

Blended learning and teaching writing: A teacher action research project

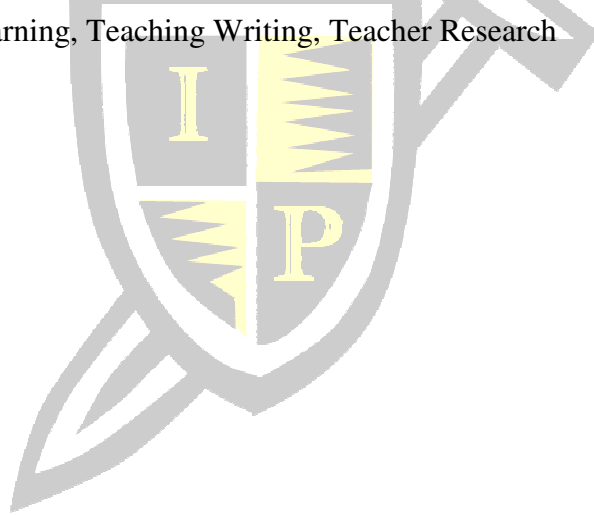
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ABSTRACT

This teacher research project focused on utilizing blended learning to teach writing to middle school students. The intervention was designed to fit into individual lessons needed to improve students' writing skills with the main focus on sentence structure. Sixteen (16) 7th grade students were assessed with a writing sample applying the new skills they have learned. The intervention took a total of two weeks with six lessons implementing instruction. These lessons included a pre-assessment of student knowledge and a post assessment summarizing their gain of knowledge. The participants are from a small private school in the Midwest of the United States.

Keywords: Blended Learning, Teaching Writing, Teacher Research



INTRODUCTION

The researchers believe that every child has the ability to learn. Each child is entitled to a secure, caring and stimulating atmosphere in which they are allowed to learn and grown intellectually, emotionally, and socially. Students should feel safe and are allowed to ask questions and share ideas. It is the goal of educators for each child to reach their full potential and feel supported while doing so. The authors want to help students to develop into well-rounded individuals with skills they can apply to everyday situations and whom can problem solve with their peers. Students will become productive members of society with hard work and self-discipline. In educating students to become productive members of society, it is important to teach them using means that are up to date and geared toward their learning styles. A typical classroom is comprised of students who are on several different learning levels and it can be challenging to teach them because they are not all on the same page and do not do well working in small groups and struggle to work independently. The target classroom for this study received a grant for each student to use an iPad mini. Given this kind of technology, the researchers want to utilize the iPad minis to help students learn better. In the present time, the students are going to school in the technology age, but the teachers are not teaching them with technology. According to Mojokowski (2013), and as Apple cautioned long ago, the importance of technology is not technology. The importance is the partnership that humans form with technology to incorporate it into their lives.

The research question was, “What happens to student learning when face-to-face writing instruction is supplemented with online instruction?” This study involved sixteen seventh grade students over a period of two weeks. In order to conduct the research, students were given a pretest, which showed where the students were academically in their grammar and writing skills. The program designed a path for each student, with the instructor-researcher’s guidance, according to students’ ability level. The students were divided into two groups, blended learning and traditional/regular classroom learning. The instructor supplemented face-to-face instruction with 50% online instruction. The goal to measure student learning was to create forward progress from their starting grade level ability. Student learning was demonstrated with mastery of concepts by taking a test on the concept that was taught and the application of concepts learned in their writings.

OVERVIEW OF RESEARCH LITERATURE

Blended learning is defined by The North American Council for Online Learning as a learning approach that combined the best elements of online and face-to-face learning (NACOL, 2013). There are a handful of studies that had been done on blended learning or supplementing online learning for face-to-face learning. Most of these students indicate that technology and learning should go hand in hand. According to Tutty and Klien (2008), using technology is highly engaging for all age groups and is a way to enhance the learning process for all performance base instruction. In addition, Mojokowski (2013), states that technology could provide access to a cornucopia of learning resources so that anyone can learn anything at any level in any place from anyone. It is about finding the correct balance between face-to-face and online learning.

This shift of blended learning involving face-to-face and online instruction is intended to make learning more productive by giving better teaching tools, more time, and informative data,

according to Vander Ark (2012). It allows individual instruction in a regular classroom setting. “The widespread adoption and availability of digital learning technologies has led to increased levels of integration of computer- mediated instructional elements into the traditional F2F [face to face] learning experience,” write Bonk and Graham (2004, p. 2), in the Handbook of Blended Learning. According to North American Council for Online Learning (2013), blended learning is likely to emerge as the predominant model of the future, and to become far more common than face-to-face or online learning alone.

Blends of online and face-to-face instruction, on average, had stronger learning outcomes than face-to-face instruction alone states the United States Department of Education (USDE) (2009). Shanley’s (2009) research of student retention on online courses states that, regardless of the mode of learning, it is important that students have an opportunity to experiment with tools and technology required for the class before the critical elements of the class are introduced. It has to be more than just adding in technology when technology is convenient; it has to be incorporated into the learning process. Students must not just learn from the technology, but should learn with it as part of their everyday routine.

The program used to incorporate blended learning into lessons was MobyMax (www.mobymax.com). This program integrates common core curriculum allowing teacher tools to control each student’s learning program individually. MobyMax allows gifted students to progress quickly, while at the same time allowing remedial students the opportunity to for the extra instruction they need. The program allows students to take a placement test, use adaptive lessons for individual students, sends progress reports, allows the teacher to communicate to individual students through messaging, and allows students and teachers to communicate as a group for homework questions and class assignments. There is also a motivational feature where students earn points to play games and compete in contests for prizes. The blended learning process used in the classroom aimed to improve students writing while focusing on their grammar usage.

Writing effectively is an essential skill that all students should master. In Feng and Powers’ (2005) study, they took students’ grammar errors and writing mistakes in their writing pieces and used the findings to create mini lessons for practice and did a follow up writing piece to show improvement. Students, in reality, frequently make grammar mistakes in writing. Many of the grammar mistakes that a student makes in their writing are consistently made in the same writing. Their findings suggest that elementary teachers should embed grammar teaching in the writing process, in particular in the revising and editing stages.

In the latest finding from the National Writing Project (2010), a recent survey of middle and high school teachers found that digital technologies are shaping student writing in countless ways and have also become helpful tools for teaching writing. Technology is allowing students to share their work with a larger audience, collaborate with other students more efficiently, and reigniting the creativity spark in the new generation of writers. It is improving their writing skills and their word usage. The report also stated that 50% of teachers surveyed say today’s digital technologies make it easier for them to shape and improve student writings. Technology can help improve writing and grammar usage.

INSTRUCTIONAL INTERVENTION

The purpose of this intervention was to improve student grammar use in their writings through the use of blended learning. In order to accomplish this goal, students were given

individual lessons to improve their writing skills with the main focus on sentence structure. The students were assessed with a writing sample to apply the new skills they have learned. The intervention took a total of two weeks with six lessons implementing instruction. These lessons included a pre-assessment of student knowledge and a post assessment summarizing their gain of knowledge. The sixteen students that participated attend a small Catholic school in the Archdiocese of Louisville. The Common Core standards were used to connect this study to curriculum. The Common Core standard L.7.1 states that students should demonstrate command of the conventions of Standard English grammar and usage when writing or speaking, and Common Core standard L.7.1b states that students should be able to choose among simple, compound, complex and compound-complex sentences to signal differing relationships among ideas.

Students involved in this study have little to no prior knowledge of the topic to ensure the growth in knowledge was from the study. The sixteen students in the seventh grade were divided into two groups based on their pre assessment taken the first day of the study. The groups had learning levels ranging from at grade level, below grade level, and significantly below grade level. The groups were divided to include all levels of learning. Group A is the group who experienced blended learning which was part conventional learning and part online learning, while Group B just stayed in the classroom using conventional learning of face to face with the teacher.

The pre assessment consisted of twenty-five questions that pertained to sentence structure. This was taken by all students and it was taken online using MobyMax, like most of the students pre assessments are taken. The students were also asked to write a short response to an essay type question using the same MobyMax program. Students were made accustomed to using this program through practice in their previous assignments. The sentence structure was also assessed on the writing assignment using a rubric. Once the pre assessments were graded, that information provided determined the breakdown of students into their two groups, Group A and Group B. The students stayed in the same groups for the duration of the unit. This way, students have the opportunity to build learning communities with one another.

The first lesson was taught as a whole class. Students were introduced to the concept of simple sentence and subject/verb agreement and completed notes and worksheets with examples for each term. Students did examples on the board, asked questions, and worked independently. Students were also asked to complete an exit slip for the lesson. Homework was also assigned to students reviewing the concepts taught in class.

The second lesson was taught in their groups. Group A, the blended learning group was assigned a lesson on MobyMax pertaining to simple sentences and subject/verb agreement. Group B continued the lesson of simple sentences and subject/verb agreement in the classroom to check homework, do examples in class, and work in small groups. Both groups completed the same exit slip when the lesson had concluded.

The third lesson was taught as a whole class. Students were introduced to the concept of compound sentence and completed notes and worksheets with examples for each term. Students also reviewed independent and dependent clauses. Students did examples on the board, asked questions, and worked independently. Students were also asked to complete an exit slip for the lesson. Homework was assigned to students to review the concepts taught in class.

The fourth lesson was taught in their groups. Group A, the blended learning group was assigned a lesson on MobyMax pertaining to compound sentence and complex sentence. Group B continued the lesson of compound sentence and complex sentence in the classroom to check

homework, do examples in class, and work in small groups. Both groups completed the same exit slip when the lesson had concluded.

In the fifth and final lesson, students took a twenty-five question post assessment and completed a short response to an essay type question using the same MobyMax program. Their sentence structure was also assessed on the writing assignment using a rubric.

At the conclusion of each lesson, data were collected. The data collection included the use of rubrics in Table 1 (Appendix), along with exit slips, and assessments that involved multiple-choice questions. The rubrics allowed the researchers to see how students applied their knowledge using their own writings versus picking out the correct answers using a script writing or script sentences. The exit slips that were collected after lessons 2-5 allowed the researchers to assess progress from day to day and to make changes in lessons and instruction if need be. The information gathered from these assessments determined the learning outcome of the unit and would show if learning was achieved. All assessments not only would show learning outcome, but also evidence if the students were able to apply the said learning to their own writings successfully.

RESULTS

In order to answer the research question, a series of lessons were taught and data collected. Prior to instruction, students were given a pretest and writing assignment to gauge the level of content knowledge prior to implementation. The pre-assessment data for the writing component used a 100 point rubric to score the students responses. The average score of the whole class was 40.18% prior to any instruction. As shown in Figure 1 (Appendix), the average score for the face-to-face group prior to instruction was 38% and the average score for the blended learning group was 42.37%. The rubric was designed to look for uses of varied sentence structures to convey meaning of the topic. The students were graded on four different categories including topic, organization, support, and language. Each category carried a possibility of twenty-five points.

Lesson one on subject verb agreement was a face-to-face lesson for both groups. Students in both groups learned the same sequence or steps. The lesson delivery differed in terms of how they received the information or lessons and the mechanics of demonstrating how they learned the information. First, students learned that subjects and verbs must agree to form a proper sentence. Students then built on that topic to learn and apply different types of sentence structure to vary combinations of writing output. At the end of each lesson, students were given an exit slip that contained five questions with one point. Both groups were given the same exit slip whether their lesson was face to face or on the computer that day. There are eight students in a group with each student able to earn five points for a total of forty points possible for the group. For the first lesson, the face-to-face group scored thirty-two points out of a possible forty, which indicates 80% level of mastery. This showed partial mastery of this objective. The blended learning group scored thirty-four points out of a possible forty and received an 85% meeting mastery level.

In the second lesson on subject verb agreement, the groups were divided into their learning groups, face-to-face and blended. Both groups completed the same exit slip. The face-to-face learning group scored thirty out of a possible forty points, which gave them a 75% indicating that they met partial mastery. The blended learning group scored thirty-five out of a possible forty points giving them a mastery score of 88% percent. In the third lesson on

compound sentences and dependent and independent clauses, the face to face learning group scored a thirty-one out of a possible forty points which gave them a partial mastery score of 78%. The blended learning group scored a thirty-five out of a possible forty points. This gave the blended group an 88% proficient level. In the fourth lesson on compound and complex sentences, the class was divided into their learning groups. Both groups received the same exit slip. As illustrated in Figure 2 (Appendix), the face to face groups scored twenty-eight out of a possible forty points giving them a non-mastery score of 70%. The blended learning group scored thirty out of a possible forty points giving them a 75% putting them in the partial mastery category.

The final assessment was given at the end of the study in which students took the same multiple-choice test and completed the same writing assignment to show growth in their knowledge and application of sentence structure. Both groups gained knowledge on the topic, but blended learning showed more gain. The whole class average for the post assessment showed 32.75% gain from the pretest. The gain from the posttest for the face-to-face group was 28.5%. The gain from the posttest for the blended group was 37% giving the blended learning group an 8.5% gain on the face-to-face group.

The whole class average for the post writing assignment showed 36.88% gain for the pre writing assignment. The gain from the post writing assignment for the face to face group is 34.25% The gain from the post writing assignment for the blended learning group is 39.5% giving the blended learning group a 5.25 % gain on the face to face group. The results show a pattern that in group A, the blended learning group, made larger gains throughout the study. Sample writing outputs are in Figures 3-6 (Appendix).

Student learning did increase at a higher percent with a blended learning environment. Blended learning allowed the instructor to work in small groups and with the face-to-face group, which did not occur to me at the start of the study. Student response to blended learning was over all positive.

REFLECTION OF STUDY AND ACTION PLAN

During this study the researchers intended to observe which group, face-to-face or blended, will produce a better learning outcome on students writing ability. The purpose of both instructional deliveries was for students to be able to learn proper sentence structure and apply it to their writing. Writing effectively is an essential skill that all students should master (Feng & Powers, 2005). The teacher researcher inquiry was about which learning group was more successful with the intention of both groups gaining some success. While both groups did gain success, the blended learning group showed more improvement in all assessments used throughout the study.

The students' learning behaviors positively shifted with both groups. The blended learning group engaged in the blended learning activities and positive gain was seen in both assessments. The face-to-face learning group also had positive gain. The researchers attribute this to the small group environment that the students received when the blended learning group was using technology implementation.

The students in the blended learning group seemed more engaged using the iPad and the computer. The students seem to favor the use of iPad minis and the computer due to the learning opportunities and capabilities of the technology. They were eager to participate and share what they learned while using the technology. The students in the face-to-face group ended up

receiving more of a small group instruction, which they expressed to me as a favorable result in the groupings. The face-to-face group was disappointed in not being able to use the tool of technology.

There were some challenges that the researchers feel hindered the students learning and the instructor's teaching ability at the time of the study. The school received the news that the school would be closing at the end of the year. Students and teachers alike were processing this new information and coping with what was in store for their future. Of course learning cannot cease, teachers and students tried to continue to make the most of the school year and time together. It was difficult for this class, as many of them have been together for several years and would soon part ways without a choice. As far as the two groups, one element that might have hindered their learning would be that the face-to-face group did not get to use the tool of technology in which this was perceived as a privilege for the students. Also, the blended learning group may have performed even better if the classroom teacher (one of the researchers) was able to be their facilitator during their online learning time. Another researcher took over during their online learning time. That time, the researcher was with the face-to-face group of students.

As the researchers continue forward with writing instruction, they will make sure to incorporate more writing assignments into the daily curriculum instruction. This will give students the opportunity to practice their writing skills. The researchers will also collaborate with fellow middle school teachers to incorporate more writing into their assignments so that students can see that this skill needs to be applied in all subjects. For students who did not master the learning objective, the researchers will give them more one on one instruction including more frequent smaller assessments to target their need for improvement. For the students who have already mastered objective, the researchers will have the student apply what they have learned in their everyday writings, such as short answer questions and journal entries. All students will be given the opportunity to use their iPads for writing assignments.

During this study, the researchers collaborated with colleagues to discuss the impact of the intervention to student learning. It was suggested by a colleague to have the students personally reflect on this new style of learning. A colleague stated to have the students do a self-assessment which would ask them what they think about incorporating blended learning into their lessons and if it improved their writing. As a response, the students showed willingness and acceptance of assignments when they are asked to explain their thinking and how it can impact their learning. Asking students to reflect and think about an assignment's importance helps them to understand its purpose. Below are a few of the quotes from the students who participated in the blended learning group.

"I liked blended learning because I can learn at my own pace. If I got stuck on something, I was able to ask a question without distracting the class. I felt more confident asking my question."

"I thought that blended learning was enjoyable and would do it again. It taught me just as much as the other students and faster. I prefer to learn with technology."

To confront issues of diversity that effect student learning, we plan to develop additional teaching strategies such as including more visual cues for students and repeating directions. Before using programs as tools for assessment, we will provide more opportunities for students to "get comfortable" with online educational programs. Providing students with headphones will help those students whom need concepts reread to them.

The study shows that blended learning has a positive effect on most students in this class and the researchers would continue to incorporate this learning tool in more of the writing lessons along with the reading curriculum. They are looking forward to having the students continue the new found interest on individualized learning in the classroom. They hope this new found interest in individualized learning will continue to show growth and success for students of all learning styles and abilities and bring a more positive prospective to the classroom.

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Table 1. Pre and Post Writing Rubric

Criteria	25	20	15	10
Topic/ Focus	Chooses a focused, interesting topic for the prompt Demonstrates a strong understanding of the topic Stays on topic throughout the work	Chooses an appropriate topic for the prompt Demonstrates an understanding of the topic Stays mostly on topic with a few loosely related statements	Chooses a topic that may not adequately address the prompt Demonstrates a limited understanding of the topic Struggles to stay on topic	Topic does not satisfy the prompt Demonstrates little to no understanding of the topic Does not stay on topic
Organiza- tion	Clearly introduces topic and previews what is to come Thoroughly develops topic with logical progression of body paragraphs Uses formatting (e.g., headings) to aid organization Skillfully uses transitions to link ideas and create cohesion Reflective conclusion follows from and supports the information presented	Introduces topic and previews what is to come Develops topic with logical progression of body paragraphs Uses formatting (e.g., headings) to aid organization Uses transitions to link ideas and create cohesion Conclusion follows from and supports the information presented	The topic is introduced, but may be less clear and may not preview what is to come Develops topic with logical progression of body paragraphs Attempts to use formatting (e.g., headings) to aid organization Uses few transitions to link ideas and create cohesion Conclusion is weak and may not follow from or support information presented	The topic is not introduced, or is unclear Topic is poorly developed in body paragraphs Formatting (e.g., headings) is not used Uses few transitions to link ideas and clarify writing Conclusion is very weak or nonexistent

Evidence/ Support	<p>Uses relevant and substantial amounts of text support from a variety of credible sources Cites and integrates sources effectively Skillfully develops the topic with facts, details, definitions, quotations, examples and/or other information Uses graphics and multimedia to aid comprehension when appropriate</p>	<p>Uses relevant and substantial amounts of text support from a variety of credible sources Cites and integrates sources effectively Skillfully develops the topic with facts, details, definitions, quotations, examples and/or other information Uses graphics and multimedia to aid comprehension when appropriate</p>	<p>May lack text support in places use less credible sources Cites sources incorrectly and integrates them less fluently Develops the topic with limited facts, definitions, or details, quotations, and/or examples Attempts to use graphics or multimedia when necessary, but may be ineffective</p>	<p>Does not use relevant or sufficient text support from resources Does not cite sources or integrate them into writing Uses few facts, definitions, details, quotations, or examples to develop the topic Fails to use graphics or multimedia when necessary to help explain the topic</p>
Language and Conven- tions	<p>Uses varied sentence structures to convey meaning Purposefully uses conventions (grammar, punctuation, spelling, capitalization, etc.) to enhance meaning Uses sophisticated academic and domain-specific vocabulary</p>	<p>Uses varied sentence structures Demonstrates command of grade level conventions (grammar, punctuation, spelling, capitalization, etc.) Uses some academic and domain-specific vocabulary</p>	<p>Sentence structures are repetitive Multiple convention errors Limited use of academic and domain specific vocabulary</p>	<p>Sentence structures are simple and repetitive Many convention errors – inability to demonstrate grade-level appropriate command of conventions Little to no academic or domain-specific vocabulary</p>

Figure 1. Pre and posttests

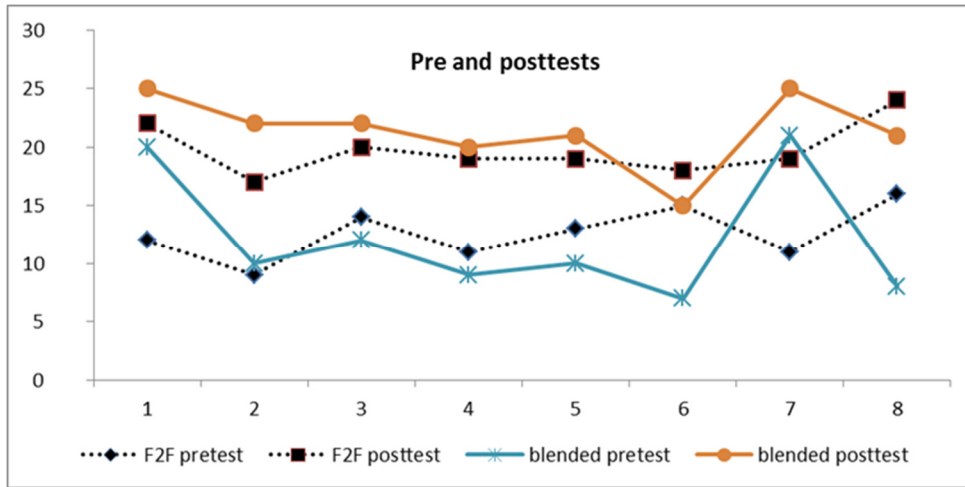


Figure 2. Pre and post writing assessments

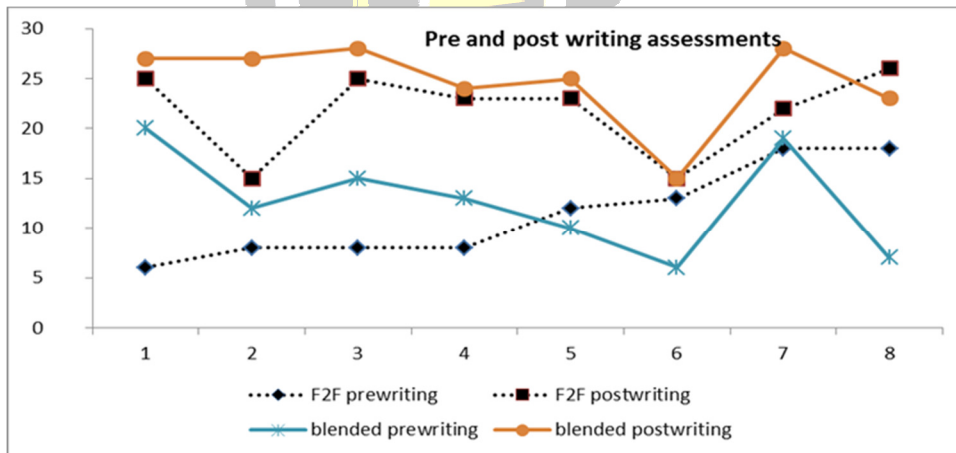
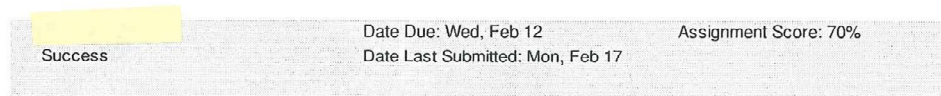


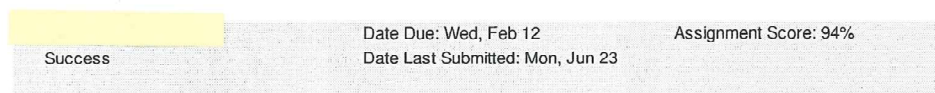
Figure 3.



Success Date Due: Wed, Feb 12 Assignment Score: 70%
Date Last Submitted: Mon, Feb 17

What it means to be [SP]susses full is that you will strive to do your best and will always do[SP] your best.[SP]Susses look like what you look like when you do you best and my best is my average. How is your BEST your AVERAGE... that doesn't make any sence. I am going to[SP] achive my [SP]susses by doing what I am supposed to do and always doing that.

Figure 4.



Success Date Due: Wed, Feb 12 Assignment Score: 94%
Date Last Submitted: Mon, Jun 23

To be successful means that you have accomplished something great or good. This means you have set a goal and achieved it. For example, you want to become an artist, in order to do that you have to spend a lot of time drawing, listen to other artist and ideas, focus on going to a good art school. Endventually you would hope to have your art sold or displayed in shops or muesums. When you have met your goal you have been successful.

To me success looks like what i have seen in my parents lives. My parents are successful in life because they have gotten jobs that they enjoy and they have raised a family. They valued my sister and I enough to get us a good education. They cared enough to travel overseas to adopt me. This is what success looks like in life.

I want to be successful and grow up to have a family and become an artist. To do this, I have been drawing everynight and that helps me become a better drawer. I will work on listening to other artist and their ideas. I want to go to a collage and study art technics. I want to be able to get my art work sold and displayed in stores. I want to be successful in life and grow up to be an artist.

Figure 5. Sample Pre-writing Output: Blended Learning

Success	Date Due: Wed, Feb 12 Date Last Submitted: Mon, Feb 17	Assignment Score: 70%
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What I think successful means is to get good grades in middle school, get good grades in highschool, go to a good colledge, get a decent job, and retire at age 62. ~~Kind of just answered the first 2 questions in the first sentence.~~ I want to be a Major League Baseball player, so for me to be successful; I will go to [SP]colledge, get good grades, and hopefully get drafted. That is what I think being successful looks like. How are you going to achieve success?

Figure 6. Sample Post-writing Output: Blended Learning

Success	Date Due: Wed, Feb 12 Date Last Submitted: Mon, Feb 17	Assignment Score: 83%
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2-11-2014
English-MobyMax

What Success Means To Me:

Success means to achieve a goal that you aim for while remembering the things that are important. An example would be fame. Once you achieve your goal of being famous, you thank the people who helped you along the way and not to let the glory of achieving your goal get to your head. That's huge success. Then there's simple success such as achieving your goal, purpose, and or aim. Simple success is like winning your side of a debate, studying for a test and passing, or practicing hard until you hit your goal. The look for success is the practice or work you do for it. Practicing and working hard enough to achieve your goal is the major part of success. Another look is the motivation. This part of succeeding in your goal, aim, or purpose shows how much work you put into your practice, work, and or effort. The way to achieve success is to try to do your best, remember the things that are important, and to have extra positive motivation. Motivation is mainly like the key to succeed in your goal. Without good motivation to keep you trying until you master your goal, you probably won't make as much success as you want. The way I am going to be successful is to keep trying every day. An example for me would be singing. My goal of success would be hitting my high notes. I would keep trying every day and have a positive motivation that I can do it until I do. Once I hit my goal, I would still practice until I hit my next goal, getting on American Idol. My main idea of success is to do the thing you love and keep trying until you make it big, and that's what I'm going to do to be successful in my goal.