

# Parent and Student Perceptions of Parent Engagement at a Cyber Charter High School

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## Abstract

As enrollments in cyber charter schools grow, it becomes increasingly important to understand how parents engage in their students' learning. Researchers have hypothesized that parental engagement is even more critical when online students learn from home, but few researchers have examined parents' engagement behavior—especially parents of adolescent learners. In this case study we addressed this gap using parent and student interviews at a full-time online charter school. Our analysis of 19 interviews with 9 parents and 10 interviews with 10 students identified five primary types of parental engagement within this setting: (1) nurturing relationships and interactions, (2) advising and mentoring, (3) organizing, (4) monitoring and motivating student engagement, and (5) instructing. We also identified obstacles to effective parental engagement, and in this paper we discuss how programs can work with parents to foster more collaborative relationships.

## Introduction

K-12 online learning began over 20 years ago and has expanded rapidly during the last decade. The majority of enrollments are from high school students supplementing their face-to-face courses with one or two online courses. These types of supplemental courses are commonly provided by programs traditionally called virtual schools (Barbour, 2013). Students are also increasingly enrolling in cyber schools (International Association for K-12 Online Learning [iNACOL], 2012), or programs that allow students to take all or most of their courses online (Barbour, 2013). These growth trends have occurred

despite attrition rates that are higher than those found in traditional brick-and-mortar schools (Freidhoff, 2015; Miron & Gulosino, 2015; Watson, Murin, Vashaw, Gremin, & Rapp, 2013). Although the solution to narrowing this achievement gap is multifaceted and complex, some researchers have focused on the need to more fully engage parents in the learning process—especially in cyber schools where students spend all or most of their time studying at home (Borup, Graham, & Davies, 2013; Liu, Black, Algina, Cavanaugh, & Dawson, 2010). However, little research exists that has examined parental engagement in cyber schools, and the existing research has focused largely on parental engagement in online elementary school settings (Hasler Waters, Menchaca, & Borup, 2014).

The lack of research on parental engagement with older student populations is especially concerning because the majority of cyber school enrollments have occurred within high school populations (Watson et al., 2013). Although research with younger populations can be insightful, generalizations cannot be made to adolescent students due to differences in student characteristics and course content (McNeal, 2012). The limited research that has examined parental engagement in cyber high schools has also been based largely on parent (Curtis, 2013) and teacher (Borup, 2015) perceptions, and greater insights are likely when these perceptions are examined in conjunction with those of students. In this research we addressed this gap using interview data obtained from students *and* parents at a cyber high school.

## Literature Review

Researchers have reported that parental engagement in K-12 online learning is critical to improving course outcomes (Boulton, 2008; Litke, 1998). Klein (2006) also reported that parents found it rewarding to work closely with their students, especially when they witnessed their children making connections between the course content and their daily life. Liu et al. (2010) suggest that parents who support their students in online courses could help students develop perseverance and an internal locus of control, as well as organizational and time management skills. However, research is lacking that helps to better understand the types and amounts of parental involvement necessary to help students succeed in these unique environments. In this section of the article, we will first review the research examining the levels of parental engagement in online environments and the overall impact that their engagement has on learning outcomes. Following that review, we will discuss the frameworks that have been created in an attempt to categorize the various types of parental engagement in online learning environments.

### Levels and Impact of Parental Engagement

Researchers have found that levels of parental involvement in online learning vary across students. For instance, 79 parent survey respondents reported spending nearly 1.5 hours per week interacting with their students regarding their learning in a freshman English course at a cyber high school (Borup, Graham, & Davies, 2013). Parent responses varied greatly, resulting in a standard deviation (74.3) close to the mean (86.0). Litke (1998) was the first to document this phenomenon qualitatively. Following the analysis of teacher, student, and parent interviews at a small program that allowed students to take most of the coursework online, Litke identified three types of parents:

1. Absentee parents who provided students with little support or supervision due to demands outside of the home.
2. Supportive parents who increased their engagement following student difficulties.
3. Participatory parents who worked closely with students throughout the course.

Similarly, Hasler Waters et al.'s (2014) review of the literature found that parents of online students traversed along a continuum of engagement—from no engagement to full engagement—based on student needs, school policies, and availability. Because needs vary across students, it is not surprising that the level of parental engagement also varies. However, problems arise when parents' misconceptions about

students' needs or other factors prevent them from providing the needed level of support that students require. For instance, Litke (1998) in part blamed poor course outcomes on parents who underestimated student needs and failed to provide them with adequate support. More recently, parents in Borup et al.'s (2013) research rated their motivational impact on student learning at a cyber high school significantly lower than the impact that their students reported. Parents' underestimating their potential impact helps to explain Boulton's (2008) case study of British high school students enrolled in a two-year online certificate program. Boulton found that parents initially supported students, but their support quickly declined and was a contributing factor in some students' failure in the program. Boulton hypothesized that sustained teacher–parent communication could have helped parents to better understand and fulfill their responsibilities. Although the number of schools that have explicit policies for teacher–parent communication is growing, many schools do not have such requirements, and those that do exist tend to be reactionary, requiring parents to communicate with teachers after their student has performed poorly (Cavanaugh et al., 2009).

Although important, communication from teachers is unlikely to overcome all of the obstacles to parental engagement. For instance, Russell (2004) reported that virtual-school parents who were economically disadvantaged and required to work long hours outside of the home could not provide important student supervision at home, placing their students at a disadvantage. Additionally, parents' perceptions of their responsibilities and their self-efficacy in their abilities to impact student learning can determine the types and levels of support that parents provide. As a result, it is important that researchers work to better understand parent perceptions and experiences.

Only two studies have quantitatively examined the relationship between levels of parental engagement and online student performance. First, Black (2009) conducted a regression analysis and found no significant relationship between parents' ( $n = 452$ ) reported levels of engagement and students' academic achievement in their virtual school courses. However, Black conducted a second regression analysis that included only the survey responses from the parents ( $n = 164$ ) whose child also completed an accompanying student survey. This analysis found a positive relationship between parents' reported level of student praise and their child's academic achievement but a negative relationship between parents' reported levels of instruction and their child's academic achievement. Similarly, Borup et al. (2013) identified negative correlations between parents' reported levels of interaction with their cyber school student and student learning outcomes. However, these researchers warned against interpreting the negative relationships too simply by concluding that parents do not have a significant impact on student learning. Borup et al. (2013) explained, "If a large portion of parental interaction occurred in reaction to poor student performance, the correlation that results from examining a large group of students could mask the true benefit of parental involvement on individual student learning" (p. 52). Also, Borup et al. measured only the total time that parents spent interacting with students, not the intended purposes of those interactions. It is possible that more refined instruments would help to identify how particular types of parent engagement are correlated to certain learning outcomes with students who have specific learning characteristics. However, the initial obstacle to this type of research is that researchers have yet to identify and clearly define the different types of parental engagement in a cyber school setting.

### **Types of Parental Engagement**

Graham, Henrie, and Gibbons (2014) explained that frameworks "by their very nature attempt to establish a common language and focus for the activities that take place in a scholarly community" (p. 13). These researchers also made the distinction between *explore frameworks*, which attempt to define and categorize variables within a phenomenon, and *explain frameworks*, which seek to identify relationships between variables and establish causal relationships. Parental engagement in cyber schools is a relatively new phenomenon and, as expected, researchers have struggled to establish widely accepted frameworks. In this section we will review initial attempts to identify types of parental engagement within online learning environments.

Guided by Hoover-Dempsey and Sandler's (1995, 2005) framework established in face-to-face settings, Hasler Waters (2012) conducted an in-depth case study examining how five parents engaged in their students' learning at a cyber elementary school. The school required parents to assume a high level of responsibility and act as *learning coach*. Learning coaches are commonly used by cyber schools and typically assume many of the administrative and supervisory roles that are typically performed by teachers in a face-to-face environment (Hasler Waters, Barbour, & Menchaca, 2014). Shoaf (2007) also explained that learning coaches of young students might grade and compile students' work for the online instructor to review. Hasler Waters found that parents acting as learning coaches engaged in encouraging, reinforcing, modeling, and instructing activities similar to those described by Hoover-Dempsey and Sandler (1995, 2005). However, she identified two additional types of parental engagement. First, parents engaged in adapting strategies that helped tailor instructional strategies, environments, schedules, and their own belief systems to better meet student needs. Second, parents leveraged support and materials from a variety of locations in ways that benefited students' learning.

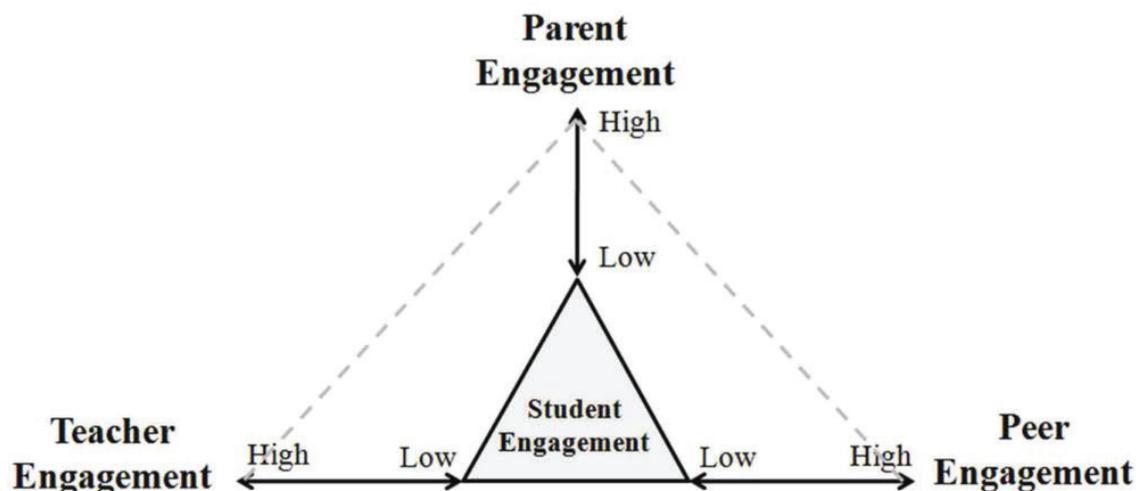
Although Hasler Waters' (2012) framework can be insightful to those attempting to understand parental engagement in cyber high school settings, it should not be generalized. Research conducted in face-to-face settings has found that parental engagement tends to decline as students age, and the effective types of parental engagement in high school settings can differ from those effective in younger grades (Noel, Stark, Redford, & Zuckerberg, 2015). McNeal (2012) added, "What is an appropriate and effective form of parent involvement for younger children may not be effective for children in later adolescence" (p. 88). The same phenomenon is also likely in cyber school settings. This may help to explain why Hasler Waters' classification of parental engagement has differed from those applied in cyber high schools.

Curtis' (2013) dissertation research was the first to identify types of parental engagement at a cyber high school. Curtis conducted 16 interviews with eight parents and categorized parents' primary engagement responsibilities into three categories: monitoring, mentoring, and motivating. Similar to Hasler Waters (2012), Curtis defined motivating as actions that encourage and reinforce student engagement. Monitoring included tasks such as establishing learning schedules, organizing learning materials, and tracking student behavior and performance. Lastly, mentoring consisted of parents demonstrating their love and care for students and guiding them through learning activities.

More recently, Borup, West, Graham, and Davies (2014) used existing online learning research to create the Adolescent Community of Engagement (ACE) framework. The framework was designed to provide a more comprehensive understanding of student support systems by explaining how parents, teachers, and student peers could work in conjunction to improve adolescent student engagement in online learning settings. The ACE framework (see Figure 1) also moved past simply exploring the different types of engagement by establishing "researchable hypotheses on how those types of engagement may improve students' success" (p. 108). As a result, the ACE framework was selected for this research.

The ACE framework hypothesizes that parents have the following overlapping responsibilities:

- *organizing* students' environment and time,
- *instructing* students not only in the course content but in how to learn it effectively, and
- *facilitating student interactions* with the content and others in the course. This third responsibility was made up of three subelements:
  - *nurturing* caring relationships and fulfilling students' basic needs,
  - *volunteering* at school activities, and
  - *monitoring and motivating* student engagement.



**Figure 1.** This figure represents the ACE framework. The surface area of the center triangle represents the level of student engagement. The ACE framework’s primary hypothesis is that the level of student engagement will increase in conjunction with the levels of teacher, parent, and peer engagement.

The authors claimed that parents and teachers could perform these responsibilities separately but that greater educational outcomes would result if their efforts were coordinated. It should also be noted that the ACE framework was not designed specifically to explain parental engagement within cyber schools, and the authors stated, “Differing learner models will also place varying emphasis on parent engagement. In full-time online programs [cyber schools] students work from home, increasing the need for parental monitoring, organizing, and instructing in comparison to what is required in supplemental programs” (Borup et al., 2014, p. 23).

Borup (2015) used the ACE framework to examine teacher perceptions of parental engagement at a cyber charter high school and found the framework largely consistent with teachers’ perceptions. However, Borup also identified *encouraging communication* to be an important element of parent engagement because teachers commonly reported that parents fostered learner–instructor interactions. Additionally, while volunteering was an important way parents fostered student engagement, it appeared to be a subcategory of motivating rather than its own element, as originally explained in the ACE framework. Teachers also expressed some frustrations when working with parents who failed to respond to their communication or who overstepped their responsibilities. For instance, some teachers believed that a small number of parents were doing students’ work rather than scaffolding them throughout the learning process. One of the primary limitations of this research was that it relied solely on teacher perceptions. This research was also guided by the ACE framework, but we focused on interview data obtained from both parents and their students.

## Methods

We used a descriptive qualitative case study methodology for this research. Stake (2010) explained that qualitative research is best when the purpose of the research is “understanding one thing well” (p. 27). Merriam (1998) also recommended that researchers “see the case as a thing, a single entity, a unit around which there are boundaries” (p. 27). For this case study, we placed boundaries around parent engagement in a cyber high school. Following Wolcott’s (1994) recommendation, we resisted the “tendency to increase the scale, rather than the depth” (p. 181). As a result, we examined parental engagement at only a single online charter high school, with the understanding that this approach

prevented us from making comparisons across settings. However, we also had embedded units within our case study so that we could identify themes across multiple parents at the school (Baxter & Jack, 2008).

## **Context**

We selected Mountain Heights Academy (MHA), a cyber charter high school in Utah, as the site for this case study. At the time data was collected, MHA employed 21 teachers and enrolled 338 students in Grades 9–12. The average course pass rate across all courses was 76%, and of all grades earned, 40% were an “A.” As a school, MHA outperformed the state average in English, science, and math on the criterion-referenced test required by the state. MHA estimated that 18% of its student body was previously homeschooled, 14% was economically disadvantaged, 11% was enrolled in special education, and 90% was white.

MHA’s belief statement, published on its website (<http://mountainheightsacademy.org>), stated that “students, parents, and teachers are all part of the educational team” (MHA, 2015, para. 2). MHA attempted to foster collaborative relationships with parents at a mandatory face-to-face orientation with teachers and administrators and via a parent organization that parents automatically joined at registration. MHA also held nonmandatory face-to-face activities throughout the year and invited parents to participate with their students.

## **Data Collection**

Participant sampling was based on teacher recommendations. MHA assigned each student to a teacher who acted as a “shepherd.” Shepherds regularly communicated with students and their parents to provide general support and act as an anchor adult whom they could contact for assistance. As a result, teachers tended to form close relationships with the students whom they shepherded. We asked five shepherds to use this understanding to help us sample two of their students for interviews for a total of 10 students. Using purposeful sampling, we asked each teacher to consider the average MHA student and provide a name of a student who was more highly engaged and a name of a student who was less engaged than the average student but also responsive to provided support and encouragement.

We invited each sampled student to participate in an hour-long interview. If a student declined, we obtained another teacher recommendation until we successfully sampled 10 students. Of the student participants, six were female and four were male. Students were also sampled across all grades: one freshman, three sophomores, two juniors, and four seniors. In addition, we conducted two interviews with each student’s parent who was the most engaged in the student’s learning. In all cases the parent was the mother. In one case siblings were sampled based on separate teacher recommendations. As a result we interviewed the siblings’ mother three times instead of two. Of the nine mothers, eight did not work outside the home.

## **Data Analysis**

The analysis was guided by elements of constant comparison coding methods as described by Glaser (1965). Parent and student statements were coded into as many different categories as possible while also following what Glaser referred to as the “defining rule for the constant comparative method” (p. 439)—comparing each statement or incident to all previous coded incidents. Codes were grouped based on similarities. This grouping was guided by the ACE framework. However, we were sensitive to themes that were not previously identified within the framework. One researcher took the lead analyzing the student interviews, and another researcher took the lead coding the parent interviews.

Measures were also taken to improve the trustworthiness of our analysis. Prior to analysis we conducted member checks by sending interview transcriptions to participants, who then checked them for

accuracy. Another member of the research team regularly reviewed all of the coding following the coding of every two to three interviews, and any disagreements in the coding were discussed and resolved.

## **Findings**

Analysis of student and parent interviews resulted in the identification of five primary types of parental engagement. Each type of engagement is discussed in this section of the article.

### **Nurturing Relationships and Interactions**

A major theme identified in the analysis was that parents' ability to facilitate communication and nurture close and trusting relationships with their students formed the foundation for all other types of parental engagement (see Table 1). Ashley summarized that before she and her spouse could impact their son's learning he needed to trust them, and their son Eric explained that he trusted his parents because they had responded to his learning needs in the past. As a result, there appeared to be a reciprocal relationship between trusting relationships and parents' impact on their students' learning, because a trusting relationship was both an outcome and a catalyst for parental engagement.

One parent emphasized the need for parents to proactively nurture loving relationships with their students: "There are lots of things that your children can learn in the outside world, but they can only really learn that you love them from you." Parents appeared to nurture loving relationships by listening to their students, understanding their academic and personal needs, and responding in ways that met those needs. Leslie believed that when she responded to her students' academic needs her students told themselves, "Hey, Mom loves me. I know she does because she makes sure that I'm getting my school done." However, five parents reported that engaging in their students' learning caused conflict. The level of conflict ranged from mild irritation to verbal altercations and open defiance. On one end of the spectrum, Alice found that her daughter would get irritated if Alice attempted to "micro-manage her." Laura was on the other end of the spectrum and reported that her son became extremely angry at seemingly benign actions. She explained that if she checked how much time her son spent in his courses he would become angry and say, "How dare you? How dare you check on me?" Similarly, Laura stated that if she reminded her son of upcoming due dates he would say, "It's none of your business, I'll get it in! Why are you bugging me?" Perhaps not surprisingly, Laura expressed discouragement and stated that she no longer wanted to do "battle" with her son.

Parents and students also recognized the importance of nurturing student-teacher relationships and interactions. Alice explained that teachers and parents "are both interested in the same outcome.... We both have to provide the support that we can." Samantha also acknowledged differences in the ways her parents and teachers engaged in her learning:

It made me really confident and secure knowing that, even though my teachers were there and willing to help, that my parents were there if I needed a different kind of support. It really made me feel that I could do anything and accomplish anything I wanted because of that support system they provided.

However, some students were "shy about talking directly with teachers and getting help," and parents had to help nurture student-teacher relationships and interactions. For instance, Leslie would tell her son, "Dude, you've got to go to the teachers.... Your teacher's your best resource." Ellie, who was in her second year at MHA, provided a student's perspective when she said,

I didn't really know how to ask for help from my teachers so I did turn to my parents a lot. ... My parents were pushing me to go and ask my teacher ... I hate being pushed... Eventually I just emailed [my teacher] and asked for help and she was really polite and responded.

**Table 1** *Coding Results for Nurturing Relationships and Interactions*

Indicators	Parents ( <i>n</i> )	Students ( <i>n</i> )	Examples
Nurturing parent–teacher communication	9	5	“I know they get a lot of criticism, so I’ve tried to say [to the teachers], ‘You know, I think it’s great that you did this assignment’” (parent)  “My mom would start quite a bit of conversations with [teachers] whenever she had questions.” (student)
Providing for students’ basic academic needs	8	3	“Just yesterday she asked me for some small candies or pennies for a lab she was doing.” (parent)  “Most of the time I’ll have the stuff to do an assignment.” (student)
Nurturing close student relationships	6	7	“Having that nurturing environment is crucial to any success, no matter what you’re doing.” (parent)  “I think that your relationship with your parent actually affects your grades.” (student)
Nurturing student–parent communication	6	7	“[S]he definitely seems happier at school when I take the time just to connect with her every day.” (parent)  “[My parents] would come to us and say, ‘Do you need help? Are you struggling with something?’” (student)
Nurturing student–student communication	4	3	“I know that if that [social] element isn’t there, then the education also suffers.” (parent)  “The first year, when I wasn’t so social, they would help with that and encourage me to go on field trips.” (student)

Parents also had to help their students correctly interpret teacher communications. Sylvia remembered that her daughter became frustrated after misinterpreting a teacher e-mail, and Sylvia had to ask her daughter, “Well, what’s really happening here?”

Lastly, parents recognized the importance of collaborative relationships with teachers. One parent stated that teacher communication sent to her let her know “the teacher is paying attention to how [the students] are doing.” Parents who initiated contact with teachers were also generally happy at how quickly they received a response. Leslie explained, “I get responses right back. They don’t delay at all.”

Leslie summarized, “It’s amazing the support that they give.” Although most parent–teacher communication was positive, some parents shared that there were negative communications. Laura, a parent of an underperforming student, expressed some frustration that teachers did not contact her more frequently using mediums other than e-mail. However, Laura also accepted some of the blame because she “could have done a little more” to initiate contact with teachers. Ruth took exception when a teacher reprimanded her student for requesting an extension on an assignment due date. Inversely, Ashley became frustrated when a teacher did not hold her son to a higher standard. Another parent found collaborating with teachers difficult because she perceived that the teachers wanted to keep her at “arm’s length,” taking the attitude that, “We’d like you involved if you do what we tell you to do, but we don’t want too much.” Janice also expressed frustration with a teacher but admitted that establishing a relationship with the teacher may have helped, “I don’t know her, never met her, but that could have been helpful.”

### Advising and Mentoring

Parents engaged in advising and mentoring activities when they assisted students on issues that extended beyond students’ current course load (see Table 2). Parents explained that adolescents begin to make decisions “they have to live with” but “don’t always see the end from the beginning.” As a result, parents advised their students in an attempt to ensure that they made wise decisions that would positively impact their future. One of these long-lasting decisions was to enroll in MHA. As legal guardians, parents could have unilaterally enrolled their students at MHA, but parents understood that students would not “give it all their effort” if they were not part of the decision-making process.

**Table 2** *Coding Results for Advising and Mentoring*

Indicators	Parents ( <i>n</i> )	Students ( <i>n</i> )	Examples
Assisting with enrollment	9	4	<p>“I was intrigued [with MHA] and it looked like something that could work for us.” (parent)</p> <p>“[My mom] put my name in the lottery to get me into the school.” (student)</p>
Encouraging students to set long-term goals	3	5	<p>“We’ve encouraged both boys to take certain classes because of their college preparatory value.” (parent)</p> <p>“[My parents] want me to learn as much as I can and be able to...grow up and become the best person that I can.” (student)</p>

Parents also advised students on setting goals after MHA, typically to attend college, so that they would “have better opportunities in life.” In order to help prepare their students to get accepted into college, some parents encouraged their students to participate in extracurricular activities. For instance, Ashley explained, “Throughout high school we’ve talked about what kind of things look good on a college application. So we’ve encouraged him to do service, we’ve encouraged him to do his Eagle Scout—all those things we knew would help.” Furthermore, Ashley advised her son on specific courses to take that would prepare him for college and qualify him for a scholarship. Leslie added that she “was always very involved with her [daughter’s] counselors” to ensure that she was providing her daughter

with sound advising that would help her to reach her goal to attend cosmetology school. Lastly, Christine, who had previously homeschooled her students, enrolled her son into MHA because when it came time for him to apply to colleges he would “need a diploma, something credible, something to say he really did it.”

### Organizing

Transitioning to online learning required students who were previously homeschooled or attended a brick-and-mortar school to change how they learned, and parents assisted students in making this transition by helping them organize their space and time (see Table 3). For instance, Edith stated that students needed “a place where they know where they go [to learn]” or they would be “going all over the house.” In fact, Janice found that she had to establish several different work spaces so her daughter could choose the one that she preferred. Providing a working environment that was free from distractions was especially difficult when multiple students were home. Ashley shared, “They get distracted from everything. I have a four year old screaming right now. There’s a lot of distraction in this house.” Edith explained that it was difficult to provide an organized learning environment because she was not organized herself.

**Table 3** *Coding Results for Organizing*

Indicators	Parents ( <i>n</i> )	Students ( <i>n</i> )	Examples
Organizing time	9	9	<p>“I do try to help her decide what subjects she wants to do and in what order.” (parent)</p> <p>“My parents helped me to organize my time and the amount of assignments they wanted me to do a day.” (student)</p>
Organizing space	9	6	<p>“We made a designated spot for each child to work. ... Where there would be as few distractions as possible.” (parent)</p> <p>“[My parents] always tried to make sure that it was quiet in there so that we could concentrate.” (student)</p>

Parents also found that they had to help students organize their time. One way parents would do this was by helping students create a learning schedule at the beginning of the year. This type of support then declined as students became more comfortable with learning online. However, the level of support varied throughout the year based on student characteristics. Anne, who had four students enrolled in MHA at different times, explained, “Each child is an individual, and I am finding with each of the four kids that I have to help some more than others.”

Parents commonly supported their students by setting general expectations for the amount of time students should work each day and then creating daily or weekly learning schedules that prioritized specific learning activities. However, parents found that establishing detailed learning schedules was problematic because it was difficult to estimate the amount of time it would take students to complete assignments. Similarly, Sylvia explained that it was good for her to provide her daughter with scheduling “ideas and suggestions, but we’re kind of all different and she doesn’t operate the same as me.”

Furthermore, some students rejected the schedules their parents provided. For instance, Eric admitted, “[My mom] usually makes a list for me that I don’t really follow.” As a result, parents commonly established general expectations and then provided students with flexibility on the course activities they worked on throughout the day. For instance, Alice established a “five-hour rule” that required her daughter to work “at least five hours every day for a 25-hour week” but allowed her to “decide what subjects she wants to do and in what order.” This resulted in a somewhat inconsistent learning schedule for some students. For instance, Alice explained, “Some days [my daughter] will work on one subject almost all day for one day and then just do the others throughout the week. But other weeks she just does a little bit more evenly every day.” Sylvia also provided her daughter with opportunities to plan her learning schedule but still maintained final approval over the schedules that she created.

It was possible for students to lose the freedom to set their own learning schedule if it negatively impacted their academic performance. Some parents also intervened when students spent so much time on their schoolwork that it negatively impacted other aspects of their lives. Samantha remembered that her parents had to “get involved a few times when it was 1 a.m. and [she] was still on the computer doing homework.”

Sometimes parents proved ineffective at encouraging their students to maintain an adequate learning schedule. In the most extreme example, Laura explained that at times her son refused to do schoolwork and would leave the home without permission because she “physically can’t restrain [him].” Some students also reported that occasionally parents actually distracted them from following a consistent learning schedule. For instance, Eric explained that at times he would be working on an assignment, and his mother would ask him to stop to help with his six brothers. Similarly, Amy stated that her parents would commonly interrupt her studies to have her help on the family farm:

Sometimes it would have been in the middle of a quiz or an essay where I would have my “[thinking] cap” on, but I would lose that when I went to help and have to come back and be a little lost. I got really frustrated.

Although Amy talked to her parents about this issue, it continued to happen and she “had to get along with it.” Ellie also found that at times when she was working her mother would take her away from her schoolwork to go with her on errands or to “to go get ice cream.” Eric added that his mother’s personal computer was not working, so they were “switching back and forth” on the computer that MHA provided Eric specifically for his education.

### **Monitoring and Motivating**

Once students were enrolled in MHA and had an organized learning space and schedule, parents monitored and motivated students’ behavior and performance (see Table 4). Although the level of monitoring and motivating that students needed could vary based on student characteristics, Anne explained that “even the independent [students] ... need to feel that support from their parents.” Parents commonly asked their students about their behavior and monitored their grades in the learning management system (LMS) or in weekly progress reports sent by teachers. Students also typically worked in locations where their parents could observe their behavior. This appeared helpful in keeping students on task. Eric explained, “It helps me keep on track, knowing that my mom is always in the kitchen.” Parents’ familiarity with students’ personality and tendencies also helped them to monitor students’ online behavior. For instance, Angie explained that her father would know that she was not doing schoolwork, because she would get a “little half-smile [on her face].”

**Table 4** *Coding Results for Monitoring and Motivating*

Indicators	Parents ( <i>n</i> )	Students ( <i>n</i> )	Examples
Monitoring behavior	9	9	<p>“I am fairly aware [of their behavior] because I walk in and out of the kitchen but they can find all kinds of ways to get around that.” (parent)</p> <p>“If [my parents] catch me messing around watching YouTube videos and stuff, they will be like, ‘Why aren’t you doing school?’” (student)</p>
Monitoring performance	9	9	<p>“I used to look at his grades and assignments every day or every other day or I’d ask him, ‘What do you have left in English?’” (parent)</p> <p>“My mom looks at my grades to make sure everything is okay.” (student)</p>
Modeling and volunteering	8	8	<p>“When parents are involved...students see that it’s important to the parents and so it’s more important to them.” (parent)</p> <p>“My dad works anywhere from 12 to 14 hours days. ... It motivates me to get up in the morning to do my stuff.” (student)</p>
Encouraging engagement	7	9	<p>“Sometimes if I see that she’s lagging, I’ll go over and make a little joke, ‘Are you not getting enough attention?’” (parent)</p> <p>“[My mom] gives me moral support at times when I feel like school is crap and I don’t want to take it anymore.” (student)</p>
Incentivizing engagement or performance	7	9	<p>“As long as you can keep a B grade average, you don’t have to pay your car insurance.” (parent)</p> <p>“[My mom] will say, ‘Why don’t you go do this much math or science or whatever and then we can go do something fun.’” (student)</p>
Establishing high expectations	7	4	<p>“They know...if you have a college degree, you have better opportunities in life.” (parent)</p> <p>“If I don’t get straight ‘A’s I’m going to disappoint my parents.” (student)</p>
Praising performance and effort	6	5	<p>“I am praising her for her hard work, it helps her.” (parent)</p> <p>“[My mom] will say ‘Oh, you got a 93 [percent] in Chemistry. Good job!’” (student)</p>

Even when parents closely monitored their students at home, it could be difficult to know what students were actually doing on their computers, and some parents found it helpful to check students' analytic data within the LMS. Edith explained that by using this data "[she] knew how long [her student] was on the computer for what class so [she knew] if she's working or actually doing something else, [such as] chatting with other friends." Laura added that while she could use her parent login to "see how many hours and minutes were spent in each subject each day," it could be difficult to interpret the data because "it's a pretty long report," and it was sometimes unclear if students were actually doing "school things" when they were logged into the computer. Ashley found it more beneficial to review her son's browser history and discovered that he was chatting excessively with friends and Googling test questions. In one instance, she had her son e-mail the teacher and say, "I deserve a zero on this because I cheated." Despite some difficulty in monitoring students' online behavior, students' knowledge that parents could verify their online activity helped them to stay on task. Amber remembered being told at orientation that her teachers and parents would be able to monitor students' online behavior, and she believed that this awareness of being monitored "helped [her] a lot" to stay on task. Samantha also found that it "kept [her] focused" and that she "would have been less careful about things" if that data had not been made available to her parents.

Parental monitoring appeared to decrease once students showed the ability to stay on task and be successful online. For instance, Eric remembered that when he started at MHA his mother was a strict disciplinarian, but at the time of the interview she had taken "a much more passive role." One student, Samantha, recommended that parents take a balanced approach to monitoring student learning while also helping their students become more independent: "They should be there and be supportive and know what's going on, but at the same time give their kids their own space."

In addition to monitoring student behavior and performance, students explained that there were several things that parents did to motivate them to engage in learning activities. First, parents set high expectations for academic performance and communicated to students the importance of getting an education. Ellie stated, "[My parents] encourage me a lot to get good grades and try to be the best that I can be as far as school goes." These expectations were regularly communicated to students by parents' reactions to their academic performance. For instance, Angie recalled getting 91% on an assignment and her mother asking her, "Well, that's good but do you think you could redo it, maybe get it higher?" Kurt added that parents are especially good at setting expectations because they have an intimate knowledge of what students "can and can't handle."

Students also recognized their parents' high expectations when parents modeled to students the importance of education by maintaining academic interests/hobbies. Janice summarized that she tried to motivate her students by modeling that "learning is a great thing" and that "it was just part of [their] lives." Parents also modeled the importance of education by volunteering at school functions. However, volunteering appeared to be difficult for many parents due to other demands on their time. Anne stated, "I realize that there are a few opportunities where I could have [volunteered], but we have eight kids, and so I tend to volunteer my time in other areas, if you know what I mean." Similarly, Amy found that even though her mother wanted to attend school functions with her, she was too busy to actually do so. However, Amy added that "it was the thought that counted," and knowing that "[her mother] made the effort" had an effect on Amy similar to the effect her mother would have had if she had actually volunteered.

Parental praise and encouragement also appeared to be effective at motivating students. Christine found that parental praise was especially beneficial in courses that were difficult: "It's helpful to me to have [my mom] be like, 'Oh, good job!' because she knows how hard chemistry is for me." Angie also found that encouragement from her father helped her to finish assignments when she was feeling "worn out." Similarly, Hollie stated that she "would get into these moods" where she would want to give up on

projects, but encouragement from her mom helped her to persist to completion. Her mother, Leslie, confirmed that she “nudged [Hollie] a lot” so that she could meet her goals.

Parents also used rewards and punishments to incentivize student performance or engagement. Kurt remembered working harder after he was verbally reprimanded for his low performance and was told, “Look, if you don’t do what you’re supposed to do, there’re going to be consequences.” Parents and students stated that consequences typically were the removal of privileges, such as playing video games, watching television, or borrowing the family car. Parents also incentivized student performance with various rewards, including ice cream, candy, eating out, money, pool trips, sleepovers, parties, concert tickets, and electronics. Samantha explained that her mother created a token economy where she and her siblings would earn tokens that could be exchanged for money when they reached certain benchmarks. However, Samantha’s mother, Anne, found that when Samantha became “old enough,” she no longer required tokens to engage in learning activities and became a “self-motivated person.” Similarly, Alice found that she did not have to incentivize her daughter to engage in learning activities, because she would reward herself by going outside or taking a break to read a book after she finished an assignment. Angie was actually happy that her parents did not incentivize her performance, because it “lessens the meaning of the project,” and she “would only have done it just to get a prize.” On the other end of the spectrum, Laura found that she was unable to motivate her son despite regular attempts. Ivan confirmed that it was “annoying” that his mother checked his grades daily and encouraged him to improve, but he admitted that “it helps a lot.” Hollie explained that parents needed to find the right balance when attempting to motivate their students and that when “you have a good relationship [parents] know when to lay off, and they know when it’s okay to push you to do better.”

## **Instructing**

Typically, when students had content-related questions, they “just asked [their] teachers because that’s what they are there for.” However, students turned to parents for tutoring or direct instruction of the course content, if their teachers were not immediately available (see Table 5). Ashley stated, “We were there when she needed help with certain assignments. We were just always here for her.” Regardless of the reason, most students said that their parents tutored them on the course content at some point. Parents provided assistance in two ways. First, if parents did not already understand the content, they would learn it together with the student. Ruth provided an example of this more collaborative approach: “We will help him a lot in English, and we are reading together. I haven’t read *How to Kill a Mockingbird*, so we are reading that out loud together.” Ruth recalled an instance when her son was struggling with a social studies project and “was not understanding any of it.” As a result, she thought to herself, “Let’s work on this together.” Another parent also engaged in shared learning activities by brainstorming a “research paper topic.”

Second, when parents already understood the course content, they would provide their students with direct instruction. As a result, parents’ ability to help their students was dependent on their understanding of the content, and in general parents were less able to assist their students in their math and science courses than in electives, language arts, and social studies. For instance, Leslie recalled that her son regularly asked her for help in math until she finally told him, “I don’t have any clue what you’re trying to do. . . . Contact your teacher.” Hollie learned that she could turn to her father for help in English and her mother for help in math. In the social sciences and language arts, parents found that they could provide more assistance by reviewing or proofreading student work before it was submitted. Parents also used their previous knowledge to instruct their students on learning strategies, such as note-taking. It was less common for parents to help students with technology, but it did occur in some cases.

**Table 5** Coding Results for Instructing

Indicators	Parents ( <i>n</i> )	Students ( <i>n</i> )	Examples
Instructing on the content	6	8	“She depended on [her dad] to help her with Math.” (parent)  “[My dad] is able to help me with some of the [English] concepts I struggle with.” (student)
Instructing on learning skills	6	6	“I had to teach him how to take notes.” (parent)  “[My parents] always say to have a pen and paper by you to take notes to help study for quizzes and tests.” (student)
Instructing on technology	2	3	“Actually this happened about twice, our internet goes down and she’ll come and tell me about that.” (parent)  “When it is technology problems, at least on the computer, I usually turn to my teachers, but if it is like something that has to do with my iPod or my Kindle or my camera or something I’ll usually go ask my dad.” (student)

Although most students were appreciative of their parents’ assistance, Ivan became frustrated when his mom would take him “through the steps” and wanted her to “just stop talking and give [him] the answer.” Leslie shared one strategy that her son would use to get her to give him the answer: “He’ll sit and just act like he has no clue...until you finally get so frustrated and irritated with him that you give him the answer.” As a result, Leslie recalled finally saying to her son, “We’re here to help. We’re not here to do it for you.” However, in one case, a student admitted that his parent went beyond providing assistance to actually doing the work for him. Matt explained that on some assignments, such as discussion board activities that he viewed as “pointless,” his mother would “do it on her computer while [he was] doing something with more urgency.”

## Discussion

Litke (1998) grouped the types of support parents provide to students into one of three categories: absentee, supportive, or participatory. However, the data collected from this study indicated that parental engagement was more fluid and that parents traversed a *continuum of support* (Hasler Waters, Menchaca, & Borup, 2014). The parents offered varying degrees of assistance based on what they believed their students needed as well as the expectations they held for their students’ academic achievement. By leveraging their intimate awareness of their students’ needs, parents were strategic in how they helped their students structure their learning time and space. Consistent with students at this stage of development (Hawk, Keijsers, Hale, & Meeus, 2009; Smetana, Daddis, & Chuang, 2003), some students

pushed back, wanting more freedom to choose when and how they engaged in schoolwork. Some parents recognized the importance of encouraging their students to take ownership of their learning, and when possible gave them a level of control over their learning.

This research also identified types of parental engagement at a cyber charter high school. We discovered that the types of behaviors parents engaged in to support their students involved in this study are most accurately grouped in five categories: (1) nurturing relationships and interactions, (2) advising and mentoring, (3) organizing, (4) monitoring and motivating student engagement, and (5) instructing. We surmise that the categories of parental engagement behaviors found among the group of parents involved in this study are slightly different than those found in the earlier research, because the students involved in this study were high school students, not elementary or middle school students.

First, parents nurtured their own relationships with their students by building trust and supporting students' endeavors. While nurturing students is a natural phenomenon, the data collected from this study highlighted the significant role nurturing played as a driver of other forms of parental engagement. Similarly, parents in another study reported that they found the opportunity to nurture their students to be one of the most rewarding aspects of being their students' learning coach (Hasler Waters, 2012). Students also appeared to value the love and trust they found from their parents. This finding corroborates Borup et al.'s (2013) study in which students reported that they valued their parents' engagement more than parents realized. Similarly, one parent, Laura, reported that her son did not want her involved in his learning. However, her son, Ivan, admitted that his mothers' involvement was "annoying" but effective. In this study, parents also encouraged their students to build relationships with their teachers. For previously homeschooled students this was especially important, since they did not have teachers before attending MHA. This responsibility for students to establish a relationship with their teachers was not originally included in the ACE framework but supports teacher perceptions in the same setting (Borup, 2015).

Second, parents advised and mentored students by helping them make prudent decisions in order to set themselves up for future opportunities. Similarly, Curtis (2013) identified mentoring as a major type of parental engagement at a cyber high school and found that mentoring was an extension of how parents showed their love of their students. As a result, there appears to be a close relationship between parents' nurturing and advising activities. From the outset, parents chose to enroll their students in MHA based on what they believed would be the best learning environment for their students. Ni and Rorrer (2012) explained that the very act of enrolling students in a charter school is an indication that parents are proactively involved in their students' learning. As a result, parents' advising and mentoring activities may be different at non-charter-school programs.

Parents' mentoring and advising activities can also vary based on student characteristics. For instance, Beck and his colleagues (Beck, Egalite, & Maranto, 2014; Beck, Maranto, & Lo, 2013) found that parents of special education students were more likely than parents of general education students to enroll their students in a cyber school to avoid bullying and other social issues at their brick-and-mortar school. Parents of special education students were also more satisfied with their students' cyber school than were parents of general education students. In addition to advising students to enroll in online courses, de la Varre et al. (2014) observed that parents also advised their students to drop out of online programs when students' performance was low, when students were unable to fully engage in extracurricular activities, or when the course content "went against their family's values" (p. 10).

The third responsibility parents assumed was helping their students to organize their learning time and space. This was important in order to help their students stay on track and focused. Lowes and Lin (2015) stated, "As online learning has grown, it has become increasingly clear to many of us working in the field that students not only need to learn a subject online but need to learn how to learn online" (p. 18). Parents in our research also recognized this need and found that students were especially lacking in their ability to manage their time and space. Some parents tried to create multiple learning spaces and

flexible schedules in order to give their students choices. Some found that it was ineffective to set strict schedules, because some course work took longer than others, and students had other priorities to manage. Students also desired more independence, and some would ignore the schedule that parents provided. Household distractions proved challenging for some, and prioritizing family needs over schooling was problematic for some students. This may be especially surprising to students and parents, because one of the primary rationales that students and parents provide for enrolling in online courses is to escape the distractions (Garthwait, 2014; Muller, 2010; Sorensen, 2012).

Fourth, parents set expectations for student performance and then motivate students to meet those expectations. Motivating students required parents to monitor student behavior and performance. Monitoring student behavior is especially important within an online learning environment because the same technology that students use to access the course content can also be used to access limitless distractions (McFarlane, 2011). Some parents admitted that it was challenging to know exactly what their students were doing and relied on data collected from the LMS and communications from the teachers to stay abreast. Parents commonly used praise and words of encouragement to motivate student engagement. However, when students still failed to meet expectations, parents adjusted how they organized their students' learning time or used their intimate awareness of their students to incentivize them with either reinforcements or punishments. In most instances, students were grateful for the level of monitoring and motivating from their parents because they found it helped them stay on track. Yet not all students appreciated the amount of parental oversight they received, as they believed that it undermined their independence. Regardless, parents appeared to be largely successful at motivating students. Similarly, Hasler Waters (2012) observed that parents were constantly adapting their strategies to keep their students motivated, and they frequently leveraged external resources, from downloading online apps to enlisting the support of other family members, to keep their students engaged. It is difficult to overemphasize the importance of parents' monitoring and motivating efforts. Murphy and Rodríguez-Manzanares (2009) summarized that in order to be successful, many online students require the physical presence of someone who is "actively encouraging or pushing them" (p. 11).

Lastly, parents engaged in both direct and indirect instruction to support student learning. Findings from this research supported Liu et al. (2010), who suggested that parental involvement could in fact boost a child's ability to acquire and practice skills necessary to be successful in virtual learning environments—including perseverance, organization, internal locus of control, technology, and time management skills. When needed, students would also request their parents' instructional assistance on assignments. However, some of the data collected indicated that some parents might have done work for the students. Some teachers have complained about the troubling effects that may occur when parents actually do the work for their students or fail to communicate with teachers about the learning challenges their students experience (Borup, 2015; Hasler Waters & Leong, 2014). Parents relied on teachers to provide most of the direct instruction to their students and only intervened when the teacher was unavailable. Most often, parents worked to learn the content alongside their students. The students valued these shared learning experiences, as they helped students to build their confidence and were seen as motivational. Parents also helped their students to develop good study habits, such as taking notes. Where teachers tend to provide this type of guidance in the traditional classroom, parents' physical proximity to students made them especially effective at providing this type of support.

It is imperative that parents receive communication from the school to help them better understand the importance of their responsibilities and strategies to best engage in their students' learning (Boulton, 2008). Knowing that their parents and teachers worked together to support their learning was also reassuring to students. For the most part, parents valued teacher communications, but some parents were not always pleased with the level of teacher support they received. Challenges over sharing the teaching space and fully understanding the split of roles and responsibilities between parents and teachers in this type of environment are not new. Research has pointed to this theme for nearly two decades,

beginning with Litke's (1998) study of parental involvement in a cyber charter school and reoccurring throughout more recent studies (Boulton, 2008; Hasler Waters & Leong, 2014; Hawkins, 2011). The ACE Framework has identified areas of overlap between instructor and parent roles and suggested that students would benefit if these shared responsibilities were better coordinated (Borup et al., 2014). In the next section, we conclude with possible implications for researchers and practitioners who wish to better understand and facilitate effective parental engagement and collaborative relationships with teachers.

## **Conclusions and Implications**

In this case study we conducted 10 interviews with 10 students and 19 interviews with 9 of their parents at MHA, a full-time online charter high school. Our analysis identified five primary types of parental engagement within this setting: (1) nurturing relationships and interactions, (2) advising and mentoring, (3) organizing, (4) monitoring and motivating student engagement, and (5) instructing. Prior to discussing possible implications of this research, we first need to understand its limitations. Although we were able to support parent perceptions with those of students, a major limitation of this research was the exclusive reliance on interview data. Greene, Caracelli, and Graham (1989) explained that the "use of only one method to assess a given phenomenon will inevitably yield biased and limited results" (p. 256). Furthermore, as is true with any case study, this research was highly contextualized, and practitioners and researchers should avoid "the temptation to read too far beyond the case itself in speculating about its meaning or implications" (p. 37). It is likely that research conducted in cyber schools with different learning models or younger students would produce different results.

### **Implications for Practice**

In this research we found four primary obstacles to parental engagement at MHA: (1) time constraints, (2) conflict with their students, (3) ambiguity regarding their responsibilities, and (4) a perception that some forms of engagement were unwelcomed by teachers. Although there is little that schools can do to alleviate parents' external time constraints, they can help parents fulfill their responsibilities more efficiently. For instance, MHA teachers sent regular progress reports to parents individually to assist them in their monitoring responsibilities. Schools could make this process more efficient for parents if they sent them one weekly e-mail that contained student progress across all courses. Parents also found the activity reports provided by the LMS to be helpful, supporting Cavanaugh's (2009) previous suggestion that online programs provide parents with their students' analytic data. However, parents found that these activity reports were long, and to understand them was time consuming. Zhang and Almeroth (2010) advocated for teacher dashboards that would display trends in students' online activity and performance in ways that allow teachers to more quickly recognize and respond to student needs. Similar dashboards would also help parents to more effectively and efficiently fulfill their responsibilities.

Second, student-parent conflict proved to be an obstacle for some parents. Although it is not unusual for there to be conflict in the home when adolescents try to establish their independence from parents (Hawk, Keijsers, Hale, & Meeus, 2009; Smetana et al., 2003), this phenomenon has yet to be fully explored in full-time online settings. It is possible that student-parent conflict is more likely to occur in an online learning environment than in a brick-and-mortar setting because parents have more contact with their students and are required to assume some of the roles that are performed by classroom teachers. As a result, cyber schools should warn parents of possible student-parent conflict—especially when conflict already exists. Steinberg (2001) explained that researchers' understanding of parent-adolescent conflict has evolved over time. Traditionally, parent-adolescent conflict was viewed as inevitable, and parents were told to "expect oppositionalism and defiance from their teenagers and to worry if these factors were not present" (p. 3). However, there is an increasing body of evidence that conflict is not a natural byproduct of effective parenting. Similarly, we found that it was possible for most parents to fulfill their responsibilities with little or no evidence of parent-student conflict. As a result, online programs should

recognize the common triggers for excessive parent–student conflict and work with parents to develop strategies that prevent and resolve conflict when it occurs.

Third, some parents were somewhat unsure of their responsibilities and how to fully support their students' learning. One parent had the following realization at the start of the year: "Wow! [My student] needs much more help here than I ever thought." Parent misconceptions appeared to result in some parents' distracting students from their work and, in at least one case, actually doing the student's work for him. This is not a phenomenon unique to online learning (Cooper, 1989), but parents of online students have more opportunities to interfere with their students' learning than parents of students in a traditional brick-and-mortar environment. To MHA's credit, it worked to educate parents regarding their responsibilities at a face-to-face orientation meeting, but greater success may have been achieved if parents had also received recommendations and strategies throughout the year that focused on common challenges and misconceptions among parents.

Fourth, parental interference may have resulted in teachers wanting to keep parents at "arm's length," as expressed by one parent. Hasler Waters and Leong (2014) also found that online teachers were reluctant to share instructional responsibilities with parents even when it would have benefited the student. As a result, cyber schools may find that they need to better educate parents *and* teachers regarding the potential benefits of parental engagement as well as specific ways that parents should and should not engage in their students' learning.

### **Implications for Research**

As stated earlier, researchers have largely ignored parental engagement at cyber high schools despite a consensus within the educational community that parental engagement can benefit students. Rice (2006) explained that part of the blame for the lack of research in K-12 online learning can be "placed on the doorstep of the research community for a lack of theoretical rational" (p. 440). Although Rice made the statement nearly a decade ago, the same holds true today. This is especially true with parental engagement, a variable that has proved difficult to define in online settings. For instance, Curtis's (2013) and Borup et al.'s (2014) parental engagement frameworks initially appear more different than they actually are because they use different terms to describe similar phenomena. One challenge to developing unified definitions is that researchers often fail to cite each other's research. This is due in part to the fact that K-12 online and blended learning research represents only a small portion of the total research published in the seemingly endless number of journals in the larger field of instructional design and technology. Additionally, much of the research on K-12 online and blended learning is published only as reports, white papers, and dissertations. The latter is an especially rich source of research that deserves more attention. Drysdale, Graham, Spring, and Halverson (2013) argued, "An understanding of trends in dissertation research can show what issues, theories, and methodologies young researchers and their faculty mentors are interested in" (p. 91). Thankfully, there have been recent attempts to highlight and distribute K-12 online and blended learning research, including this and other journals' special issues on the subject. The Michigan Virtual Learning Research Institute (MVLRI) and iNACOL led an effort to create a clearinghouse for all forms of K-12 online and blended learning research (<http://k12onlineresearch.org/>). Furthermore, in 2014 the *Handbook of Research on K-12 Online and Blended Learning* (Ferdig & Kennedy, 2014) was published, and in 2015 the first issue was published of the *Journal of Online Learning Research*, a journal devoted solely to issues pertaining to K-12 online learning. These and other efforts have the potential to create a stronger research community and result in more coordinated research efforts.

The ACE framework was selected to guide this research and proved helpful in identifying and defining types of parental engagement within this research context. However, our analysis extended beyond the ACE framework's original description of parental engagement. For instance, we expanded the ACE framework's concept of *nurturing* to also include parents' responsibilities to foster student–teacher

and parent–teacher communications. We also added the concept of *advising and mentoring*, which was not originally identified within the ACE framework. Whetten (1989) explained that when establishing a framework, researchers should “err in favor of including too many factors, recognizing that over time their ideas will be refined” (p. 490). Similarly, the authors of the ACE framework stated that the framework was not a comprehensive list of factors that influence student engagement, and they anticipated that qualitative research “could refine and/or expand” (Borup et al., 2014, p. 123) the framework. However, Merriam (1998) explained that case studies should not be viewed as a way of “testing” the hypotheses inherent within the framework.

Additional insights into parental engagement could also be obtained by conducting research in a variety of settings and by analyzing additional types of data, such as actual parent–teacher e-mail communications. Once researchers have identified and defined the various types of parental engagement, they can work to create and validate instruments to quantitatively measure parent engagement. These types of instruments would allow researchers to identify the types of parental engagement that are most strongly correlated with course outcomes. Although this type of research can be difficult—especially when collecting data from minors, it can prove insightful to those wishing to improve learning outcomes and reduce online attrition rates.

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