

When considering the politics of education, public focus is often drawn toward topics that take place within the classroom- teacher pay, class size, pedagogical choices (ex: high-stakes testing), curricular choices (ex: Critical Race Theory), and more. Far less public focus is dedicated to issues beyond the classroom, although on occasion a non-classroom political issue may break into the common discourse (ex: school lunch debt, school safety and security measures, etc.). I believe school buses, as equipment, may be the next non-classroom educational topic to be elevated into political debate. Of course, this is not the first time that school buses will enter public attention, however, this time the focus will be on the bus, and not on the passengers' race or their destination.

Beginning with the introduction of the Energy Policy Act of 2005, which included the establishment of the National Clean Diesel Campaign, the United States federal government, through the Diesel Emissions Reduction program, began "providing loans, grants, and rebates to projects... in order to replace legacy diesel engines" (Lattanzio, 2021). In 2010 the Energy Policy Act was reauthorized with additional formality and funding given to the Diesel Emissions Reduction Act (DERA), still associated with the National Clean Diesel Campaign. DERA has continued to receive funding and is currently awaiting reauthorization. Most recently, funding was renewed through the 2021 American Rescue Plan ("Consolidated Appropriations Act, 2021") (EPA, 2021a) with several pending legislative initiatives which would reauthorize and extend funding (DeConcini & Neuberger, 2021).

Notably to education, the National Clean Diesel Campaign and the Diesel Emissions Reduction program joined Clean School Bus USA (an Environmental Protection Agency (EPA)-supported public-private partner program, founded in 2003) in addressing diesel emissions specifically within the national school bus fleet. The scale of the topic is significant. According to The World Resources Institute (Lazer, Freehafer, Neuberger, & Worker, 2021), roughly 95% of United States' half million school buses run on diesel fuel. In Florida this number is precisely 95%, with 17,001 of 17,896 buses in the 2019-2020 academic year being run on diesel fuel (Florida Department of Education, 2021). Further, the importance of the topic is critical. The need to address diesel emissions extends beyond climate change and fossil fuel dependency. Stemming from research begun in the early millennium in California (Fitz et al., 2003), researchers across the country have linked school bus ridership and its associated exposure to diesel-related pollutants to negative health outcomes (Harder, 2005; Beatty & Shimshack, 2011) and decreased academic performance (Austen, Heutel, & Kreisman, 2019). Increasingly this body of research is being noticed by news and media outlets (Lewis, 2018; Robertson, 2021; Myers, Sexton, & Araya, 2021; Blanco, 2021; Esteves, 2021; Casey, 2021). Ms. Frizzle and the Magic School Bus have even become involved (EPA, 2020).

As discussion of the need to electrify the US school bus fleet grows, public opinion will inspire state policy responses (Wright, Erickson, & McIver, 1987). Wright, Erickson, and McIver's study of public opinion and state policy response, also provide explanatory reason for the difference in bus-electrification policy adoption between states, such that New York and California were some of the earliest to legislate electrification efforts (World Resources Institute, 2021). They suggest that a liberal policy, such as bus-electrification, can be expected first in wealthier states, given that "state income is a proxy for liberal policy preference" (p. 988).

Florida – a conservative state with a significantly smaller tax revenue than New York or California – provides a unique example of deviance from Wright, Erickson, and McIver’s (1987) prediction- at least upon first look. Robertson (2021) reported on Miami-Dade County Public Schools’ vote to electrify their bus fleet. However, upon a deeper inspection and a larger stakeholder analysis (Ehrensall & First, 2008) the school board can be seen as responding to newly available state funds (Florida Department of Environmental Protection, 202), collected from a legal settlement with Volkswagen (Klas, 2018) related to diesel emissions. \$57M of the \$166M settlement were directed toward bus electrification and modification following the lobbying of a citizen advocacy group (Florida Conservation Voters Education Fund, 2021). This judicial funding source circumvents legislative policy decisions, which are not to be expected in conservative Florida. Contextualizing the Miami-Dade school board decision, using stakeholder analysis, helps explain why there has yet to be a state educational policy response to initiatives such as CleanRide4KidsFL (Clean Ride for Healthy Niños Florida, 2021), a campaign cohosted by the Florida Conservation Voters Education Fund and the Chispa League of Conservation Voters. Further, the state’s ability to administer federal DERA funds for the purpose of bus electrification, reduces the need for a state-level policy response. In 2020, 18 Florida buses were ordered using DERA funds (EPA, 2021b), although only 16 of the 137 *nationally* funded buses will be fully electric.

While fully electric school buses do have lower annual operating costs (Esteves, 2021), their initial cost still exceeds modified diesel, compressed natural gas, and liquified petroleum gas (usually a mixture of propane and butane) bus options. A turning point may be near, however (Stech Ferek, 2021; SBF Staff, 2021a). Recent innovations in electric school buses, including battery production efficiencies, have increased the market profitability of promoting electrification (Blanco, 2021). This, combined with citizen advocacy, the increased development of public opinion (Wright, Erickson, & McIver, 1987), and the convergence with environmental interests may be exactly what is needed to generate sufficient support for pending federal legislation (SBF Staff, 2021b)- namely the Clean School Bus Acts of 2021 (H.R.1344, S.506) and the Clean Commute for Kids Acts of 2021 (H.R.2721, S.1271). The injection of funds from these bills through DERA and similar grant and rebate programs overcomes the financial barrier presented by the initial investment in fully electric buses. What remains unclear is to what degree these programs might overcome the barrier predicted by Wright, Erickson, and McIver – that being, public preference for conservative policy in less wealthy states and districts. While the case of Miami-Dade schools, explained earlier, overcame the state’s conservative policy preference, the district itself is aligned with a reliably liberal county with a plural racial demographic and some of the greatest financial resources within the state.

This political barrier, related to the allocation of finite resources in less wealthy states, has good reason to be overcome- if it can be. As put within The Hill, “... the districts with the most dire need for electric buses are those in rural, often poor areas, where longer routes mean that kids spend more time in fume-filled school buses” (para. 13). But this need faces more than the political barrier outlined by Wright, Erickson, and McIver. This need, and the opportunity it poses – to bring in new outside tax revenues (due to the redistributive nature of federally administered grant/rebate programs) – are also blocked by inequitable prioritizing of educational political attention to issues within the classroom.

If the health of children, particularly those living in rural or poor localities in conservative states, is to be paid its due attention, through support for school bus electrification, then classroom politics must relinquish some of its grip on the public.

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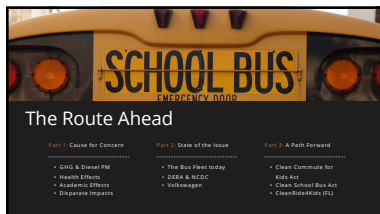
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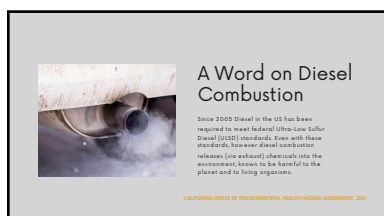
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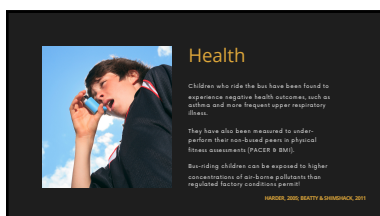
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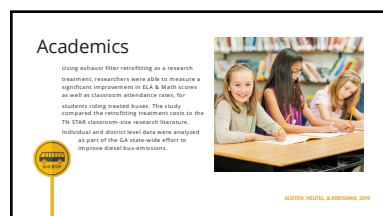
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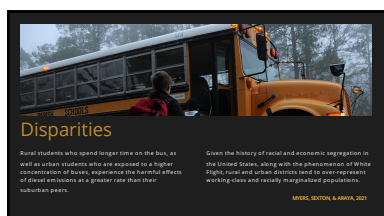
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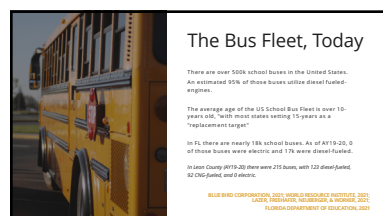
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