

Measuring Engagement of Online High School Students

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Abstract

The purpose of this mixed methods study was to explore why online learners do not engage with their studies. Online high schools can create social change by creating learning environments that can flex place, pace, path and time. Theoretical constructs of student engagement were based on recent work in brick and mortar schools and adapted for an online context. Over 400 high school students were surveyed for their perceptions of what are the most engaging aspects of online learning. Twenty three teachers were interviewed about how they engaged students. Students who were engaged showed a pattern of having and keeping a work schedule, communicating with teachers, feel confident about their reading skills, and have involved parents. Teachers engaged students by personalizing lessons, communicating frequently through multiple channels, learning about their students personal lives, and understanding school is not the most important thing in many students lives. The research affected social change by raising awareness among students and faculty about the importance of staying connected to school for academic success.

Problem

There is a gap in **professional knowledge** of how to structure and create culture in an online school to maximize student engagement.

The **asynchronous nature** of student work and the distributed nature of the student body create difficulty in engaging students beyond the minimum requirements.

Purpose

This mixed methods study examined what factors affect student engagement in online high schools, and focused on 3 of these 4 areas (Cavanaugh, Barbour, & Clark, 2009):

1. identify best practices for online teaching strategies
2. identify characteristics of adolescents to be successful in online environments.
3. Examine the quality of student learning experiences in virtual school environments.
4. identify how in-school and online classmates can interact.

Relevant Literature

Appleton, J. J., Christenson, S. L., & Furlong, M. (2008).
Barbour, M., Brown, H., Hoey, R., Hunt, J., Kennedy, K. Ounsworth, C., . . . Trimm, T. (2011)
Cavanaugh, C. S., Barbour, M. K., & Clark, T. (2009).
Fredericks, J. A., & McColskey, W. (2012)
Furlong, M. J., & Christenson, S. L. (2008).
Lawson, M.A. & Lawson, M.A. (2013).
National Research Council, Committee on Increasing High School Students Engagement and Motivation to Learn. (2004)
National School Climate Council. (2007)
Skinner, E. A., & Pitzer, J. R. (2012)
Thapa, A., Cohen, J., Guffey, S. & Higgins-D'Alessandro, A. (2013).

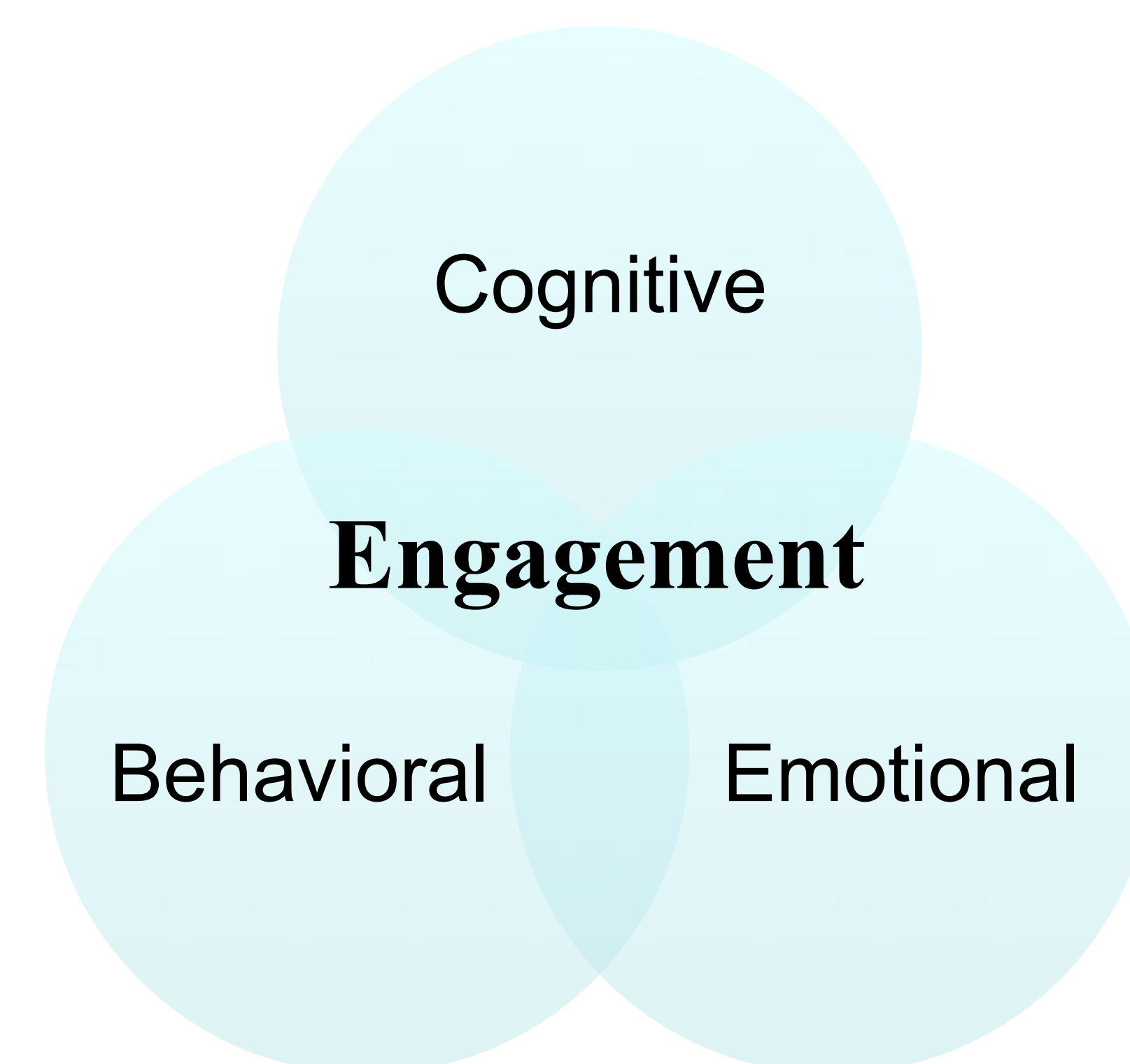
Research Questions

RQ1: What demographic factors are correlated with engagement?

RQ2: What do students identify as the most engaging aspects of being an online student?

RQ3: How do students support their learning in an online school?

Definition of engagement, adapted from Lawson and Lawson 2013



Procedures

Design: a concurrent mixed methods study

Sample

All full and part time **students** (N≈1100) were invited to participate in the survey through an email from the school office. Response rate ≈ 40%. All faculty were also invited through an invitation from the school office and replied to the researcher.

Instrumentation

 (researcher developed)

- Student survey, developed with assistance from MNVA faculty, 47 items
- Teacher interview protocol (45 min. interview)

Data Analysis

The responses to questions about hours of work a student put in per week were added to the teacher communication score and the number of classes a student attended to create a **student engagement score**, which was correlated with other demographic factors.

Teacher interview data was transcribed and coded by the author using **constant comparison analysis**.

Correlation of Student Engagement Score and Other Demographic Factors

Demographic Factor	Pearson Correlation
Years attended	.131
Age of student	.023
Student's grade in school	.044
Teacher attitude score	.040
Technology access	.018

Findings

No strong correlations were found between demographic factors and student engagement. Students found the flexible scheduling and modular lessons appealing. Students liked classes that explained the material in simpler language or with graphics. Teachers identified school culture as a key element of student engagement.

Students supported their learning with organization skills such as making lists of assignments and planning how to study for a test. Students also responded that they took notes and contacted teachers when they had questions.

Limitations

Despite efforts to reach out to students through multiple communication channels and offering a \$5 gift card incentive for completing the survey, it was difficult to entice unengaged students to take the survey.

- Most of the student respondents were students who were engaged.
- Only one virtual high school was involved in this study.
- Teachers were interviewed at the end of the school year when exhaustion and frustration may have peaked.

Conclusions

Students are engaged often because they have **engaged parents** or other adults who have expectations that they succeed at some level. They enjoy forming relationships with their teachers; teachers said students worked harder for instructors they they knew better.

Time management skills and **reading skills** are key in students' success. **Teacher assistance** that bolstered these self-regulation skills was valued.

Teachers enjoyed aspects of school culture that allowed **forming relationships** with students and working to make **curriculum more relevant** as students were more engaged with a more **personalized curriculum**.

Social Change Implications

Students and teachers were empowered as their voices were heard about what engages students.

Changes in school policies are being enacted to change communication practices and assignment structures to increase engagement.

Teachers are being allowed to alter curriculum to make it more relevant and engaging for students.

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