

Research article

Utilizing Instructional Strategies Within A Blended Learning Model for At-Risk Students: A Qualitative Case Study

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Abstract

Many at-risk students attending an alternative high school in a northwestern state were not graduating on-time even after a learner-centered blended learning model was implemented. The administration and teachers sought to understand why the change to a learner-centered program was only slightly increasing the graduation rate each year. The purpose of this qualitative case study was to explore how the learner-centered instructional strategies used within a blended learning model were being implemented and supporting at-risk students. Weimer's learner-centered framework was used to ground the study and guide the research questions which examined teacher and student perspectives about the learner-centered instructional strategies that were being implemented. Interviews were conducted with six teachers from diverse disciplines who had taught at the study site for 3 or more years, four recent graduates, and six current students who were 18 years old or older. Classroom observations of the 6 teachers were conducted and archived student surveys from the previous 2 years were collected. All data were analyzed and coded to identify common themes and strategies regarding learner-centered instruction. The findings indicated the teachers needed professional development in how to implement learner-centered and blended learning strategies and how to help students take responsibility for their education. Implementation of appropriate learner-centered and blended learning strategies might result in students completing their courses and increased graduation rates. As more students

graduate, instead of dropping out, positive social change will occur in the community as they responsibly enter the workforce. **Copyright © WJER, all rights reserved.**

Keywords: at-risk students, learner-centered, instruction, alternative high school, blended learning, graduation.

Introduction

Many at-risk students attending an alternative high school in a northwestern state in the United States are not graduating on-time. The graduation rate for this state was 77.3% in 2013-2014, 78.9% in 2014-2015, and 79.7% in 2015-2016 as reported in the state's K-12 Report Card. Meanwhile, the national average was 84% according to the National Center for Education Statistics (2018). A contributing factor for the low graduation rate was the alternative high schools which had an on-time graduation rate of 36% according to the State Board of Education (Russell, 2016). The low graduation rates at the alternative schools prompted the president of the Board of Education to ask for an investigation into how to help these students graduate on-time (Russell, 2016).

A task force was established and created a comprehensive report, which ultimately resulted in the Governor signing a bill to provide grants to 20 local education agencies to pilot new educational programs. The State Department awarded grants to districts or schools to plan, develop, and implement these new learner-centered programs to increase student success in their regular and/or alternative schools. This project study involved High Mountain School District (a pseudonym), which was one of the 19 sites chosen for the pilot programs.

High Mountain School District and its alternative high schools were chosen because of their low graduation rates which ranged from 27.3% to 52.7% for the 2015-2016 school year as indicated by the State Department of Education. The school district and the Valley Alternative High School (VAHS; a pseudonym) principal knew there was a problem as the at-risk students were not graduating on-time and they believed it was a result of using a traditional school structure and traditional delivery of the curriculum instead of learner-centered instructional strategies within a blended learning model (VAHS principal, personal communication, August 15, 2016).

The district research coordinator presented a plan at the April 28, 2015 School Board meeting describing the changes to be implemented. VAHS implemented the suggested changes for the 2016 – 2017 school year by incorporating learner-centered instructional strategies within a blended learning model. Their goal was to see if this model would enable the at-risk students to be more successful academically, take ownership and responsibility for their own learning, and graduate on-time (VAHS principal, personal communication, August 15, 2016). However, little evidence exists providing an understanding of which learner-centered instructional strategies support at-risk students (Mayer, Lingle, & Usselman, 2017; Nair, 2016; Rivera, 2017; Zacharis, 2015).

The students attending VAHS are considered at-risk because they might become dropouts due to the individual characteristics identifying them as at-risk, which they are required to have by the state to attend an alternative high school. If under this new learner-centered instructional program within a blended learning model the graduation rate does increase, then the program would be presented to other alternative schools within the district and state to help them improve their graduation rates (VAHS principal and district research coordinator, personal communication, August 15, 2016).

With the change to learner-centered instructional strategies used within a blended learning model, the teachers needed to learn and understand how to become facilitators of learning instead of transmitters of learning (Nair, 2016). Teachers at VAHS were provided professional development in the form of three book studies on instructional practices (Horn & Staker, 2015) and two book studies on restorative practices to help the teachers with mentoring their students (Rivera, 2017; Zacharis, 2015). In addition, during the summer of 2016 teachers wrote and developed their instructional units with help from technology specialists (VAHS principal, personal communication, May 16, 2016). Throughout the 2017-2018 school year, teachers met in Professional Learning Communities by discipline to refine and refocus their semester or yearlong curriculum into four units of instruction with a capstone project at the end of each unit or every two units (district research coordinator, personal communication, May 17, 2017). At the end of the 2017-2018 school year, teachers were asked to read Harvey and Goudvis' (2017) book on instructional strategies and Dweck's (2006) book on mindset over the summer to increase their understanding of how to be an effective teacher. In addition, a small group of teachers attended statewide conferences on how to implement a learner-centered program (VAHS principal, personal communication, May 16, 2017).

A problem arose at VAHS when the graduation rate for the 2017-2018 school year increased but not as much as was hoped and the district research coordinator and VAHS's principal began to wonder how the new learner-centered instructional strategies within the blended learning model were being implemented and why they did not produce the expected results of increased student success as indicated by the literature (Suprabha & Subramonian, 2015; Weimer, 2013). Based on this data, the district administration and VAHS principal wondered if there was a gap in practice in the implementation and understanding of learner-centered instructional strategies used within the blended learning model (district research coordinator and VAHS principal, personal communication, June 5, 2018).

Research Questions

The two central questions that were researched in this qualitative case study were:

RQ 1. How are the learner-centered instructional strategies within a blended learning model being implemented by the teachers at VAHS as perceived by the teachers, recent graduates, and current students who are 18 years old or older to facilitate learning, so students graduate on-time?

RQ 2. What learner-centered instructional strategies within the blended learning model do teachers, recent graduates, and current students 18 years old or older at VAHS perceive as encouraging students to take ownership and responsibility for their own learning?

Conceptual Framework

This qualitative bounded case study was grounded in the conceptual framework of Weimer's (2013) learner-centered teaching. The major focus of learner-centered teaching was to shift the balance of power away from the teacher and toward the students to help them understand that what they are learning was their responsibility (Weimer, 2013). Thus, high school students, who have been conditioned to want the teacher to tell them what to do, when to do it, how to do it, and make all the decisions, now had to make those decisions (Weimer, 2013). In this model, the teachers who have traditionally been in control will now become facilitators of learning and help the students learn how to be responsible for their own learning (Weimer, 2013).

Having become concerned, as a college professor, that college students were not prepared for college, Weimer (2013) suggested that a shift to a more learner-centered model would help prepare students for college. However, secondary schools needed to transition from a teacher-centered model to a learner-centered model, so students could acquire the skills necessary to be successful in college. The secondary school teacher must become a resource person, mentor, instructional designer, and expert learner (Weimer, 2013). With these changes, the students would become engaged in the tasks created by the teachers, learn how to communicate with their peers, discover new knowledge through discovery, make decisions, and take ownership of their learning (Weimer, 2013). Rufatto et al. (2016) agreed with this and discovered that as teachers shifted the learning responsibility to the students, grades improved.

Weimer's (2013) learner-centered teaching also focused on the delivery of the content and how much of the course content needed to be covered. Many college professors, as well as high school teachers, believe they must cover all the content in their courses to prepare their students for the next course (Weimer, 2013). This is true, but some students have difficulty retaining the information at the pace of the instruction and the amount of content that is presented (Weimer, 2013). Thus, Weimer (2013) proposed that covering the content equates to superficial learning. Instead, students needed to be engaged in the content and learn the content like the experts in the field learn (Weimer, 2013).

In addition, Weimer (2013) suggested connecting learner-centered teaching with a blended learning model where the teacher provided face-to-face instruction, as well as opportunities for independent and/or small group learning online. Likewise, Jacobs (2016) indicated that blended learning in secondary schools can help students learn life skills such as self-direction and responsibility, so they were better prepared for college. The blended learning model enabled students to take more responsibility and ownership of their learning (Horn & Staker, 2015). It also required students to be more prepared (Rufatto et al., 2016). By being prepared, the students could plan when they were to attend class, what needed to be completed before each class, and when they would complete the work outside of class (Horn & Staker, 2015; Rufatto et al., 2016).

Weimer's learner-centered conceptual framework related to this qualitative case study by providing specific strategies that should help at-risk students become independent learners, academically successful, and graduate on-time. The research questions in this study focused on identifying how the learner-centered instructional strategies were being implemented as perceived by teachers, graduates, and current students 18 years old or older to facilitate student learning. In addition, the research questions helped to discover if teachers, recent graduates, and students 18 years old or older perceived the blended learning model as enabling the students to develop the skills and ownership of their own learning which Weimer (2013) mentioned as being important for high school graduates. By incorporating blended

learning into the instructional model, this allowed the students to determine the path, place, pace, and time for learning (Horn & Staker, 2015). This required the students to be responsible for their own learning.

Literature Review

Project Genre

Professional development was the chosen genre for the research study because teachers needed to be trained in learner-centered instructional strategies and blended learning if they were expected to facilitate learning using these strategies. Most current teachers attended schools that were teacher-centered, and their teacher education programs were teacher-centered (Darling-Hammond, 2017). Thus, they need to be exposed to this new way of teaching. Teachers are familiar with professional development and recognize its effectiveness if it is focused on the needs of the teachers and/or students (Darling-Hammond, 2017). Capraro et al. (2016) noted that professional development should last at least 14 hours. Other researchers insisted effective professional development must be continuous and not just last a few days at a workshop or conference (Bayar, 2014; Brown & Militello, 2016). The teachers at VAHS indicated during their interviews a desire to have more training in how to teach in this learner-centered blended learning model. The students also indicated they wanted their teachers to incorporate more small group discussions into the courses, so they were not spending the whole day on their laptops doing assignments.

Professional development is a process where schools and districts with the support of their teachers, universities, and experts, help the school address the needs of their teachers and students to improve student achievement (Killion & Roy, 2009). Professional development also involves active learning and reflection on the part of the teachers (Brown & Militello, 2016). The teachers at VAHS who participated in the interviews, indicated they needed more training in this learner-centered blended learning model, and they knew it would require a time commitment. For this professional development to be effective it needed to be classroom/student centered, concentrated on the needs identified by the teachers, and continuous (Seals, Mehta, Wolf, & Marcotte, 2017). Because the curriculum is online and the students submit their assignments online, there was a need for the professional development to not only support the teachers but also provide technology support for the teachers and students (Horton, Shack, & Mehta, 2017).

Besides the initial 3 days of intensive professional development, the teachers need to meet continuously throughout the school year (Bayar, 2014; Brown & Militello, 2016). They need this continuity, in order to have time and space to incorporate what they are learning into their lessons (Brown & Militello, 2016).

For teachers to gain the most out of professional development sessions, they need to collaborate and respect each other's experiences and opinions. They also need to look at the data on their students' academic achievement, test scores, and graduation rates. Kelly and Cherkowski (2015) mentioned that collaboration, relationships, and reflection need to be incorporated into the professional development. These need to occur for the training to be successful in getting teachers to try new learner-centered instructional strategies. In addition, through professional development, the teachers develop relationships with mentors who can also provide support (Addae, 2016). Addae (2016) expanded on the concept of relationships to include seeing how the data relates to the teachers' personal experiences. The teachers needed to determine whether the data on student achievement and engagement matched their experiences and observations.

Collaboration

Collaboration is a major component to effective professional development. Once the teachers have developed trusting relationships, they can respect each other's experiences and discuss new ideas as to how to help their students (Kelly & Cherkowski, 2015). Through collaboration with other teachers, the teachers will learn how to enhance their courses, so they are more learner-centered (Addae, 2016). The teachers need to learn how to collaborate effectively with their colleagues before they can help their students learn this skill. By collaborating with their peers, the students will learn how to be independent thinkers, be accountable for their work, learn social skills, learn how to have productive face-to-face interactions, and learn how to work as a group member (Brown & Militello, 2016). All these skills need to be taught to the students, so they can be productive team members after high school.

Reflection and Feedback

Reflection is another component of effective professional development. Teachers need time to process what they are learning, how they are implementing what they are learning, and what impact these new learner strategies are having on their students (Addae, 2016). Once the teachers have incorporated a new learner-centered instructional strategy, they need to reflect on their practice, the students' responses, and share that information with their colleagues (Capraro et al., 2016). Having the teachers videotape themselves teaching and sharing this with their peers to receive

feedback is another way to improve one's teaching (Xiao, & Tobin, 2018). Thus, by working with their colleagues, teachers can plan lessons, implement the lesson, reflect on the lesson, adjust the lesson, and implement a similar type of lesson incorporating the changes (Xiao, & Tobin, 2018). Professional development allows the teachers to collaborate with their peers to analyze data, reflect on the results, and understand their own practice (Xiao, & Tobin, 2018). Students also need to learn how to reflect on their work. Korthagen and Kessels (1999) noted that Hans Freudenthal, who initiated the Freudenthal Institute in the Netherlands to help teachers teach math, indicated that students needed to use inquiry and reflection with a group to learn math.

Feedback is vital for learning and professional growth. Addae (2016) stated that adults need feedback to motivate them to learn and make meaning out of what they are learning. High school students also need feedback to help them learn. Teachers need to ask the students what they want the teacher to provide feedback on and how they want to receive the feedback. Similarly, Guarino, Whitaker, and Jundt (2017) stated that teachers need to provide feedback and praise to their students. The feedback needs to match the criteria and/or outcomes of the assignment or activity (Xiao, & Tobin, 2018). The students can then use the feedback to improve their projects or assignments. However, one must be careful that the student has the resources available to make the revisions. Otherwise, the feedback could hinder the students' ability to complete the work (Guarino et al., 2017). This is also true for teachers. Without the necessary resources to implement the revisions to a lesson, some of the feedback may only frustrate the teachers as they learn how to be facilitators of learning.

Outcomes

Garces and Granada (2016) noted that, through professional development where the teachers collaborated, shared student data, reflected, and discussed, the outcome was a better learning opportunity for the teachers. As the teachers transition to learner-centered instructional strategies, they need to collect student data and analyze them with their peers to determine if students are making academic progress. Positive changes may not occur right away as teachers become facilitators of learning and students start taking on ownership and responsibility for their own learning. By keeping focused on planning learner-centered activities and thinking about desired outcomes for the students, the teacher will gain knowledge and skills to develop activities that promote student learning and the desired outcomes (Brown & Militello, 2016). Through frequent and different types of assessments the teachers can determine if the students are exhibiting the expected outcomes (Addae, 2016). As a school transitions to more project-based learning and competencies, more professional development will be required for the teachers to collaborate to develop consistent criteria for assessing student work at different levels of outcome (Sedova, Sedlacek, & Svaricek, 2016).

Discussion

Spalding (2014) suggested that as a school transitions to a different educational system, they do not alienate the students but help them learn to teach themselves. One way to help students realize they can teach themselves is through discussions. As the students, under the guidance of their teacher, debate, challenge, question, and require evidence to support claims, they realize that they are teaching themselves and their peers. In a discussion format, the teacher and students share the responsibility for dispersing knowledge (Addae, 2016). By engaging the students in discussions, teachers are helping students develop their cognitive and thinking skills, as well as their understanding of the material (Sedova et al., 2016). Either the teacher or a student starts the discussion with an open-ended question. During the discussion, it is the teacher's responsibility to comment on the correctness of the comments made by students and the content of the students' responses (Sedova et al., 2016). By incorporating discussions into the lesson plans, teachers can let students provide their voice to the discussion and present their ideas, challenge each other, and provide conflicting thoughts resulting in the students having a better understanding of the material being discussed (Sedova, 2017). Samuelsson (2016) identified four types of discussions for which teachers will have to receive training as to how to implement them into their lessons: explorative, problem solving, predetermined, and democratic. Learning how to interact in these different types of discussion is a skill that students need to learn to be productive members of a democratic society and effective team members in a company.

Methodology

The research design and approach for this qualitative study was a bounded case study. This design was chosen because it involved students and teachers experiencing the same phenomenon of learner-centered instruction using a blended learning model at an alternative high school that served at-risk students. The participants for this qualitative case study were from VAHS, an alternative high school which served at-risk students in Grades 9 through 12.

Teacher participants. Six teachers volunteered to participate out of the nine who qualified to participate. Creswell (2012) noted that the perspectives expressed by the teachers needed to answer my research questions. Thus, the teachers were asked their perspectives as to how learner-centered instructional strategies were being implemented

and how students were taking responsibility for their own learning. The six teachers' perspectives allowed me to obtain a clear understanding of the instructional strategies they used and how the students were taking responsibility and ownership of their education.

These six teachers represented approximately 50% of the teachers at the school. An attempt was made to get an equal number of male and female teachers to participate because there was almost an equal representation at the school. However, four male and two female teachers chose to participate. These six teachers did represent diverse academic disciplines (Creswell, 2012).

Graduate participants. A minimum of three recent graduates chose to participate from a group of volunteers. These graduates were included due to their personal experience in this educational model and because their perspectives were necessary to add depth to the understanding of how the implementation of the learner-centered blended learning model facilitated their academic achievement (Rufatto et al., 2016). There was a need for these students' perspectives to be included in educational research studies.

Three recent graduates were interviewed, who were at least 18 years old. They were purposefully chosen among those who had gone on to postsecondary education or the workforce to ensure that both groups were fairly represented (Creswell, 2012). This separation of the graduates was necessary to discover if there was a difference between the perspectives of those in postsecondary education and those in the workforce. A fourth graduate was added to obtain redundancy and complete this case study. Of the four graduates, three were female and one was male. One graduate was a current college student working part time, two had attended college first semester and were now working full-time, and one was working full-time. No graduate participant decided to drop out of this study; none had to be replaced (Yin, 2014). There were 23 graduates in the 2017-2018 graduating class. Thus, the four graduates represented 17% of the graduates.

Student participants. Five current students who were 18 years old or older were purposefully chosen from those who volunteered. This number did increase by one to reach redundancy. The perspectives from these six current students were important to help discover how the implementation of the learner-centered instructional strategies within the blended learning model supported them and how they were taking responsibility for their own learning. The inclusion of three 5th year seniors was necessary to discover why they did not graduate within the traditional four years (Rufatto et al., 2016). The other students were two seniors and one junior who were 18 years old or older. Thus, a total of six students, four recent graduates, and six teachers were involved in this study to ensure redundancy and completion of the study (Yin, 2014).

Analysis of the Data

The data from the interviews, classroom observations, and archived student surveys along with the notes and comments made throughout the data collection process were coded to identify potential themes, patterns, and to develop a visual description of the data (Creswell, 2012). This process was implemented after each interview and observation for discovering similar and/or divergent themes, as well as to determine if the research questions were being answered and if not, how to rephrase the questions or the observation checklist to answer the research questions (Creswell, 2012). Once themes or patterns started to emerge, a priori codes and emergent codes were developed from these and noted on a spreadsheet with the responses from the participants listed under the specific codes (Creswell, 2012). This process was inductive and was used to develop a description of VAHS and the themes that became apparent throughout the interviews and observations.

The data collected from the interviews, classroom observations, and student surveys indicated the participants wanted more face-to-face time between teachers and students and/or students and students which included small group discussions and less online time. Five of the six students interviewed indicated they spent the whole day online. Some of the teachers indicated they missed the benefits of having small group discussions with their students. Others wanted time to conduct whole group sessions on difficult topics or concepts and then time to work one-on-one or in small groups with their students.

The graduates explained that they were able to graduate on-time because they would ask their teachers for help and they had peers to support them. However, once they attended college, they realized they did not have the critical thinking, creative thinking, and communication skills to be successful. This resulted in two of the three college students dropping out of college after one semester.

The data also indicated most students needed help to be motivated to complete their courses. The two incentive plans, which recognized the students as they completed a course, helped to motivate many of the students. However, the students who were not motivated by these incentive plans, did not ask for help from their teachers, and/or did not have peer pressure and/or support still struggled to complete their courses.

Finally, the classroom observations indicated the teachers needed help in learning how to develop questions that would lead to classroom discussions. They also needed to understand and expand on their current knowledge of how to encourage students to be engaged and participate in small group discussions. Thus, the need for professional development focused on providing the teachers with the knowledge and skills in how to incorporate small group discussions into their courses.

Table 1 contains the learner-centered instructional strategies, blended learning strategies, and school structure identified by the participants, classroom observations, and student surveys. These open codes led to the three major themes listed on the right in Table 1.

Table 1: Research Question 1: Open Codes, Axial Codes, and Themes

Open code	Axial code/ Temporary Theme	Theme
<ul style="list-style-type: none"> • One-on-one • Feedback • Revision • Explanations • In-depth 	One-on-one instruction	Knowledge of learner-centered instructional strategies
<ul style="list-style-type: none"> • Discussions • Teamwork • Peer support • Interactive • Small Group 	Small Group Instruction	
<ul style="list-style-type: none"> • Online has distractions • Online is hard • Students don't go • Paper and pencil 	Blended Disadvantages	Knowledge of blended learning
<ul style="list-style-type: none"> • Resources online • Syllabus of assignments/dates • Work at own pace 	Blended Advantages	
<ul style="list-style-type: none"> • Choice of work location • Student choice of activity • Student choice of courses 	Student Choice	
<ul style="list-style-type: none"> • Set class time • Set one-on-one time • More one-on-one • Whole school same schedule 	Scheduling	Development of structure
<ul style="list-style-type: none"> • More structure • Structure with flexibility • Less free time 	Structure	
<ul style="list-style-type: none"> • Choice to attend or not 	Student Choice	

Both the observed and teacher reported instructional strategies were recorded in Table 2. One key takeaway from the table was four teachers indicated they used small group instruction. However, during the classroom observations it was evident that these small group sessions were really the teacher working one-on-one with the students. Another key takeaway was the lack of using peer tutoring, online discussions, and teamwork sessions.

Table 2: Instructional Strategies Observed or Stated to be Used by Teachers

Teacher	T1	T2	T3	T4	T5	T6
Emphasis on thoughtful exploration of complicated issues	O		X			
Different activities take place during class sometimes simultaneously		X	X		O	O
Whole class direct instruction	O	O	X			
Small group instruction	X		X	X		X
Peer Tutoring					O	
One-on-one instruction	X	X	O	O	O	O
Teamwork sessions			X			
Practical applications		O				X
Debates/Discussions	O	O	X	X		
Online independent work	X		X	O	O	
Online discussion postings			X			
Online research			X	X		
Student choice of work location			O		O	O
Student choice of activity			O			O
Student self-reflection	O		X	O		X
Prompt feedback			X	O	O	O

Note. T1 = Teacher 1, O = Observed, X = Teacher reported

Table 3 indicated how the six current students described how much time they spent each day in face-to-face instruction, one-on-one instruction, and online during a typical day at school. The students confirmed that the teachers were spending little time each day in face-to-face instruction and more hours a day in one-on-one instructional sessions with students. The most interesting data were the amount of time the students spent online each day which also indicated that when the students were in face-to-face or one-one-one instruction sessions they were also on their laptops.

Table 3: Number of hours a student spends in each instructional strategy per day.

Current Students	S1	S2	S3	S4	S5	S6
Face -to-Face Instruction	0	3	0	0	1	0
One-on-one Instruction	1	2	0.5	3	0	1
Online	6	6	6	6	3	6

Note. S1 = Student 1, 6 = 6 hours

A description of the themes follows with an explanation as to how the teachers, students, and graduates perceived the changes in the instructional strategies and the school structure and how these changes were perceived to have impacted student academic achievement. Table 4 and 5 indicate the themes from the interview that support each interview.

Table 4: Research Question 1 Open Coding Codes and Interview Transcript Excerpts, Classroom Observation Transcript, and Student Survey Data

Open Code	Transcript Excerpt
One-on-One	G1: One-on-one tutoring really helped me. G2: You could just go and sit down and just have them explain it to you face to face instead of in front of a bunch of people. S2: I like when teachers do one-on-one. S5: I am actually seeing the teacher and can say Hey, I would like some help. Can I get some help?" T1: The most important strategies are the one-on-one working with kids. T2: I know that I have had multiple students this year comment on how much they appreciate the one-on-one. S14 - S18: All wanted one-on-one time with a teacher. O4 – O6: Teachers were working with students one-on-one O1 – O3: Teachers stated they did one-on-one sessions with students.
Feedback	S2: The feedback I get is really helpful. S4: I do get some feedback. And then they actually put it on physical notes which I like S6: I like it because I get the feedback. T1: The feedback is key to this model of education because the feedback will help them understand what they need to do or where they are at. S14 – S19: All felt they get helpful teacher feedback. S14, S15, S17, S18, S19: All felt the feedback improved their understanding. O4 – O6: Students were provided with prompt feedback.
Revision	S2: She will do more revisions and sit down with me and help me go through it and get the final paper looking pretty. T2: I get out my laptop, they have theirs, and we revise together. T6: Students do many revisions.
Explanations	S6: Like I need full on detail of what I am doing. I need in one-on-one.
In-depth	G1: I needed more in-depth after the lecture or the class lesson.
Discussion	G4: Small group of 5 was easier to talk and discuss things when we were all on the same page. G4: Most of the work is on computers which I get, but some of the things you should have more discussion. S2: Class discussions also really help. S3: I do like small group discussions. S5: It has helped me because I can bounce ideas and whatever I need to get done with somebody, so it helps me go a little bit faster than I am. T4: And people can share their experiences, especially in my class, and I think it is good for people to see that. That’s kind of been lost. O1, O2: Discussions occurred in the classroom. O3, O4: Teachers indicated they do class discussions
Teamwork	G1: Teamwork sessions really did help me. G4: More teamwork but everyone has to put in the same amount. T3: This system is really about teamwork It is the student and the teacher, so when students started seeing that hey teachers are meeting me halfway, I can meet them halfway too, a lot got done. S14-S19: All felt neutral or disagreed that group work was a regular part of their activities. O3: Teacher indicated that she uses teamwork sessions.
Peer support	G4: We got so many credits is because we would push each other as a group. S4: They stick by me until I know, they know that I can do it. That I got this.

	<p>S4: They actually make sure that I get it done and on-time and well. O5: One student was helping another revise an essay.</p>
Interactive	<p>S5: If we did kind of like an activity that way, we actually got it down and not just in one ear and out the other. T3: That they have to have interaction and they have to do some group projects. T4: I definitely would like mandatory sessions but short sessions to where it was like 20 minutes of instruction and kind of interactive stuff and then you could work on your work.</p>
Small Groups	<p>G3: Small groups. I think they should have done that more. G3: So, when you work in small groups you can focus more. S2: I think more small group instructions. S5: I think the strategies that I would personally like would be like people who are in the same spot in a group. T2: It is just breaking it down into smaller more skills driven specific groups. T5: They are all at different points and there is no way to provide a class situation or mini session that covers all the points that they need.</p>
Online has distractions	<p>S3: I feel like having my curriculum on the laptop will take my attention away and I get distracted easily. S4: Because we wouldn't have the accessibility to the entire internet because most of it is not blocked anymore. T3: There are more distractions online.</p>
Online is hard	<p>S5: I don't like the curriculum to be online. I wish we would go back to paper and pencil that was a lot easier and it kept me on track a lot more. G4: Because it might be really hard, it was difficult for me. So, there are a lot of people who don't want to say that because I don't want people to think I am stupid because I don't know what I am doing. But I got the hang of it.</p>
Students don't go	<p>S5: And that did not work last year with the sections that people were supposed to go meet with teachers because no one kept up with that. T5: The first year was the realization that the kids had no responsibility towards their course work and the result is nobody went to any of the sessions they didn't want to or needed to. T5: Students take advantage of the system to hide out and stay away from doing work or they are just not capable of doing the work by themselves and they languish falling further and further behind.</p>
Paper and Pencil	<p>S1: A little more of the paper and all that. Because since a lot of times writing it down helps you remember stuff. S4: I wish we would go back to paper and pencil that was a lot easier and it kept me on track a lot more.</p>
Resources online	<p>G1: Here are a bunch of things you can refer to for this one question or word that you need. T4: That the curriculum is right there. The answers are all on the computer and you can re-watch that video so many times.</p>
Syllabus of assignments/dates	<p>G3: The sessions are printed out for the whole semester on what you are going to be doing.</p>
Work at own pace	<p>G2: There was not the pressure of like trying to keep up with everyone else. S1: Then I can do it on my own, on my own pace. S2: Pace is definitely one of my favorites and it is working really well for me. S3: The reason I like the pace is because like I said, if there is not really a deadline so no stressing out. T2: The students that I see that are really owning it again are those kids who recognize that this is at their own pace and nothing is holding them back unless it is them. T5: They feel empowered by it. They can choose what they want to do, when they want to do it, and get it done.</p>
Choice of work location	<p>G4: Like letting me choose my work location too because even in classrooms I get bothered quickly. S1: I think I just like the place because some places you can work better than others. O5 and O6: Students had choice of place to work.</p>

Students choice of activity	G1: Probably the student choice of activity on how I would like to do an assignment. T2: Student choice in what book to read T3: Student choice in developing a course of their choice. T6: Students choose the theme for their project. S14, S15, S19: Believed they could make decisions about the topics that they studied in school. S16, S17, S18: Most believed they could not make decisions about the topics that they studied in school. O6: Students had choice of activity.
Student choice of courses	G4: Add another class as quick as I could but at my own pace. T4: Student choice in what class to take that I offer.
Set class time	G1: The only thing that I liked was the set schedule. S4: I want to go back to set class times.
Set one-on-one time	S4: I wish they would set time for teachers to work with individual students if they really need help.
More one-on-one	G4: I would like more mon-on-one time.
Whole school same schedule	G1: It would be nice to have the whole schedule the same. S4: I liked it when it was set sections. 4 classes a day. T4: Maybe set schedules too.
More structure	G2: There needs to be more structure and more rules. S4: In the traditional setting I earned 15 credits. The next year under the flex model, I earned 8 and each year after that has been less and last year, I earned 1 credit. (Summarized from comments made to three questions.) T1: When you make the class sessions mandatory for the students to be in and you make it to where we are in lesson planning and we are doing it properly, they love it. T4: I definitely would like mandatory sessions but short sessions to where it was like 20 minutes of instruction and kind of interactive stuff and then you could work on your work. T5: I would like to see more structure in that I know when I can send kids to specific teachers for help at specific times. S16, S17: Wanted more structure
Structure with flexibility	G3: But if it was mixed between more structure and less structure in a way that could work then it is perfect. T1: I would love to see blended school where kids were taking 4 classes every single quarter and inside those classes were a flexible system that is designed by the teacher.
Less free time	G3: Less free time. I think there is too much free time. S4: It gave me time to slack, easily.
Choice to attend or not	G3: I feel you should have the choice to attend the session or skip it if you don't need help. S3: I feel like they gave you the choice to leave class early or you could help, stay and help the students.

Note: T=Teacher, S=Student, G=Graduate, O=Observation, S14= Survey age 14

Table 5: Research Question 2 Open Coding Codes and Interview Transcript Excerpts, Classroom Observation Transcript, and Student Survey Data

Open Code	Transcript Excerpt
Ask for help	T5: There is increased amount in a number of students to seek out the teacher that can get them the help. S2: One of the biggest things they teach here is never be afraid to ask for help. S2: If I am struggling with something, I can go to my teacher and say I am struggling with this. Help me. S5: I am not just sitting there, I am actually seeing the teacher and can say, "Hey, I would like some help. Can I get some help?" G3: If I needed help, I went and asked.
Ask for new classes	T6: Students will request more classes.

	G4: The way I go so many credits is because I would ask and add a lot of classes because I could take a lot at once.
Go to class	T2: I do the facilitation plan every day because I think that helps with them taking ownership if they know where they need to be and with us having the expectation that they will be there. T4: Getting kids to go to class is the biggest thing with having the mentor on board and if they are not on board it is tough to get them there. T6: Students will actually go to their classes based on what they see on the facilitation plan on the board. Then of course, you have the complete opposite of that where students aren't going to their classes.
Self-motivation	T2: The kids who are motivated and are driven are really flying high. T5: The model addresses only those students that are capable of handling themselves and does nothing to help those who can't and that leaves the teachers out. S2: Teachers here taught me to be able to use myself as a motivator. G2: But when I got to middle school and I realized it wasn't just like me being dumb, it was like the place I was in wasn't allowing me to thrive. G2: I think taking responsibility for your own education is really a personal thing but overall I think it is something that you have to want and you never have to stop trying.
Feel empowerment	T1: That's probably the biggest thing we have seen is a lack of student buy in as well as a lot of success when students buy in because they are taking responsibility. T3: I have seen that ownership piece take hold and then everything else from there went up. T5: They feel empowered by it. They can choose what they want to do, when they want to do it and get it done. S2: Being able to take responsibility for myself is actually kind of liberating.
Time management skills	T5: They can make choices for their own personal work load and they can schedule their own time and they are competent. S2: It's teaching you how to do time management because if you don't you will go way behind, and you won't even know it until it happens. S14 – S19: The majority felt the school expected them to learn time management skills.
Facilitator	T1: Not a lot of teachers are facilitators who know how to facilitate working with kids one-on-one. T3: I'm a facilitator of conversation and communication and honesty that day.
Mentor	T1: We have some teachers that are very good at mentoring kids and we have some teachers who are not very good at mentoring kids. T3: My favorite role has got to be the mentor piece because I just see the culture shifting when we talk about relationship with students being number one. G2: I also think that that mentor thing really helps because since there are not that many of them in there, teachers can understand the person. G3 Mentoring is helpful because if you are like struggling you can go talk with your mentor and they can figure out what to do.
Facilitation plan	T3: I group students based on their academic needs and schedule those groups for the least amount of conflict. So, definitely the facilitation plan helps. T5: With the facilitation plans where it seems to be changing daily, I do not have time to look at it daily.

Helps students	<p>T1: It goes a lot into the kids taking, the teacher taking ownership of the students ability to learn. S2: It helped me with communication skills. S5: It helps with my communication skills. S6: My teachers are also like, you know, reminding me about graduating. They are also like really helping me too. G4: My mentor was really helpful by helping me.</p>
Teach motivational skills	<p>T1: We have to teach them how to find success. T2: The kids who are not as driven, I think they are struggling a little bit only because they are used to being spoon fed and so they are struggling. T3: Teach the Habits of Success. G4: If you motivate them, they will want to do more. G4: It just matters that they are doing it and if they feel motivated. You want them to feel confident in what they are doing. G2 – G4, S1 – S3, S6 felt the school taught them this skill.</p>
Teach coping skills	<p>T2: We need to teach them how to have empathy and patience. T2: Most of the need they have is that emotional need and they need that support not only in the classroom but just in life. T3: I would want them with me all the time to really make sure their basic needs are good and that their relationships are solid and then teaching them coping skills. T5: We will never be able to solve their problems but teach the kids how to cope with them, address them, and have the teachers understand more where the kids are coming from.</p>
Credit recognition	<p>T4: A lot of these kids are like taking a lot of like ownership and kind of pride in getting these credits. G2: But when they went Oh, that is so cool. It was so awesome that you get praise from the teacher. You get praise from your mentor. You get to walk down to the office. You get praise from the principal and praise from the secretary and you get a piece of candy. It was very simple, but it makes you feel like it is worth it.</p>
Peer help	<p>S4: I have two friends who stick by me until I know, they know that I can do it. That I got this. S4: I have started hanging out with them more and more. They have been motivating me. S5: Small groups so that if one person or x amount of people don't understand hopefully somebody in that group can help others understand. G4: Focus on my stuff with other people that would work with me and had the same classes and we would do our stuff together. G4: We got so many credits is because we would push each other as a group.</p>
Dealing with stress	<p>S2: I think the students that dropped out, it is the stress of the change or they just didn't want to do it. S3: It gives you time, but OK I am not getting stressed out about a deadline that I have to get his. I can work at my own pace. G2: There was no the pressure of like trying to keep up with everyone else.</p>
Lazy	<p>S4: I was lazy and didn't come to school enough. S6: Oh, my teachers didn't help me, I will blame them. What was really my fault.</p>
Procrastination	<p>S6: I didn't graduate last year due to procrastination.</p>
Too much freedom	<p>S4: It gives me time to slack, easily. S6: It was a lot like freedom. I would stay in one classroom a lot with my friends and just not get things done.</p>

	G1: Students running around and not getting their work done and being a really big distraction. G3: I think there is too much free time. And not enough like instruction time.
Credits given, not earned	T4: I think like some teachers take some stuff out. G2: How are they supposed to get out in the real world and know where to start when you are teaching them right now that the real world is just going to hand them things and they do not have to work for anything because they will just cry or bat their eyes and then they will get things that they want. G3: Not cut out assignments for students. I just don't think I was fair. G3: Because when that happens you are just not prepared for like in general or what you are going to learn in school.

Conclusion

Learner-centered instructional strategies are important for helping students succeed academically (Rufatto et al., 2016; Suprabha & Subramonian, 2015; Weimer, 2013). Blended learning has proven to be more effective than traditional or online instruction (Bayar, 2016; Brown & Militello, 2016; Guarino et al., 2017; Horn & Staker, 2015). Thus, it is important that these strategies are being implemented with at-risk high school students. At-risk students earn this label by being identified as potentially becoming a dropout. It is important that the academic needs of these students are met so they do not drop out and instead become high school graduates. The use of small group discussions is a way to help these students learn the content in their courses by requiring them to present their ideas supported by evidence. It enables them to ask questions which will help them clear up misunderstandings and misconceptions. In addition, to helping the students with their academic studies, discussion encourages the students to learn the skills of communication, problem solving, teamwork, listening, asking questions, organizing one's thoughts, and collaborating with others which employers are looking for in their new hires.

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