ABSTRACT OF CAPSTONE

Ishmael Craig Herald

The Graduate School

Morehead State University

April 9, 2021

MICROCREDENTIAL FOR FACILITATORS

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Abstract of Capstone

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A capstone submitted in partial fulfillment of the
Requirements for the degree of Doctor of Education in the
Ernst and Sara Lane Volgenau College of Education
At Morehead State University

By

Ishmael Craig Herald

Bonnyman, Kentucky

Committee Chair: Dr. Michael W. Kessinger, Associate Professor

Morehead, Kentucky

April 9, 2021

ABSTRACT OF CAPSTONE

MICROCREDENTIAL FOR FACILITATORS

This capstone was developed out of a need for professional training for those who are tasked with facilitating a classroom of secondary students in online and hybrid courses. Facilitators are becoming a vital part of both expanded student opportunities and student success, especially in rural school districts. As rural schools struggle to hire qualified educators, they turn to online and hybrid learning courses as a way to fill that gap. Students must still be monitored and supervised. These rural schools often use any available school personnel as a facilitator for this role, yet, there is no established training for school personnel to see that they fulfill this new role successfully.

Learning has taken on a new look since the COVID pandemic. Virtual and hybrid learning may become a new standard in education. With this change comes challenges. Managing the learning process through online learning management platforms can be confusing for students who have never navigated through these waters before. Students need an advocate who can model for them how to be successful learners in this new environment.

To be true support for students, facilitators must be proactive and involved in student learning. Understanding this new role will require an understanding of the types of support that students in online and hybrid courses need. The two microcredentials created in this capstone are designed to build the capacity for

facilitators to effectively model communication and navigation through the syllabus and learning management system.

These microcredentials were designed to educate facilitators not only on how to model communication and the learning management system but also cover the need for positive relationships and how to build students to become self-advocates. The strategies and artifacts the candidates submit through this microcredential process will prove that they have mastered the necessary skills and proven competence while equipping them with tools they can use in the classroom as they facilitate the learning experience for students in online and hybrid courses.

KEYWORDS: Rural schools, Student support, Capacity building, Digital learning, Facilitator

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MICROCREDENTIAL FOR FACILITATORS

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DEDICATION

I dedicate this capstone to my family.

To my parents, Cecil Herald and Jenny Lee Clemons Herald. I do this in my dad's honor, the honor of the man from whom I have learned so much, the person who has influenced me the most to become the person I am today. My dad will always be my hero. My mom taught me how to be strong. I do this to show how my mother's love and supportive way have made me successful and strong.

To my son, Trevor Fox Herald. Becoming a father changed me. Pursuing goals for myself was no longer good enough. I wanted to be a positive role model for my son. That desire drove me to push myself to heights I never intended to reach. My son is so smart and talented, but I wanted to instill in him a desire to be a lifelong learner. I am proud of the man he is today and the man he is growing to become.

To my brother, Hilburn Clemons Herald. Hib has always been by my side. As brothers, we have tackled challenges in life together. As good friends, we support each other no matter where life takes us. It is good to know that no matter the path, Hib will always be my younger brother and best friend.

ACKNOWLEDGEMENTS

First, I have to acknowledge my loving, supportive wife, Autumn. I would not have felt comfortable starting this process at this point in my career without her supportive nature and nurturing spirit.

I want to thank my committee. Dr. Michael Kessinger helped me stay focused and on task during this process. Dr. Jimmy Evans led me to get involved in the doctorate program at Morehead State University. Dr. Steve Stubbs showed me that someone from a Career and Technical Education background could attain this level of a degree.

To all the professors and faculty of Morehead State University and Eastern Kentucky University, I thank you. The staff of both these institutions helped prepare me through their classwork that I had to complete to get to this moment. They all had a part in molding me and growing me into my capstone.

I want to express a special note of thanks to Dr. Steven Fardo at Eastern Kentucky University for his guidance through the Career and Technical Educational program, including my master's degree and administration certificate. He gave me the focus and confidence to expand and become an instructional leader.

Prior to education, I had supervisors that taught me about the world of work and how you learn so you can improve yourself, not just to keep a job. That gave me the understanding that I needed to improve myself and keep me focused-driven. One of the most influential supervisors was "Dollar" Bill Hylton, whose unique and

unusual leadership style taught me many things. Above all, he showed me how to

adapt to my situation and work through barriers.

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Executive Summary

What is the core of the capstone?

The rural K-12 school system in America is obligated to do more than get their students across the stage with a diploma. These students should have the same access to high-wage jobs as graduates from more urban areas. One disadvantage for rural students is that access to these jobs is not in their backyard. As high-paying, high-demand jobs are in short supply in rural areas, it is not enough that rural schools simply graduate students; they must prepare students for a workforce that is outside of their region. Travel becomes a necessity. These rural students often travel for postsecondary education. It is also common for adults who live in rural areas to travel more than an hour for a high-wage, high-skilled job.

Often in rural areas, schools are the backbone of their communities. The school district is usually the largest employer in that community. There does not exist a lot of opportunities in rural areas for high-wage careers unless these students want to pursue education as their career, and that often requires travel for postsecondary training. Schools need to train students to reach beyond their home turf and be prepared to take their place in the 21st-century workforce.

Rural schools also struggle to keep staff because they have less funding. As adults move to find better jobs, enrollment decreases, and as enrollment decreases, so does funding. The state can only do so much to help rural schools. In January 2018, the state eliminated the funding supporting professional development for teachers (KDE, 2018). On top of the funding losses in other areas, this loss of professional

development funding puts a strain on these schools to support professional learning needed for their staff.

In rural schools especially, it is difficult to get teachers for specific higher level courses. If a rural school has a teacher qualified to teach the higher levels of content, there are usually not enough students who are academically ready to justify having the course. If a rural high school has a math teacher that can teach Calculus, but only three students are prepared to take Calculus, how can the administration justify tying up one teacher for these three students and a class period? Does the school give up on the idea that these three students deserve to learn Calculus? How is a rural school supposed to individualize instruction if they do not have the staff to do so?

One way that rural schools can offer students access to courses that will lead to high-demand, high-wage careers is to use online or hybrid learning models. These three students could take Calculus online through a dual credit instructor during the same class period they would have had the local math teacher. Students still get the course they need with this model, which also makes the local math teacher available to instruct a larger group of students.

Definitions

The following terms will provide a foundation for the reader to understand the various aspects of this capstone project. The creation of a series of microcredentials to help develop the skills of a classroom facilitator is essential to supporting the potential needs of students within the course.

Andragogy – the study of how adults learn, which is different than how

children learn. Knowles (1984) defined rules about adult learners in that adults are

self-directed learners, not like children, who must be guided by an instructor. Adults

build upon previous experiences whereas children do not have prior knowledge and

must be introduced to concepts and taught from the base up. Knowles also

acknowledged that adults desire to learn more about topics of interest to them and

will take the initiative to invest in their own learning, something rarely seen in the

way children learn. Knowles referred to this difference in learning as andragogy.

Knowles also indicated that adults problem-centered in how they approach learning.

All of these learning factors differ from how youth learn.

Dual credit – courses where students receive both secondary and

postsecondary credit.

Facilitator - Facilitators are the adults in the classroom monitoring students

taking online and hybrid courses. Facilitators provide day-to-day support for the

students taking these courses (Irvin et al., 2009).

Hybrid or blended learning– instruction in a combination environment where

the instructor is not always present for each class period. Students work in the online

platform associated with that class when the instructor is not present for in-person

instruction.

Hybrid courses – Courses that include both online instruction and in-person

instruction. In secondary education, hybrid courses are often seen in dual credit

courses, taught in person by the college instructor a day or two a week and students

working in the online platform the remaining days a week. Hybrid courses do not have to be dual credit courses. Some instructors will live stream into classes in several schools a few class periods a week and students work in the online platform the remaining class periods for that week. Hybrid courses have taken on an important role since the COVID-19 pandemic. Most schools that have returned to in-person instruction are using hybrid courses to instruct their students.

Microcredential – According to NEA (2018), a microcredential is "a digital form of certification indicating demonstrated competency/mastery in a specific skill or set of skills" (para 1). A microcredential is not platform-specific, nor is it limited to time, as professional developments usually are. A microcredential differs from standard professional learning in that professional development is often generic and does not allow for mastery of practice (Tyton Partners, 2020). Most professional learning is based on a certain number of training hours. A microcredential is more of a demonstration of competency and the skills learned.

Online courses – Courses that students take solely in the virtual environment using media such as Google Classroom or BlackBoard. In secondary education, online courses can be elective high school courses or dual credit courses, which are taught by college instructors for both high school and college credit.

Pedagogy – the practice of teaching. As for this research, pedagogy refers specifically to teaching those who are dependent upon the instructor to initiate the learning process and who have little or no background knowledge to bring to the learning process. It is in this way that pedagogy differs from andragogy.

Professional learning – knowledge and skills provided to all those who work in education that will enable students to learn and achieve at high levels (Learning Forward, 2020). Every school has a responsibility to provide professional learning opportunities to all their staff.

Problem Statement

The one issue with the hybrid type of instructional delivery or form of independent study is that there must be a staff person observing and supervising students while working on their online or hybrid model courses. These staff are facilitators in their roles, but there exists no set training for facilitators. In many cases, these staff members struggle to fulfill their duties as a facilitator. A microcredential made available to both certified and classified staff would aid in facilitators understanding and performing their functions, which, in turn, would have positive impacts on student success in online and hybrid courses.

Many students are not successful in their first traditional online class. School districts across the country became aware of this reality with the move to virtual instruction during the COVID-19 pandemic. How can this be resolved? In rural eastern Kentucky, specially designed hybrid learning opportunities support students in high school settings. Often, these dual credit courses are the first college-level courses students take. The beginning work for leaders to get this model to work successfully is to have specific postsecondary instructors who can teach a rigorous dual credit class positively. In this atmosphere, college professors come into the classroom weekly or bi-weekly for student-instructor interaction. Students also have

an in-person class facilitator in class every day. The facilitator has access to the students' online courses and provides a level of support comparable to traditional high school classes, which students use to help build success.

Purpose

Rural schools in eastern Kentucky survive by maximizing resources to their fullest potential. This survival includes using funding wisely and maximizing personnel, so students gain the most benefit possible. One way to accomplish this is by tapping into online and hybrid classes for students. A room full of students can all take different courses online, and only one person, the facilitator, is needed. Students can also partake in a hybrid model, where the instructor teaches in person only on selected dates. Students participate in the online format of the class during times when the instructor is not physically present. This blended format works well for regional courses where the instructor teaches at two or more schools.

The rural schools in eastern Kentucky may not have access to a wide variety of higher-level classes by way of the traditional face-to-face classroom setting. Still, they can provide access using facilitators for hybrid and online learning courses. Facilitators can be teachers or instructional aides, making the position more manageable depending on each school's unique situation.

Guiding Questions

This study raises a few questions. First, what method of training do staff need to become effective facilitators? Facilitating is a very different leadership skill than

the traditional classroom instructor position. School staff must have the proper training to transition into this unique role successfully.

Second, what qualities make an effective facilitator? Skills and traits must be identified that lead to positive facilitating in blended and online classes. Adults will make better facilitators once they have completed a microcredential course focusing on the skills needed to be an effective facilitator.

Review of Literature

Rural schools in America face many issues, including staffing, geographic barriers, and low enrollment, which affect the institution's financial ability (Barbour, 2007; Barbour & Mulcahy, 2006; Hobbs, 2004). Compounding these issues are the limited postsecondary educational opportunities and lack of local industry options in rural areas. Students often travel long distances for any postsecondary prospect (Bishop & Mane, 2004). In particular, rural schools are utilizing technology and online education more than ever to overcome many of the issues that affect and limit their systems (Barbour, 2007; Hobbs, 2004).

Schwartz (2015) noted that for six years in a row, "skilled trade vacancies are the hardest to fill in the U.S., and for the fourth consecutive year, skilled trade roles are the hardest to fill globally" (para 4). The youth in America are not able to fill many open positions upon graduation because, in addition, rural schools are often disadvantaged in training students to fill these skilled jobs. Rural schools simply do not have the resources, local industry, or educators required to provide students the training needed for such skilled jobs. Some rural schools struggle to keep a science

teacher who can only teach the basic requirements. The science teacher may not be credentialed to teach higher-levels of science that students need for postsecondary success in skilled fields such as nursing. A movement to align the curriculum between secondary and postsecondary education and the labor market is needed. "The crisis in the construction workforce was evident before the 2007 recession started" (Toppin, 2018, p. 67). Beyer (2017) stated that the construction shortage jumped from 21% in 2012 to 56% in 2016.

There is a reason why the workforce is either unable or unwilling to fill these jobs. Carnevale and Desrochers (2002) discussed the reason the U.S. is first in the global economy. It is due to capital investment and flexibility, and not to the skills or quality of the workforce. Carnevale and Desrochers found that high-paying jobs that only require a high school diploma are decreasing drastically. More technical training is needed to fill the types of jobs that are going unfilled. But how is this to be accomplished in rural areas?

Non-traditional learning environment. Undeniably, online learning is "the fastest growing alternative to traditional K–12 education in the United States" (Glass & Welner, 2011, p. 3). Hybrid learning can use strengths from both the traditional model of classroom instruction and distance online learning. There is a need to implement blended learning to improve individual student's educational process (Lalima & Dangwal, 2017). Online education using the hybrid learning environment allows for advanced curriculum, all while keeping rural schools open and accessible to students (Barbour & Mulcahy, 2006).

Hybrid learning and online environments, especially for dual credit classes, are necessary for a thriving rural school. Findings also support the fact that dual credit does positively affect students' futures (Watt-Malcolm, 2011; Foster, 2010). In specific pathways, dual enrollers in advanced learning opportunities perform as successfully as, and in some cases, outperform the college-preparatory track students. (Yettick, Cline, & Young, 2012). These dual credits and hybrid opportunities mean that students will have online and in-class access to an instructor and a subject they would not have access to at their home high school.

Allen and Seaman (2016) found that less than 30% of postsecondary faculty "value the legitimacy of online education" (p. 21) in that they feel students are less impacted by online education as they are with traditional in-person methods. To counter this, schools will need someone to facilitate the hybrid classroom when students are working in the online environment.

Facilitators. On-site facilitators are different from course instructors, as they are the ones in the class and provide the day-to-day support for the students (Irvin, Hannum, Farmer, de la Varre, & Keane, 2009). Facilitators are in the classroom or computer lab working with students directly in small groups. Facilitators are the ones who interact with and support and encourage the student on many levels. Students rely on facilitators to provide them with additional assistance. The facilitators are vital to providing a learning culture and "have a key role in reducing dropout" (de la Varre et al., 2014, p. 327).

"A major aspect of students' online experiences that facilitators provide is

setting the climate for learning through encouraging, acknowledging, and reinforcing

student contributions" (de la Varre et al., 2014, p. 327). Intervention facilitators take

an active part in the support and guidance of the class. De la Varre et al. (2011a)

found that teachers felt facilitators who interacted and engaged students were of better

quality than those who only watched and took a back seat to the educational process.

Students also expressed that they had more self-confidence when their facilitator

engaged, encouraged, and supported them (de la Varre et al., 2011b).

   A limited amount of research dealing with distance learning for rural K-12

school systems exists (Aud et al., 2013). Very few studies include the use of

facilitators in online and hybrid models. The responsibility of a facilitator must be

clearly defined if online and hybrid learning is to be successful. A facilitator must

monitor student behavior and activity in the classroom and be available to answer

students' questions and support them with guidance. A facilitator must understand

that their role is a supportive one also to the instructor. These adults will need some

form of professional training to understand this role of facilitator and to be successful

in that role.

   Microcredential. A microcredential is focused on one skill, thus its name.

According to Brown, Rhodes and Gammill (2017), a microcredential shows that

mastery has been demonstrated and achieved on a specific assessed standard. The

microcredential is a certified badge or seal that the person can take with them across

jobs, provides evidence to back up what the person learned, making it more than just

a certificate showing they had attended a training (NEA, 2018). It is not the number

of hours that the adult learner is engaged in a seminar or meeting that matters.

Microcredentials are not concerned with hours of learning, but whether or not the

adult learner can demonstrate the knowledge and skills they should have learned.

(BloomBoard, 2020)

Microcredentials are more than a professional development. They are

recognized certifications for educators. There is a shift happening in education to

validate this level of training. According to Tooley and Hood (2021) states are

utilizing microcredentials in various ways. They found that while most educators

pursue microcredentials on their own, there are some states that mandate

microcredentials. Since a microcredential focuses on one micro skill at a time,

sometimes a series of microcredentials, referred to as a stack, are developed for an

area that requires attention to more than one topic to demonstrate mastery (Marcus,

2020). Kentucky Educational Development Cooperative has developed an "advanced

licensure" microcredential option (Tooley & Hood, 2021, p. 33) for educators in

Kentucky. The level of work needed to earn a microcredential is much more intensive

than attending a workshop or taking a college course (BloomBoard 2020). Although

not tied to a specific number of hours, a microcredential is often looked at as a

driver's license (BloomBoard).

According to BloomBoard (2020), the earner of the microcredential will have

to complete research, collect artifacts demonstrating developed skills, and offer

feedback upon their completed project before submission. A rubric is used to gauge

the learner's knowledge and performance with a pass or fail, but the learner will

receive feedback on areas of improvement needed to show mastery. This process does

take some time to complete, but unlike traditional professional development, time is

not the determining factor in achieving the microcredential (Darling-Hammond et al,

2017). When the adult learner can conclusively demonstrate the critical knowledge

and performance identified in the microcredential, they receive the certificate.

Digital Promise, an organization that develops and supports educational

microcredentials, defines components that comprise an effective microcredential. To

gain support from Digital Promise (2016a) as a quality microcredential, the course

should exhibit the following attributes:

> Bite-sized—focused on a specific, observable competency
> Subject-adaptable—can usually be adapted to multiple subject areas to
> > support college and career-ready standards
>
> Research-based—grounded in educational research
> Teacher- and student-centered—teachers can be selected based on the specific
> > and relevant needs of students
>
> Personal and timely—supports professional growth
> Portable—can be shared as digital badges in online platforms
> Transparent—supported by publicly available, accessible content, including
> > criteria for assessment
>
> Performance-based—demonstrated through artifacts, such as:
> > • Lesson, project, and unit plans
> > • Student work samples
> > • Teacher and student reflections
> > • Observations
> > • Videos of teacher and student interaction
> > • Peer and self-evaluations and reviews (p. 4)

Professional learning. A microcredential is a type of professional learning, but not in the traditional design. Professional learning experiences in the U.S. are not typically set up in a format of andragogical learning and practical application in the classroom (Wei et al., 2009). Traditional professional learning happens in a pedagogical style, where an instructor informs participants about a particular topic. There is no testing for understanding or application of skills learned. Knowles et al. (2005) believe that adults are driven towards professional learning when they see the immediate application to their work. Drago-Severson (2004) believes professional learning for adult educators should have both have flexibility for the adult learner and collaboration with peers to share and receive feedback. Self-directed learning is more aligned with an adult's sense of autonomy (Knowles et al.).

Wei et al. (2009) found that more than 90% of professional development by educators comes from workshops and conferences. These types of trainings are more informational than practical. Terehoff (2002) finds increasing demand for professional training that is supportive and increases educational effectiveness. Microcredentials conflict with the traditional professional learning model in this way. Digital Promise lays out the foundational concepts that create an effective educational professional learning experience that differs from the traditional format. Those factors are that the microcredential must be competency-based, on-demand, personalized, and sharable (Digital Promise, 2016b).

Limited funds have dampened professional learning. In Kentucky, the state's educational budgets eliminated funding for teacher professional development (KDE,

2018). Since the COVID-19 pandemic, professional learning has taken another sharp

turn onto the online format. Due to the many travel restrictions, teachers suddenly

found themselves unable to attend their traditional professional trainings. As teachers

had to change from in-person to virtual instruction, "teachers actively sought out

learning opportunities and taught themselves" (Agnello, 2020, para 5).

  Andragogy. What makes a microcredential the best approach for facilitators

to master this new role? Could this same process not be mastered through some sort

of professional learning? The difference between a microcredential and other forms

of professional learning has to do with andragogy. Andragogy supports the idea that

adults learn differently than children, so adults need a learning system that is based on

the way that they learn (Knowles, 1984). Children have no prior knowledge, so the

teacher starts from a clean slate. The teacher introduces students to a topic and

establishes the fundamentals of that topic. Adults possess some knowledge and

experience with many topics. Adults do not need to start from the position of a clean

slate.

  Knowles (1982) recognized that adults want to individualize their own

educational and professional paths. Adult learners choose topics that have a positive

impact on their professional life. They need training that allows them to jump into the

learning process without bogging them down with the redundant things they already

know and to build upon their knowledge and expand their experience on that topic. A

microcredential does just that. A microcredential presents adult learners with a way to

grow professionally in a format that supports how adults learn.

As mentioned earlier, Wei et al. (2009) found that more than 90 percent of educational professional training comes from workshops and conferences, which do not allow for self-directed learning. Attendants at these workshops and conferences simply sit and listen to the presenter, possibly asking a few questions, and then move on to the next session or topic. This format is much like a traditional classroom, where the instructor pours out knowledge to students at a base level and students take notes, which is pedagogical. There is no application, no testing for mastery, and no personalization for the adult learner. Professional development should be content-focused, be active instead of passive, be collaborative and supportive, provide for reflection and feedback on the process, and allow for the considerable time necessary for all of this to occur (Darling-Hammond et al., 2017). In devising any type of professional learning for adults, the rules of andragogy must be realized.

When it comes to andragogy in education, Hawley and Valli (1999) believe that professional learning flows best when participants can be in charge of their own learning. It is important for adults to feel this connection to their professional learning. When they do, "they often experience a remarkable increase of motivation to learn and a strong desire to the learning process" (Ingalls, 1984, p. 6). Adults bring experience and knowledge to their professional learning. They either know about the concept and want to learn more, or they want to expand upon the experience they already possess. Microcredentials do just that.

Microcredentials allow adult learners to be in charge of their own learning, which takes it beyond simple professional learning. It is that personability that allows

for ultimate growth. According to BloomBoard (2020), a developer of educational

microcredentials, the "personalized, self-paced learning process, supported by

coaching and collaboration with their peers, gives educators control over their

professional learning and results in a more authentic, meaningful experience" (para

3). Contrast that with Wei et al. (2009), who found that most educators were

unsatisfied with the traditional methods of professional development as for their

usefulness and practicality.

A microcredential takes base information already known by adult learners and

builds upon it towards mastery. Because this professional learning is a building

process, it allows not only for educators to become better at their craft, but also

allows educators to pass along that knowledge and experience to their peers, either

inside the school system or within a cohort (Terehoff, 2002).

Summary. Rural schools need a way to keep students on task in online and

hybrid courses that allow students advanced opportunities for career success. Also,

adjustments to COVID-19 have forced schools across the nation to take instruction to

online platforms and hybrid models of instruction. Schools may need trained adults to

function as facilitators who can effectively monitor and support students who are in-

person and yet taking classes online. To date, facilitators have no official training.

The product of this capstone was the development of such training in the form

of the beginnings of a microcredential stack to train facilitators. Microcredentials are

based on andragogy and require the earner to provide evidence of successful practice

of the required skills, making microcredentials more effective than the traditional

professional training of workshops and sessions. Microcredentials are a valuable way for schools to do this and still maintain their duty to provide educational opportunities to all students.

Who is the capstone meant to impact?

The idea for facilitator microcredentials developed from the needs in rural schools in eastern Kentucky which struggle to provide expanded learning opportunities for their students due to various factors. These rural schools have fewer students than urban areas, which means less funding to offer opportunities to students. The rurality of these schools makes it difficult for high school students to take early college or dual credit courses as districts cannot afford to transport these few students over an hour to the closest community college campus. These schools must find ways to offer expanded learning opportunities despite these geological and economic barriers.

One way the rural eastern Kentucky schools are overcoming these barriers is to offer advanced opportunities through online or hybrid classes. Students take these more rigorous courses in their home high school either with live classes being streamed into their classroom or in an online platform. The instructor of the class is rarely or never physically inside the students' classroom to monitor student participation or to guide students daily. They must be supervised by a school employee while learning in these online and blended learning environments. While this allows students more access to a wider variety of higher-level courses, the school

employee who supervises and monitors the classroom must take on a unique role of facilitator, becoming a go-between in the student/teacher relationship.

Although the facilitator oversees student management in the classroom, the facilitator is not the teacher. The instructor of the online or hybrid class is the teacher. This fact is a critical point that must be taken to heart if there is success in the online and hybrid models. The instructor, in many cases, will not be present in the classroom but must have a supportive leader in the classroom with the students, be the teacher's voice, and reinforce the teacher's rules and work ethic that they want out of their students. However, the facilitator is the adult in charge of monitoring student behavior and is in authority over the students, even to the point of being a disciplinarian if needed. The facilitator and teacher must develop a working team relationship that will foster educational success for the students.

While the facilitator is the instructor's voice in the classroom, he or she is also the students' support system, communicator, and technical help in the classroom. Often, students who have never taken a more independent type of course in an online or hybrid class do not fully understand the dedication, effort, time, attention to detail, and planning it takes to be successful in these advanced courses. Part of the facilitator's job is to help students understand those concepts and provide guidance as to how students can learn successfully in these types of classes.

Because the role of a facilitator can be a daunting task, facilitators need training on how to be effective in this role. The natural tendency is either to take charge of the classroom and overrule the instructor or to become a bystander and not

provide any support to students. The idea in this capstone was the establishment of two microcredentials a facilitator could access and earn. Additional microcredentials are needed to fully become a master facilitator. Those future microcredentials would be the next steps to pursue to expand this capstone.

Each microcredential covers a particular aspect of the facilitator role, such as communication between instructor and student, and technology troubleshooter. The completed microcredentials will help school employees to develop the skills and foundation needed to be a successful facilitator for the rural school.

The reach of this capstone is not limited to rural eastern Kentucky schools. Since the COVID-19 pandemic, schools across the country have been forced to move their instruction to a virtual environment. As schools reopen, the hybrid model of instruction where students are learning in-person and online may have left schools needing a facilitator for in-person classrooms while the teacher is virtual.

How was the capstone project developed?

Realizing that student success takes a holistic larger overview, the researcher had to narrow down what could be done inside the classroom. The researcher had seen students struggle once leaving high school in postsecondary education. The way to increase the dual credit opportunities for students at the secondary level was to have a facilitator supervise a classroom of students doing dual credit. This met with some resistance by postsecondary partners because of the struggles they had had with students in the past. The first-time postsecondary students had the same struggles as beginning online secondary students in dual credit courses.

That was when the researcher started looking at ways to support students. Any support should be offered as a way to help students be successful not only now but in the future as well. These additional considerations provided at the high school level would put students on a more successful path than a college student on their own trying to do online classes without support. The typical focus of accelerated opportunities for students is to offer dual credit but there has not been a support system for those students. As the classroom teacher is the biggest determining factor for student success as that person who interacts with students daily, so it makes sense that the facilitator of an online course would have a lot of influence on students in their care. With proper guidance and training, these facilitators could be the support those students need. That is what brought about the idea of the facilitator microcredentials.

In the scope of the facilitator microcredential, the researcher knew there are many components to great instruction, but those must be narrowed down to the components that were under the control or influence of a facilitator. The researcher decided to gather a focus group of postsecondary professors that offered dual credit and use this group to decide what the points were that a facilitator could impact.

To identify the skills needed for facilitators, the researcher worked with a focus group of secondary and postsecondary partners. The focus group developed as the researcher sought out people from personal experience who the researcher considers professionals in their fields. The researcher already had working relationships with these people and knew they wanted to meet the needs of the

students. Each person in the focus group has some form of experience with online or

hybrid courses with first-time college-level students. Some of these instructors had

taught in person college-level courses and then moved to online and now are doing

dual credit. These are the experts. They design and build these dual credit online and

hybrid courses. The instructor is the one who sets the standards for the course. It is

the opinion of these experts that the researcher wanted to know.

Students or former students were not chosen for the focus group. This was not

because the researcher was not interested in a student point of view, but due to the

COVID-19 pandemic, the researcher had limited access to students. The student point

of view could also be skewed by various factors. Some students may have only taken

one online class with one instructor which creates a limited scope while the

professionals in the focus group have taught multiple college-level courses for years.

They may have had thousands of students over the years. The researcher decided that

a professional's opinion would give a more focused view on what would make a good

facilitator than a student could.

The goal of using the focus group was to find common themes from

professionals that a facilitator would face and need to know how to respond to

effectively. If several professionals mentioned topics repeatedly, those topics would

become part of the theme. It would be from these themes that the microcredentials

would be developed.

The focus group consisted of individuals from various secondary and

postsecondary schools. These professionals have different work backgrounds and

teach different content areas. Some were secondary assistant principals or principals who have taught online and hybrid dual credit courses. Some were college professors who have taught for over 20 years. Some professionals work specifically with dual credit programs. Each member brought their background and experience to the table.

The researcher has personal experience with each of the members in respective fields. They have attended trainings on facilitation and conferences on overcoming rural school barriers together. They often work together on expanding dual credit opportunities to students in eastern Kentucky, connecting teacher and student in advanced courses despite their geographical distance. These professionals have created advanced pathways for students to access training for high-wage, high-demand jobs. It was through this collaboration that the researcher began to see the importance of a facilitator in rural schools.

This team of professionals supported the researcher in his efforts to create an advanced health science pathway used in his area technology center. This advanced pathway meant students could take an advanced biology course through the local community college as a hybrid dual credit course that the health science teacher could not teach. As the health science teacher facilitated the class, the researcher saw the role of a facilitator unfold and realized the need for training. The members of the focus group gave the researcher the insight needed to design the microcredentials.

The professionals understand that a facilitator does not have to be certified in a content area in order to be successful at facilitation. While a CAD or 3-D printing class may have a facilitator, it is not required that a facilitator understand CAD or 3-D

printing to help students in those classes. What might be required from a facilitator is an understanding of troubleshooting technology should an issue arise. The facilitator may need to know how to reset a piece of equipment or know who to contact for additional supplies.

The researcher posed questions to the focus group concerning the barriers to student success in online and hybrid dual credit courses. Respondents' answers were categorized into concepts that influence student success in these online and hybrid courses. As the responses ranged from bulleted points to more in-depth conversation, the researcher broke down the focus group's response statements into themes. The responses are categorized into tables that can be found in the appendices.

Theme One: Rigor and time management. Appendix A contains the responses for this topic on rigor and time management. Students should be prepared or mature enough to match the level of rigor and expectations required for college-level work. "A major difficulty for online students is staying on task. Some tend to delay completing assignments and studying until it is too late for them to spend the time needed to learn the material" (College professor/dual credit instructor). High school students are usually pushed by their teacher to get assignments done. While the focus of the questions is on dual credit and high school students, from the responses given, the same issues affect first-time college students. Somewhere in their high school education, students may need access to a support system that exposes them to the change in rigor in college-level courses. High schools have forever been dealing with the issue of how to get students to take ownership in their

education—getting students to embrace true learning and not just trying to get through the class.

The high school atmosphere allows for students to complete assignments late and makeup assignments. This comes down to students having the motivation (College professors). The lack of motivation shows itself when "students wait until the last minute to complete work" (College professor/distance learning coordinator). Almost all of the classes taught at one Area Technology Center are dual credit.

Students coming into their first class in the Area Technology Center had to face a learning curve. At high school, students could complete an assignment and move on to the next assignment while not depending on mastery to pass the class. In Career and Technical Education, this type of motivation will not allow students to be successful. The success of the students requires that they must build on basic skills to reach the advanced skills need to complete the task of the classes and programs. There is a "tendency among many of them to procrastinate on assignments" (Sasser). "Just because an assignment is not due until the end of a grading period does not mean that they should postpone working on the assignment" (Secondary assistant principal/dual credit instructor).

Theme Two: Technology. Appendix B reports the responses on this topic of technology. There are many ways in which technology has improved education. Yet, if the technology is not working properly, or if there is a technology issue, the educational process cannot continue as it should until the problem is corrected. For the online and hybrid courses, the instructor may not be in the classroom to help

students work through a technology issue. Students may not know why they cannot log on or why their computer is not working. A facilitator could help students with these frustrating technology issues.

A facilitator will need to be familiar with different technologies and how to use and troubleshoot them properly. In some instances, it may be a fix as simple as unplugging the device and plugging it back in. It could also be a major technical failure and require the assistance of the school's technology director. In other instances, there may be a major technical issue in the school district that cannot be fixed quickly. If there is an assignment or test due and a technical difficulty happens, the student will need support from the facilitator as a go-between to let the instructor know that the issue was unavoidable.

Technology issues also happen when the student is working on the class from outside the school, such as at home. If this happens, the student may not know how to properly document this technical issue or be able to walk themselves through a troubleshooting process. Part of the facilitator's duties will be to show students how to problem-solve minor technical issues and glitches and document them accordingly. This could be simple things such as using a different browser to access a document or taking a screenshot of the error message on the computer screen and emailing it to the instructor. Normally, these students go to their in-person teacher when they have a technical problem, but as part of growing in self-reliance and ownership of their own education, students taking online and hybrid courses may not be given a second

chance to submit an assignment if they do not follow through with the proper steps to troubleshoot the issue.

Theme Three: Communication. The responses regarding communication are presented in Appendix C. One of the tasks of a facilitator is to help students understand the syllabus and break down the information it contains. In online classes and especially college classes, the syllabus is the first, and most cases, the major form of communication to students. A syllabus outlines the class. Most of the time, it also contains a complete list of work required and timelines for assignments. It also includes all the different commutation information for the instructor. High school students are not accustomed to having this much information at the beginning of the class inside one document and process this to develop a plan for success. The same may also be true for first-time college students taking online classes.

The instructors in secondary public education are often required to guide and support their students in all aspects of the class. While this allows all students to receive the same instructions and content, but it does not teach students skills needed to be successful at the next level or to manage these sets of information on their own. Students in online or hybrid courses will need a facilitator to help bridge the gap in this transfer of information.

In secondary school, it becomes the responsibility of the teacher to meet the learning styles of the students. In college classes, the student is expected to meet the standards of the class. The highly effective instructor, either secondary or

postsecondary, offers many different types of activities that are meant to engage the student.

Other Themes. There were other themes mentioned by the focus group members and are contained in Appendix D. Some issues brought out by the responses led to themes that are beyond a facilitator's range of control. While issues with technology were one of the main themes revealed by the responses, one of the aspects of technology mentioned by the focus group was internet access at home. If students did not have reliable internet access at home, they could fall behind in their online courses. While facilitators cannot provide much assistance in providing internet access for students at home, this issue could be addressed by the school administration. Schools could purchase wireless internet hotspots and allow students to check out the hotspots. The facilitator could be responsible for assisting in this initiative.

This also leads to another issue. If the school purchased the wireless hotspot, then the school is responsible for the activity that occurs on that hotspot. The district technology director may have to restrict the hotspot's internet access to certain websites and monitor that hotspot to be sure school property is not used in accessing material that is against school policy. During the COVID-19 pandemic, schools were allowed and encouraged to purchase hotspots for students to access their classes online. While this was a good idea, some students used all the data the first weekend by streaming movies online and then had no data available for their online classes. Again, this level of monitoring would not be something a facilitator could do.

Therefore, the researcher placed this topic aside as a theme outside of the control of the facilitator.

Some instructors set up their courses in a streamlined week-by-week approach. Each week is its own folder, and inside that folder is all the information the student needs for that week's assignments. Other instructors place all assignments in one folder, all reading documents in another, and all tests in another folder. There may not be a right or wrong way to set up a course online, but students in high school may be more familiar with a week-by-week format with reminders from their instructor on due dates and assignments, as this is a similar structure of their high school classes.

While a facilitator can help students acclimate to the new online medium, the design and setup of the course is something out of their control. Some instructors understand the learning curve that high school students face when taking these online and hybrid courses. Other instructors may take a more laid-back approach to instructing the course and depend on the student to be responsible enough on their own to read the syllabus and follow the course outlines without instructor intervention. The textbook and required reading may be on a more difficult level than high school students are used to. Students may have trouble following an e-book or completing tests through an online e-book study guide. These are factors that should be considered by the instructor before ever offering the course to high school students.

Summary. The focus group consisted of those who are setting the standard for student success. They are the ones who are developing the courses and who are ultimately responsible for assigning student grades. The focus group came up with valid points of consideration, but understandably, the thread holding it all together needed to be the support of the facilitator inside the classroom. It was in that context that the researcher came up with a list of possible microcredential topics. Two were selected for this capstone, with the remaining topics listed in next steps. For the capstone, the researcher developed two microcredentials: one that focuses on communication and the other, technology, specifically, the learning management system.

Why were this capstone and related strategies selected?

If rural schools are to be competitive, online and hybrid classes need to become a foundational component in these schools to provide students with advanced opportunities for successful careers. These schools must have trained adults who can effectively fulfill the facilitator's role so students can be successful in dual credit and other advanced courses delivered in online and blended learning environments. As no current official training exists to meet this need for the facilitator position, the researcher recognized the need to create a training instrument in the form of facilitator microcredentials.

Being in education for 24 years, the author has seen the value of professional development as a teacher and an administrator, both in attending many professional training conferences and in presenting alone and on teams over various aspects for

school improvement. The kind of professional developments that resonate and create change for this researcher are ones given by someone who has experience in that field or a practitioner of that skill about which they are talking. Sessions where someone simply reads a book and summarizes it do not carry the same weight. There is no practical usage from these sessions, no data to interpret, no passion, no personal experiences to share, no successes to proclaim.

When someone has applied a practice and can provide personal feedback as to how it has helped them, it shows an activity directly tied to the learning process with success. Using this background as a premise, the researcher wanted to develop a training for facilitators that allowed for some practical experience and sharing of lessons learned along with the successful application with feedback on the entire process.

Today, accountability is more of a focus in education. We want students to be accountable for their own education. If the student knows the assignments that you have for them are not going to count toward a grade, the students are not going to pay attention to it. This also holds true with teachers. If they know that the administration does not hold them accountable to highly effective levels, they may not make attempts to improve or hold students to high standards. Schools are also held accountable by the state's Department of Education for meeting certain standards to ensure students are receiving a quality education. This same principle of accountability is valid for educational professional learning.

Microcredential. As the author began looking at ways to create a facilitator training, these aspects of personal experience, practicality, and accountability came to the forefront and became important. A microcredential seemed to answer all these points in that it is "a digital form of certification indicating demonstrated competency/mastery in a specific skill or set of skills" (NEA, 2018, para 1). A microcredential requires candidates to practically and personally apply researched information in their classrooms and provide evidence that the demonstration created a change that was successful. The evidence is then submitted for evaluation to hold the candidate accountable for their work. Evaluation is processed according to the approved rubric to the organization supplying the microcredential. The candidate also provides feedback on what they learned from the learning and application process. This is the type of quality professional training this researcher wanted for facilitators, so a microcredential was chosen as the format for this facilitator training.

As the focus group had pointed out themes for facilitators, the researcher determined that a microcredential would be needed for each theme. Two themes of concern from the focus group were communication and technology difficulties. Because students in secondary schools have not taken either a college-level or advanced course or may not have taken any course in an online or hybrid model before, they may not be aware of the challenges that can come along with these courses. Students will be using online learning platforms and submitting assignments in ways they never have before. As technical issues arise, students need someone who

can assist them, document and solve minor technical issues and send major technical issues to the proper person to provide assistance.

Communication is also vital to student success in these online and hybrid courses. As the instructor is often not in the classroom with the student, email and communication through online learning platforms is necessary for the student to understand what the instructor wants and for the instructor to understand what issues or concerns the student may have. These students are accustomed to having their teacher in the classroom with them, so this move to virtual communication may take some training from the facilitator. The students may need some coaxing to stay on task and check for announcements and due dates for assignments. The instructor may need to communicate with the facilitator regarding issues or concerns. The facilitator needs to understand how important communication is to the success of students in these virtual and hybrid courses.

Microcredential structure. In order to create the format for each microcredential, the researcher began by examining producers of microcredentials with which he was familiar. These producers were Digital Promise and Kentucky Valley Educational Cooperative. Digital Promise has provided an online program for professional developments, of which microcredential topics being one of those. Digital Promise provides microcredentials on many educational topics. Kentucky Valley Educational Cooperative does not have as many microcredentials, but as they are located in the researcher's region, their microcredentials were more known and experienced by the researcher. Upon continuing to study microcredentials, the

researcher discovered a third entity, BloomBoard, that creates educational

microcredential.

What the researcher found by examining the microcredentials offered by these

entities is that there is not a true standard format for a microcredential. There were

some similarities in the flow of the microcredentials, much like a standard lesson

planning format follows, but the content taught influences the final product. Most

microcredentials start with an introduction or discuss competencies, like objectives

for the classroom lesson. Some microcredentials contained an outline. Others

contained small literature reviews that supported the need for the microcredential.

Each contained a listing of references and required resources.

It was at this point that the microcredentials varied significantly. The actual

documents required for each microcredential seemed to be based upon the needs of

the topic being presented. Some microcredentials only required written essay

answers. Others wanted detailed evidence including student work. The evidence

could range from lessons completed in a classroom to videos of the candidate

modeling standards in the classroom. Because of this varying documentation, the

rubric used to grade the criteria also varied.

The rubric was presented before the list of assignments that would be graded.

This was standard for the microcredential format. The researcher found this confusing

at first but then realized that the rubric is setting the standard before the candidate

gets to the artifacts involved. It allows the candidate to assess the level of grading

before getting to the actual work they would do. As this process was standard, it created a logical educational sequence for all microcredentials to follow.

If entities are wanting educators to take more than one microcredential as a form of professional development, it makes sense that it would be simpler to follow the process if microcredentials look similar. There also exists the potential for a microcredential to become part of a stacked microcredential. That possibility exists for the facilitator microcredentials developed by this researcher. Similar to college courses in a program that follow a standard format, a potentially stackable microcredential should have a similar flow between microcredentials. This outlook reduces stress on candidates as they transition to the next microcredential.

There were associated costs with some microcredentials. Some microcredentials required candidates to pay a fee to access the microcredential and some were free. The difference was dependent on the producer of the microcredential and the delivery platform involved. Some entities provide a stipend to those experts who grade the microcredential. The cost varied but was typically less than the cost of a one-hour graduate-level college course. Other entities grade their microcredentials in-house, and as there is no additional cost for this, they do not charge candidates a fee.

In developing the microcredentials, the researcher wanted to follow a logical format with an easy-to-understand process. After reviewing many microcredentials from different platforms and developers, the researcher selected what he believed to be the options that fit best with the facilitator microcredentials of technology and

communication based on similar topics found in various microcredentials for other areas.

Each microcredential provides a listing of the objectives and topics to be covered, along with a detailed description of the steps before, during, and after implementation. Supporting research is provided as to sources that can be accessed by the participant that support facts in each noted area. Each microcredential gives a list of resources the participant can use in the implementation of their microcredential. Submission guidelines are given for each of the three sections of questions to be answered by the participant. These sections are usually essay questions asking for prior knowledge and beliefs before beginning the work, evidence of effective demonstration of learned concepts, and a reflection of what was learned, what challenges were faced and how this will impact future actions. Each section is guided by a detailed rubric. Some rubrics had two categories for grading, while others had three categories for grading. This researcher believed the three-category rubrics allowed for more details of expectations, so the facilitator microcredentials would contain three-category rubrics.

Limitations of the Study

Limitations. The foundation of this capstone centered around the presence of a facilitator in the classroom with students in online and hybrid courses. The researcher did not investigate other areas that may influence student success in these courses.

The focus group questioned for this project did not contain any students who have experienced online or hybrid learning. This does limit the responses from the students' perspective on what they may need from a facilitator to increase their success in these learning environments.

There were some points made by the focus group that may be beyond the influence of a facilitator. For instance, course design and choice of the instructor were mentioned as barriers to student success. Often, these are decisions made long before the need for a facilitator in the classroom and are not within the facilitator's ability to affect.

Delimitations. The questions given to the focus group covered areas of concern or barriers to student success. The questions did not go beyond that. The researcher used the responses to determine the skills a facilitator should demonstrate with mastery through the designed microcredentials. Follow-up questions were not given. Students were not included in the focus group.

This capstone project began before the pandemic of COVID-19, which closed in-person education throughout the country and the world. The massive shift to online instruction and the switch to hybrid learning due to the COVID-19 pandemic shutdown and reopening was not thoroughly investigated by the researcher.

Reflections

"We know through multiple studies across many years that skillful teaching is the prime mover of student success. This is true for traditional classroom learning and also for other approaches and platforms such as online learning" (Rutherford, 2020, p.

1). This is why the researcher felt this project needed to be completed. Throughout 24 years in education, the researcher has worked to advance opportunities to students in rural eastern Kentucky, where socioeconomic, geographic, and financial barriers abound. These students deserve access to training for high-wage, high-demand jobs. With the advances of technology, opportunities for advanced courses in virtual and hybrid learning have increased tremendously. Yet, with all the access to technology and online courses, the adult in the classroom, normally the teacher, is the biggest indicator of students' success. The adult who has the heart to help students learn and grow makes the biggest impact on students.

The barriers discussed in this capstone show the need for a strong presence in the classroom when the instructor is not physically there each day. The facilitator will be the one who supports and develops the relationships with students. At the beginning of the course, the facilitator will be the students' advocate. Throughout the course, the facilitator trains these high school students to be self-advocating, still guiding when needed, but allowing students a safe yet accountable environment to grow and mature as learners**.**

Implications for Future Research

The focus group pointed out several barriers to student success in online and hybrid courses that might be out of the circle of influence for a facilitator to control. Internet access at home and the online platform selected for the course are barriers identified by the focus group. These would need to be addressed in future research as to how to minimize or even eliminate these barriers.

For this capstone project, the researcher focused on two of the barriers to student success as microcredentials for facilitators. There are still some areas of concern voiced by the focus group listed in Appendix D that a facilitator might positively impact. "The students would benefit from a time management study skills learning opportunity. Many colleges and universities have added first-year seminar classes to help support students' success during the first semester. The high schools that plan to offer dual credit and advanced opportunities may need to look at developing a program for those students who plan to take advantage of those opportunities. Students could also benefit from training in time management skills. Many students in an online environment get behind just due to lack of good time management" (College professor). The remaining points of concern are the next steps to consider towards developing a stack of microcredentials for facilitators of online and hybrid courses.

Next steps

The next steps for this project could include several components. A beginning point would be to review the current information from the focus group and current research for developing additional microcredentials as part of the stack for facilitators. There may be some follow-up questioning to do with the focus group. There is also a need to do some additional research and see if there are existing microcredentials that could be paired with the facilitation microcredentials that are currently developed.

Another step would be to consider expanding the focus group to include secondary teachers, which were not included in the original focus group. Secondary teachers would have more experience in dealing with topics such as classroom management. Classroom management would likely be the first microcredential to create in the next steps, as the facilitator will need to know how to manage students in this environment. There may be a classroom management microcredential already in existence that fits the facilitator's needs based upon feedback from the new focus group and the additional research. If no such microcredential exists, a microcredential would need to be created based upon feedback given from the newly developed focus group and research-based best practices. As this first microcredential might be an overview, there exists the possibility of developing future microcredentials from research obtained. The classroom management microcredential could be broken into specific skills such as building relationships, behavior management, and time management.

The microcredentials should be promoted to the professional public. Promotion of the microcredentials could start with the regional focus and then expand to the state with the end goal to have them available on a national platform. One avenue is to look at journals for rural schools to submit articles for publication based around the microcredentials. Another way of getting the microcredentials into the public eye is to do presentations on a national stage, reaching beyond the regional setting for the newly developed microcredentials.

Once the microcredentials become known, a next step would be to get the microcredentials placed on a national platform where they would be accessible for use. School districts within the state should be looked at for support. Then schools and educational institutions beyond the state could be contacted that may be interested in the microcredentials to build staff capacity. One may work with a regional educational cooperative to gain acceptance on a regional level. This would lead to state-level exposure. Consulting with publishers of educational microcredentials would be an excellent opportunity for promotion. These publishers can provide support and resources in evaluating the candidates' work.

Educational institutions all over can use these microcredentials as supportive tools to help students be successful. It also creates a way for these institutions to build staff capacity by giving incentives to educators who go through a microcredential to improve their skills and show mastery of those skills.

Capstone Project

Overview of Communication Microcredential

Communication became an obvious choice as a microcredential, as the facilitator is helping students in online and hybrid classes where the instructor is typically not present in the classroom and not easily accessible to students. The focus group gave insight into specifics from their years of experiencing communication issues with students in these environments. It is common knowledge that the student-teacher relationship is a very important component of student success. This relationship can be somewhat difficult to develop through an online course. A substantial part of that relationship is communication.

The focus group voiced that this communication was something that needed improvement, not just with online students, but with all students. Sometimes face-to-face instructors think that kids struggle to understand when they do not discuss concerns with their teacher. It is easier to develop relationships in a face-to-face class and see the students every day, to check up on students. Students in an in-person class may not effectively communicate with the teacher that is in the classroom with them.

This guidance with communication in the face-to-face classroom does not always prepare the student to be a self-advocate in communication once they leave the in-person classroom environment. The focus group noted that first-time college students struggle with communication issues, things like contacting the instructor proactively before they get in trouble or before it's too late to save the grade. The

facilitator can help those students by breaking down the syllabus, so students understand due dates and the grading scale.

In the online format, the syllabus could be viewed as one-way communication from the college professor to the student, but it is a communication document nonetheless and a very important one. Inside of a syllabus is the information on how to contact the instructor and their office hours.

All educators want their students to be successful. Most would rather have extended emails or communications when a student is struggling so that they can intercept the difficulty and provide the proper assistance. The teacher can help the student at the time they are having the trouble instead of dealing with the backwash of problems at a point where it is too late for the student to recover. This communication intervention will be less stressful on both student and teacher. No instructor wants to fail a student, and most, if not all, would want to support that student. That is part of the importance of communication.

Overview of Technology Microcredential

Technology developed as the second microcredential for facilitators. As with communication, there are many aspects of technology that were brought out by the focus group, from bandwidth issues, student access to computers, and the whole equity issue. Again, the researcher had to narrow this focus within the realm of support that could be offered by an in-classroom facilitator, so the researcher decided on the aspect of helping students learn to navigate the learning management system for that particular course. The online learning platform or learning management

system can be confusing for someone who has not been in the process of online

learning before. Students need to know how to log in, find information, submit

assignments, and complete tests. The facilitator can model this for students, allowing

students to observe and then perform those actions on their own under the facilitator's

supervision.

Not only is communication important at the beginning with the syllabus, but

the students have to also understand communication throughout the entire class by

checking announcements, sending and responding to emails and discussion boards,

and reviewing the feedback given by the instructor in the learning management

system. Students who are not familiar with all of these forms of communication

inside the learning management system must get into a habit of routinely checking

and using these methods of communication.

Students must understand that communication is proactive and not reactive.

They must take the initiative to check and respond accordingly to any information in

the online learning platform. Students in a face-to-face class have someone who may

push them a little bit more to communicate and check those messages and feedback

regularly. The facilitator will be present in the classroom to help the students

remember to do these things, but it will be the students' responsibility to do them as

they learn to stand on their own feet and self-advocate with communication.

Structure and Sections of Microcredentials

Since these microcredentials could become stackable, the general structure

and sections will remain standard. This not only helps to make the microcredentials

easier to take, but it may also make them more appealing to pursue if they look like previously taken microcredentials.

Objectives: Each microcredential begins with an overview of key methods and objectives. These are short, bite-sized overviews that allow the candidate to see, in broad terms, the focus and goals of the microcredential. As the overview is expanded, the entire microcredential is broken down into bulleted concepts.

Outline: This gives the candidate a more detailed outline of what is included in the microcredential, allowing for a better understanding of what is to be evaluated at the end.

Research: The next sections are researched-based. A short review is listed so to emphasize the reasoning behind the concepts covered. The review is based on scholarly articles which are cited for credibility. Candidates can do further research on these articles if desired.

Resources: Each microcredential has its own list of resources, which include websites, video links, and further reading for better clarification and implementation. The purpose of this section is to give candidates a toolbox with everything they need to be successful in the microcredential. Candidates are welcome to go beyond the bounds of what is listed in the resources and find something that is more suited to their skills, but these resources should still allow the candidates to successfully complete the microcredential. Each microcredential has information and tools that could be used specifically in that microcredential and some that crossed over and could be used in both.

Rubric: While there are several styles of rubrics, the three-level microcredential rubric is used in these facilitator microcredentials. This allows the candidate to see not just a pass or fail option of grading, but allows for an area of improvement needed grading scale, which is helpful to candidates if they do not quite make the mark the first time. It also allows a candidate who may be close to full completion but not quite making the mark the opportunity to see what area they fall short in and resubmit only that section.

Artifacts: These are the actual documents to be created and submitted by the candidate. They include four components: an overview, a survey, a video, and a reflection.

Overview: The overview question is like a pretest. It lets the scorer know where the candidate stands at the beginning of the process, allowing to show room for growth if needed. This question is limited by a word count. This makes the candidate choose their words wisely so as to convey the proper information within the narrowed bounds of the word count.

Survey: The candidate must create a student survey to be given to students before the actual online or hybrid course begins. The survey does not need to be difficult or lengthy. Links to sample surveys and videos on how to create these surveys are included in the resources. Each microcredential will have its own student survey. In the communication survey, the facilitator would ask students about their learning styles, preferences of communication, likes and dislikes about forms of communication, etc. In the technology survey, the facilitator might ask what types of

technology the students are comfortable using if they have ever taken an online course before, and about their levels of troubleshooting technology problems. It is the hope of the researcher that if the same person takes these two microcredentials, that person can use the student survey tool in a combined format inside the classroom. In theory, the facilitator could be developing a learning style profile for each of the students.

Video: The third artifact is a video presentation specifically to the microcredential. These are both forms of communication. The researcher chose this as a requirement. In order to be successful, one must teach something in order to truly learn more about it.

The usage of a video presentation plays right into the technology microcredential as showing students how to navigate the online learning management system. The communication video produced by the facilitator would break down the components of the syllabus. The facilitator will be responsible for producing a video of each syllabus and learning management system component, explaining the importance of each to the students. The resources section contains video demonstrations on how to visually breakdown both the syllabus and the learning management system.

If the facilitator only submits an essay answer on why understanding the syllabus is important to students, it really does not let the evaluator of the microcredential know that the candidate fully understands that component. Also, if it is not visual or verbal instruction, then the students do not see it. It also shows

competency and understanding of those communication skills typically done online and can be done without face-to-face interaction.

Reflection: This component is another essay answer which allows the grader opportunity to decide if the candidate has shown growth and met the requirements or competencies to receive the microcredential.

Using the rubric, any of these components could be resubmitted. This adds validity and credibility to the microcredential as professional learning. Candidates have the ability to grow and resubmit artifacts from any component that did not reach a satisfactory level.

Facilitating Communication
to
Support Student Success in Digital Learning

The facilitator demonstrates effective communication between students and the instructor.

Key Methods

The facilitator
- understands strategies that improve communication and interpretation of communications of high school students participating in online or hybrid courses with their instructor.
- effectively creates a learning environment that supports communication with students to successfully understand and meet online learning objectives.
- provides evidence of their understanding of communication strategies to improve student understanding of instructor communication through the syllabus and the online platform.
- reflects on the impact of the strategies on student understanding of expectations and communication.

Components

Overview

Online and hybrid learning can create communication challenges that secondary students have never faced before. According to de la Varre et al. (2011), these students are often less independent, do not possess the skills required to master navigating this new method of learning. Students rely on facilitators to provide them with additional assistance.

The facilitator should demonstrate key actions, responsibilities, and strategies to support students in communication. The facilitator will discuss and demonstrate communications with students needed before the course begins, throughout the course, and at the end of the course to ensure students successfully meet course objectives.

The Process
Communication Preparation for Facilitators
- Become familiar with syllabus layout, online platform, and communication components.
- Make connections with the instructor to develop a communication plan to support secondary students.
- Set clear expectations of facilitator responsibilities with communication.
- See that all students have proper tools, equipment, and access to needed items for the course.

Communication Implementation for Facilitators
- Introduce students to the syllabus.
- Demonstrate where to find information in the syllabus.
- Assist students in developing a self-pacing course calendar from the syllabus.
- Ensure students can successfully log in to the online platform.
- Discuss the grading scale with students.
- Model for students how to find information in the online platform.
- Build capacity in the student to be self-advocates and communicators in online classes.
- Provide direction and support to students when needed.
- Encourage students to communicate with peers in the course.
- Monitor student progress and report concerns or issues to the student and instructor.
- Provide encouraging encouragement and constructive feedback with students and instructor.

Communication Evaluation for Facilitators
- Ask for feedback from students and instructor.
- Document student and instructor feedback and adjust throughout the course as needed.
- Grade performance in communication through self-reflection for personal and professional growth
- Document any issues and resolutions for future considerations.

Supporting Research

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Submission Guidelines and Rubrics

Rubric

Module	Yes	Almost	Not Yet
Communication Preparation Artifact 1 Overview Question	The facilitator's responses provide a clear understanding of the role communication has on student success and how the facilitator plays an important part in that role.	The facilitator's responses provide a basic understanding of communication but lack a full understanding of the impact communication has on student success or how the facilitator role plays a part.	The facilitator's responses provide a poor understanding of communication and do not demonstrate understanding of the impact communication has on student success or how the facilitator role plays a part.
Communication Implementation Artifact 2: Student Survey	The survey demonstrates effective facilitator communication using multiple strategies. Questions are relevant and appropriate.	The survey demonstrates basic facilitator communication using several strategies. Questions are relevant and appropriate.	The survey demonstrates poor facilitator communication using few strategies. Questions are vague and lack insight.

Communication Implementation Artifact 3: Video of Facilitator Communication	The video demonstrates effective facilitator communication using multiple strategies. Student support is relevant and appropriate. The amount of material is appropriate for the time allotted.	The video demonstrates an aspect of facilitator communication using few strategies. Student support may not be relevant for the entire audience or are not connected to the outcomes.	The video is too long or too short for effective communication to occur. The key points are not evident or well covered. Student support is not evidenced.
Communication Evaluation Artifact 4: Reflection Question	The facilitator's responses provide a clear understanding of the role communication has on student success and how the facilitator plays an important part in that role.	The facilitator's responses provide a basic understanding of communication but lack a full understanding of the impact communication has on student success or how the facilitator role plays a part.	The facilitator's responses provide a poor understanding of communication and do not demonstrate understanding of the impact communication has on student success or how the facilitator role plays a part.

Work Examples/Artifacts

Please provide context by answering the following:

Please submit evidence of how you effectively demonstrate communication in the facilitator role:

- **Artifact 1: Overview Questions (200-500-word limit)**
  Describe the Communication Preparation strategies that helped to develop your communication outlook to support student learning**.**

- **Artifact 2: Student Survey**
  Along with a basic introduction, create a survey to communicate with each student and gather information about how they learn best, their preference for working in groups, and comfort level with different forms of communications.

- **Artifact 3: Video/Presentation of Communication**
  Create a video or presentation (either a compilation of clips or a continuous video about 20—30 minutes in length) that demonstrates that the facilitator understands the components of the communication. The facilitator should demonstrate the skills needed to support the students to explore all the forms of communication needed to be successful. Topics can include:
    o   Cover and explain the importance of each section of the syllabus.

- o Demonstrate the proactive and not reactive communication avenues for students.
- o Show students how to create a calendar pacing guide to meet deadlines and requirements.
- o Build student capacity to communicate with self-direction and motivation.

- **Artifact 4: Reflection Questions: (200–500-word limit)**
  Please provide context by answering the following:
  - o Were you able to create a more meaningful experience for students by utilizing the communication strategies and artifacts? Were you able to build the communication capacity of the students so that they are better prepared to be successful in their future educational endeavors? Explain your thinking.

Facilitating the Learning Management System
to
Support Student Success in Digital Learning

The facilitator demonstrates effective technology uses to support student learning as students learn to navigate the online learning management system.

Key Methods

The facilitator
- understands strategies that improve technology uses of high school students participating in online or hybrid courses with their instructor.
- effectively creates a learning environment that supports technology with students to successfully understand and meet online learning objectives.
- provides evidence of their understanding of technology strategies to improve student understanding of the learning management system.
- reflects on the impact of the technology strategies on student understanding of expectations and success.

Components

Overview
Online and hybrid learning can create technology challenges that secondary students have never faced before. According to de la Varre et al. (2011), these students are often less independent, do not possess the skills required to master navigating this new method of learning. Also, students become overwhelmed with navigating and understanding the online learning platform (de la Varre et al., 2014). Students rely on facilitators to provide them with additional assistance.

The facilitator should demonstrate key actions, responsibilities, and strategies to support students in learning and navigating the online learning platform. The facilitator will discuss and demonstrate navigating the learning management system with students needed before the course begins, throughout the course, and at the end of the course to ensure students successfully meet course objectives.

The Process

Learning Management System Preparation for Facilitators
- Become familiar with online platforms and technology components.
- Overview lesson/activities before students
- Set clear expectations of facilitator responsibilities with assisting students as they navigate the online learning platform.

- See that all students have proper tools, equipment, and access to needed items for the course.

Learning Management System for Facilitators
- Introduce students to the learning management system.
- Ensure students can successfully log in to the online learning management system.
- Model for students how to find information in the learning management system.
- Assist students in developing a self-pacing course calendar from the syllabus and online learning management system.
- Discuss submission of assignments in the learning management system.
- Build capacity in the student to be self-advocates in navigating the online learning system.
- Provide direction and support to students when needed.
- Encourage students to communicate with peers in the course with technology issues.
- Monitor student progress and report concerns or issues to the student and instructor.
- Provide positive encouragement and constructive feedback with students and instructor.

Learning Management System Evaluation for Facilitators
- Ask for feedback from students and instructor.
- Document student and instructor feedback and adjust throughout the course as needed.
- Grade the effectiveness of facilitating the online learning management system through self-reflection for personal and professional growth
- Document any issues and resolutions for future considerations.

Supporting Research

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Student motivation

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        https://www.youtube.com/watch?v=_ADqEopUuTU

Submission Guidelines and Rubrics

Rubric

Module	Yes	Almost	Not Yet
Learning Management System Preparation Overview Question Artifact 1	The facilitator's responses provide a clear understanding of the role technology has on student success and how the facilitator plays an important part in that role.	The facilitator's responses provide a basic understanding of technology but lack a full understanding of the impact technology has on student success or how the facilitator role plays a part.	The facilitator's responses provide a poor understanding of technology and do not demonstrate understanding of the impact technology has on student success or how the facilitator role plays a part.

Learning Management System Implementation Artifact 2: Student Survey	The survey demonstrates effective facilitator technology skills using multiple strategies with technology. Questions are relevant and appropriate for defining students' current technology usage.	The survey demonstrates basic facilitator technology skills using several strategies with technology. Questions are relevant and appropriate for defining students' current technology usage.	The survey demonstrates poor facilitator technology skills using few strategies with technology. Questions are vague and lack insight for defining students' current technology usage.
Learning Management System Implementation Artifact 3: Video of Facilitator Technology Skills	The video demonstrates effective facilitator technology skills using multiple strategies. Student support is relevant and appropriate. The amount of material is appropriate for the time allotted.	The video demonstrates an aspect of facilitator technology skills using few strategies. Student support may not be relevant for the entire audience or are not connected to the outcomes.	The video is too long or too short for effective usage of technology to occur. The key points are not evident or well covered. Student support is not evidenced.
Learning Management System Evaluation Artifact 4 Reflection Question	The facilitator's responses provide a clear understanding of the role technology has on student success and how the facilitator plays an important part in that role.	The facilitator's responses provide a basic understanding of technology but lack a full understanding of the impact technology has on student success or how the facilitator role plays a part.	The facilitator's responses provide a poor understanding of technology and do not demonstrate understanding of the impact technology has on student success or how the facilitator role plays a part.

Work Examples/Artifacts

- **Artifact 1: Overview Questions (200-500-word limit)**

  Please provide context by answering the following:

  Describe the Learning Management System Preparation strategies that helped to develop your technical understanding and skills to support student learning.

  Please submit evidence of how you effectively demonstrate understanding of the learning management system in the facilitator role:

- **Artifact 2: Student Survey**
  Along with a basic introduction, create a survey to gather information on each student's level of technology usage, preferences with technology, and comfort level with different forms of technology troubleshooting.

- **Artifact 3: Video/Presentation Facilitating the Learning Management System**
  Create a video or presentation (either a compilation of clips or a continuous video about 20—30 minutes in length) that demonstrates that the facilitator understands the components of successful facilitating of the online learning management system. The facilitator should demonstrate the skills needed to support the students to explore all the forms of technology needed to be successful. Topics can include:
    o Email access and retrieval.
    o Demonstrate the proactive and not reactive avenues for navigating the online learning management system.
    o Show students how to incorporate important assignments and test dates into an online calendar.
    o Build student capacity to use the online learning management system with self-direction and motivation.

- **Artifact 4: Reflection Questions: (200–500-word limit)**
  Please provide context by answering the following:
  Were you able to create a more meaningful experience for students by utilizing the online learning management system technology strategies and artifacts? Were you able to build the capacity of the students so that they are better prepared for success in their future educational endeavors? Explain your thinking.

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Appendices

Appendix A

Main Barriers to Student Success – Rigor and Time Management

What are the main barriers for student success in distance learning dual credit courses?	
College professor/Dual credit instructor	A major difficulty for online students is staying on task. Some tend to delay completing assignments and studying until it is too late for them to spend the time needed to learn the material. I find that regular due dates and emails or other instructor contact help counteract this. A facilitator in the classroom or online meetings with an instructor are other ways to address this
Secondary area technology principal	Instructional Time/Availability
College professor/Distance learning coordinator	Poor Time-Management skills/procrastination – students are bad about waiting to last minute to complete work are trying to jam online work into an already busy schedule. I see many students wait until the last minute to complete work.
College professor	Motivation/dedication to completing the course (there needs to be a task master cracking the whip)
Dual credit coordinator	They struggle to break away from the high school mode. What I mean by this is that they try to think of their college class as a close resemblance to their high school classes. In fact, they are quite different in modality, rigor, time consumption etc.
College professor	I have seen is that some students may have difficulties being a college student in a high school classroom. Since they are still in high school, they assume their behaviors in other classes are acceptable in the college classroom.
Secondary assistance principal/Dual credit instructor	Students need to also understand and be aware of timelines when it comes to distance learning. Just because an assignment is not due until the end of a grading period does not mean that they should postpone working on the assignment. I have found that as an instructor I should give weekly if not daily updates to students when it comes to long term assignments
College professor	I would say that the MAIN barrier for dual credit students (at least early on) is that they are accustomed to high school environments rather than college environments and often lack the kind of motivation that is required to master college-level skills. In most college classes the intellectual content must be assimilated to a greater degree than what they are familiar with and it is necessary for most dual credit students to change their mind-set from 'doing what the teacher requires,' to 'taking an interest in the subject and pursuing it independently.
College professor	Students could also benefit from training in time management skills. Many students in an online environment get behind just due to lack of good time management.

Appendix B

Main Issues with Dual Credit Courses - Technology

What would be the main issues you are aware of?	
College professor/Dual credit instructor	Technology access and difficulties with technology are also major barriers. Clear instructions, explanatory videos, and access to tutors or facilitators to help get students logged in and familiar with the delivery platform can help students overcome this hurdle. Some students also try to complete assignments with phones. As we saw in the anatomy class, some Chrome books or other tablets may lack the ability to run all programs. This is a harder problem to address. The instructor can try to design the course to be usable on multiple platforms, but Blackboard and other programs may need to do some of the changes.
Secondary area technology principal	Technical Support
College professor/Distance learning coordinator	Technology issues (lack of technical skills and access to appropriate technology) – many students lack the technical skills to participate in online this includes being able to download software and install, access online programs such as Teams or Skype. We see many students who take online classes and do not have internet access at home or even a computer and try to take online courses using a phone which is not always possible. Some students have poor internet access, some still have dial up or satellite internet which are so slow and will not always pull up course content.
College professor	Internet access Computing power
Dual credit coordinator	I feel sometimes that students depend on their high school for computer and internet access. This can be a barrier to some students wanting to take courses that do not have the proper utilities to complete assignments and the like.
College professor	All of the students are so in love with their phones that they have a bit of a problem ignoring them during class.
Secondary area technology principal	One of the main barriers in this area is technology. For instance, insufficient internet service or outdated computer equipment. Other students cannot afford internet service or computers.
College professor	Computers or Chromebooks needed to access the coursework. Being in a low-income area, many of our students do not have a computer or Chromebook needed when participating in distance learning.

Appendix C

Main Issues with Dual Credit Courses - Communication

What would be the main issues you are aware of?	
College professor/Dual credit instructor	I find that regular due dates and emails or other instructor contact help counteract this
College professor/Distance learning coordinator	Some students may be first generation students or have behaviors of first generation students and afraid to ask for help.
College professor	The number one issue is communication with the student via email and announcements on Blackboard. There would be a lack of interaction with the instructor in terms of discussion about class topics.
College professor	I require students to participate in ongoing class discussions in my online courses and make it clear that they need to post messages on at least 3 separate days each week, get started early, etc., so that the discussion will actually be a discussion rather than simply a place to express an opinion or thoughts without getting feedback. Nevertheless I always have a few students (both dual credit and non-dual-credit) who wait until Saturday night each week to post all of their messages (which is not the same as participating in an ongoing back-and-forth exchange).
Secondary area technology principal/dual credit instructor	As an instructor then you should be available at various hours throughout the week for students to ask questions. Having a video session at 7:00 pm one night a week will sometimes be better than trying to answer emails all throughout the course of a day.
College professor	Communication is one of the most important things in an online environment. Goals and expectations must be clear. Also, the student may not be comfortable asking questions or contacting the instructor. I think that when we teach online classes it is easy for students to feel disconnected from the instructor since they do not have that face to face interaction. That is why good communication is important. Another way to help is to do an introduction video, so the student actually sees you.

Appendix D

Other Topics or Areas of Support Needed

What type of support would do secondary students need to be successful in a distance learning Dual Credit course?	
College professor/Dual credit instructor	I also think that more training is needed for instructors of online classes to create their own content. I find that students can complete some publisher content without truly learning the material. I have seen publisher content that is so extensive that students get lost and have trouble focusing on the information they need. Some allows a student to progress by answering multiple choice questions, often using Google on another screen, without ever requiring them to take the time to learn the content.
Secondary area technology principal/college instructor	Access to the Internet, about 40% of the student population in my area does not have Internet access at home.
College professor	Some students have difficulties juggling an incredible schedule of high school classes, college classes, various activities related to clubs, trips, sports. Students who can handle all those activities need to be incredibly organized. Some are--- some are not.
Dual credit coordinator	Course design – how the course is setup can be a huge barrier for students especially if they cannot find content, instructions, etc. to be able to successfully complete the work. My dissertation was based on course design and faculty development which are critical component to online learning.
Secondary assistant principal/dual credit instructor	Some students have difficulties juggling an incredible schedule of high school classes, college classes, various activities related to clubs, trips, sports. Students who can handle all those activities need to be incredibly organized. Some are--- some are not.
College professor	For distance learning, students need flexibility. Students are all working at different times, so the instructor needs to be flexible on their hours. Of course, instructors can't be available 24 hours a day, but need to make sure questions are answered in a timely manner to assist students that may be struggling.

VITA

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EDUCATION

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