

Flipping the Classroom

A Pathway to High-Quality Curriculum Implementation

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Abstract

- **Background:** a simple opening sentence or two placing the work in context.
- Theoretical rationale: a brief definition and description of your CPP language and why it is relevant to your context
- **Aims or purposes:** One or two sentences giving the purpose of the work.
- **Goals, objectives, assessment-metrics:** One or two sentences explaining how you produced your project
- **Significance:** One or two sentences expressing the significance of the work and to whom it might have significance

Background (2 pages)

Clearly identify and briefly introduce the community need to which your CPP language responses responds. Use data from the current community context to develop the rationale for developing the community need. **We need to reevaluate our implementation of HQIM to enhance its effectiveness, as data indicates it is not delivering the mastery it promises.**

Discuss how you identified this community need. Make sure to support this discussion in the CPP literature, research, and use reliable references. **I identified this community need while participating in an HQIM pilot program, where I have been involved for the past four years. Now, as the person responsible for its implementation, I continue to face significant challenges.**

Discuss the specific social/historical/cultural contexts out of which your focus on one specific CPP language emerged. Make sure to support this discussion in CPP literature, research, and data from reliable references.

Identify and describe the particular learning community for whom your curricular project is designed to make a positive impact. **This is meant to impact the teachers implementing a HQIM which now extends beyond the Jr. High school and has now expanded into the high school and the elementary schools and ultimately the students.**

A persistent challenge facing Carlos F. Truan Middle School is the underperformance of 7th and 8th-grade students in mathematics, as evidenced by consistent trends in STAAR assessment data. Analysis of STAAR performance data from 2013 to 2024 reveals that a consistently low percentage of 7th and 8th-grade students have achieved the "Approaches" performance level on the mathematics assessments. This trend is particularly concerning in light of the district's efforts to implement High-Quality Instructional Materials (HQIM) across all grade levels in partnership with Instruction Partners. While the adoption of HQIM holds significant promise for improving student outcomes, the continued underperformance in mathematics at Carlos F. Truan, despite years of collaboration with Instruction Partners, suggests that factors beyond the quality of materials and external support may be at play. This observation aligns with research highlighting the complexities of HQIM implementation. Blazar et al. (2019), for example, found that simply providing teachers with HQIM did not guarantee improved student outcomes. Their study revealed that teachers often struggled to implement new materials with fidelity, highlighting the need for robust professional development and supportive school environments to facilitate effective HQIM use. The experience at Carlos F. Truan underscores the need to examine not only the quality of HQIM and professional development but also the broader instructional context in which these materials are being used.

Theoretical rationale (3 pages)

Grounded in course readings, argue for the significance of your CPP language in terms of a) theories of curriculum and instruction and b) educational practice. How is this CPP language going to address and remedy the community need laid out in section one above? It is fine to support this discussion in curriculum literature, research, and data from a reliable related sources on your CPP language, but the emphasis here should be on using course readings that advanced your CPP language and why these are relevant social/historical/culture context which you selected for your project. Locating the use of your selected CPP language within a real community/school is required to better connect the CPP language to a local, community condition or circumstance being addressed.

This proposal suggests that the flipped classroom model be adopted as a curricular-pedagogical praxis to address the persistent underperformance of 7th and 8th-grade students in mathematics at Carlos F. Truan Middle School. This model, which inverts the traditional delivery of content by shifting direct instruction to online resources and utilizing class time for active learning, aligns with constructivist principles by encouraging students to actively construct their knowledge through hands-on activities and problem-solving. Moreover, the flipped classroom facilitates inquiry-based learning by providing a structure for students to explore concepts at their own pace and apply their understanding through in-class activities that encourage exploration and critical thinking. By providing opportunities for students to engage with mathematical ideas through pre-class videos and apply their learning in collaborative in-class activities, the flipped classroom fosters deeper conceptual development and problem-solving skills, potentially leading to improved performance in mathematics. Furthermore, the flipped classroom model supports differentiated instruction by allowing students to access content at their own pace and in a format that suits their learning preferences, enabling teachers to address individual learning needs and provide targeted interventions. By embracing this model, Carlos F. Truan Middle School can create a more engaging, effective, and equitable learning environment that supports the development of mathematical understanding among all students.

Project Description and Aims (3 pages)

Briefly describe the aims of your selected CPP language. Referencing literatures on your selected CPP language and the textbook chapter on curricular aims, articulate your aims of the project. Emphasize the importance of aims via the textbook in paragraph form. Detail exactly what you will deliver in terms of the aims, goals, and objectives of your curricular project. Overall, here focus on aims in taking up your selected CPP language in relation to the specific learning needs of the community at which your project is directed.

This project, grounded in the flipped classroom model as a curricular-pedagogical praxis language, aims to enhance the mathematical proficiency of 7th and 8th-grade students at Carlos F. Truan Middle School, as evidenced by improved performance on the State of Texas Assessments of Academic Readiness (STAAR) in Mathematics. The project will deliver a comprehensive program that includes the development of high-quality instructional videos covering key mathematical concepts aligned with the Texas Essential Knowledge and Skills (TEKS). These videos, created by teachers at Carlos F. Truan Middle School, will be accessible to students outside of class time through a learning management system, allowing for self-paced learning and differentiated instruction. In-class time will be transformed into an active learning environment, where students engage in collaborative problem-solving activities, hands-on explorations, and real-world applications of mathematical concepts. The project aims to cultivate a deeper understanding of mathematical concepts, improve problem-solving abilities, and foster greater student engagement and motivation in mathematics. Regular formative assessments, embedded within the online and in-class components, will provide ongoing feedback to guide instruction and support student learning.

Project Goals, Objectives, and Assessment Metrics (3 pages)

Provide a chart or table or graphic that breaks down the overarching aims into measurable goals and objectives, and you will also need to provide a brief narrative describing this chart. Here, is the articulation of the specific goals, objectives, and assessment metrics of your project. Develop a coherent assessment/metrics plan aligned with goals and objectives, detailing how you will assess those goals and objectives.

References

- Steiner, D. (2024). The unrealized promise of high-quality instructional materials. State Education Standard, 24(1). <https://www.nasbe.org/the-unrealized-promise-of-high-quality-instructional-materials/>
- Blazar, D., Heller, B., Kane, T., Polikoff, M., Staiger, D., Carrell, S.,...& Kurlaender, M. (2019). Learning by the Book: Comparing math achievement growth by textbook in six Common Core states. Research Report. Cambridge, MA: Center for Education Policy Research, Harvard University.