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## The 4th Industrial Superintendent: Transforming Public School Systems beyond 21st Century Mindsets

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### Abstract

With the advancement of artificial intelligence, machine learning, cybersecurity, and other disruptive technologies indicative of the fourth industrial revolution, are reshaping the current workforce. Literature points to the need to realign American K-12 education to fit the organizational workforce of the future. Inquiry-based learning (IBL) practices is how other nations are currently training their citizens for the next industrial revolution. The United States continuously struggles to educate students from historically marginalized communities in an equitable way as studies have shown how schools that cater to a diverse population of students are not using IBL practices which will essentially allow all students access into the future workforce.

The conceptual framework used within this study is based on one of a handful of technological historians that research how technology impacts historically marginalized communities. This study focuses on the innovation portion of how a Superintendent created and spread his shared vision throughout his school district. Appreciative Inquiry was used to help guide participants through a reflective practice as they discussed how they imagined, produced, employed, the shared vision of shifting pedagogical practices from a factorized model of education toward equitable IBL practices of learning focused on real-world projects. Findings show a pattern that follows the conceptual framework as the Superintendent and district leaders have created their own system wrapped around IBL strategies and iterative processes of continual growth.

**Keywords:** K-12, fourth industrial revolution, singularity, shared vision, superintendent, technology integration, appreciative inquiry, inquiry-based learning, Big History, artificial intelligence