary of any Federal plan for vocational education because the needs of industry would come before interests of students (Kliebard, 1987). Dewey has been associated with constructivist educational theory, which is the antithesis of behaviorism. "The essential core of constructivism is that learners actively construct their own knowledge and meaning from their experiences" (Doolittle & Camp, 1999, p. 6).

Dewey's constructivist approach to teaching was criticized by *Social Efficiency* advocates as being too inefficient (Hyslop–Margison, 2001;

Kliebard, 1999). The arguments between *Social Efficiency* and *Democracy and Education* spilled over into the public sphere with the publication of the Dewey and Snedden debate (Dewey, 1914, 1915a, 1915b, 1917; Snedden, 1912, 1915), as well as other public commentaries about vocational education (Bishop, 1911; Cromwell, 1915; Hays, 1908; Matscheck, 1916).

Yet, there were other prominent voices in the debate for vocational education that have been all but lost to history. One of those voices was of Eugene Davenport, Dean of the College Agriculture at the University of Illinois. He worked to build a national system of vocational education from 1908–1915 through lobbying legislators, writing books and pamphlets, and lecturing across the United States. Eugene Davenport's book, *Education for Efficiency*, represented his philosophy of vocational education. The *Education for Efficiency* philosophy could constitute the most significant agricultural influence in the debate for vocational education. The purpose of this historical study was to reexamine the debates for a national system of vocational education while including Davenport's philosophy of *Education for Efficiency*. There were two research questions that framed the study. First, what was Davenport's *Education for Efficiency* philosophy? Second, what impact did Davenport have on the formation of a national system of vocational education?

Methods

Historical research methods were used to accomplish the purposes of this study (Ary, Jacobs, & Razavieh, 1996). Educational researchers utilize documents to interpret the meaning and significance of historical events. The essential task of historical research is to build causal inferences.

Causal inference in historical research is the process of reaching the conclusion that one set of events brought about, directly or indirectly, a subsequent set of events. Historians cannot prove that one past event caused another, but they can make explicit the assumptions that underline their attributions of causality in sequences of historical events. (Gall, Gall, & Borg, 2007, p. 546)

This historical analysis of Davenport's *Education for Efficiency* philosophy was an examination of vocational education history through a social microscope. The Davenport situation represented a relevant and lesser-known segment of the Smith–Hughes debate between *Social Efficiency* and *Democracy and Education*. The value of the historical examination of *Education for Efficiency* was to illuminate the alternative paradigms in vocational education (Burke, 1993).

Data was gathered through research at a land–grant university library. The primary sources utilized in this study included manuscripts, books, articles in the *New Republic*, *Atlantic Monthly*, *School and Society*, *Prairie Farmer*, *Ladies Home Journal*, university bulletins, and reports of the National Education Association and Pan American Scientific Congress. Secondary sources of information included books; reports from the U.S. government; and articles from *The Agricultural Education Magazine*, *Journal of Vocational Education Research*, *Journal of Career and Technical Education*, *Journal of Industrial Teacher Education*, *Journal of Agricultural Education*, *History of Education Quarterly*, *The Historian*, and *Curriculum Inquiry*.

Trustworthiness was built by the researcher throughout the research. The researcher exposed all documents to internal and external criticism. The researcher established external criticism by reviewing each document to determine originality and authenticity. None of the documents were found to be forgeries or altered documents. The documents were also examined for internal criticism to evaluate the accuracy and worth of the statements for addressing the objective of the study. An audit trail, a reflexive journal, and peer critiques of themes were also part of the internal criticism process to deter bias (Gall et al., 2007).

Davenport's Education for Efficiency

Amid the debates between the *Social Efficiency* and *Democracy and Education* specialists were the arguments presented by Eugene Davenport. His belief of *Education for Efficiency* became a philosophical statement about vocational education in America. Eugene Davenport was the Dean of the College

Agriculture at the University of Illinois from 1895 to 1922 (Nolan, 1929). There, he had political and public influence in the debate of vocational education. The *Education for Efficiency* philosophy advocated for a universal education that trained all students to their fullest potential in academic and vocational subjects (Davenport, 1909b), which was a middle ground between the two popular vocational education philosophies.

Education for Efficiency aligned with those who advocated for *Social Efficiency* by promoting for specialized industrial training for high school students. "... Efficiency in something ... that will contribute to the sustenance, the development, or the happiness of man..." (Davenport, 1909a, p. 102). Davenport believed that between 25 to 50 percent of a student's class time should be in vocational studies. Yet, he was against the *Social Efficiency* tenet of social stratification.

Davenport argued for the *Democracy and Education* belief of social equality through education. "To segregate any class of people from the common mass, and to educate it by itself and solely with reference to its own affairs is to make it narrower and more bigoted generation by generation" (Davenport, 1908b, p. 6). Davenport was also motivated to advocate for universal education because of the need for social and occupational mobility. "To educate the children of different classes separately is to prevent the natural flow of individuals from one profession into another..." (Davenport, 1908b, p. 7).

Finally, he agreed on the principles of behaviorism (*Social Efficiency*) but maintained that constructivism (*Democracy and Education*) had a place even in vocational education. "We must find ways of teaching the vocations which will not only train for service, but also educate the individual as much as possible and develop the occupation..." (Davenport, 1915a, p. 18). Many of Davenport's philosophical tenets represented either side of the *Social Efficiency* and *Democracy and Education* debate.

Ultimately, Davenport aligned himself with the ideals of both *Social Efficiency* and *Democracy and Education* by arguing for public high schools that included both vocational and academic classes for both vocational and liberal purposes. "Whether the education be classical or industrial, it is alike a part and an essential part

of the successful development of young, strong, and virile race” (Davenport, 1908a, p. 7). His belief in the value of vocational education co-existing with academic education helped to build his arguments against separate vocational school systems. The greatest success of vocational education would come from the association with the non-vocational subjects (Davenport, 1915a). Children should be educated holistically for a life beyond their occupations. “The ultimate object of all education is not industrial efficiency but the full development of man; for vocation is a means of living and not the purpose of existence” (Davenport, p. 21). The union of the two polarized philosophies was a critical precept of *Education for Efficiency*.

Davenport became involved in the political debates of vocational education as early as 1908 with the Davis Bill. The Davis Bill was designed to create a separate system of schools for vocational education funded by the Federal Government (Kliebard, 1999). The Bill had numerous influential supporters including Snedden. Yet, the Davis Bill drew many critics who were against two separate educational systems, such as Davenport. Davenport claimed his influence against the Davis Bill involved the Assistant Secretary of Agriculture, Dr. W. M. Hays. Hays was a prominent figure in vocational education bills, including the Nelson Amendment (True, 1929). He worked to recreate the separate vocational school system that existed in Minnesota and Wisconsin through the Davis Bill. Davenport reported his influence with Dr. Hays within his unpublished autobiography (1936).

So I said to my friend Hays that if he did not desist from all attempts to get this favorite legislation through Congress I would campaign the country and organize an opposition that would bury his pet schemes too deep to be resurrected. The bluff worked...” (p. 48)

The Davis Bill died in the 60th Congress in 1910 (True, 1929). Agricultural education historian Rufus Stimson credited Davenport's message of a unified education system as being more effective in gaining public support than the arguments of a dual system of public education (Stimson & Lathrop, 1942). Davenport called the defeat of the Davis Bill and the separate

school system the greatest victory of his life (1936).

Davenport worked to make what he had proposed in his *Education for Efficiency* a reality, even after the defeat of the Davis Bill. He made reports to the Association of Agricultural Colleges and Experiment Stations (True, 1929), National Education Association (1909b), Pan American Scientific Congress (1915b), *Prairie Farmer* magazine (1911a), *Ladies Home Journal* (1912), various state teachers' associations (1909c, 1910a, 1910b, 1911b), and the Commission on National Aid to Vocational Education (1914) advocating for his vocational education system. Davenport contribution to the evolution of vocational education was to enlighten teachers, professionals, and the general public about his beliefs of *Education for Efficiency* and lobbying for a national system of unified education.

The Smith–Hughes Vocational Education Act of 1917 validated many of the arguments of *Education for Efficiency*. The Smith–Hughes Act created separate tracks of vocational education within the existing public secondary school system. The subjects that fell under the umbrella of vocational education included agriculture, industrial education, and home economics. Funding from the Federal government would be administered through state boards of vocational education. The funds would be awarded to those high school vocational courses that were preparing students for work in those indicated vocational fields. At least half of the instruction for those students in vocational tracks must be directed “to practical work on a useful or productive basis...” (Kliebard, 1999). *Education for Efficiency* aligned with many parts of the Smith–Hughes Act. The paralleling of vocational and academic tracks within the same school aligned with the *Education for Efficiency* demand for universal education. Davenport agreed with the distinction between academic and vocational courses as well. “Every man needs two educations, one that is vocational and one that is not – one that will fit him to work and one that will fit him to life” (Davenport, 1909a, p. 61). Finally, the Smith–Hughes Act also advocated for instruction in at least 50 percent of vocational courses for students in a vocational track, though Davenport argued for between 25 and –50 percent (Davenport). Davenport was excited about the Smith–Hughes

Act and called it a personal triumph (1936). Davenport stopped campaigning for his *Education for Efficiency* philosophy after the passing of the legislation through Congress.

Summary

Education for Efficiency represented a middle ground between the larger debates of *Social Efficiency* and *Democracy and Education* and aligned to the main tenets of the Smith–Hughes Act of 1917. Davenport's efforts in disseminating his *Education for Efficiency*

philosophy to educational stakeholders helped solidify the support for vocational education in public schools. He was directly cited in the defeat of Davis Bill of 1907 (Stimson & Lathrop, 1942), and his lobbying efforts for vocational education form a causal inference to the precepts of the Smith–Hughes Act. The following table aligns the tenets Davenport's *Education for Efficiency*, which were represented in the Smith–Hughes Act, with the contemporary philosophies of *Democracy and Education* and *Social Efficiency*.

Table 1.
Education for Efficiency Compared to the Leading Philosophies

Tenets of <i>Education for Efficiency</i>	Educational Philosophies
Traditional academic education for all secondary students	<i>Democracy and Education</i>
Social equality and opportunity through education	<i>Democracy and Education</i>
Distinct vocational courses in secondary schools	<i>Social Efficiency</i>
Intensive training in vocational topics	<i>Social Efficiency</i>

Davenport favored the *Democracy and Education* ideals of academic and social equality through education. Dewey and Davenport worked against a vocational education system that would lead to the social stratification of the American working class. Yet, Davenport still held some of ideals of the *Social Efficiency* movement in high regard. He argued for vocational training in public high schools with no less than 25 percent of the student's curriculum in vocational topics. The assertion of intensive and purposeful education in vocations was in alignment with *Social Efficiency* precepts as well. Finally, Davenport united the two arguments by calling for both traditional courses and intensive vocational education courses within the same school. Furthermore, he argued that these subjects should be taught in both constructivist and behaviorist teaching methods. The passage of the Smith–Hughes Act resulted in mixed reactions with educational leaders.

Researchers have cited Dewey's unhappiness and the victory of *Social Efficiency* advocates with the Smith–Hughes Act (Doolittle & Camp, 1999; Hyslop–Margison, 2001; Kliebard, 1999). Dewey believed that the difference between vocational education tracks

in a unified school and a separate vocational school system was minimal (Gregson, 1995; Kliebard, 1987). But the Smith–Hughes Act was a compromise to the early vocational educational bills, such as the Davis Bill of 1907. The Smith–Hughes Act allowed for students to be educated in the academic and vocational subjects in the same school, even though separate vocational education tracks were established (Bragg & Reger, 2000; Braundy, 2004; Lewis, 1998; Rury, 1984). Prosser continued to lobby for a separate school system until 1917 when he had to concede (Wirth, 1972). Davenport (1936) felt personally satisfied with the Smith–Hughes Act of 1917. While *Education for Efficiency* represented portions of the Smith–Hughes Act of 1917, no direct link between the two could be found. Davenport virtually stopped his vocational educational writing efforts after 1917. This may be the main reason why Davenport has been an ignored figure in the history of Career and Technical Education. Yet, Davenport's philosophy should not be ignored by agricultural education historians because he was an influential figure in the national debate of vocational education

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