

K-12 Online Learning Research: 2018 Trends from Dissertation Research

Introduction

The purpose of this review of dissertations is to provide resources to inform Quality Matters' interest in quality assurance for online courses at the K-12 level. These efforts naturally include concerns with teaching and course design. This review includes a summary of the relevant dissertations published in 2018. Findings were organized around their applicability to the QM Standards (See Table 1). This review also includes Appendix A, listing information about the dissertation studies collected and analyzed. Finally, where there were ideas identified in research that did not correlate with one or more of the standards, those are given special note.

Table 1

QM Standards for Reference

| Standard | Name | Description |
|-----------------|---|---|
| 1 | Course Overview & Introduction | The overall design of the course is made clear to the learner at the beginning of the course. |
| 2 | Learning Objectives (Competencies) | Learning objectives or competencies are measurable and clearly stated. They assist learners in focusing their effort in the course. |
| 3 | Assessment and Measurement | Assessments are integral to the learning process and are designed to evaluate learner progress in achieving the stated learning objectives or mastering the competencies. |
| 4 | Instructional Materials | Instructional materials enable learners to achieve stated learning objectives or competencies. |
| 5 | Learning Activities and Learner Interaction | Learning activities facilitate and support learner interaction and engagement. |
| 6 | Course Technology | Course technologies support learners' achievement of course objectives or competencies. |
| 7 | Learner and Instructor Support | The course materials include support services essential to learner and instructor success. Course instructions articulate or link to relevant information and services. |
| 8 | Accessibility and Usability | The course design reflects a commitment to accessibility and usability for all learners. |

Methodology

Primary review activities were conducted June 16, 2019, through December 18, 2019, by Mary Rice, under the direction of the QM staff Manager of Research and Development Barbra Burch and Director of Research Kay Shattuck.

Searching Databases

Searches of several databases were conducted with the advanced search function, toggling search fields ranging from “subject headings” to “keywords” to “all text.” Some databases were searched using Boolean Operators (AND, OR, NOT), though often these functions were employed automatically by the advanced search function within the database. Databases searched include ProQuest Dissertations and Theses, EBSCO, and ERIC.

Defining Terms

Strategies for conducting the review included searching databases for articles about online learning across a broad range of contexts. A list of keywords associated with online learning and special education formed the initial search terms. These terms are similar to those used by Rice and Dykman (2018) in their review of literature for the *Handbook of Research on K-12 Online and Blended Learning*. Where available database thesauri and indices were employed for further refinement of terminology and to generate synonyms. Search terms appear in Table 2.

Table 2

Initial Search Terms

| Online Learning | Higher Education | K-12 | Environment | Anticipated Topics |
|--|---|---|---|---|
| Virtual school(s), virtual classrooms, | College, institution, higher education, post-secondary, | K-12, elementary, secondary, public school, | Fully online, supplemental, credit recovery, blended learning | Accessibility, attrition, persistence, achievement, |

| | | | | |
|--|---|--|---|---|
| cyber school(s), distance education, online learning, online instruction, cyber school, e-learning, Internet coursework, web-based instruction | technical, tertiary, university, vocational | charter school, private school, homeschool, grade school, high school, adolescent, child | (environment), hybrid, modern learning environment(s) | teacher preparation, teacher training, accommodation, modification, media, legalities, policies, literacy, satisfaction, engagement, technology, parents, perceptions, experiences, roles, professional development |
|--|---|--|---|---|

Additional Search Constraints and Exclusion Criteria

Additional constraints were applied to returned search results. Dissertations that were not already in the QM Research Library database

(<https://www.qmprogram.org/qmresources/research/>) were added. These constraints included a restriction by year (2018-Present). Dissertations that focused on digital learning but were not necessarily part of an online learning program were excluded. Dissertations were chosen as a focal text because of their tendency to explain with specific detail the methodology and theoretical assumptions of the studies. Such characteristics illustrated how a study supported the standards or augmented them. Also, articles published in 2018 are profiled in a different report. However, the conclusion of this report includes recommendations supported by *both* articles and dissertations with relevant citations.

It was considered that dissertations might be discovered that were not empirical (i.e., not driven by a research question, methods/strategies, and findings). However, that was not the case. There is very little theorization of online learning at the K-12 level occurring in dissertations,

although it has been documented that theorization of K-12 online learning is very common in published journal articles. Some dissertations were higher in quality than others, meaning that some had thicker reviews of literature, displayed an easier-to-read writing style, and/or displayed findings with data support in more succinct ways. Inclusion in this review does mean that dissertations met minimal standards for these types of quality only, rather than stringent ones.

Findings

Dissertations were grouped into themes based on study topics, research populations, and empirical aim. Appendix A contains a list of all the studies with authors, findings, grade level, course type, and population studied. Descriptions of major themes appear below. A few of the articles represented more than one theme.

Engagement and Self-Regulation

Ten of the 22 dissertations have components related to engagement and self-regulation. These topics align with many of the QM Standards indirectly but, perhaps, most directly to Standards 4, 5, 6, and 7. The unanimous or unchallenged findings from these dissertations were that students were more engaged when they were provided activities and when they had access to support services. These findings suggest that course activities be considered separately from interaction (or merely delineated within the same standard in a more structured way). This is because engagement with people and engagement with activities is revealed differently in research (Douds, 2018; Keaton, 2018; Lewis, 2018). Some activities require learners to interact with peers or teachers while others do not, and these are not of equal value to student learning.

The most interesting set of findings came from Zhang (2018) who tested the Community of Inquiry (COI) components established for higher education against K-12 learners' reports of presence and learning outcomes in K-12 settings. Zhang's findings are summarized in Table 4.

These findings are noteworthy because they suggest a number of adjustments to the standards. First, they suggest that *learner support from people* should be a separate idea from *learner support about technology*. Second, the instructor support should not be restricted to support about technology but, instead, focus on what helps the teacher support self-regulatory behaviors, prolonged engagement, and communication with stakeholders such as parents.

Table 4

Zhang's (2018) Findings Summary

| Hypothesis | Result |
|--|----------------------------------|
| H1: Teaching presence positively predicts students' online SRL strategies. | Supported |
| H2: Teaching presence positively predicts students' self-efficacy. | Not Supported |
| H3: Teaching presence positively predicts cognitive presence. | Supported |
| H4: Teaching presence positively predicts learning outcome. | Not Supported |
| H5: Social presence positively predicts students' self-efficacy. | Supported |
| H6: Social presence positively predicts cognitive presence. | Supported |
| H7: Social presence positively predicts learning outcome. | Supported ¹ |
| H8: Cognitive presence positively predicts learning outcome. | Supported |
| H9: Self-efficacy positively predicts online SRL strategies. | Supported |
| H10: Self-efficacy positively predicts cognitive presence. | Supported |
| H11: Online SRL strategies positively predict cognitive presence. | Supported |
| H12: Mentor presence positively predicts self-efficacy. | Not Supported |
| H13: Mentor presence positively predicts online SRL. | Supported |
| H14: Mentor presence positively predicts cognitive presence. | Not Supported |
| H15: Mentor presence positively predicts learning outcome. | Not Supported |
| H16: Students who use school as their primary online learning locations demonstrate higher level of social presence, mentor presence, cognitive presence, self-efficacy, online SRL strategies, and learning outcomes, compared with those who choose to spend their majority time of online learning at home. | Partially Supported ¹ |

Specifically, Zhang's work revealed that online learning mentors' presence did predict student self-regulation but *did not* support cognitive presence or self-efficacy. Similarly, teaching presence predicted cognitive presence but *not* student learning outcomes or self-efficacy.

However, self-efficacy predicted self-regulating behaviors in learners. Finally, learning at the school site instead of home predicted the use of self-regulation strategies in some cases, particularly for students who were new to taking online courses. This is important because although students may not often cite peer interaction or working at the school as being a favorite aspect of online learning, it is actually very important to their learning outcomes. This might be difficult for course vendors to negotiate because more interaction with peers does not necessarily translate to increased satisfaction with the course. Such complexities might be considered in revising standards or accompanying materials.

Learner Outcomes

Learner outcomes are an outgrowth of Standard 3: Assessment and Measurement. However, learning outcomes are predicated on successfully implementing all of the standards. Learner outcomes were the most well-represented topic, with 13 of 22 dissertations focusing on it. In Zhang's (2018) study, variables that predicted learning outcomes were social presence (the ability to know and be known in the community of learners) and cognitive presence, which is often a reflection of what learners already know (their previously acquired background knowledge that helps them orient toward a new task).

Other studies were conducted by Henderson (2018), who looked specifically at parent-teacher relationships as being valuable to learning outcomes and found they were predictive. Keaton (2018) studied students in STEM courses and found self-efficacy and self-regulation were important to learning outcomes. Specifically, this study also mentioned research opportunities as a strategy for boosting learning outcomes. Metro-Craig (2018) highlighted the importance of feedback (which might be considered an element of teaching presence) and found credit recovery-seeking algebra students perceived it to be important to their success, although

Zhang's (2018) work said teaching presence was not predictive of learner outcome but, rather, of self-regulation and cognitive presence.

Another set of studies looked at learner outcomes across different technological formats. These included a comparison between blended and online learners in a credit recovery course (Packer, 2018). The findings showed *no difference* between the learning outcomes of both groups.

In addition, Squires (2018) measured whether the use of Universal Design for Learning supports predicted positive learning outcomes, and it did not. However, learners in the study did report enjoying the features. This is another instance where strategies that satisfied learners online are not necessarily the ones that helped them learn best. Finally, Taylor (2018), Townsend (2018), and Ward (2018) all looked at demographic characteristics and found what previous research has found—namely that students from higher socioeconomic backgrounds who are white are more likely to have positive learning outcomes than other students. That said, it may be easier for students from the socioculturally advantaged backgrounds to engage with, understand, and access support for course materials as a result of historical privilege-allocating practices that extend beyond the online course or school context. Taking a strong stand about the need to have materials that are critically engaging for students across sociocultural boundaries might be useful for improving the standards.

Stakeholder Experiences

The stakeholder experience is perhaps best captured by Standard 8: Accessibility and Usability; although, experience is often considered a squishy concept in rubric and assessment development. Ten of the 22 dissertations captured data and analyzed it with reference to stakeholder experiences. In these studies, learners reported wanting and enjoying more support

from the course materials, particularly in the form of engaging activities and from adult mentors such as teachers and parents (Bradley, 2018; Diliberti, 2018; Keaton, 2018; Henderson, 2018; Lewis, 2018; Massey, 2018; Metro Craig, 2018).

Teacher perspectives were also documented in two studies. In Virgil Womble's (2018) work, communication was documented as an important instructional strategy for all stakeholders. Townsend (2018) also interviewed teachers and found that they struggled to educate African American children online as well as their peers.

One particularly noteworthy study was a policy analysis of Ohio's charter schools (Churchwright, 2018). In the dissertation, Churchwright spoke from the perspective of a state officer who found that policy was wholly inadequate to address the needs of learners with disabilities in online learning, particularly in regard to the Least Restrictive Environment provision of the Individuals with Disabilities in Education Act (2004). The implication of Churchwright's (2018) work on course design is that learner interaction (Standard 5) must be used strategically to provide students with disabilities access to their peers. This comes alongside Zhang's (2018) finding on the predictive power of social presence.

Finally, virtual school leaders offered perceptions of online learning (Tabor; 2018; Weiss, 2018). These leaders were by far the most optimistic of any stakeholders about online learning's potential. In both studies, they showed a marked preference for deregulation and permission to innovate.

Teacher Quality and Support

Three of 22 dissertations documented the need for teacher quality (Churchwright, 2018; Diliberti, 2018; Massey, 2018). These studies highlighted the need for teachers to understand the needs of diverse students and make modifications when necessary. This need might conflict to

some degree with traditional notions of best practices in course design where the course is finalized before it is taught. Even in instructor support in Standard 7, the current language reflects strong orientation toward technological support and maneuverability in the course material is mostly for helping young learners with technological issues find workarounds. There is actually little in the standards addressing what teachers must do to make optimal use of course materials designed for learners. This might be a potential area for revision as well. Other educators besides teachers might also be included in this thinking, and design features might be enabled in a course to optimize all the personnel in a virtual course who might interact with a child.

Discussion and Suggestions for Future Work

Of the ideas mentioned in this report, the need to focus more on the multiple users of the course in its design is an important one. The dissertations here alongside scholars like (Evmanova, 2018; Mize, Park, & Moore, 2018; Rice, 2018) who have published work in course design suggest that the multiple stakeholders *who are also course users* do not have sufficient representation in the QM Standards. For example, Squires' (2018) study of Universal Design for Learning and supports embedded in courses should have been a big success, but it was not. Instead, the findings of the study bring into focus the fact that it is impossible to offer every application, every learning format, every text that might pertain to a course objective. One must choose. In fact, the person choosing is a course designer who may have little interaction with teachers who teach the course or students who take the courses. Further, course designers almost assuredly have no interaction with parents or other on-site mentors. Yet, such an understanding about users is important to solid course design (Rice, 2018). When making such choices, it is important to consider who the learners might be and regularly obtain multiple kinds of feedback

about the materials. These data might include self-reports of what people enjoyed, but they must also include data about what was effective for learning.

Finally, the research findings that students from all backgrounds are not succeeding across all demographic groups should bring pause. Being a successful K-12 online learner should not require that one be a particular race or ethnicity or belong to a certain socioeconomic class. Course design might help with this by ensuring that activities are as free from cultural bias as possible and that Standard 8 is a foregrounding standard, rather than an add-on set of considerations at the end.

There are a number of promising new technologies published in journals in 2018 that might help, as well. These tools range from fairly new and innovative tools, such as virtual or augmented reality (Cakmak & Sirakaya, 2018; O'Connor, 2018), game-based learning (Wang, Xing, & Laffey, 2018), and educational reconstruction (Kersting, Henriksen, Bøe, & Angell, 2018) to technologies with longer histories such as web conferences (Downing & Dymont, 2018; Rehn, Maor, McConney, 2018) and project-based learning (Lokey-Vega, Williamson, & Bondeson, 2018). Each of these studies is enthusiastic about the promise for the use of these tools. However, credit recovery students in some studies have reported a preference for short activities with videos followed by straightforward questions about comprehension. Thus, different tools have the potential for impacting student learning when applied thoughtfully within learning contexts—whether that context was a virtual school, a virtual program in a traditional school, or a teacher preparation program.

Appendix A: Dissertation Information

| Reference Information | Findings | Grade level | Course type | Population |
|--|--|---------------|------------------------|--|
| Barry, L. (2018). <i>The effects of a teacher feedback intervention in a virtual school setting</i> . (Doctoral dissertation, University of Pittsburgh) | Although there was an increase in the quality of feedback provided by teachers in the virtual education setting, there was no evidence of a functional relationship between increasing the quality of teacher feedback and increasing the active engagement of students with disabilities in the virtual education setting. | high school | biology, physics, math | general education and special education teachers |
| Boyd, A. (2018). <i>Perceived parent involvement and a technology-enabled workbook intervention effect analysis on summer learning loss for 6th and 7th grade students attending a Pennsylvania K-12 virtual school</i> (Doctoral dissertation, George Mason University) | Students completed a workbook intervention designed to minimize summer learning loss. While not statistically significant, pre-test scores/intervention explained a small amount of variance in summer slide above and beyond parental involvement, and the additional effect of perceived parental involvement and the intervention explained a variance in summer slide. | middle school | math | parents and students |
| Bradley, T. A. (2018). <i>Middle school students' experiences in an online problem-based learning environment</i> . (Doctoral dissertation, Walden University) | Students who were motivated to learn and engaged in the learning process were more successful in the program. | middle school | no specific | no specific |
| Churchwright, K. K. (2018). <i>Policy autopsy: A failure of regulatory oversight to ensure Least Restrictive Environment in Ohio's Electronic Charter Schools</i> (Doctoral dissertation, Miami University) | The researcher contends that (a) the layered policies that govern Least Restrictive Environment and Ohio e-schools do not align, (b) these policies may be irreconcilable, and (c) the current practice of policy implementation on the issue represents an abdication of state responsibility for educational governance, including policy enforcement and reporting to the public. | K-12 | no specific | no specific |

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|--|---|--------------------|--------------------|--|
| <p>Diliberti, R. K. (2018). <i>Assessing quality: Teachers' perceptions of state virtual school courses</i> (Doctoral dissertation, Oakland University)</p> | <p>Teachers perceived that most (39 out of 43) quality indicators were present to at least a reasonable degree in most state virtual school courses. Quality indicators less likely to be present included proctored tests and exams, student-student interaction, direct instruction, and items related to continuous improvement. Teachers did not perceive that all assignments/activities and assessments in some courses were aligned to the learning objectives. Teachers perceived online assessments and teachers' responsibilities to be most related to student outcomes in state virtual school courses. Indicators with the greatest number of recommendations related to course assignments/activities, continuous improvement, course interaction, and assessments.</p> | <p>K-12</p> | <p>no specific</p> | <p>teachers</p> |
| <p>Douds, T. (2018). <i>The predictive relationship between student engagement scores and pass/fail rates of a credit recovery course among high school students</i> (Doctoral dissertation, Liberty University)</p> | <p>Participants included a nonrandom sample of 49 students from two public high schools. The students completed the Motivation and Engagement Scale – High School (MES-HS) survey comprised of 44 questions, which measured student motivation and engagement. Results indicated student engagement was a predictor of a student's academic success. Suggestions for further research were included.</p> | <p>high school</p> | <p>no specific</p> | <p>students who need credit recovery</p> |
| <p>Henderson, T. (2018). <i>Parent-Teacher Relationships in cyber charter schools: Investigating the quality of the parent-teacher relationship and its impact on student achievement</i> (Doctoral dissertation, Duquesne University)</p> | <p>The quality of the parent-teacher relationship did have predictive effect related to student achievement. Parental perception of the parent-teacher relationship, opportunity for parent involvement, parent efficacy, and time for parental involvement were assessed.</p> | <p>K-12</p> | <p>no specific</p> | <p>parents of K-12 children</p> |

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| <p>Keaton, W. G. (2018). <i>Examining the academic and extracurricular experiences and behaviors of high school students in online STEM courses</i> (Doctoral dissertation, George Mason University)</p> | <p>This study used teacher ratings, school data, and student interviews to investigate the perceptions students in online STEM courses have of their past and current educational experiences. Areas important to success in online STEM courses were self-efficacy, self-regulation, rigor, and research opportunities.</p> | <p>high school</p> | <p>STEM courses</p> | <p>general education students and general education teachers</p> |
| <p>Kish, P. M. (2018). <i>The virtual school teacher evaluation process</i> (Doctoral dissertation, Kent State University)</p> | <p>Virtual school leaders indicated that teachers were usually evaluated in online settings using asynchronous tools and documents, but some are evaluated synchronously.</p> | <p>K-12</p> | <p>no specific</p> | <p>virtual school leaders</p> |
| <p>Lewis, D. (2018). <i>Secondary student experiences with mandatory enrollment in North Carolina Virtual Public School courses: A hermeneutical phenomenological study</i> (Doctoral dissertation, Liberty University)</p> | <p>Student levels of internet self-efficacy are not a strong determinant as to whether their experiences will be wholly positive or negative nor is their acclimation to technology a determining factor for how a student might perceive online learning. Students revealed concerns regarding presence of the online instructor as well as perceived support. Students acknowledged favorable perceived value of the required, school-based course facilitator. In addition, students noted increased dependency on various learning strategies in order to successfully perform in their assigned courses.</p> | <p>secondary education</p> | <p>no specific</p> | <p>general education students participating in mandatory courses</p> |
| <p>Massey, D. A. (2018). <i>Teacher's implementation of engaging activities in online high school courses</i> (Doctoral dissertation, Walden University)</p> | <p>Teachers' motivation to implement activities was positively influenced by autonomy, competence of content knowledge, and relationships. Motivation was negatively influenced by a lack of competence in technical skills in the online environment.</p> | <p>high school</p> | <p>no specific</p> | <p>general education teachers</p> |

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| <p>Metro-Craig, K. S. (2018). <i>A case study exploring at-risk high school students' perceptions of interactive feedback and supports in online Algebra I credit recovery</i> (Doctoral dissertation, Northcentral University)</p> | <p>Although students perceived they were independent and prepared for an online algebra credit recovery course, having course supports, opportunities to receive feedback, and a teacher for both social emotional and academic support throughout the entire course was perceived to have a significant impact on their performance.</p> | <p>high school</p> | <p>Algebra I</p> | <p>students who needed credit recovery</p> |
| <p>Obodai, J. L. (2018). <i>A quantitative correlational study relating synchronous instruction to student engagement and course pass rates of 11th and 12th grade online students</i> (Doctoral dissertation, Northcentral University)</p> | <p>There was a positive correlation between synchronous instruction and participation, course completion, and course pass rates, but overall significance was not found.</p> | <p>high school</p> | <p>English, math, science, history</p> | <p>no specific</p> |
| <p>Packer, S. K. (2018). <i>A comparison study of high school math student performance and perceptions between blended and online learning</i> (Doctoral dissertation, Texas A&M University-Commerce)</p> | <p>A quasi-experimental pre and posttest study with additional student surveys was to determine whether the blended or online learning setting was the most effective approach of technology use in high school math credit recovery courses. Difference in percent scores between the prescriptive and cumulative tests and between the two environments were discussed and recommendations offered for future research.</p> | <p>high school</p> | <p>math</p> | <p>students who needed credit recovery</p> |

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|---|--|--------------------|----------------|--|
| <p>Squires, R. I. (2018). <i>Universal Design for Learning in online credit recovery: Do course features impact achievement?</i> (Doctoral dissertation, University of Montana)</p> | <p>The null hypothesis could not be rejected. Mean score gain differences on pre-test, post-test scores were not statistically significant or important across control and treatment groups. Course grade and final grade data also did not demonstrate a statistically significant or important difference in achievement across the groups. Passing rates were higher in the treatment group than the control group (9% based on enrollment numbers and 5% for individuals). Results from the open-ended survey questions and qualitative interviews revealed three key themes: (1) appreciation of the mastery assignment options, (2) the importance of instructor/course mentor support, and (3) the initial time commitment of working with the new assignment type for the instructor. Results indicated that an incremental approach to including UDL course features did not result in a statistically significant impact on student achievement.</p> | <p>high school</p> | <p>English</p> | <p>students who need credit recovery</p> |
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|---|---|--------------------------------------|--------------------|---|
| <p>Tabor, J. W. (2018). <i>Effective online learning: An examination of online summer school curriculum at a suburban Texas high school</i> (Doctoral dissertation, Texas A&M University)</p> | <p>All stakeholders believed the online learning method could be effective, for many students but not all, when engaging students. Student engagement varied by lessons, but most were engaged in their coursework an average of eight minutes. No matter what levels of engagement, all received credit for their work with scores between 90-100. Using post-interview data, most students found the work to be simple and easy. The lessons that engaged students were short, usually included videos and some level of questioning to make sure the student focused on the lesson. Self-regulation was a barrier for many students.</p> | <p>middle school high school</p> | <p>no specific</p> | <p>students who need credit recovery</p> |
| <p>Taylor, L. R. (2018). <i>A correlational study of student demographic characteristics, academic achievement, and virtual course completion for high school students enrolled in a virtual school program in southeast Texas</i> (Doctoral dissertation, Lamar University-Beaumont)</p> | <p>There was a statistically significant relationship between students with higher academic achievement and demographics for students in higher grades, males, high GPA, and course completion. Recommendations for future research include the collection of data from multiple school sites, a more diverse student population, and a change in how the variables were measured using archival data.</p> | <p>high school</p> | <p>no specific</p> | <p>no specific</p> |
| <p>Townsend, T. H. (2018). <i>Academic hustle: Teaching African American students in online educational environments</i> (Doctoral dissertation, Indiana State University)</p> | <p>Teachers liked the flexibility to adapt strategies or assign different parts of the course. However, they also perceived that the permanence of racism had followed African American students to the online setting and some displayed deficit orientations to students.</p> | <p>K-12</p> | <p>no specific</p> | <p>current and former virtual teachers of African American students</p> |

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|--|--|--------------------|--------------------|-------------------------------|
| <p>Vigil Womble, L. (2018). <i>Instructional strategies and processes secondary online teachers utilize to engage students</i> (Doctoral dissertation, Capella University)</p> | <p>Communication with all stakeholders in online learning was necessary, incorporating constructivist activities was imperative, and accountability on behalf of both students and teachers was crucial.</p> | <p>K-12</p> | <p>no specific</p> | <p>no specific</p> |
| <p>Ward, J. L. (2018). <i>The relationship of student demographic and academic characteristics on students' success in high school online courses</i> (Doctoral dissertation, Mississippi State University)</p> | <p>(a) Students with high GPAs, (b) upper-grade level high school students, (c) female students, and (d) students who paid for their lunch were more successful in completing online high school courses.</p> | <p>high school</p> | <p>no specific</p> | <p>no specific</p> |
| <p>Weiss, E. (2018). <i>Virtual school leaders' experiences and perspectives of the benefits of and barriers to Kindergarten through grade 12 virtual schools in Florida</i> (Doctoral dissertation, Nova Southeastern University)</p> | <p>Six themes emerged from the interviews as findings: educational optimism, pro-innovation bias, strategies of least resistance, fidelity to old-school norms, virtual schools as a public but private schooling niche, and the counterintuitive gauntlet of innovativeness: the legitimacy of virtual schools and stakeholder divides.</p> | <p>K-12</p> | <p>no specific</p> | <p>virtual school leaders</p> |

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|--|--|--------------------|---|--------------------|
| <p>Zhang, Y. (2018). <i>The effects of community of inquiry, learning presence, and mentor presence on learning outcomes: A revised community of inquiry model for K-12 online learners</i> (Doctoral dissertation. Michigan State University)</p> | <p>Four key findings: First, in contrast to Shea and Bidjerano’s (2010) model, this study found a significant relationship between teaching presence and SRL and a non-significant relationship between teaching presence and self-efficacy. Second, because learning under the supervision of a mentor is a unique feature to K-12 online learning, mentor presence significantly predicted students’ use of self-regulated learning strategies. Third, when using the revised framework to predict learning outcomes (i.e., satisfaction, perceived progress, final grade), the hypothesized model containing CoI and SRL can be related to learning outcomes, thus answering previous scholars’ calls for a realistic integration of learning presence and learning outcomes into the CoI framework. And fourth, based on a comparison of two groups of students with different primary online learning locations (i.e., at-home vs. at-school), at-school students showed significantly less feelings of isolation, higher ability in generating curiosity once the online learning starts, higher perceptions on mentor’s practice as a problem solver, and higher goal-setting and help-seeking strategies than those whose primary online learning location is at home.</p> | <p>high school</p> | <p>foreign languages, science, social sciences, and English</p> | <p>no specific</p> |
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