AN EXPLORATORY STUDY OF SELF-ASSESSMENT TEACHING APPROACHES IN ASL/ENGLISH INTERPRETER EDUCATION PROGRAMS

Katelyn B. Wilson

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AN EXPLORATORY STUDY OF SELF-ASSESSMENT TEACHING APPROACHES IN ASL/ENGLISH INTERPRETER EDUCATION PROGRAMS

by

Katelyn B. Wilson

A Dissertation

Submitted in Partial Fulfillment of the

Requirements for the Degree of

Doctor of Education

Major: Higher and Adult Education

The University of Memphis

August 2022
I dedicate my dissertation to my late mother, Kathleen Marie Couvillion Wilson. She always believed in me and encouraged me to follow my dreams and to pursue higher education. I felt her cheering me on through this journey. Her example taught me walking with God, coupled with patience and perseverance, is what leads to success. It is because of her I am the strong woman I am today.
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“You can’t achieve anything entirely by yourself. There’s a support system that is basically a requirement of human existence. To be happy and successful on earth, you just have to have people that you rely on.” - Michael Shur
Abstract

Self-assessment is an emerging topic in ASL/English interpreter education that is being recognized as critical for students completing the degree-to-certification process and needs to be thoroughly explored. Using Scaffolding Theory and self-assessment drawn from Self-Directed Learning Theory, this exploratory, qualitative interview study discusses the importance of self-assessment in interpreter education. The purpose of this study was to explore how instructors in ASL/English Interpreter Education Programs are teaching students to engage in self-assessment and the types of Commission on Collegiate Interpreter Education (CCIE) required self-assessment they are teaching, product-based and process-based. Product-based assessment focuses on the outcome of the interpretation, while process-based assessment focuses on identifying why errors are occurring. Nine instructors from six different accredited Interpreter Education Programs across the United States were interviewed via Zoom. All of the participants agreed that self-assessment is crucial to interpreter skill growth, and they require self-assessment as part of course assignments. Although all of the participants taught self-assessment, only two taught both product-based and process-based self-assessment as required by CCIE. This study revealed key components for self-assessment as implications for theory and implications for practice indicated that teaching scaffolding and self-directed learning may help students understand the importance of self-assessment. Scaffolding is a useful theory in studies on self-assessment in interpreter education because it supports self-directed learning. It is recommended that instructors teach both types of self-assessment required by the CCIE and to use interpreting models to teach process-based self-assessment.
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Instructors tend to use scaffolding to teach self-assessment
Student engagement in self-assessment is a required part of course assignments in interpreting courses. The essential components of self-assessment include goal setting, critical reflection, learning without fear, and life-long learning.

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Chapter 1: Introduction

This dissertation was an exploratory study of how instructors in ASL/English Interpreter Education Programs (IEPs) teach students how to engage in self-assessment. I am interested in self-assessment, as it relates to self-directed learning, in Interpreter Education Programs. This study was based on interviews with IEP instructors of accredited programs. Accreditation is through the Commission on Collegiate Interpreter Education (CCIE). The first chapter of this dissertation will present the personal context behind the study, the theoretical context that frames it, definitions of key terms, the background of the study, research problem, research purpose and questions, significance of the study, limitations, and a brief overview of the methodology.

Personal Context

I have first-hand experience with the frustration that comes with not being ready to successfully work as an interpreter upon graduating from an IEP. I graduated with my Bachelor of Arts degree in 2008 but did not attain the National Interpreter Certification (NIC), awarded through the Registry of Interpreters for the Deaf (RID), until 2021. I took the certification exam multiple times, but never met the minimum requirements to pass. RID is the national organization that is the certifying entity for ASL (American Sign Language)/English interpreters. Individuals who hold this certification have passed two tests, a knowledge exam that indicated they have general knowledge about interpreting as a profession and a performance exam that demonstrates they have ethical decision-making skills and that they satisfy the minimum skills necessary to interpret in a variety of settings (RID, 2015-2021c). It is not uncommon for graduates from four-year IEPs to experience a time-gap between graduation and certification. According to Holmes (2020),
it can take anywhere from six months to more than five years for graduates to achieve the NIC.

IEPs typically have four years to educate novice interpreters, most of whom have not had any formal education with American Sign Language. The first two years of an IEP focuses on language acquisition. This leaves only the last two years for students to learn about the interpreting profession and develop their skills for the world of work. There simply is not enough time in an IEP for students to graduate with sufficient skills to pass national certification requirements.

States that require licensure to interpret limit the opportunities available for students or recent graduates to further develop their skills in professional settings beyond graduation. Licensure sets boundaries for interpreters allowing them to work in settings based on their certification levels. Interpreters holding entry level credentials interpret in low-risk situations that may not challenge them to build their skill set; therefore, many novice interpreters fall through the gap between graduation and real-world experience (Wang, 2015). Novice interpreters must be able to adequately set goals, develop a plan of action, execute that action, and evaluate their progress. I am interested in finding out if self-directed learning tools, beginning with self-assessment, can close this graduation to work gap. This study explores how interpreter educators are teaching students to engage in self-assessment and what types of self-assessment they are teaching.

**Theoretical Framework**

I used Self-Assessment, drawn from Self-Directed Learning Theory (Andrade, 2019), and Scaffolding Theory (Eun, 2017; Gish, 1993; Verenikina, 2004; Vygotsky, 1978) to frame this study. Vygotsky might seem dated, but I drew on this foundational
scholar since current scholarship is based on these theorists. Moreover, I found that the assumptions and tenets from this theorist are still applicable to studying self-assessment. Self-assessment is a key aspect in the cycle of self-directed learning and is an essential tool for novice interpreters to build their skills to working levels (Zhong, 2008). Self-assessment allows students to understand how to accurately determine their strengths and weaknesses. Once they identify their strengths and weaknesses, they can determine the areas that need improvement (Valdez, 2018). Students then can implement a learning plan and follow through with the plan as self-directed learners. The process can evolve into a cycle of learning as students or novice interpreters reassess their skills for further growth and skills development (Fitzmaurice, 2018b).

Scaffolding Theory supports Self-Assessment as the goal of scaffolding is for students to become more self-directed learners (Brookfield, 1985, 2015). This can be done through the Zone of Proximal Development (ZPD) which is the distance between what a student can do with the support of their instructor and what they can do independently (Shabani, et al., 2010). It begins with instructors carrying the load for educating students, but as time goes on, the students begin to rely less on the instructor and more on their own abilities. Instructors can use self-assessment as a tool in ZPD to assist students in becoming independent learners. Gish (1993) applied scaffolding to self-assessment and found sufficient evidence that scaffolding supports self-assessment in Interpreter Education Programs. ZPD and scaffolding create a cycle of learning that guides students to autonomous learning, allowing them to gain confidence as they master each level of learning (Eun, 2017).
Definitions of Key Terms

In this study, I used Verenikina’s (2008) definition of scaffolding to describe how instructors build students’ skills from being fully dependent on them, to becoming collaborative learners, and ultimately to developing into autonomous learners. Scaffolding is used in conjunction with the Zone of Proximal Development (ZPD), which is the educational theory that bridges the distance between what students can do with assistance to what they can learn to do independently. Instructors can use self-assessment as a scaffolding tool to guide students to becoming independent learners.

Self-assessment is the step in self-directed learning when students reflect on their work and evaluate the outcome. It is in this phase of self-directed learning that students discover their strengths and weaknesses in their work and how they successfully met the goals that they set out to accomplish. This is the learning phase where students can re-evaluate their process and make revisions as needed (Andrade & Du, 2007). I used Andrade and Du’s (2007) definition of self-assessment throughout this study: “the process of formative assessment during which students reflect on and evaluate the quality of their work and their learning, judging the degree to which they reflect explicitly stated goals or criteria, identifying strengths and weaknesses in their work, and revising accordingly” (p. 160).

Reflection is used in this study to define the act that students take intentionally to engage in a metacognitive process to examine beliefs, goals, and practices to gain new or deeper understanding that leads to actions that improve learning for students (McCarthy, 2013). According to Gile (2009), there are two types of assessment in interpreter education: product-based and process-based. In product-based assessment instructors
place the focal point of the courses on the interpretation or the performance. This type of assessment is a summative approach to assessment, looking at “the what,” focusing solely on the outcome of the interpreting process. Process-based assessment, however, is a formative approach to assessment, looking at “the how” and focusing on giving answers to why individuals make the product choices. Process-based assessment requires students to look deeper into their interpreting process and engage in a cognitive analysis to identify why errors are occurring.

Interpreting and interpreting process, specifically ASL/English interpreting, are defined as the process of ASL/English interpretation conveying information from one language (the source language) to another language (the target language) while maintaining an accurate and effective message (NAD, 2021). Interpreter education in adult and higher education is furthering one’s education either through continuing education (workshops, seminars, etc.) or through earning a degree at a college or university. These programs are meant to enhance skills and professional development.

**Background of the Study**

It is important for interpreters to be qualified professionals because they work in a variety of settings. They interpret in many different contexts such as legal, medical, mental health, education, religion, political, etc. Because interpreters never know where they will find themselves working, they not only need to hold a bachelor’s degree, but they must also be well acquainted with subjects that arise in other professions. Interpreters must have extra-linguistic knowledge (ELK) in a variety of fields and must be able access the information to incorporate into interpretations (Ryonhee, 2006). They must also be able to work along a spectrum of consumer language competencies.
ASL/English Interpretation is addressing communication accuracy that can impact people’s lives; thus, in some states, it has been deemed that ASL/English interpreters need to hold a license to practice. Likewise, the Commission on Collegiate Interpreter Education (CCIE), the accreditation entity for Interpreter Education Programs, requires self-assessment as part of their standards for accreditation (CCIE, 2019).

This study stemmed from the need to lessen the time between students graduating from Interpreter Education Programs and the time they obtain the National Interpreter Certification (NIC). As mentioned above, many students experience a time gap of six months to more than five years before achieving the NIC (Holmes, 2020). This gap can be prolonged in states that require licensure to practice interpreting because it limits the opportunities available for students to improve their skills. According to Wang (2015), students need to engage in self-directed learning to lessen the time gap between graduation and certification.

Self-Assessment is integral to the skills growth and development of interpreting students because it invokes critical thinking skills (Fitzmaurice, 2018a). According to Russell and Winston (2014), students’ engagement in critical thinking about their work is directly connected to their success as interpreters. Pinazo (2008) noted that self-assessment encourages life-long learning in interpreters. However, Xiangdong (2018) stated that while self-assessment is important, if instructors are not teaching students how to self-assess, then students will experience minimum success when engaging in self-assessment. In this study, I explored whether instructors are teaching self-assessment, if they are then when they are teaching it, what types of self-assessment they are teaching, and how they are teaching it.
Statement of the Problem

Interpreters continuously make decisions while interpreting between two languages, English and American Sign Language (ASL). There are different steps in the interpreting process such as listening to the original message (source message or language), analyzing it for meaning (transfer), then producing the message into another language (target message or language). Transfer is the “invisible” step in the interpreting process where interpreters make decisions on how they will produce the message in the target language (Patrie, 2001).

Interpreters must engage in metacognitive practices that require creativity in the decision-making process (Washborne, 2014). Interpreting students may not initially feel sufficiently confident to engage in these metacognitive practices, therefore instructors need to teach them how to engage. One possible way is through scaffolding to prepare students to become self-directed learners. According to Wang (2015), although instructors try to focus one-on-one with students through simulations in class, there simply is not enough classroom time for students to develop the necessary skills to be successful in a skills-based profession. Students must learn to engage in self-directed learning to maximize their opportunity for growth (Wang, 2015).

Self-assessment is a key component to interpreting students becoming self-directed learners. Instructors need to teach students how to accurately engage in self-assessment to build their self-confidence with self-directed learning. Although students still need instructors to provide feedback on their skills, the instructors can scaffold the student’s learning, so they become more self-directed learners (Fitzmaurice, 2018b). The literature shows that students need to be taught how to self-assess (Gile, 2009; Patrie,
2001), but there is a gap in the literature when it comes to knowing how to teach students in Interpreter Education Programs to self-assess their skills.

This project explored self-assessment as it relates to interpreter education. According to Russell and Winston (2014), there is a direct connection between students who think critically about their work and becoming successful interpreters. Conversely, interpreters who do not engage in critical thinking tend to have errors in the interpretation that cause inconsistencies throughout the message.

**Purpose Statement**

Using Self-Assessment drawn from Self-Directed Learning Theory (Andrade, 2019) and Scaffolding Theory (Eun, 2017; Gish, 1993; Verenikina, 2004; Vygotsky, 1978), the purpose of this study was to explore how interpreter educators are teaching students to self-assess their skills in Interpreter Education Programs. It was important to identify the strategies used for teaching self-assessment, not to assume that it is being taught, but to determine if it is being taught. This study determined if, and when, a sample of Interpreter Education Programs are teaching self-assessment, how they are teaching it, and what types of self-assessment they are teaching, process-based and/or product-based (Gile, 1994; Patrie, 2001).

The Commission on Collegiate Interpreter Education (CCIE), the accrediting entity for ASL/English Interpreting programs in the United States, addresses the importance of both product-based and process-based assessment, but there is no guidance on how and when to introduce these concepts. Standard 7 of the CCIE accreditation requirements focuses on the skills competency aspect of the program curriculum and Standard 7.3 states, “The curriculum addresses self-assessment of the process and
product of interpretation” (CCIE, 2019a). While the CCIE requires that IEPs address assessment, there is no empirical evidence showing that programs are assessing product and process, and neither is there evidence showing that self-assessment is used to address these two areas of assessment. Moreover, self-assessment has been presented to interpreter education (Gile, 1994; Patrie, 2001) without evidence of implementation or how to implement it in the curriculum.

It was an integral part of this study that the programs in this qualitative interview design study be accredited under the CCIE. There are only sixteen accredited bachelor’s degree Interpreter Education Programs in the United States for ASL/English Interpretation (CCIE, n.d.a). I conducted individual semi-structured interviews with nine instructors from six different accredited Interpreter Education Programs that offer a bachelor’s degree.

Another requirement for participants was that they are nationally certified through the Registry of Interpreters for the Deaf (RID). Interpreters who hold RID certifications have passed a rigorous examination process and engage in continuing education to maintain their certification. National certification allows interpreters to work in a variety of settings, broadening their scope of work. A final requirement for participation included that the participant have a minimum of three years of experience teaching interpreting courses in an Interpreter Education Programs. Participants needed to have experience to draw from during the interviews.

These minimum requirements strengthened this study because they qualify the participants and their experience. It was not a requirement that participants teach full-time in a program, rather they could be adjunct instructors as some programs may rely on
adjuncts to teach these courses. These participants were chosen by emailing all of the program coordinators at accredited Interpreter Education Programs requesting their involvement in this research. Some coordinators forwarded the request to the faculty in their programs to expand the opportunity for recruitment.

**Research Questions**

The questions directing this study are the following:

1. How are instructors in Interpreter Education Programs in higher education teaching students to self-assess?

2. How are instructors in Interpreter Education Programs teaching the Commission on Collegiate Interpreter Education required product-based and process-based self-assessment?

**Significance of the Study**

This research is important to interpreter education because there is no empirical data that discusses or recommends how instructors in Interpreter Education Programs should teach their students to engage in self-assessment. The literature recommends that Interpreter Education Programs teach self-assessment (Gile, 1994, 2009; Patrie, 2001), but there is no documentation as to how this is done. This research will be used to improve interpreter education and the interpreting profession as a whole. Research that is done on ASL/English interpretation or interpreter education can be applied to Interpreter Education Programs of other languages as well. This research has the potential to have a wide application for improving interpreter education as well as the field of interpreting.
Study Overview

The following chapters discuss, in detail, a review of the literature (Chapter 2) and the methodology used in this study (Chapter 3). In chapter two, I discuss Self-Assessment drawing from Self-Directed Learning and Scaffolding Theory, their history, key concepts, and how they apply to this research. I also discuss the scholarship on self-assessment and interpreter education, identifying gaps in the literature. Chapter three reports the methodology used in this research and how I collected and analyzed the data. In chapter four, I review the findings from this study. In chapter five, I discuss the findings and implications, as well recommendations for future research.
Chapter 2: Literature Review

In this chapter, I will discuss self-assessment and describe how it informs this study. Next, I will look at Scaffolding Theory and show how it supports self-assessment to form the framework for this study. Then, I will discuss both interpreter education and self-assessment. I will discuss the types of self-assessment and their purpose in interpreter education. I will conclude by identifying gaps in the literature and assert that there is a need for research on how interpreter educators are teaching self-assessment and what types of self-assessment they are teaching.

Self-Assessment

Self-assessment (SA) promotes life-long learning and is an integral part of the self-directed learning (SDL) cycle for skills-based professions such as American Sign Language (ASL)/English interpretation. Autonomous learners can begin their self-directed process of learning with self-assessment and can continue the cycle of learning by reassessing. As the following literature review will show, students need to be taught how to self-assess their product and their process. If students are going to learn to accurately self-assess their process, they need both confidence and motivation (Fitzmaurice, 2018b).

According to Andrade (2019), self-assessment is a key component of self-directed learning when it comes to setting goals and self-monitoring progress. Andrade discusses the differences between formative and summative self-assessment. Formative self-assessment is an on-going process where an individual makes observations about their progress over time. Summative self-assessment observes one’s progress at the end of a period of time where a task is completed. When instructors teach students how to engage
in formative self-assessment, students gain awareness about the product and process of their learning (Andrade, 2019).

According to Panadero, et al. (2016), students who learn how to self-assess their work tend to feel encouraged to be involved in formative self-directed learning. There are four primary reasons why students should learn how to self-assess their skills. First, when students engage in self-assessment, their learning and performance advance considerably compared to students who do not engage in self-assessment. Second, when students learn how to self-assess their skills, their self-directed learning strategies are automatically affected and improve. Third, students participating in self-assessment increase their self-efficacy in self-directing their performance tasks. Finally, when students self-assess their progress, they are empowered to take more control over their learning and learning outcomes. Hence, self-assessment can be used to enable students to become more independent in their learning (Panadero, et al., 2016).

Reflection is an integral step in the self-directed learning process and instructors need to serve as role-models for this step. Different definitions of reflection are found in the literature. Boud et al. (1985) defined reflection as metacognitively engaging with experiences retrospectively in a way that leads someone to new realizations about their experience. According to Jarvis (1987), reflection is an integral part of the learning process, and to adequately engage in reflection, one must not only be cognizant of their experiences, but also use reflection to gain new insights that can change their future learning behavior. Hatton and Smith (1995) define reflection as engaging in retroactively viewing an experience in a deliberate manner which causes one to take action towards improvement. McCarthy (2013) quote several scholars’ definitions of reflection including
Dewey, Schon, Schunk and Zimmerman, and York-Barr, Sommers, Ghore, and Montie. Dewey’s definition includes carefully considering something that leads to further consideration. Schon states that prior understanding can be used to reflect on the phenomena, but it must result in “new understanding” and “a change in the situation” (McCarthy, 2013). McCarthy (2013) notes Schunk’ and Zimmerman's definition of reflection as what takes place after the learning experience is completed and it impacts how the learner responds to the learning process. Finally, York-Barr, Sommers, and Montie define reflection as intentionally taking time to engage in a metacognitive process to examine beliefs, goals, and practices, to gain new or deeper understandings that lead to actions that improve learning for students (McCarthy, 2013). All of these definitions include three main components: deliberate thinking, new understandings, and future change. These three components comprise the purpose of reflection in self-assessment.

One way that reflection can be incorporated into interpreter education is by implementing service-learning projects and in-service projects (Gencel & Saracaloglu, 2018). Through these projects, students are able to engage in learning with their peers or other professionals and glean from their knowledge and skills. Another resource available to students for self-reflection is technology. Through technology, students are able to engage in a more deeply reflective process. Using technology, students can review their notes, create reflective journals through blogs or vlogs, and follow their development (Haidari, et al., 2019).

**Scaffolding Theory**

In the previous section, I demonstrated how Self-Assessment is an integral aspect of learning and how it best fits within interpreter education. In this section, I will give a
history of Scaffolding Theory and an overview of the Zone of Proximal Development (ZPD). I will then discuss the steps in Scaffolding Theory and how it relates to interpreter education. Lastly, I will demonstrate how Scaffolding Theory, paired with self-assessment, will best support this research.

According to Verenikina (2004), the scaffolding method is an educational theory that instructors use to lead students to become self-directed learners. Scaffolding offers temporary support to students who are unable to complete a task on their own. Over time the instructor reduces the amount of support as the student becomes more independent. Scaffolding leads novice learners to solve problems, create goals, and carry out tasks independently (Smit, et al., 2013). Scaffolding Theory is based on Vygotsky’s concept of the Zone of Proximal Development (ZPD) which defines the space between what a student can do independently and what they can do if they have support. It is the measurement used to gauge how much assistance learners need to reach a level of competence where they can work on their own. ZPD uses positive reinforcement to encourage students to become self-regulated learners (Verenikina, 2008).

History

Scaffolding theory was developed by three cognitive psychologists, David Wood, Jerome Bruner, and Gail Ross in the mid-1970s; however its origins can be traced back to the early 1800s. In the mid-1800s, Hegel and Marx referred to scaffolding as a “building’s skeleton” indicating the temporary aspect of scaffolding (Shvarts & Bakker, 2019). It was not until the early to mid-1900s that Vygotsky began to expand on the scaffolding theory by developing the concept of the ZPD, discussed below in the Scaffolding Key Characteristics section of this research study. In the mid-1900s,
Bernstein supported Vygotsky’s approach to scaffolding as a tool to develop more long-term results (Shvarts & Bakker, 2019).

Scaffolding Theory was introduced in 1976 by Wood, et al. (1976) in their research on the role of tutoring in problem solving. The researchers coined the term “scaffolding” to describe the process of a novice student becoming independent in achieving their goals. They studied thirty children ranging from three to five years old, in twenty minutes to one-hour sessions, as participants in their research project in which each child’s success on one level determined if they moved forward to the next level thereby developing steps to implement the scaffolding theory. (Wood et al., 1976). Wood, Bruner, and Ross (1976) described the six functions of scaffolding: cognitive structure, reduction in degrees of freedom, direction maintenance, metacognitive coaching, recruitment, and contingency management. Direction maintenance is the function that best supports this study. Direction maintenance is the point of the scaffolding process that confirms that the learner has grown in their developmental process. Vygotsky noted that direction maintenance is what takes place in the Zone of Proximal Development (Shvarts & Bakker, 2019).

**Zone of Proximal Development (ZPD)**

Vygotsky began defining the Zone of Proximal Development as early as the 1920s and he continued to build on ZPD throughout his career (Shabani, et al., 2010). ZPD is applied to human development and focuses on learning in both formal and informal settings. ZPD is where students learn to distinguish between what they can do on their own and what they are able to do with assistance. The idea is to expand students’ independent learning abilities and give them confidence in their autonomous learning.
The student does not become independent overnight rather, they receive independence a little at a time as the instructor slowly withdraws support from the dependents. Another perspective of ZPD is that the beginner student borrows knowledge and skills from the advanced educator until they are able to complete tasks independently (Eun, 2017). This aligns with self-assessment as both self-assessment and scaffolding encourage students to become autonomous learners by giving them the tools necessary to reach their goals.

When using ZPD, it is important to determine what the instructor contributes to the scaffolding process that allows the student to advance to the next level of learning. Scaffolding begins with the instructor carrying the load for educating students, then moves to the instructor only intervening on occasion, eventually leading the student to show evidence that they are able to work autonomously. As the student takes on more responsibility for their learning, they begin to work collaboratively with the instructor, eventually directing their own learning (Gish, 1993). The level of instructor intervention determines where the student is in the scaffolding process. It is important for instructors to know how long to control the learning and when it is time to shift to allow the student to become an autonomous learner (Verenikina, 2004). Not only does scaffolding teach students how to solve problems, but it also teaches them to reflect on their work to determine which techniques are successful and which techniques are not successful when it comes to problem solving (Margolis, 2020). However, not all assignments will fall into the ZPD because some students may already have skills, or there may be exercises that they may not be able to do even if they have assistance from the instructor (Shabani et al., 2010). This concept supports the reflection aspect of self-assessment because it also
allows students to reflect on their learning process to determine their strengths and weaknesses.

Scaffolding also encourages students to engage in the social aspects of learning when students participate in peer-reviews and interact with instructor feedback. These interactions can strengthen a student’s learning experience as well as guide the instructor in knowing what the student needs for autonomous learning. As discussed previously, instructors must cultivate the learning environment for students to progress to independent learning (Merriam & Baumgartner, 2014). Students must be ready to engage in assessment, whether it be self-assessment, peer-review, or instructor feedback. If they are not ready, they will become fearful when the instructor begins encouraging more autonomous learning. Students who are not prepared to participate in assessments may become discouraged and drop out of the program of study. Students who engage in formative feedback will likely find the motivational aspect of scaffolding and begin to achieve deeper levels of learning (Light et al., 2009).

**Application of Scaffolding Theory to Education and Other Relevant Fields**

Walqui (2006) used scaffolding for English language learners who learn English as a second language scaffolding which can be applied to second language acquisition of all languages. He argued that because language learning requires both cognitive abilities and social practices, the sociocultural perspective of ZPD is applied in Scaffolding Theory. The sociocultural aspect of learning can be seen in scaffolding as students mimic the intellectual behaviors of the instructors while they are becoming independent learners.

Walqui (2006) argued that scaffolding is a transition from a planned curriculum to a supervised curriculum. At the beginning of language learning, the instructor carefully
plans lessons, so students gain a foundation of the language. Over time the instructor reduces their involvement by supervising students’ social interactions with native language users. Another view of this concept is that educators initially use repetition to introduce new materials into student learning. Once the student has a basic knowledge of the subject area, in this case, the English language, they are supervised as they explore ways they will achieve their goals. With the exploration comes a connection with the community where they interact, and they are able to adjust their learning to fit their needs. Ultimately, the instructor and student engage in a “handover/takeover” which increases the students’ responsibility for their own learning while the instructor acts as a supervisor. The student gains a “flow” where they find the steady ground and can begin managing their autonomous learning (Walqui, 2006).

Walqui (2006), used the sociocultural approach to learning as the foundation that supported her use of scaffolding. According to Walqui (2006), scaffolding allows educators to have the means to push students forward in their language learning to reach their full potential. They cited Leir’s model of scaffolding from 2004 as a representation showing levels of challenge and support. Wilson and Devereux (2014) applied Scaffolding Theory to support their studies in Academic Language Learning (ALL). Wilson and Devereux (2014) noted that high challenge and low support resulted in students becoming frustrated which caused them to seek shortcuts on their assignments. When students were faced with low challenges and low support, they found the work to be pointless and became bored with the learning experience. Students who were in situations where the challenges were low, but the support was high they felt that the work was just busy work, and that the instructor was oversimplifying the materials. The author
noted that in contrast to the previous three levels of challenge and support is high challenge and high support, students who met greater challenges that were coupled with more support were more engaged and their skills grew more rapidly (Wilson & Devereux, 2014).

### Figure 1. A model of scaffolding as high challenge, high support (Wilson & Devereux, 2014).

Gish (1993) applied scaffolding theory to ASL/English interpreter educators and used the feedback process with students, such as in self-assessment, to allow them to find their independence in learning. She argued that there are four stages to ZPD, the first being a conversation that is paired with an exercise that allows the student to apply the content, bringing meaning to the assignment. The second stage is when the student begins to take on responsibility for their learning, but the student uses the instructor’s exercise as a blueprint to guide the learning. The third stage requires the student to internalize their learning process and it becomes more natural for them. In the fourth and final stage, the student may revisit the conversations with the instructor to reiterate the learning process. As the learning is being scaffolded, the teacher monitors the student’s progress to ensure that the student is ready to take on more responsibility for the learning experience leading to autonomous learning. If the student is not ready to move forward in the scaffolding
process, the instructor will not introduce new information. In interpreter education, it is important for instructors to listen to what their students are saying about their skills development so they can know when the students are ready for the next stage of scaffolding (Gish, 1993).

**Scaffolding as a Framework for this Research**

The aspects of scaffolding that best support this research are ZPD, as explained by Gish (1993) with the four-step process mentioned above. Instructors can implement these four steps with the goal of students becoming more independent in their learning. These four steps guide students to become self-directed learners. ZPD, along with direction maintenance, function together to determine the growth of students. According to Eun (2017), ZPD and scaffolding present a cycle of learning where a novice learner relies on the support of an instructor until they become self-reliant in their work. Once the student has mastered one level of learning, they can start the process again at their next level of learning, creating a continuous learning cycle from the beginning point of learning to the destination goal. The stages Gish (1993) uses in her demonstration of interpreter education and scaffolding is the same process that is applied to students. Self-assessment provides sufficient evidence that scaffolding learning theory is appropriate for studying self-assessment in interpreter education programs. Therefore, scaffolding theory in conjunction with self-assessment is the best theoretical framework for this study of the ways instructors in interpreter education programs are teaching self-assessment and what types of self-assessment they are teaching.
Interpreter Education

In this section, I will discuss the history of interpreter education, showing that the interpreting and interpreter education professions are recent fields of study. I will also discuss the limited volume of literature on interpreter education. The scarcity of literature is largely due to the newness of the profession. Lastly, I will discuss the gaps in the literature as it relates to self-assessment in interpreter education.

History of Interpreter Education

Interpretation as a profession is a 20th century phenomenon. The profession can trace its beginning to spoken language interpreters who provided services during the negotiations of the Treaty of Versailles after WWI, and later during the Nuremberg Trials after WWII; however, interpreter education developed later (Frishberg, 1986). According to Ball (2013), interpreter education is still a young field in the United States as the need for interpreters was not realized until the Vocational Rehabilitation Act was amended in 1954. This law supported individuals with disabilities in receiving support in vocation and job training. With the implementation of this law, the need for ASL/English interpreters became evident. At that time, people who interpreted for individuals who were Deaf tended to be hearing people who were the children of Deaf parents, taught students or were religious interpreters. The Rehabilitation Act of 1965 (PL 89-333) provided for the first time the federal approval of payment to interpreters as services for deaf and deaf-blind individuals (Vocational Rehabilitation Act, 1965). However, at that time, there was no professional training required to provide ASL/English interpreting services (Ball, 2013).
Except for Central Bible Institute in Springfield, MO, it was not until the 1960’s that Interpreter Education Programs began to rise in the United States. Central Bible Institute primarily trained people to interpret church services as a form of mission work in the church. In 1963, the first workshop focusing on interpreting was offered, which was a brainstorming session to determine who needed interpreting services, where they needed them, who would provide them, and how they would be educated (Ball, 2013).

In 1964, the Registry of Interpreters for the Deaf (RID) was founded, formerly called the National Registry of Professional Interpreters and Translators for the Deaf. The organization initially established three primary goals: (a) to compile and publish a list of interpreters, (b) to establish evaluation and certification systems, and (c) to educate people about interpreting services. The organization was incorporated in 1972, and at that time, RID revised their organizational goals to include advancing interpreter education and research on interpreting (Humphrey & Alcorn, 1995).

Nineteen Sixty-five marks the first time that an interpreter in a vocational rehabilitation setting was paid for their work. In 1966, the San Fernando Valley State College established a four-term program in manual communication and interpreting. By the end of the 1960’s interpreter education began becoming professionalized and the first curriculum guide for interpreter training was finally published in 1973. The profession began to grow and in 1979 a new organization was founded specifically for interpreter trainers, Conference of Interpreter Trainers (CIT). This organization was established to support interpreter educators as well as to provide professional education opportunities. This was also the year that it was recommended that Interpreter Education Programs transition from associates degrees to bachelor’s degrees (Ball, 2013).
By the 1980s, there were forty-eight interpreter education programs in the United States and in the decades following, the profession grew exponentially in education and professionalism (Ball, 2013). In 2006, the Commission on Collegiate Interpreter Education (CCIE) was established as the entity for accrediting Interpreter Education Programs. The CCIE established standards for maintaining excellence in IEPs (CCIE, n.d.b). Prior to the establishment of the CCIE, there were no degree requirements for interpreters. However, in 2009, RID began requiring certification candidates to hold an associate degree (in any field) to sit for the certification exam, moving to a bachelor’s degree requirement by 2012 (RID, 2015-2021c). This requirement raised the bar for interpreter education, supporting ASL/English interpreting as a profession, leading to the establishment of masters and doctoral programs in interpretation that created a nascent segue for interpreter educators. Currently, there are still only a few graduate-level degrees, master’s and doctorates, in ASL/English interpretation as well as in interpreting pedagogy.

**Interpreter Education Literature Review**

Interpreter education encompasses both adult education and higher education. As previously stated, the ASL/English interpreting profession has only required interpreters to obtain a degree in higher education since 2009 (associate’s degree) and 2012 (bachelor’s degree). Interpreters who already held a nationally recognized interpreter certification may not have held a higher education degree, however, they were allowed to maintain their certification through grandfathering by maintaining their Continuing Education Units (CEUs). Individuals wishing to achieve national certification after 2012 are required to earn a bachelor’s degree, but they may also be allowed to achieve
certification through an alternate pathway with adult education training and experiences (RID, 2015-2021c).

American Sign Language/English interpreter education relies heavily on, and is aligned with spoken language interpreting education research due to the sparsity of literature on ASL/English interpreter education. Not only is the literature available for ASL interpreter education lean, but the topics are also often diverse and disconnected. This literature review found that there is a vast range of topics on interpreting and interpreter education. These topics include cognitive and motivational aptitude (Bontempo, et al., 2014; Stone, 2017; Shaw, 2011; Stauffer, 2010), technology and global learning (Campbell, et al., 2019; Cox, 2012; Darden & Maroney, 2018; Hlavac, 2013), interpreting for Deaf-Blind individuals (Urdal, 2017), legal interpreting (Burn, 2017; Roberson, et al., 2012), mentoring (Pearce & Napier, 2010), admission criteria (Holmes, 2020), language modality and linguistic diversity (Ehrlich & Wessling, 2019; Quinto-Pozos, et al., 2018), interpreter skill development (Napoli & Ferrara, 2021; Snyder & McDermid, 2019), and interpreter education curricular components (Herring & Swabey, 2017; Motta 2011; Napier, 2006; Taylor, 2013; Winston, 2005). These are just a few examples of how literature related to interpreting and interpreter education covers a broad spectrum of topics with limited research in the field.

These articles are published in a variety of journals, some of which are related to spoken language interpretation, but not directly related to sign language interpreting or interpreter education. The impact factor (IF) of journals on interpreting and interpreter education tend to be low. One example of this is the International Journal of Research and Practice in Interpreting with an IF of 1.864 (JBPC, n.d.). Low IFs persuade
interpreters and interpreter education researchers to seek out other journals for publication. Not only are the publication sources of literature on interpreting and interpreter education divergent, but the topics of study are vast and lack follow-up.

**Interpreter Education and Self-Assessment**

The literature review found that research on self-assessment in interpreter education is limited and with sparse follow-up, leaving many gaps in the literature. Xiangdong (2018) asserts that the topic is under-researched in their study on self-assessment in spoken language interpreter education. They also state that there are inconsistencies in the research on student self-assessment in interpreter education due to validity factors on whether or not self-assessment is an effective tool for improving students’ interpreting skills.

Pinazo (2008), another spoken language interpreter education researcher, noted that self-assessment, like scaffolding theory, promotes life-long learning in interpreters. They said that self-assessment should be included in interpreter education curriculum because competence in developing interpreting skills relies heavily on one’s ability to reflect on their own work. Stauffer (2011) also stated that interpreter education programs may want to consider incorporating the development of self-assessment skills in their curricula. Xiangdong (2018) determined that while self-assessment can improve students’ mindset toward self-directed learning, if instructors are not teaching students about self-assessment, then there are minimal results in requiring self-assessment.

Stauffer (2011) researched students’ ability to self-assess their ASL skills, which is a foundation for interpreter education. Stauffer’s premise for studying self-assessment in ASL students was based on the NAD-RID (National Association of the Deaf/Registry
of Interpreters for the Deaf) Code of Professional Conduct. In 2005, these two organizations came together to develop an ethical code for ASL/English interpreters to follow. The second tenet of this code is, “Interpreters possess the professional skills and knowledge required for the specific interpreting situation” (RID-2015-2021b). Stauffer (2011) argued that self-assessment is an important skill for interpreters to assess qualifications for interpreting assignments.

Some researchers such as Wang (2015) and Washbourne (2013), discussed self-directed learning in the broader context without focusing on self-assessment. They concluded that for interpreting students to continue skills development post-graduation, they must become self-directed learners. The necessity of self-assessment can be inferred because it is an integral part of the self-directed learning cycle (Wang, 2015). On the other hand, Washbourne (2013) noted that instructors should be actively involved in developing self-directed learning skills in students.

While skills-based professions practice simulations in class, there is not enough practice time for students to achieve the interpreting skills necessary to be successful in their given field. According to Hunsaker (2020), simulations are scripted or partially scripted activities that offer interpreter students the opportunity to learn through experiential learning. Non-interpreting roles are played by actors, Deaf and/or hearing, and the sole purpose is to provide an educational experience for interpreting students. For students to maximize their growth, they must work outside of the classroom as self-directed learners. Instructors require students to find their own practice materials, in ASL or English, for their out of class practice, but guidance is lacking on how they should self-direct this practice time (Wang, 2015). Thus, it is important for interpreter educators to
teach students how to engage in self-assessment. According to Fitzmaurice (2018a), analytical skills, one's ability to problem-solve, and the ability to independently engage in critical thinking are among the most important aspects of the interpreting profession. Self-assessment allows interpreting students to scaffold their learning as they slowly move away from total dependence on the instructor to a more autonomous learning mindset (Fitzmaurice, 2018b). Fitzmaurice (2018b) found that when interpreting students were taught how to accurately self-assessment, their assessments were more similar to that of the faculty than those students who had not been taught how to self-assessment. Students need to be taught how to accurately engage in self-assessment so they can increase their confidence in their ability to do so. As students work their way through the scaffolding process, they still need feedback from their instructors on how to improve their self-assessment skills (Fitzmaurice, 2018b).

According to Smith (2014), instructors can teach students how to engage in the self-assessment aspect of self-directed learning by teaching them Think-Aloud-Protocols (TAPs). The TAPS process was developed by Russell and Winston (2014), participants verbalize their thoughts while they are interpreting in an effort to bring to the surface what they are thinking. This can be done during the interpretation or in a retrospective manner once the interpretation is completed. TAP practices can be video recorded for the interpreter to review them and follow the TAP process. TAPs are similar to free writing; except they are conducted verbally. This teaches individuals how to analyze the transfer phase of the interpreting process. According to Patrie (2001), the transfer phase of the interpreting process is invisible because it is what happens in the brain prior to exhibiting a product. TAP allows individuals to analyze this invisible aspect of their work (Smith,
2014). These TAPs are a scaffolding tool to empower students to reach their desired outcomes.

Sowa and McDermid (2018) reviewed the efficiency of Russell and Winston’s TAP. They found that there were both benefits and disadvantages to the TAP approach to self-assessment. TAP promotes impromptu conversation about the interpretation while it is happening, but if an interpreter or student does not have the cognitive capacity to interpret and to verbalize their thoughts simultaneously, they engage in a retrospective TAP where they wait until they are finished interpreting to assess their thoughts (Sowa & McDermid, 2018). They also found weaknesses to the TAP process, specifically the retrospective TAP because it can be influenced by one’s long-term memory. Verbalizing one’s thoughts while actively interpreting also takes time to learn, and mastery may not be within reach for novice interpreters. Ultimately, they found that although students and seasoned interpreters thought it was worth their time, they still did not have consistency in their approach to the self-assessment process.

Likewise, Witter-Merithew, et al. (2001) researched guided self-assessment as applied to interpreters who interpret in educational settings. They introduced students to self-assessment in the first skills-based class and noted that the process should constantly be applied throughout the program, not just the course. They found that the most valuable aspect of self-assessment is that students became more self-aware of their learning to advance their interpreting skills. They also noted that self-assessment is a valuable foundational tool that interpreters can use to motivate life-long learning and improve skill development.
Product-Based Versus Process-Based Self-Assessment

Russell and Winston (2014) asked the questions: Should we be teaching students to engage in critical reflection of complex factors related to the cognitive processes of interpreting and should we be evaluating interpreters based on their ability to engage in critical reflection? Fitzmaurice (2018) answered his research questions in their research where he taught students how to self-assess their interpreting product. Through his research, they discovered that students who were able to accurately analyze their interpreting product scored higher on proficiency evaluations such as the Educational Interpreter Performance Assessment (EIPA). The EIPA is an assessment that evaluates the skills of educational interpreters in K-12 settings. This assessment evaluates the interpreter’s product for accuracy, thus Fitzmaurice (2018) taught students how to self-assess their product. Fitzmaurice (2018) found that when he taught students how to self-assess their product, the students’ EIPA scores increased.

While teaching students to self-assess their product was successful in Fitzmaurice’s (2018) research, he also found that there are challenges that instructors may face when teaching self-assessment. These challenges include students not understanding why they had to learn how to accurately self-assess their work. The instructors repeatedly reminded students why it is important and ultimately the students realized that the exercises were beneficial to improving their skills (Fitzmaurice, 2018). Fitzmaurice (2018) also found that when students engage in self-assessment, they develop life-long learning skills.

Gordon & Magler (2007) developed rubrics that instructors can use when having students engage in self-assessment. Figure 2 (p. 31) demonstrates the product-based
assessment used in the book, *The Mentor’s Companion*. Product, in this example, includes number production, appropriate use of numbers, and mouthing.

Figure 2. The Mentor’s Companion Rubric Sample (Gordon & Magler, 2007)

Another source available to Interpreter Education Program instructors to use for teaching product-based self-assessment are the books: *Interpretation Skills: English to American Sign Language* (Taylor, 1993) and *Interpretation Skills American Sign Language to English* (Taylor, 2002). These books detail several possible product errors that can occur during an interpretation. These possible errors include both ASL production and English production. For example, an error in ASL may include grammar and sentence structure or the accuracy of a sign. An error in English may include vocal production, grammar, and word choice.

According to Gile (2009), process-oriented training in interpreter education occurs when instructors place the focal point of the courses on the interpreting process rather than on the final production (ASL or English). The interpreting process, according
to Seleskovitch (1978), involves three steps: (a) intake and comprehension of a message, (b) analyzing the message for concepts, meaning, and ideas, and (c) producing the message in the target language. Because the process in interpreting between two languages occurs in the brain of the interpreter, instructors work with students in becoming more aware of the cognitive skills, tasks, and decisions involved in the interpreting process. Instructors work with students to identify what is happening within the students’ brains to determine where breakdowns are occurring. Rather than giving feedback on the outcome, the instructor focuses on how students are cognitively processing information to arrive at an outcome. Process-oriented training focuses on how to achieve a quality message (Gile, 2009, p. 14).

There are a variety of different interpreting process theories proposed by educators. Three of the models that are often used in interpreter education are 1) the Colonomos Model, also known as the Integrated Model of Interpreting (IMI) (Colonomos, 2015), 2) the Cokely (1992) Sociolinguistic Model, and 3) the Gish (MRID, 1996) Model of Interpreting. Each of these models attempt to describe the cognitive process that takes place when interpreting from ASL to English or English to ASL.

Colonomos developed the Integrated Model of Interpreting (IMI) in 1989, drawing from Seleskovitch’s work on spoken language interpreting. Figure 3 (p. 33) demonstrates the IMI which is broken down into a five-step process: (a) source/target message, (b) receptive/expressive channels, (c) analysis and composition factors, (d) message, and (e) monitor/feedback. The figure illustrates the interpreting process beginning with the speaker’s utterance (source message) in ASL or English. Once utterance of the source language begins, the message enters the receptive channel, where
the comprehension phase of the interpretation takes place. Next, in the receptive channel, the interpreter begins cognitively processing the message for comprehension and meaning, while taking into account the nonverbal aspects of the message (pointing, gesturing, etc.). These nonverbal components of a message influence the meaning intended by the speaker. The receptive channel leads to the analysis and composition step. The analysis and composition factors listed in the model are integral to the successful transfer of meaning within the interpreting process. Once the analysis and composition steps are completed, the interpreter begins to deliver the message in the target language. The target message is the visible product of the invisible interpreting process. The last step in the IMI process is monitoring/feedback. This takes place after the message has been delivered into the target language. The interpreter engages in a self-assessment of their interpretation. If the interpreter notices errors, they can then correct the errors. This is a continuous process when an interpreter is working simultaneously while the speaker is talking (Colonomos, 2015).

Figure 3. Integrative Model of Interpreting (Colonomos, 2015)
Cokely developed the Sociolinguistic Model of Interpreting in 1992, which uses a seven-step process that is demonstrated in Figure 3 (p. 33). The seven steps include: (a) message reception, (b) preliminary processing, (c) short-term message retention, (d) semantic intent realized, (e) semantic equivalent determined, (f) syntactic message formulation, and (g) message production. Cokely’s model expands on each of the seven steps to demonstrate an in-depth look at the interpreting process. There is no visible representation of steps two through six. Once the interpreter receives the source message, the internal processing begins and is not visible again until the message is produced in the target language (Cokely, 1992).

The Sociolinguistic Model of Interpreting begins with the interpreter receiving the source message in either ASL or English. Once the interpreter receives the message, they begin the preliminary processing step which filters information without meaning and identifies a lexicon that determines the intent of the speaker. This stage uses prior knowledge to understand the message, then leads into the next stage of short-term message retention. In this stage, the interpreter holds the information in their short-term memory while making sense of the message and determining its meaning. The result of this stage is the chunking of information which allows the interpreter to realize the semantic intent of the message. At the end of the semantic intent realization step, the interpreter understands the speaker’s intent of the message. Once the interpreter understands the intent, they can move into the semantic equivalence determination stage where they analyze the message for any linguistic or cultural information that would impact the meaning of the utterance. This is the step where the interpreter begins to develop an equivalent message in the target language. The level of semantic equivalence
in the target message is influenced by the interpreter’s competency in the target language linguistics and culture. In the next step, the interpreter formulates a syntactic message that allows the interpreter to produce the message in the target language while matching the cultural and linguistic norms of that language. After the message is formulated, the interpreter moves into the final stage of message production. In this step, the interpreter produces the message in the target language (Cokely, 1992).

**Figure 4.** Cokely’s Sociolinguistic Model of Interpreting (Cokely, 1992)

The Gish Model of Interpreting was proposed in 1987, but it was never published. Later, in 1996, the Minnesota Registry of Interpreters for the Deaf (MRID) developed self-paced learning modules for educational interpreters. While the publication did not include Gish as an author, the project relied on Gish’s input. It focuses on information processing and does not include target message output or self-monitoring. This model is similar to a mind-map which breaks down each part of the source message. Gish’s model
includes: (a) speaker’s goal, (b) theme(s), (c) objectives, (d) sub-objectives, (e) units, and (f) details (MRID, 1996).

The Gish Approach to Information Processing (Figure 4, p. 35) allows the interpreter to analyze the message as the interpreter receives it, preventing the interpreter from becoming overwhelmed by the information. The interpreter must first understand the goal of the source message such as the presenter’s intent, if it is educational, entertaining, persuasive, etc. Then the interpreter determines the themes of the source message, breaking it down into themes. The themes are the main points that the source message wants the audience to understand. The goal and themes are rarely explicitly stated, leaving the interpreter to make predictions. Once the goal and themes are established, the interpreter must understand the objectives for each theme. The objectives are the main points of the theme and are occasionally clearly stated. Next, the objectives may be broken down further, creating sub-objectives. Sub-objectives, like objectives, are only occasionally clearly stated. The sub-objectives are supported by units which is the level where interpreters analyze most often. The units are where information is chunked and may be implicitly or explicitly stated. Lastly, the units are broken down into details which include information that cannot be changed such as names, dates, etc.

![Diagram](image)

**Figure 5.** The Gish Model of Interpreting (MRID, 1996).
Massey (2005) suggested that there are six sub-competencies that are required for interpreters to function professionally: (a) communicative competence, (b) extra-linguistic competence, (c) psycho-physiological competence, (d) instrumental-professional competence, (e) transfer competence, and (f) strategic competence. These six sub-competencies are part of what Massey called “The Dynamic Process.” This is the interpreting process and includes a breakdown in any of these sub-competencies that can impact the interpreting product (Massey, 2005). According to Massey (2005), interpreting professionals accept that students must be taught the competencies that are required to successfully produce an interpretation, and that they relate to the interpreting process, then it must be acknowledged that students need to be educated on these six competencies and how they relate to the interpreting process. This accepts that process-oriented training is necessary for student success (Massey, 2005).

According to Gile (2005), process-oriented training targets the reasons why errors occur rather than the errors themselves (product-oriented training). This means that the instructors instill strategic measures and skills in the students for working through the interpreting process. When instructors implement process-oriented training, they tend to be more flexible with linguistic choices and message fidelity, ultimately improving the product (Gile, 2009, p. 15). Repetitously discussing how theories relate to students’ successes, as well as their deficiencies emphasizes the process-based analytical application.

Educating students based on their product identifies outcome, whereas process-based training gives answers to the reason why the product choices are made (Gile, 2009). This helps with pinpointing errors and forces the student to dig deeper into a
cognitive analysis. He noted that students who participated in process-based self-assessment tended to feel less stress than those who participated in product-based training. Klimkowski (2014) referred to product-based education as “summative” and process-based education as “formative.” The author noted that summative assessment is based on “the what,” but formative assessment is based on “the how.” Summative assessment judges the productiveness of the process rather than focusing on the process itself. Summative assessment assumes that assessment is objective, and that knowledge is measurable. It also reduces the instructor-student interaction. On the other hand, formative assessment promotes instructor-student interaction and how instructors provide feedback to students by looking at the learning process rather than the learning results (Klimkowski, 2014).

**Gaps in the Literature**

There are several gaps in the literature of self-assessment in Interpreter Education Programs, namely: (a) how instructors are teaching self-assessment in interpreter education programs, (b) how students are applying self-assessment in interpreter education programs, (c) self-efficacy in self-assessment, (d) motivation and self-assessment, and (e) What types of self-assessment instructors are teaching (product or process) in Interpreter Education Programs.

Self-efficacy is an integral aspect of self-assessment, yet there is no research that has been conducted on whether or not interpreting students have self-efficacy related to self-assessment. While other skills-based professions have demonstrated the need for students to have self-efficacy to reach mastery levels in their skills, research is still needed on self-efficacy as it relates to process-based self-assessment in interpreting
students. As students practiced self-assessment, they became more positive about the approach and their reluctance reduced (Fitzmaurice, 2018b). Pajares (2003) stated that when students have greater self-efficacy, they can see greater results in their work, but when they do not express self-efficacy, the opposite can occur. They also noted that just as it is important to be aware of students’ skills, it is also important for instructors to be aware of students’ self-efficacy. When students are confident in their abilities, they tend to demonstrate skills that are more advanced (Pajares, 2003).

Motivation seems to be another common theme when it comes to students accepting process-based analysis. Gile (1994) thought that this has to do with the effort that is required to analyze one’s process. He stated that students must be motivated to engage in self-assessment. Dangerfield and Napier (2016) also thought that motivation played a role in self-assessment. However, there is no research on what motivates interpreting students to self-assess. Future research needs point to motivation and self-assessment-in interpreter education programs as a foundation for a trajectory of research on the topic of self-assessment.

Ultimately, Fitzmaurice (2018b) said that students should be taught how to self-assess. While there has been one research project on how to self-assess, there has not been any follow-up research on whether or not that self-assessment model is successful. There is a foundational gap in the literature regarding how instructors are teaching self-assessment in Interpreter Education Programs. It is important to first understand how self-assessment is being taught before continuing to other research on self-assessment in interpreter education. The existing gap drives this research to ask these questions, “How are instructors in Interpreter Education Programs in higher education
teaching students to self-assess?” and “What types of self-assessment are instructors teaching in Interpreter Education Programs in higher education?”

**Chapter Summary**

In this chapter, I discussed self-assessment, drawn from Self-Directed Learning Theory, and Scaffolding Theory, highlighting how, together, they form the framework for this study. I also discussed interpreter education and how self-assessment relates to interpreter education. Lastly, I identified four gaps in the literature: (a) how instructors are teaching self-assessment in interpreter education programs, (b) how students are applying self-assessment in interpreter education programs, (c) Self-efficacy in self-assessment, (d) Motivation and self-assessment, and (e) What types of self-assessment instructors are teaching (product or process) in Interpreter Education Programs? In the next chapter, I will discuss the methodology that I used to conduct my research study.
Chapter 3: Methodology

In chapters 1 and 2, I discussed how I use Self-Assessment and Scaffolding Theory to frame this study on assessment in Interpreter Education Programs. I explained that teaching self-assessment is important in Interpreter Education Programs, pointing out the gap in the literature of not knowing how self-assessment is taught or what types of self-assessment are taught. In this chapter, I will discuss the research approach that I used to conduct this study, and the details of the data collection and data analysis. Furthermore, I will discuss the trustworthiness, subjectivity, and representation of this study.

Purpose Statement and Research Questions

The purpose of this study was to analyze how instructors were teaching self-assessment to interpreting students. It was important to first identify how self-assessment is taught without making assumptions that it was being taught. This study explored the following research questions:

Question 1: How are instructors in Interpreter Education Programs in Higher Education teaching students to self-assess?

Question 2: How are instructors in Interpreter Education Programs teaching the Commission on Collegiate Interpreter Education required product-based and process-based self-assessment?

The first research question provided a clearer understanding of the scaffolding process that instructors in interpreter education programs use to teach students how to self-assess, looking at how and when it was being taught. The second question delved deeper into self-assessment and determined whether instructors were teaching product-
based and process-based self-assessment as the CCIE recommends. These questions led to an understanding of whether students were being taught to use formative or summative self-assessment and how instructors taught students to metacognitively reflect on their product and/or process.

**Theoretical/Conceptual Framework**

I combined Self-Assessment (Andrade, 2019) and Scaffolding Theory (Eun, 2017; Gish, 1993; Verenikina, 2004; Vygotsky, 1978) to conceptualize how instructors in an Interpreter Education Program (IEP) were teaching self-assessment. Self-assessment is an integral aspect of self-directed learning because it ties into goal setting and reflection. When students self-assess, they can identify strengths and weaknesses to determine areas for improvement (Valdez, 2018). When students identify the areas where their skills need honing, they can use it as a tool to enhance their skills development to higher levels (Zhong, 2008).

In conjunction with Self-Assessment, I used Scaffolding Theory to situate how instructors teach self-assessment in IEPs. Scaffolding is a cycle of learning that works as a stepping-stone to help students achieve higher levels of learning that develops into autonomous learning (Eun, 2017). Scaffolding Theory goes hand in hand with self-assessment because one can see scaffolding as a tool that leads to self-directed learning. This can be done through the Zone of Proximal Development (ZPD), the space between what a student can do with instructor support and what the student can do independently (Verenikina, 2008). Gish (1993) applied scaffolding to self-assessment and found sufficient evidence that scaffolding supports self-assessment in IEPs. Like self-assessment, ZPD and scaffolding create a cycle of learning. Both theories guide students
to autonomous learning, allowing them to gain confidence as they master each level of learning (Eun, 2017).

**Research Approach**

I conducted a qualitative interview design study. According to Creswell and Creswell (2018), a qualitative approach to research allows researchers to explore issues in their field through methods such as interviews, focus groups, etc. Unlike quantitative research, a qualitative approach allows the researcher to actively interact with participants and data collected as they analyze it for themes. The qualitative interview was the best approach for this research because this was an exploratory study conducted to determine further research needs. Qualitative interviews allowed the researcher to personally collect and analyze the data (Creswell and Creswell, 2018). Interaction with the data was an important aspect of this research project because it allowed the researcher to look beyond the surface of spoken words. Through this approach, the researcher was able to analyze nuances and pauses for deeper meaning.

I collected data by interviewing nine instructors from six different Commission on Collegiate Interpreter Education (CCIE) accredited Interpreter Education Programs in the United States to explore how self-assessment was being taught in their programs. I used a two-interview protocol; the first was a semi-structured interview with open-ended questions, and the second interview was a follow-up for additional comments, clarifications, and member checking.
Research Site and Participants

Participants

I conducted individual semi-structured interviews with nine instructors from six different accredited Interpreter Education Programs that offer a bachelor’s degree. There were only 16 CCIE accredited bachelor’s degree Interpreter Education Programs in the United States for ASL/English Interpretation and these accredited programs are considered the best IEPs in the United States; therefore, I interviewed participants from those programs. Another requirement for participants was that the instructors were nationally certified through the Registry of Interpreters for the Deaf (RID). Interpreters who hold RID certifications have passed a rigorous examination process and engage in continuing education to maintain their certification. The participants were also required to have at least three years of experience teaching interpreting courses, so they have a point of reference during the interview. The final requirement was that participants teach interpreting courses. The participants were not required to be full-time faculty due to the possible use of adjunct instructors to teach interpreting courses. At the beginning of the first interview, each participant chose a pseudonym to use. The participants are referred to by their pseudonym to maintain their privacy.

Participant Recruitment

The participants were chosen by first e-mailing the program coordinators from each of the 16 accredited Interpreter Education Programs from across the United States, requesting their participation in my research. In the email, I explained the scope and purpose of my study, listed the minimum requirements for participation, and attached the recruitment letter. Once I sent the initial recruitment e-mail (see Appendix A), I received
some responses right away. I sent a follow-up e-mail (see Appendix B) to the program coordinators who did not respond four days after the initial request. The coordinators who responded that they were unable to participate forwarded the request to their faculty members of which some responded that they wanted to be involved with this project. Steps to recruit participants, send follow-up requests, and schedule first and follow-up interviews overlapped depending on when people responded. I developed a chart to keep the interviews organized (see Table 1, p. 45). I included the university name and individual’s email address in this chart to avoid duplications. Upon completion of the interviews, I removed the university name and the email address from the chart to maintain the participants’ privacy and ensure confidentiality.

**Table 1 – Interview Schedule**

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>University</th>
<th>Email</th>
<th>Confirmed Participation</th>
<th>Sent Doodle</th>
<th>Interview #1 Appt.</th>
<th>Sent Zoom Link &amp; Informed Consent</th>
<th>Interview #2 Appt.</th>
<th>Sent Zoom Link</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Date/Time</td>
<td>Yes</td>
<td>Date/Time</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

I received a total of 14 responses from 11 different programs; nine individuals responded that they wanted to participate, and five individuals declined. Once a participant responded that they wanted to be involved with this study, I sent them a Doodle Poll with several date and time options, at least twenty options total. When I received an alert from Doodle that a participant responded to the poll, I sent them the informed consent (see Appendix F) and a confirmation e-mail which included the date and time of the interview with the Zoom link. Ultimately, there were nine participants
from six different accredited bachelor’s degree Interpreter Education Programs from all over the United States, that participated in this study.

**Confidentiality and Storage of Collected Data**

I ensured the protection of human subjects for each participant by having them sign informed consent documents. The documents were sent via email and signed prior to the beginning of the interview process. I maintained each participants’ privacy and confidentiality by allowing the participants to choose a pseudonym for me to use in the study. All files, documents, and recordings were saved in a secure, encrypted OneDrive with only myself having access to them.

**Data Collection**

**Instrumentation**

I used semi-structured qualitative interview questions via Zoom to collect data for this study (see Appendix C). I used Zoom to conduct the interviews as the interpreter educators were from various programs across the United States. I was either located in my office on the campus where I work or in the privacy of my home while I conducted the Zoom interviews. The participants were at various locations that were most convenient to them at the time of the interview. I video and audio recorded the interviews using Zoom. I used rev.com to transcribe the interviews.

**Participant Interviews**

I conducted two semi-structured Zoom interviews per participant, an initial interview and a follow-up interview. The first interview lasted up to one hour per participant. Once the interviews were completed and analyzed, I conducted a follow-up interview that lasted up to thirty minutes to clarify details and do member checking (see
Appendix D). In Zoom, the participants had to wait for me to admit them into the meeting. I began the interview with “getting to know you” questions to develop rapport with the participants. In the next step, I asked semi-structured questions to learn how and when the instructors were teaching self-assessment in their IEPs. Throughout the interviews, I took field notes to complement my journal reflections after each interview. At the end of the initial interview, I scheduled the follow-up interview. Upon completion of the initial interview (see Appendix C), I sent the video recording to rev.com to be transcribed. I received each transcript within twenty-four hours and began reviewing the transcript.

I conducted the follow-up interview (see Appendix D) after reviewing the transcript of the first interview. At the follow-up interview I reviewed the summary of the data from the initial interview with the participant for the purpose of member checking which was important for trustworthiness. I also used this interview to clarify any questions from the first interview. At the end of the follow-up interview, participants had the opportunity to add any additional information or comments. Upon completion of the follow-up interview, I sent the videos to rev.com for transcription and received the transcripts within twenty-four hours. All information was stored on an encrypted OneDrive folder. Identifying information, such as participant names, the names of the universities, and contact information were all redacted from any document that was used in this data set.

Trustworthiness/Credibility

According to Lincoln and Guba (1985), the goal of trustworthiness is to ensure that the research findings are worth acknowledging. It is important for researchers to
acknowledge trustworthiness and credibility throughout their research, not just in the analysis phase (Elo et al., 2014). In the data collection phase, the researcher must be self-aware of their presuppositions and assumptions (Koch, 1994). I engaged in self-awareness by journaling after the interviews, detailing my presuppositions, assumptions, and how my positionality was shaping data collection and ongoing data analysis. I also contacted the participants post-interview to review their responses to the questions and seek any necessary clarification as part of member checking to improve scrutiny and credibility (Savin-Baden & Major, 2013). I was also conscious of the questions that I asked and non-verbal cues I presented to avoid influencing or leading participant responses in the interviews.

To maintain trustworthiness in the analysis phase, it is essential to accurately demonstrate the findings in the words of the participants from the data collection phase (Polit & Beck, 2012). I continuously checked my researcher positionality, assumptions, and inferences throughout the data collection and data analysis phases throughout the process through journaling and sometimes through a discussion with my mentor. I used the same strategy when working on the findings reporting phase of the research. I used verbatim quotations from participant interviews to maintain credibility (Polit & Beck, 2012).

**Data Analysis**

Interviews with each of the instructors were transcribed within twenty-four hours upon completion through rev.com. Once transcriptions were returned to me, I reviewed the transcripts checking for accuracy and clarification on who was speaking. I also input my field notes taken during the interviews indicating important information and
interviewee nuances (Davidson, 2009). I had taken field notes on the paper form of the interview protocol I used with each participant. When I reviewed the transcript of the first interview, I added my notes in the comment section on the Word document. This helped when it came to the second interview and reviewing the information with the participant. It was essential to include not only what is being spoken, but also how words are being used in phraseology and inflection as these aspects of communication can impact the intent of the message (Polit & Beck, 2012). This was also accomplished through memo-writing. Memo-writing helped me explore themes in the interviews. As I wrote memos, I could identify themes (Charmaz, 2006).

When the transcriptions and memos were complete, I began thematic analysis drawing on Braun and Clarke (2006) by looking for patterns within the data that was collected (Braun & Clarke, 2006). To begin the analysis, I did three rounds of coding; the first round was in vivo coding to maintain the participant’s words in the codes (Saldana, 2009, pp. 74-77). The second round was pattern coding which allowed me to begin looking for preliminary themes (Saldana, 2009, pp. 152-155). I did two rounds of pattern coding; the first round was to look for patterns in individual interviews and the second round was to look for patterns across all of the interviews. The initial coding revealed eleven different codes that developed into broader categories. The categories were: (a) types of self-assessment, (b) self-assessment is critical, (c) dialogue is important, (d) instructor experience with self-assessment, and (e) scaffolding self-assessment. Each of these categories held rich data that would develop into themes.

Upon completion of identifying the categories, I began looking for preliminary themes so I could richly populate the themes and name them (Braun & Clarke, 2006).
The categories clearly supported each other which ultimately led to the themes. For example, the category “Types of self-assessment” helped populate the theme that “instructors are using one type of self-assessment, product, or process, and not both.” A subtheme that I identified using the different categories was that instructors consider self-assessment to be crucial to student skills development. The categories that supported this subtheme are that “instructors require students to engage in self-assessment” and “they enforce the requirement by including it as part of the grade.” The other team that I identified, “There is no one approach used to teaching self-assessment” came through the patterns and categories that instructors do not have experience with self-assessment as learners, and whether or not instructors use scaffolding with teaching students to self-assess their skills.

**Positionality**

I was interested in studying self-assessment in Interpreter Education Programs because I have firsthand experience of the frustration that comes with not being ready to successfully work as an interpreter upon graduating from an IEP. Although I continued to advance my education in ASL/English interpretation and became heavily involved in the interpreting and Deaf community, I did not obtain the National Interpreter Certification (NIC) until thirteen years after receiving my bachelor’s degree in Interpreter Education. I achieved state credentials and began teaching in an IEP, but still seemed to struggle with achieving the NIC.

Interpreter Education Programs are skills-based programs that require a strong foundation in American Sign Language (ASL) prior to students entering interpreting courses. When students enter a program without prior knowledge of ASL, it can take two
years of courses for the student to gain fluency in the language. If students are seeking to earn a bachelor’s degree, that allows only two years for students to transition from language learning, entering foundational interpreting courses, and moving into more advanced courses where interpreting skills are developed. Ultimately, according to Wang (2015), there are not enough in-class hours for students to fully develop their interpreting skills. This leads to a delay in professional interpreter certification once students complete their IEP.

States that require a license to interpret limit the opportunities available for students or recent graduates to further develop their skills in professional settings beyond graduation. Continued development can be done through mentorships, internships, and self-directed learning. It is important for novice interpreters to engage confidently in self-assessment to improve their skills post-graduation if they intend to reach the skills necessary to obtain national certification. Interpreters who hold the National Interpreter Certification (NIC) hold the minimum skills necessary to interpret in high stakes settings (RID, 2015-2021c). They must be able to adequately set goals, develop a plan of action, execute that action, and evaluate their progress if they are going to continue to see enough growth to obtain higher certification levels. Many students do not have such confidence, so they do not engage in SDL and many not successfully transitioning from graduation to real-world work experience.

I used reflexivity throughout my data collection and analysis. Reflexivity is necessary during and after the process because it allows the researcher to reflect on their subjectivity (Pillow, 2003). My subjectivity could have shaped the data collection and the data analysis phases of this research project. For example, I thought that my experience
with the delay in gaining certification after graduation could potentially influence my data collection and data analysis. However, that did not happen as the participant responses to the interview questions did not bring up any thoughts or feelings related to my experience with achieving certification. Furthermore, the data collected did not include information about the delay between graduation and certification. But it was important to keep this presupposition in mind throughout the study. My years of experience teaching in an IEP did shape the data collection and analysis. My experience helped me to understand the data from the role of an instructor. Reflexivity played a key role in ensuring that as much as possible my presuppositions and assumptions were not imposed on the interview participants. It was important for me to debrief and discuss with a mentor, in confidence, about my subjectivity throughout data collection, data analysis and as I reflected on themes that arose in the data.

**Limitations of the Study**

There were several limitations of this study. One limitation was the small participant pool from 16 accredited programs, limiting the number of instructors available for this study. Another limitation was the time constraints due to the narrow time frame available for collecting data. The time constraints reduced the number of possible participants due to scheduling conflicts. Furthermore, due to the small participant pool, I found only three participants out of the nine who taught self-assessment in their programs. This limited the richness of the data. This was an exploratory study, not a comprehensive study of all the different accredited Interpreter Education Programs.
Chapter Summary

In this chapter I discussed how I conducted the study to determine if and how instructors in Interpreter Education Programs teach self-assessment and what types of self-assessments are addressed in their programs. I also addressed that this is an exploratory study that may shed light on future research that could be conducted in the area of self-assessment in Interpreter Education Programs. I conducted semi-structured interviews with nine participants from six different programs. The data was analyzed using Braun and Clarke’s (2006) thematic analysis. In the next chapter, I discuss the findings of the research.
Chapter 4: Findings

The first three chapters of this exploratory research study introduced self-assessment in Interpreter Education Programs, defined the theoretical framework, reviewed the literature on interpreter education and self-assessment, and covered the research design for the study. The purpose of this study was to explore how interpreter educators are teaching students to self-assess their interpreting skills in interpreter education programs as there is a gap in the existing literature on how Interpreter Education Programs approach teaching students to engage in self-assessment.

In this chapter, I will present each of the four themes found in this study:

1. Instructors tend to use scaffolding to teach self-assessment. Scaffolding was used in courses to teach self-assessment by using rubrics, demonstrating how to self-assess, and through feedback.

2. Student engagement in self-assessment is a required part of course assignments in interpreting courses. Instructors motivate students to self-assess their skills by making it a graded requirement for assignments and withholding feedback until students submit a self-assessment.

3. The essential components of self-assessment include goal setting, critical reflection, learning without fear, and life-long learning. Instructors have students set goals that they want to achieve, and some instructors have students develop a plan for how they will achieve their goals.

4. Instructors in Commission on Collegiate Interpreter Education (CCIE) accredited programs are teaching product-based self-assessment. The CCIE requires that instructors in accredited programs teach product-based and
process-based self-assessment. All of the instructors in this study are teaching product-based self-assessment; however, only two of them are teaching process-based self-assessment.

A qualitative interview design was used to collect data by using semi-structured interviews. Each participant chose a pseudonym to use to keep their identities confidential. The interview questions posed to participants were designed to collect data to answer the following research questions and all findings are included in this chapter.

**Question 1:** How are instructors in Interpreter Education Programs in Higher Education teaching students to self-assess?

**Question 2:** How are instructors in Interpreter Education Programs teaching the Commission on Collegiate Interpreter Education required product-based and process-based self-assessment?

Table 2 (p. 56) indicates the widely recognized ASL/English Interpreter Certifications in the United States. Table 3 (p. 57) outlines the demographics of the participants. Participants 1-8 preferred to be referred to by their participant number and the ninth participant requested to use the pseudonym, Robin. All of the participants were white with eight of the participants being female and one being male. This is reflective of the interpreting field. For example, the Registry of Interpreters for the Deaf (RID) publishes a fiscal year report which was last published in 2019. In that report, there were 14,452 members of which 9,315 self-identified as European American/White. There were 9,763 members who self-identified as female (RID, 2019). All of the participants held a Master’s degree or higher and all held at least one national interpreter certification. Table 3 (p. 57) of available interpreter certifications that are widely recognized.
## Table 2 - Interpreting Certificates

<table>
<thead>
<tr>
<th>Registry of Interpreters for the Deaf Certifications</th>
<th>Texas Health and Human Services Certifications</th>
<th>Educational Interpreter Certification</th>
<th>National Association of the Deaf</th>
</tr>
</thead>
<tbody>
<tr>
<td>• National Interpreter Certification (NIC)</td>
<td>• Board of Evaluations of Interpreters IV (BEI-IV)</td>
<td>• Ed:K-12 (Educational Interpreter Performance Assessment)</td>
<td>• National Association of the Deaf-V (NAD-V)</td>
</tr>
<tr>
<td>• National Interpreter Certification – Advanced (NIC-A)</td>
<td>• BEI-Medical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• National Interpreter Certification – Master (NIC-M)</td>
<td>• BEI-Court</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Certificate of Interpretation (CI)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Certificate of Transliteration (CT)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Comprehensive Skills Certificate (CSC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Transliteration Certificate (TC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Interpretation Certificate (IC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Specialist Certificate: Legal (SC:L)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• OTC (Oral Transliteration Certification)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The participants’ experience teaching interpreting in higher education ranged from five years to thirty-six years. The job titles varied and included program directors, instructors, professors, and adjunct instructors. Participants were recruited via e-mail through program coordinators. Some coordinators forwarded this research information to the faculty in their programs. This study included nine instructors in six different CCIE accredited Interpreter Education Programs, with four participants from the same program. Lastly, Table 3 (p. 57) identifies the types of self-assessment that each instructor taught, either product-based or process-based.

**Table 3 - Participant Information**

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Gender</th>
<th>Race</th>
<th>Credentials</th>
<th>Years of Experience</th>
<th>Title</th>
<th>Program</th>
<th>Type of Self-Assessment Taught</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 1</td>
<td>F</td>
<td>White</td>
<td>Ph.D. NIC-M SC:L Ed:K-12</td>
<td>22 years</td>
<td>Program Coordinator</td>
<td>Program A</td>
<td>Product-based and Process-based</td>
</tr>
<tr>
<td>Participant 2</td>
<td>M</td>
<td>White</td>
<td>M.Ed. BEI IV-BEI - Court NIC IC TC</td>
<td>35 years</td>
<td>Senior Instructor</td>
<td>Program B</td>
<td>Product-based</td>
</tr>
<tr>
<td>Participant 3</td>
<td>F</td>
<td>White</td>
<td>ABD NIC</td>
<td>5 years</td>
<td>Adjunct Instructor</td>
<td>Program B</td>
<td>Product-based</td>
</tr>
<tr>
<td>Participant 4</td>
<td>M</td>
<td>White</td>
<td>Ed.D. CI CT SC:L Ed:K-12</td>
<td>16 years</td>
<td>Associate Professor</td>
<td>Program C</td>
<td>Product-based</td>
</tr>
</tbody>
</table>
Table 3 (Continued) - Participant Information

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Gender</th>
<th>Race</th>
<th>Credentials</th>
<th>Years of Experience</th>
<th>Title</th>
<th>Program</th>
<th>Type of Self-Assessment Taught</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 5</td>
<td>F</td>
<td>White</td>
<td>M.Ed. CI CT</td>
<td>18 years</td>
<td>Adjunct Instructor</td>
<td>Program D</td>
<td>Product-based and Process-based</td>
</tr>
<tr>
<td>Participant 6</td>
<td>M</td>
<td>White</td>
<td>M.Ed. CI CT</td>
<td>30 years</td>
<td>Senior Instructor</td>
<td>Program B</td>
<td>Product-based</td>
</tr>
<tr>
<td>Participant 7</td>
<td>F</td>
<td>White</td>
<td>Ph.D. CSC OTC TC</td>
<td>36 years</td>
<td>Program Coordinator</td>
<td>Program B</td>
<td>Product-based</td>
</tr>
<tr>
<td>Participant 8</td>
<td>M</td>
<td>White</td>
<td>Ed.D. CI CT SC:L NAD V NIC-M BEI-Medical</td>
<td>9 years</td>
<td>Clinical Assistant Professor</td>
<td>Program E</td>
<td>Product-based</td>
</tr>
<tr>
<td>Robin (Participant 9)</td>
<td>F</td>
<td>White</td>
<td>Ph.D. CI CT NIC-A Ed:K-12</td>
<td>10 years</td>
<td>Director/Assistant Professor</td>
<td>Program F</td>
<td>Product-based</td>
</tr>
</tbody>
</table>

Themes

The participant information included the qualifications for each participant and their years of teaching experience in Interpreter Education Programs. These participants hold the credentials and experience needed as interpreter educators to engage in
discussion during the interviews. Based on the interviews with the research participants, I identified four key themes from the interviews. The themes include: (a) instructors tend to use scaffolding to teach self-assessment, (b) student engagement in self-assessment is a required part of course assignments in interpreting courses, (c) the essential components of self-assessment include goal setting, critical reflection, learning without fear, and lifelong learning, and (d) instructors in Commission on Collegiate Interpreter Education accredited programs are teaching product-based self-assessment. Theme One, Theme Two, and Theme Three address the first research question and Theme Four addresses the second research question that will be discussed further in chapter 5. I explain each theme below and how each addresses the research questions.

Table 4 (p. 59) and Table 5 (p. 60) summarize how instructors are teaching students to self-assess and their different approaches to self-assessment. Table 4 (p. 59) details the different types of self-assessment and the materials that instructors in the study use to support their instruction.

**Table 4 - How instructors teach students to self-assess**

<table>
<thead>
<tr>
<th>Participant/How Instructors taught self-assessment</th>
<th>#1</th>
<th>#2</th>
<th>#3</th>
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<th>#6</th>
<th>#7</th>
<th>#8</th>
<th>#9/Robin</th>
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<tbody>
<tr>
<td>Required in course assignments</td>
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<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>Scaffolding</td>
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<td>Y</td>
<td></td>
<td>Y</td>
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<td>Y</td>
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^1 A key focal area of student engagement in critical reflection involved encouraging students to look for patterns of error in their assignments (e.g., errors that occur repeatedly) rather than looking for mistakes that occur only once.
Table 5 - Approaches to teaching self-assessment and materials used in instruction

<table>
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<tr>
<th>Participant</th>
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<td>Y</td>
<td>Y</td>
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<tr>
<td>Instructor developed Rubrics &amp; charts</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>Goal Setting</td>
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<td>Y</td>
<td>Y</td>
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<tr>
<td>Dialogue</td>
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Theme One – Instructors tend to use scaffolding to teach self-assessment

One purpose of the first research question was to determine if interpreter educators were teaching students how to self-assess their interpreting skills. I found that while all of the instructors were teaching students to self-assess their skills, five participants, Participants 3, Participant 4, Participant 5, Participant 8, and Participant 9, used scaffolding to teach self-assessment (Table 4, p. 59). The instructors who used scaffolding in their courses implemented the use of rubrics, demonstration, and feedback. Some instructors used rubrics and charts as a guide for students to use on assignments. The purpose of rubrics and charts was to eliminate barriers that students may experience due to not understanding assignment requirements. Other instructors use the scaffolding

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3 Includes the use of GoReact© (Orem, Utah, USA) technology which is an online assessment tool. Students can upload their video work and instructor and student can comment or share feedback on the student’s work and the comment/feedback is embedded in the video.
process for self-assessment in their course by demonstrating it for students. Feedback was another way that instructors used scaffolding when teaching self-assessment. They begin by giving more feedback to students, then slowly allow the student to take over the process until the student can independently self-assess their skills.

Participant 4 noted that their program incorporated the concept of scaffolding and the Zone of Proximal Development throughout the entirety of their curricula. They identified their use of scaffolding beginning with the language acquisition courses. They introduced self-assessment in the American Sign Language III (ASL III) course, taught in the sophomore year, and built on it throughout the remainder of the program. Participant 4 stated,

It [scaffolding] starts around the sophomore year, and then more in depth with the interpreting in the junior year. Because it's a four-year program, the junior year is when they start the interpreting classes.

When students transition from language acquisition courses to interpreting courses, the instructors modified the elements in the rubric to incorporate interpreting product components such as sign parameters (handshape, location, palm orientation, movement, non-manual/facial expressions), use of space, conceptual accuracy, etc.

Participant 4 described the way they use scaffolding to teach students how to self-assess. The instructor uses a rubric to guide students in self-assessment beginning in the American Sign Language (ASL) courses. The rubric works with the students’ Zone of Proximal Development and as they move through the program, they become more independent as they using the rubric throughout their interpreting courses. Using the
same format for the rubric, with additional requirements, in the interpreting level courses allows the students gain independence in self-assessing their skills.

In the early levels, like in ASL, [American Sign Language] they don't understand what they're doing. I don't know how it's taught, but I feel like students don't understand what they're doing and how to assess their work. The rubric that they're given is actually the same rubric that we use throughout the whole program, except we add more on when we get to the interpreting level.

Participant 4 added that using this type of approach can aid in eliminating barriers that students face when it comes to self-assessment, such as students not understanding self-assessment. They stated, “I think sometimes that students don’t understand it, but they don’t tell you that they don’t understand it.” Using the same rubric established expectations from the beginning of the program, reducing the shock factor when students entered interpreting courses.

We use the same rubric throughout so that students know what to expect throughout the program, and it's not a shock, um, that they're getting this rubric versus that rubric, and this class was different than this class.

While the participant has the students begin using self-assessment in the freshman year, they noted that they could improve the way they introduce assessment in their ASL courses. Participant 4 stated, “They [students] have to be able to transcribe the languages appropriately. So that's one of the early, um, skills that basic skills that's taught.”

Participant 5 uses scaffolding for self-assessment by first providing a chart for students to use as a guide. They stated,
So that chart is their first, and kind of foundational self-assessment tool. In addition to the chart then, there is an assessment paper. They do a chart and a paper for all of the interpreting assignments in a semester. The paper is sort of reflection, but it's academic reflection.

Participant 5 noted that at first students were required to use this specific chart, but as they moved through the program, they could decide to use the same chart or to use a different one. This allowed the students to have more control over their self-assessment. Later, students transition to writing a synthesis paper as a self-assessment.

By the time they get to their third semester with me, there's no more chart. They can do a chart if they want to if that helps them kind of gather the raw data that they want for their paper. But, ultimately the product that they're turning in is just a paper and it's synthesizing. There's no more chart with all the examples. It's all synthesized into that paper.

By the end of the program, students transitioned to one-on-one meetings with the instructor where they talked about their self-assessment. Participant 5 stated, “We have a one-on-one meeting the student and I because I want them to be able, not just write about their work, but to talk with another person.”

Participant 3, Participant 8, and Participant 9 apply Scaffolding Theory through demonstration and feedback. Each of these three participants detailed their instruction on self-assessment and how they scaffold it in their courses or in their programs. However, other participants stated that self-assessment was not scaffolded in their programs, rather it was introduced in a non-systematic manner. Table 4 (p. 59) lists the participants who used scaffolding to teach self-assessment.
Participant 3 noted the importance of developing students’ ability to self-assess. They discussed demonstrating self-assessment by showing their product to the students and demonstrating how to self-assess it. Participant 3 stated,

So, we'll [instructor and student] do it together, then you'll [student] do it. I'll [instructor] give feedback on it. And then you'll [student] do it. And that kind of thing, right? Also, by demonstrating, so I'll [instructor] sign something or maybe I will show a product of mine or something, and then I will demonstrate what that self-assessment would look like. So that way they're [student] not just out in the field, trying to figure out what do I do, but at each stage, I present an authentic representation of what I expect from them and let them know that it could be a scale of things, but that in general, this is what I'm expecting to know.

Participant 3 also noted that they began self-assessment as a verbal reflection of their emotions. This allows students to clear their minds of their emotional thoughts so they can focus on their interpretation. Participant 3 said,

First, what I do is we give verbal self-assessment. Then, I will get them to reflect. I want them to emotionally reflect on what's going on. That way they can get that out, because what we see in students is that they tend to stay in their head. So, if we can get that out on paper, then we can continue to move on. Once we've done that, then I will open it up for verbal self-assessment where they tell me what's going on, and I give them feedback on that. Not necessarily, well, your self-assessment said no, but maybe I will change your word.

Participant 3 also stated that they show students how to self-assess without them being aware that it is a self-assessment. This instructor scaffolds the self-assessment
instruction by demonstration, then slowly steps back and lets the students take over their self-assessments independently. They do this through reflection. Participant 3 stated,

So, what they don't, I guess necessarily realize is that they're, self-assessing. I'm just guiding them through that. And then with those specific students that's their tendency, I throughout the semester will taper off me, and to put more on them. So maybe then I'll have more of a reflection time, and then they'll talk about their reflection time, that kind of thing.

So, I just, I embed it into assignments. I embed it into our everyday speech. Even if they're just doing something as presentations, then I will give [students] an, "Oh, well, what did you think? Okay. Open that up." [Students say] "Oh, I saw something. What did you see?" And then I do it that way. So, then it just becomes the norm. It becomes, this is what we do, we self-assess at every stage because as we go on, we will self-assess.

Participant 8 described their process in detail. They introduce self-assessment early in the program with their Ethics and Decision-Making course. Although this is a course that focuses on ethics rather than interpreting skills, they still have students work on translation exercises and self-assess those assignments. The instructor has students translate ethical scenarios, then they do a written analysis followed by a presentation of their analysis. Participant 8 explained,

I get them for Ethics and Decision Making, which is not one of our skills courses, right? I don't have an obligation to have them [do an] assessment of their interpreting work, but I still have them do it anyway. So, it starts out with translation in that one. What I have them do first is, I have them translate [ethical]
scenarios and that assignment builds. First, I have them do translation of those. While they're doing other things and then the next one is that they follow a pretty prescribed pattern of analysis for ethical scenarios and decision making. And then they do the translation, the written analysis. And then their final part of that is a presentation of their analysis of it.

Participant 8 went on to say that they use demonstrations or modeling of self-assessment to teach students how to do it. This keeps students from feeling uncertain about how they are supposed to self-assess. Participant 8 stated,

And when they have a translation assignment, they always have a model. So, there really isn't anything that I give my students and tell them to interpret for that does not have a model interpretation, because I'm not gonna waste time having them do something and then wonder whether or not it was right. It's not that, and we go over the fact that we talk about that when we do the translation of the scenarios. I say, so for those it's primarily me, that's the model interpreter.

Participant 8 uses scaffolding in this assignment throughout the semester noting,

Which is an assignment that lasts a whole semester, so that they learn the assignment in parts and then it all adds up to the end assignment. So, I talk to them, I mean I do everything from my slide set. But I talk to them about when they're reviewing their translation, what to look for, just in generalities. You know, I tell them, “Look for an outline of information. Was that there?” And usually that's not problematic because it's right in front of them.

Participant 8 also scaffolds self-assessment throughout the program. While they have students translate and assess their translations in the ethics course, they begin self-
assessing interpretations during the junior year of the program. In that year, they begin teaching the students what self-assessment should look like. Participant 8 stated,

A lot of people do that. But part of ours is that we film the whole thing and then they assess their, um, performance in that. So that also starts in the first semester of their junior year, Introduction to Research class, I start to teach them the framework for a self-assessment and discourse analysis that they apply in their final skills class.

In the senior year, Participant 8 has students pick goals and schedule one-on-one meetings with the instructor to review their work.

So, I [instructor] teach that in little pieces, right? In Senior Seminar they [students] have to actually sit and pick goals, in terms of after reviewing their performance. And I help them pick goals. They have at least three individual appointments with me when they're in Senior Seminar where we sit down in the first set of goals. I actually sort of pick for them, you know. I have them look over Marty Taylor's [book] errors. They start with the errors; they start with interpreting skills books and they apply that as self-assessment.

Participant 8 described, in detail, the way students assess their work by using instructor or other interpreter demonstrations. They talk about it in their one-on-one meetings and encourage them to look at their work, going beyond the discomfort of looking at themselves interpret. Participant 8 noted that this type of process allows students to understand that there is no perfect interpretation, and everyone makes mistakes.
I have them [students] look at their own work, look at a model interpretation, and then I have them analyze a certain section of it and look for errors and strengths. And then I correct whether or not they're catching stuff. So, that process of teaching them to see the most important things, I teach them how to do. I do that in a couple of ways. I give them samples of other interpreters’ work that I've looked at and point out an assessment of somebody else's work. I talk to them about the soft skills of it too, about being kind to yourself, because that's a big hurdle for self-assessment. A lot of us [interpreters] don't want to see our work on video. I'm not even that fond of it. Not my favorite thing, but we have to teach them to do that or else they don't succeed afterwards [post-graduation]. They don't do directed practice. So, we talk about that, talk about what they should see. I show them other people's assessment of their own work. I also give them samples of my own work that are self-assessed. So, I have one of the tools that I use is something called holistic scoring. Which it's just a two-column affair that has all of the teaching that I do and is designed to be applicable for Deaf interpreting students and hearing interpreting students. So that means I get a transcript for everything from the captioning. I will build a transcript [and from the] transcript I'll take out an excerpt of it. Then I have two columns, which is the actual utterance: usually that's the English one. Or sometimes I will do it from the model interpretation, ASL to English interpretation. Then, on the other side I have main points, secondary points, supporting points. So, they have this utterance, and they have these categories, and it has the things listed in there. Then, they go back, and they say, “Well, I did this. I said this.” They don't always get right. They think
they say things sometimes that they don't, but it's still a start. I give them samples of my own work that I've done that with. I give them the scoring, scoring sheet for holistic scoring, analyzing my cold interpretations of things too. That does two things. That teaches them that nobody's perfect. That there's always room for improvement. When I'm willing to show them my mistakes, I think it gives them some more freedom to be honest in their own self-assessment.

Participant 9 gave a detailed description of how they teach students to self-assess their skills through demonstration and examples. They noted that students tend to start out with less to say in their self-assessments, but they become more descriptive once they begin to understand how to self-assess.

[Teach it] one tiny piece at a time. I put sample reports up. We talk through it in class. I make sure they understand what all the categories are referring to. I try to show them examples. Um, and- and the report builds on itself, so literally, the first report, I'm like, "Just concentrate on two things. Like, is it your process time and additions? I don't care. You know, you look at your work. But I want just one thing at a time."

Once they give the reports to me, I give them feedback on those reports they start to go, like, "Okay. I get it." I expect that the first reports are going to be a little less robust than they're going to get to by the time their seniors and doing this.

Participant 9 stated that students learn how to use the proper wording for self-assessment by reading the instructor comments. This is a way of scaffolding self-assessment instruction. Participant 9 said,
I ask more and more of them as we go on. I think by them reflecting on my comments to them is a way of scaffolding what they see. Um, I will also go inside of their comments, and comment back. If they say something that, "I should've fingerspelled that." I might say, "Yes, and this is why. Let's talk about the rationale."

As they go on, I start asking more questions and making a whole lot less comments. So, asking them to reflect on what could've worked more effectively, or you know, why was this effective? And you know, what was the target?

Once the students become more comfortable in their self-assessment skills, Participant 9 begins to allow more space between them and the student during self-assessment. This allows students to become more independent in their self-assessment process. Participant 9 described this process,

I can start backing off from direct feedback to much more of a dialogue question kind of thing. The week after they've done one of these, we go back and look at the target language and rip it apart. So, when ASL is the target language, a lot of times just don't know some of the subtleties of the language. So, some of the ways of scaffolding them is like, click [pause video] That was eye gaze." You know. Click [pause video] “Did you see where that space was used?” They don't see it.

Most of the participants used scaffolding for self-assessment instruction. Some instructors scaffolded self-assessment through demonstration and feedback. While some instructors scaffolded self-assessment throughout the program, beginning in language acquisition courses, others began scaffolding self-assessment in the junior level courses in the program.
Theme Two – Student engagement in self-assessment is a required part of course assignments in interpreting courses

All the participants indicated self-assessment is important and they required students to use self-assessment by making it part of their assignments. Some instructors made it a graded requirement in their assignments. Other instructors withheld their feedback from students until the self-assessment was submitted. The instructors who withheld feedback noted that students were eager to submit self-assessments because they valued the feedback.

Grading Requirement

All the instructors who participated in this research stated that self-assessments are required for their courses, and they encouraged students to engage in it in various ways. Most of them reinforced engagement in self-assessment by making it part of their grade. For example, Participant 2 stated that, “If they don’t do it, they don’t get a grade.” Participant 6 stated,

Well, I think the motivation has to come from the student. You have some students that want feedback. And so, they honestly want to improve their product and will work with me on the self-assessment. They'll do a more thorough or a deeper level analysis of their product compared to other students that just want the grade and will give you surface level information instead of kind of digging deep. Participant 7 stated, “I do it by not grading their work until they submit it. I found just not even looking at the work until they submit it is more effective as a motivator.” Participant 8 also used grades as a motivator, but it is based on a “learning without fear grading scale.” In this instance it was more of a participation grade than a grade based on how
well they self-assessed. This raised the question of how students are supposed to know how to self-assess if they are not taught how to do it, and the fairness of students being required to do something that they were never taught how to do? However, Participant 8 did note that the grade is still affected if students do not submit a self-assessment, “So, I just go over it in the context. It's part of the assignment, anyway. They get graded on whether or not they do the self-assessment of their translation.”

**Self-assessment before instructor feedback**

Some participants motivated students to engage in self-assessment by withholding instructor feedback on their assignments until students turned in their self-assessments. Instructors felt that this motived students because students wanted their instructors’ feedback on the assignments they submitted. To illustrate, Participant 4 scheduled one-on-one, student-led, meetings with their students where the student talked about their work first, before the instructor made any comments about it. They stated,

For example, in simultaneous interpreting, before I even assess the video myself, I'll have the student come in and sit with me. I'll play a little bit [of the video], and then I'll pause it and I'll say, ‘Okay, now tell me about this part.’ I let them just verbally talk to me about that part and whether they thought they did well or whether they thought that there were issues with the interpretation. I have them come in and I just listen. I don't give my feedback; I don't give my opinion; I don't do anything. I let them talk the whole time.”

Participant 6 discussed ways students were motivated to engage in self-assessment. The instructor would then respond to the students with feedback in a timely
manner. Students value instructor responses to their work because it lets them know if they are progressing as expected. Participant 6 noted that getting back to them within a timely manner encourages them to then be more responsive or to dig deeper because the [instructor] feedback is of more value as they're preparing for their next project. Every time they would do a video for a grade or anything, I wouldn't grade it until they turned in their self-eval as well. Participant 6 noted why they withhold feedback until students have submitted a self-assessment. They note that withholding feedback forces the students to look at their own work which makes instructor feedback more beneficial. Participant 6 stated, Prior to doing the self-critique forms, you would have students that would record something and then not even look at it before submitting it. The first step, I think, is having them realize that you've got to look at your work. You have to look at what you're doing. Because if you're not if you're not going to do that, then any feedback that I give you is not going to be beneficial because you're not going to know what I'm talking about. But you can look at what you're doing and approach it, try to get away from a personal perspective, but to look at the signs or the production, as a product, then we can have deeper discussions about what, how to improve that product.

Participant 9 uses GoReact© (Orem, Utah, USA) as tool to communicate with students and give them feedback. The instructor can hide feedback until students have first reviewed their work. Participant 9 said, So, that's a huge thing. Basically, the students may do a piece in- in GoReact. And I go in and do my comments, but I hide them until they've had a chance to go in
and do their own examination of their work. And, I have things set up. I have sets of markers that would indicate, you know, was it a process issue? Was it a target language issue? Like, what's the issue?

All of the participants in this study required student engagement in self-assessment as part of course assignments. Instructors used a variety of methods to motivate students to engage in self-assessment. Some instructors required that students submit a self-assessment to receive instructor feedback. Other instructors made self-assessment a graded requirement. Using these motivation methods encourages students to think more critically about their skills.

Theme Three – The essential components of self-assessment include goal setting, critical reflection, learning without fear, and life-long learning

This study revealed components that instructors found important to self-assessment. Instructors had students set goals to engage them in self-assessment and as a strategy for teaching it. They also used self-assessment to encourage students to think critically about their work through reflection. Learning without fear was another concept that instructors discussed regarding self-assessment. The “fearless” component included rewording how students talk about their work. Lastly, life-long learning was an important aspect of self-assessment as it supports interpreter professionalism.

Goal Setting

Goal setting was an important component of self-assessment when participants discussed ways they encourage students to engage in self-assessment. Instructors had different approaches to goal setting. Some instructors required students set goals prior to their first assignment based on their perceived strengths and weaknesses. Other
instructors required students set goals after an assignment that set a baseline for the rest of the course. There were some instructors who not only had students set goals, but they also had them establish a plan of action of how to achieve the goals they set.

Most of the instructors used goal setting to engage students with self-assessment and used it as a strategy for teaching it. Instructors required students to establish goals that they wanted to achieve either by establishing them before an assignment or after an assignment. When students set goals after an assignment, it established a baseline from which their skills needed to grow. Then students assessed the assignment to help support their need for setting a particular goal. Goal setting then becomes a necessary part in the self-directed learning cycle. Wang (2015) supports goal setting because they noted that setting goals is required prior to developing an action plan. Once students established their goals, they develop a plan for what they would do to achieve these goals. Instructors thought that goal setting was important because it created a foundation on which students could build their skills.

As part of the student self-assessment process in their assignments, most instructors required students to set goals for ways they would improve their skills. Students set goals based on their strengths and weaknesses that they found in their assignments. Participant 4 taught students to develop skills goals when they taught consecutive interpreting (when the interpreter listens to the source message, waits for a pause, then conveys the message in the target language before the source speaker begins again). They begin by having students prepare a “pre-taping” of their interpreting skills to establish a baseline. The students establish skill goals by reviewing their work to identify patterns and develop their goals based on patterns that they identified. This was a
semester-long self-assessment focusing on English to ASL for the first half of the semester and ASL to English for the second half of the semester. At the end of the semester, the students recorded a “post-taping.” Then they reviewed both the pre-taping and the post-taping and wrote a reflection paper about their skills improvement.

Not only did some participants have students set goals, but they also had them develop a plan to achieve those goals. Participant 3 gave a detailed explanation of their self-assessment guide and discussed items in each category that the self-assessment addressed. If students’ areas for improvement were not found within those categories, students are asked to think outside of the list to develop goals.

Participant 6 had students set goals prior to their first skills performance, projecting what they want to accomplish over the course of the semester, then they addressed those goals in each performance. Participant 6 stated,

When they [students] do their first self-assessment, before they even do the performance, they set goals for what they want to accomplish over the course of the semester. And then with each self-assessment, we're [instructor and student] addressing specifically those goals. “Did you do these goals or what did you do to meet these goals?” And then the [instructor] feedback that they receive, it says either, “yeah, you're on the right track. Here are some other ways you could have, you know looked at your work.” And then each time they turn in a self-assessment, we're looking at those goals.

For Participant 6, part of the students’ self-assessment was to answer the questions, “Did you meet these goals or what did you do to meet these goals?” The instructor then gave them feedback on whether they were on the right track or not. This
strategy allowed the students to know whether or not they needed to adjust their self-assessment approach, but there was no formal training on how they should do their self-assessment. It was based more on a trial-and-error type of approach.

Likewise, Participant 7 had students complete weekly skill logs where they set goals, then outlined their plan of action to address their goals. Each week they discussed the success of their approach and created a new plan of action for the next week. These were based on the interpreted product and there was no in-class formal training on how students should self-assess their skills.

Participant 8 had students conduct a self-assessment with the purpose of selecting their next goal to pursue. The instructor had them review a performance, then met with them to determine their first round of goals for them. They wanted to know the goals that the students were working on, as well as “how they are getting to their goals.” Participant 8 noted,

They [students] assess themselves with the goal of selecting their next goal to pursue as interpreters. In the interpreting classes, we [the program] have ones that are designated as skill courses and they [students] have benchmarks that they have to pass at each one of those and in those, they assess their interpreting ability. And then they [students] do self-assessment on their assessment in some of my classes like, so I give them feedback on how they're giving themselves. You know, how they're getting to their goals and how well they're following the process of self-assessment.

Participant 9 also noted the importance of not only setting goals, but also establishing a plan to achieve the goals. The plan must be actionable in that the student
cannot set unattainable goals or plans to achieve those goals. The instructor starts by asking students this: “Well, give me two things that you can do that would help you start attending to improving your process." And I always say, "Don't tell me you're gonna watch videos six days a week if it's not doable, don't put it down.” So, I definitely want something doable that they might actually use, so that we're seeing progress in the next project.

**Critical Reflection**

Each participant discussed the importance of self-assessment to interpreter education using words such as, “critical,” “integral,” and “crucial.” They noted that self-assessment was critical to student growth and development as an interpreter. It is what moves an interpreter from student to professional and keeps moving them forward in a continuous learning cycle. Self-assessment also supports critical thinking, an important for individuals who want to become interpreters. Interpreting itself requires critical thinking in the interpreting process and self-assessment can nurture those skills. Table 4 (p. 59) indicates that all of the instructors have students engage in critical reflection as part of self-assessment.

Participant 3 stated that “self-assessment not only develops interpreting skills, but it also develops the critical thinking skills.” This is supported by Fitzmaurice’s (2018a) claim that self-assessment invokes critical thinking skills.

Participant 1 noted that self-assessment is what takes an interpreted product and looking at it critically, promotes skills growth. Participant 1 stated:
The work you produce is not something that you just produce and go on to the next thing. I think self-assessment, self-reflection, self-analysis of your work is what’s going to move you.

This is supported by Wang (2015) who noted that self-directed learning is necessary for professionals to see growth in their skills. Participant 4 said that they think

It’s critical for skill development. Students have to be able to look at what they are doing and then figure out what's not working. What are they not doing right, and how can they make improvements? And if a student isn't going to assess their work, then they’re not going to be seeing improvements.

Participant 3 begins self-assessments with their students by using reflections. They noted,

I definitely do a reflection. I purely believe in reflection. But whenever I do a reflection, there are times where I think a general reflection is appropriate. But oftentimes, I give them a prompt or so to reflect on. So, if we are doing a specific signing assignment in class, then maybe I would give them the prompt to reflect specifically on maybe their external feedback, or external responses to it, or maybe their internal response, or whatever it is. But [it’s a] guided reflection.

Participant 5 noted that there were different parts of an interpretation, “the interpreting piece, the language piece, and the critical thinking piece.” They stated that self-assessment was what brings it all together to make it a “whole.” Self-assessment is part of the self-directed learning cycle. It is the beginning and the end of the cycle which starts the cycle over again.

Participant 8 said:
So, I [instructor] record a translation of the written materials. And I tell them there are many right ways to convey concepts and there's many things that change the interpretation, depending on who's sitting in front of the you [student/interpreter]. But you [student] need to look at your [student] translation of it and mine [instructor] and talk about. I make them write reflections about what they learned. “Just, what did I learn while I did this?”

Learning without Fear

Other instructors used a “fearless” approach to getting students to self-assess. The fearless approach changes the way instructors talk about assessment. Instructors use positive phrases rather than critical phrases to create a safe space for students to self-assess their skills without the fear of being criticized. For example, Participant 5 stated that their program used an apple analogy to demonstrate how the interpretation is a “snapshot” of their work and not a part of who they were as a person. Participant 5 continued,

So, let's talk about this apple. We could talk about what color it is. If it's shiny, if it looks kind of mealy, maybe we know the name of it. Let's turn it around; let's smell it. Let’s all talk about this apple. Then you transition into the apple as an example or a snapshot of the work that you did in this moment on this particular piece. It’s about removing ego from it, about removing self, the sense of self-worth.

Participant 5 was also intentional about the terminology they used when it came with assignments. Rather than using the word “assignment,” they used “lab.” This allows
students to approach their work as an experiment from which they can learn rather than a “one-shot” assignment.

Much like Participant 5, Participant 9 focused on having students separate themselves from their work.

So, I work really hard at, you know, "Separate yourself from the work. Try and use objective language." Like, that's literally part of their grade. If it's like, "I sucked at this." I'm like, "Yeah, but that's not the language we use to actually get better at this." So a lot of focus on, "It's about the work, not you. It's objective language." Um, that it's targeted so that you're looking at a couple of things instead of like, "Oh my God. The whole thing was terrible." I'm like, "No it wasn't." So constantly reinforcing the concept if you have to build on your strengths, or if you refuse to recognize your strengths, you can't get better. And it’s not like empty compliments. It's like, "No, truly. What worked there?"

Participant 8 discussed the use of such terms as “knowledge rich” and “knowledge lean.” Knowledge rich skills as those that go beyond the surface level of interpreting. An example of knowledge rich skills is message equivalency in the source language and the target language. Message equivalency in interpreting is when the interpreter maintains the intent of the original message through conceptual accuracy. The goal is for the impact of the message on the hearing and Deaf audience to be the same. For example, if the intent of the message is humor and the hearing audience members are laughing and there is an equivalent message in ASL, the Deaf audience should laugh also. An example of knowledge lean skills is the way a specific sign was produced. Participant 8 stated,
So, I don't want them to [use] knowledge lean as opposed to knowledge rich skills. You can get students that will spend all day on their fingerspelling production and on their numbers production, but as we know, those are knowledge lean skills. I try to get them to move right away and to understand the difference between those kinds of surfacing. While very important, nonetheless, not something that I really actually don't allow that as an ongoing goal or I'll have them categorize it as knowledge lean and knowledge rich goals. I'll say, have two of these [knowledge lean or knowledge rich] and one of those [knowledge lean or knowledge rich], right? So, the important things are the things that impact dynamic equivalents. And yes, fingerspelling and numbers says that. And yes, how much lexical flexibility you have and lexical choice's do that. But it's not the same as the interpreting ones, which I need to get them to move towards.

Participant 8 also uses terms such as “acceptable” and “unacceptable” as part of the students’ knowledge rich and knowledge lean self-assessment.

I show them objective scoring. I show them a scoring unit. I show them ‘acceptables’ and ‘unacceptables’ and how that works. So, what kind of goal are they getting at there? Knowledge rich, knowledge lean, that sort of thing. I try to get them to see when they're looking at assessing dynamic equivalence in their own interpretations.

Participant 3 created an environment for fearless learning by having students give themselves accolades. Because students sometimes struggle with self accolades, the instructor provides a list of words for them to choose from. Participant 3 noted,
They have to write accolades for themselves. They must pick based on this, right here, they must pick some things that they think that they did well. And if there's nothing, then they have to think outside of this list. And then constructive suggestions, not negative, but constructive suggestions that they observe or that they feel they did, they could work on based on this list. And then from that, then they would expand on an action plan outside of that.

Dialogue

As noted in Table 5 (p. 60) some of the instructors who taught self-assessment chose dialogue to encourage students to engage in self-assessment. This is a scaffolding approach that guides students to learn ways to become more independent in their goal setting. Many of the participants, whether they teach self-assessment or not, used GoReact© (Orem, Utah, USA) as an online assessment tool. Instructors can upload videos to GoReact© (Orem, Utah, USA) for students to interpret, or students can upload their interpreted videos. Instructors and students can comment on their work, either via text or video, and the comment is embedded in the video. This allows the instructor or the student to simply click on the comment and it will skip to the point in the video where the comment was made, opening a dialogue between the instructor and the student to discuss their work.

Participant 3 used verbal self-assessment to encourage students to talk about their assignments. When students began to verbalize their assessment, the instructor could introduce terminology, in the form of a checklist, so they could talk more professionally about the work. Participant 3 stated,
So, if they [students] say, “Oh my, it was, I was horrible.” [The instructor would say]
“You weren't horrible. The product might have been missing. What was it missing?”
And then kind of guide them into that verbal self-assessment. Then later, as we're getting more comfortable with that, that's when I introduce that checklist self-assessment to show, okay, so these are things that we've been doing, now let's put words to it. Let's put more of our professional words to it so you can identify specific areas to do that. I used to do the opposite. What I found was that they weren't able to emotionally reflect on anything because they just needed only these words. And so if we work through their innate response, then we can modify that moving forward.

Participant 3 also noted that they use open-ended questions to guide students through self-assessment. This helps the students feel more dependent on the instructor which can ease their initial fears of self-assessment. Participant 3 stated,

I've had some students where they are very against self-assessment or anything like that, they just want me to tell them, that's it. That’s when I really use the guided technique, where I [said] “Okay, you want me to be the talker? I'll be the talker.” So, I'll talk open ended question, answer my question. Now I'll ask an open-ended question. We kind of go back and forth.

Participant 4 uses GoReact© (Orem, Utah, USA) to initiate dialogue with the students. Then they would meet with the student to discuss their video. They noted,

“Before I even assess the video myself, I'll have the student come in and sit with me, and I'll play a little bit, and then I'll pause it and I'll say, ‘Okay, now tell me about this part.’ This dialogical process allowed the instructor to determine if the student was
accurately self-assessing their work. Participant 4 also had one-on-one discussions with students to dialogue through self-assessment. They went on to say,

If I hear a student saying, ‘Oh, well, I did really well here,’ and I'm like, ‘No you didn't,’ in the back of my mind, I make note of these things in the back of my mind. Then, as I'm going through and assessing them, I'm saying, ‘We need to work a little bit more on self-assessment, because when we met in our meeting, you said that you did this part really well, but you missed the meaning of what the speaker was saying.

This is a great example of how an instructor taught students to self-assess by working with the students’ Zone of Proximal Development.

Participant 5 shared the way that students who engage in dialogue in GoReact© (Orem, Utah, USA) tend to receive more feedback from the instructor. Participant 5 stated, “The response has been, ‘Oh my gosh, you know, I've never gotten this much feedback." The students ultimately wanted to have the dialogue, so they were motivated to engage in self-assessment. Participant 5 would have students watch their videos for self-assessment, making notes throughout the video. Once students watched their videos and made their comments, the participant would activate the instructor comments, opening the dialogue between the instructor and the student.

Participant 9 has students write a report to clear their thought processes. This allows the instructor to see what they are thinking and opens up a dialogue between the instructor and the student. Participant 9 stated,

They also do a written report along those lines, where they’re talking about what they saw in their work as effective and what could use attention. They’re asked to
discuss what was going on in their head, because obviously I can't peak in there and see what was going on in their mental processing. So, discussing that, what they learned from the overall experience of doing that assessment project.

**Life-long Learning**

Life-long learning is important for interpreters because they must experience continuous growth in their skill and general knowledge. Life-long learning was important to participants because it contributed to professional development plans and determined which in-service training events interpreters should take to improve their skills. Life-long learning is also an integral aspect of the interpreting profession because interpreters tend to work alone often and need life-long learning to continue their skill growth. It is important for interpreters to continuously improve their knowledge because it contributes to message fidelity, and it allows the interpreter to accept responsibility for their own learning rather than transfer the responsibility to the Deaf community.

Participant 7 discussed ways self-assessment could guide students to choose workshops to attend. Self-assessment helps them make informed decisions on areas for improvement, rather than just randomly choosing workshops to attend. It allows interpreters to continue learning once they have graduated. Other participants discussed that post-graduation, many interpreters often find themselves working alone and they need to be able to continue to grow as a professional interpreter. For example: Participant 6 talked about how self-assessment skills were important.

I think it [self-assessment] is very important because if you want to get better, you have to know what you're doing right and you have to know what you're doing wrong. As interpreters, if we don't look at what we're doing or look at our
product, then how do we know that it's effective? So, I think it's really important that we learn how to self-assess without having to have somebody there to tell me that I'm doing the right thing or I'm doing the wrong thing. Ultimately in the field of interpreting, a lot of interpreters are working solo and there's nobody there that can tell them that.

Interpreters need to be life-long learners, striving to maintain up to date information so they can interpret messages accurately. Participant 4 motivated students to engage in self-assessment by sharing their own experiences and helping them understand the importance of being a life-long learner in the interpreting profession.

This is a field where you're going to be a lifelong learner. You need to reflect on what you've done, and you need to then learn how to make improvements. Otherwise, you're not going to see yourself improve. If you're not reflecting, you're not improving.

Other comments related to the importance of self-assessment include Participant 2 stating, “It’s very important, if used appropriately.” This refers to the need to teach students the process to accurately self-assess their work. Participant 8 felt so strongly about self-assessment that they stated they do not allow students to enter internship if they have not shown the ability to self-assess. They stated, “You cannot expect us to put this responsibility on the Deaf community and that’s what ends up happening.”

Participant 9, noted that self-assessment was “critical to how these students develop their sophistication around their discussion of their work.”

Participant 7 tells students that it is the responsibility of the faculty to help students learn while they are in the program, but, once they graduate, learning becomes
the students’ responsibility. Participant 7 emphasizes lifelong learning. While in- in the program, the faculty are responsible for what students will learn in the curriculum, but once they graduate, students are responsible for their learning.

Participant 7 also discussed the importance of students moving from instructor feedback to supporting their own learning. They noted that students can choose workshops and continuing education opportunities to support their life-long learning.

I would say learning how to go from teacher feedback to lifelong learning, supporting their own learning and identifying where they need to improve. You know, I think as interpreters, sometimes new interpreters. They'll just go to workshops because they can learn or, you know, they need something to use or they don't know this or that. But I don't know that they purposefully say, "I need a workshop on this because I've come to realize in my own work that I need more practice learning, uh, something. Techniques for this skill." Instead, it's just a smorgasbord. "Well, I'll have a little of this, a little of that, and hope that I get to be a better interpreter because of it."

Participant 3 noted the importance of getting students to understand that this is a life-long learning journey.

I like to put a personal spin on it. So, I tell them some of my experiences and self-assessment of things that I still do currently. Because I think it's very important for them to acknowledge that this is a lifelong thing as an interpreter.

Goal setting, critical reflection, learning without fear, and life-long learning are critical components of self-assessment in Interpreter Education Programs. Goal setting is a component of self-assessment which leads to self-directed learning. While critical
reflection is important to self-assessment because it promotes skills growth, learning without fear develops a love for learning because students aren’t scared or intimidated. Together, these components promote life-long learning.

**Table 6 - Product-based and process-based assessment in CCIE accredited Interpreter Education Programs**

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<th>Participant</th>
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**Theme Four – Instructors in Commission on Collegiate Interpreter Education accredited programs are teaching product-based self-assessment**

All participants taught product-based self-assessment; however, two instructors teach both product-based and process-based self-assessment as required by the Commission on Collegiate Interpreter Education (CCIE) accreditation. To teach product-based self-assessment, some instructors in this study used materials such as books to develop rubrics/charts, and they required that students to look for patterns of error in their interpretations. When instructors taught process-based self-assessment, they had students use interpreting models as a reference.
**Product-based self-assessment**

All of the instructors in this study taught product-based self-assessment. The participants used different materials to teach product-based self-assessment. Some of the instructors used books as a reference to develop rubrics and charts as a guide for students to follow. As demonstrated in Table 5 (p. 60), all of the participants used materials with rubrics or developed their own rubrics and charts, as well as used goal setting to guide their students through self-assessment. Some participants developed their own approach to self-assessment. They created rubrics or charts, but they were not based on sources found in books, journal articles, or interpreting theories. These participants took an individualistic approach to self-assessment, basing it on each individual students’ needs and the students’ skillset. Other participants used their own categories of proficiencies or provided weekly logs for students to complete. Some instructors had students look for patterns of error rather than focusing on one-time mistakes.

**Rubrics and Charts from Books**

Table 5 (p. 60) demonstrates the types of materials that instructors used to teach self-assessment. Some instructors used books such as Marty Taylor’s *Interpretation Skills* books and Gordon & Magler’s book *The Mentor’s Companion* book. Others used rubrics and charts that they developed or pulled from one of these books. Some instructors used interpreting models to support self-assessment. Instructors who used interpreting models had students apply the model(s) to their interpretation to determine where a breakdown occurred, ultimately working to fix the process error.

When instructors taught self-assessment, they may have referenced the same materials and authors in their teaching, but there was inconsistency in how they
approached using those references. For example, Participant 4 and Participant 5 referenced using Marty Taylor’s (1993, 2002) “Interpretations Skills” book series in their programs. Taylor’s books, *Interpretation Skills: English to American Sign Language* (1993) and *Interpretation Skills: American Sign Language to English* (2002), discuss the components of an interpreted product. These components provide examples of possible errors that can occur when interpreting from English to ASL and from ASL to English. Examples of possible errors that Taylor (1993, 2002) presented include: English to ASL errors such as incomplete sentence structure, or misuse of facial grammar in ASL to English such as ineffective pausing or inaccurate register use.

Participant 4 incorporated Taylor’s (2013) book developing a table of the list that Taylor (2013) outlined. They had students match their pattern of error when interpreting from English to ASL and from ASL to English with the possible errors found in the table. Patterns of recurring errors are emphasized over one-time errors. Participant 4 stated,

They are actually assessing it to figure out what they need to work on throughout the semester. Then, with the skill goals, they have a form they fill out. Every week they have to do an activity that’s targeted towards their goal.

The Taylor (2013) books supported students in setting improvement goals for the semester. It listed possible skills that the students can work on and it breaks down the possible product errors that can occur. Participant 4 went on to describe how they applied the Taylor books to self-assessment.

We use the Marty Taylor books for our self-assessments, so they have to look at the Marty Taylor books to find out which pattern we're looking at. So it is a fingerspelling issue? Is it a space issue, etc.? They look through those books, they
find the pattern of error. Then, they put that in the table. Then they go back to the Taylor book, and they say, "Yep, I'm doing this correctly." And we do this both in English and ASL.

Another resource that Participant 4 referenced was Gordon and Magler’s (2007) *The Mentor’s Companion*. This book provided a guide for interpreting mentors on ways to mentor students through sample rubrics (Figure 5, p. 36). They used the book stating that they developed a modified rubric from rubrics found in the book.

Participant 4 used the book to identify parameters that they used to grade students’ work. Parameters of ASL signs describe the components of a sign: handshape, palm orientation, movement, location, and expression. Rubrics are important to self-assessment because they establish a means to measure how well students self-assess their skills. Charts support rubrics by demonstrating expectations for students to follow. Using rubrics and charts can help guide students through their self-assessment and can also be used to standardize self-assessment across programs. Participant 4 stated,

>We have a rubric that we use that we modified from the Gordon and Magler, *The Mentor's Companion* book. It's in the back, in the appendix, we took that rubric and made modifications to it. We took a little bit away and added to it. So, what we do is we go through, and we teach the rubric. So, ‘This is the rubric. This is what you're gonna be graded on. This is what these parameters are and what we expect within the elements.’ Then when the students interpret an assignment in that class, they then have to assess their work and then figure out if what they did was effective or if it could be modified to make the message clearer. And we've used a written format where they write out the English, write out the source, write
out the message that they rendered, and write out what they would have done
differently, or maybe not. If they say, ‘Nope, this message, I feel was effective,’
or, ‘I would have liked to change this message to this.’ They would gloss that out
and then write the reasons why. [They would write] the rationale as to why they
would want to make those changes in their interpretation.

Participant 5 also used the Taylor (2013) books as a reference for self-assessment.
They used the skills listed in the book to work with students to develop a self-assessment
chart. The chart broke down the skills (product) which gave students examples of what to
look for in their self-assessment. Participant 5 noted about the chart,

   It takes from [the] Marty Taylor's books. So, she's got like skill 1.3 A and skill 1.4
   A and [has] this huge dissertation thing where she broke it down all down. So, the
   students, 10 years ago, took that book and created a chart that we still use.

While the students initially used the Taylor books as a guide for self-assessment, they
were not always required to use them. Once they understood self-assessment, there was
more flexibility in which chart they wanted to use. Participant 5 stated,

   We're all working with that same chart, the tool that's based on Marty Taylor's
   books. Then, in the fall semester, they can use that chart, or they can use an
   alternative chart, so they have the choice of which chart they want to use to fill
   out for their self-assessment.

Participant 3 developed a chart with categories of proficiencies and another
person has students set goals, then students reflect on their work to see if they met those
goals. Participant 3 stated,
So, there's six categories. The first one is presiding information, non-manual information, signing space, vocabulary, fingerspelling, and then the overall message. In each of these six categories, it breaks it down to what you should really look for. So, we have these six categories, and it's pretty understood that's what you need to have a full message. However, when we're trying to talk about self-assessment sometimes it's like, [student] “I don't know, I just know that I need to use signing space.” [Instructor] “Okay. Well, what does that look like?”

So, for the presiding information, we have stress and emphasis for important words and phrases, affect emotions, register equivalency, and sentence concept boundaries. [Instructor] So, do you have just a sentence, do you have a concept, that kind of thing.

*Individually Developed Rubrics and Charts*

Participant 6 based their rubric on the students’ performance, making the categories match with the performance requirement.

They have several categories, depending on what their performance consisted of. If it was a children's story, did they take on the characterization of the various characters in the story? Can you see that reflected? So, there are specific points to each type of performance that I want them looking at to see if they feel like they did [it]. First of all, if they did what they had planned to do and if they visualized the story or the poem or the song is what they did equivalent to what they visualized?

Participant 6 stated that they do not measure self-assessment, rather they look at whether or not the student completed the self-assessment.
I don't really measure it other than they have to do it. I do give feedback on their, their self-assessments to support what they're saying or to ask questions about what they're saying to get them to dig a little deeper. But I don't actually have a rubric or anything that I use to measure the self-assessments work. I just encourage them to do that and try to get them to build on that. So, theoretically, they're going to fill out the form watching their video. But then I think the way you kind of reinforce that is then to go back and say, okay, you said you did this, but here's what I saw, and make notes on their form and get them to have a dialog about their product.

Participant 2 made their own tool based on one that was originally developed at Gallaudet University. However, they were unsure of the exact information from the materials. Participant 2 noted,

I do tend to use a tool that was originally developed from Gallaudet University, that divides into, I think it's five different sections, and I have since expanded on that to seven I believe. The first being an overall comprehensive, and then the second piece looking at the equivalency of message. Which is a little different than the overall comprehensive, because you're looking at smaller pieces than the production of the signs that looks more into the parameters of the sign. There is a non-manual production piece and then there is the grammar part. How close or far away from ASL are they and that would depend upon what the stimulus is calling for. But it [also] looks at their professionalism, how they dress, what's their appearance, and how do they react. Do they stay fairly confident with the speaker,
or do they tend to be very nervous, and even though they make look the part, but are they acting the part as well?

I don't have a rubric for that. It's usually depended upon the stimulus that I'm sharing, and knowing what the stimulus has available to it, and what the end product - could look like if they were to use all the pieces necessary to them.

Lack of a common rubric could become an issue as it may cause inconsistency in how individual instructors approach self-assessment this could result in students not understanding how they are supposed to engage in self-assessment. An example is when Participant 2 stated that they “do not really use a rubric and guided self-assessment is based on individual stimulus materials.”

Participant 3 used a checklist for self-assessments. The checklist allows students to use words that are factual rather than assumptions, encouraging them to use professional terminology in their self-assessments. Participant 3 stated,

So, let's say we do the checklist kind of thing that we're talking about with the peer-to-peer feedback, or with their own self-assessment feedback. When they go to write out their self-assessment, I look for words that are factual, less emotional, right? There's certain times for the feeling and the reflections, but [student] “I feel that, you know, I just was bad.” [Instructor] “Okay, well, that's not assessing yourself, which is one reason why I have this checklist. Assessing and seeing, “What, what did you analyze about yourself on this one section with each of these sections?”

When Participant 5 taught product-based self-assessment they developed a “several page” chart that used the skills that Taylor (2013) broke down in her books as a
guide for students. The skills incorporated the proper development of a visual language. This included the five parameters of a sign: palm orientation, the handshape of the sign, location of the sign, movement, and nonmanual markers (facial expressions). When assessing these skills, one must take into consideration the grammatical structure, syntax, and use of space. The book provided a guide for students because it identified and explained the product that was being assessed. Instructors used the chart for the first semester, but after that, they used it as a reference and provided students with choices. Students could use that chart, or they could use an alternative chart to guide their self-assessment. Participant 5 noted that giving students choices is a principle of adult education. They stated, “I just remember a real principle of adults learning is, um, offering choices.” They go on to say,

That first summer we're all working with that same chart, the tool that's based on Marty Taylor's books. Then, in the fall semester, they can use that chart, or they can use an alternative chart. [It is] one that I developed with my colleagues and peers during my master's program.

Participant 5 noted that their program also used the same chart throughout their bachelor’s program. Their chart was developed by students who already graduated from the program and had experience with self-assessment. This in turn encouraged current students to use self-assessment as a tool for skills development.

Participant 8 noted that they have students “look over the [possible] errors found in the Marty Taylor books and apply it in self-assessment,” using the book as a guide for product-based self-assessment. Some participants referenced other authors that they used
to develop rubrics and charts, but other participants did not reference any literature that helped them develop their self-assessments.

Participant 3 gave specific examples of product that students are to self-assess and the questions they use to assess it. Participant 3 noted,

For non-manual information, we have sentence types and causal boundaries. So not “How do you produce it, but what is it on your face?” Production and the use of non-manual, adverbial and adjective markers. And then for signing space, the use of verb directionality and pro-predominant systems, comparison contrast, and then sequence and cause and effect as well as location, relationship using ASL classifiers. And then for vocabulary, do they have sign recall? Was there hesitancy? Was there fluidity? Their sign parameters, were they complete? Was there fluency and cohesion in the vocabulary in itself? Then fingerspelling is separate from vocabulary. So, the production, so clarity and accuracy of handshapes, did they spell the word correctly? Did they use finger spelling appropriately? And were numbers produced correctly and clearly as well. And then for the overall message, we have eye contact and movement. Did they develop a whole sense of the message? Not necessarily was everything perfect, but overall, right? Um, did they demonstrate process time appropriately? And was the message conceptually accurate based on what mode we're in, whether it's translating or interpreting.

Participant 2 focused on product-based self-assessment using a tool that was developed at Gallaudet University. The tool focused more on ASL classifiers, sentence structure, etc. Participant 2 noted,
When I ask the students to look for specific things, that would be, probably, the most detailed self-assessment that, tool, that I’ve used is whenever I give an assignment and I say you know, "You tape yourself and I want you to look at how many times you used classifiers. I want you to look at how many times, your sentence structure veered away from ASL structure. The sign choice was based upon a gloss of the English word you heard, versus a concept that is more accurate to the meaning.”

**Patterns**

Participant 4 uses Think Aloud Protocol as a way for students to self-assess their thought process such as, why they made a certain face or why they felt really comfortable. The students then do a post-taping of their skills at the end of the semester and compare it to their pre-taping, then write a reflection about it. Participant 4 had students identify patterns of strength and patterns of weakness. They encouraged students to look for at least three instances of a strength or weakness to determine that it is a pattern. “If you do it once, it's not a pattern.”

Participant 4 also uses product-based self-assessment. Product-based self-assessment has students take a summative look at their work, focusing on the outcome of the interpreting process or “the what” (Gile, 2009). Participant 4, who focused on product-based self-assessment, noted that they preferred to use terms such as “effective” and “less effective.” They had students do a pre-taping of their skills at the beginning of the semester to establish a baseline. The instructor developed a rubric based on the Gordon and Magler’s *the Mentor’s Companion* which focused on product-based components to find patterns of strength and patterns of error. Product examples included,
“fingerspelling issue and space issue.” Once they identified patterns, they developed skill goals to improve. Participant 4 stated, “So that skill goal that we do keeps them assessing their work all semester long through these activities.”

Participant 7 has students look at their interpreting product during self-assessment. They not only looked at their production, but they also must self-assess their professionalism and appearance. Participant 7 detailed this information,

You know, in terms of watching them, did they feel comfortable? Their appearance. The grammar, was the grammar appropriate for the tasks they were asked to do? Were they drifting into more ASL? Were they keeping in English? Um, so with transliterating they consistently mouthing and, uh, was it clear? Was there evidence of the techniques we [instructor and student] used?

Participant 6 described some components of their rubric consisting of thirty points and was product-based. They noted that students could not use blanket terms, rather they had to be more specific in their self-assessment.

Each one totaled to 30 or something. The first response was, "How did you feel about this product?" They had to learn to go beyond, "I felt good, I felt bad, I hated it, I was disappointed." [They had to assess] "I felt that I was effective in X, Y, and Z." “I broke down at this point and this point and why. And then, um, it would go into, um, exactly that, "What are two areas that you were successful at?" And then, "What are two areas that you felt, um, um, that the message broke down?" And, "Try to be specific." "What do you think the effect of these errors would have on your audience, on your target audience?"
Participant 6 also noted that students needed to look for patterns of error, then determine how to remedy the errors. They would begin by asking questions identify the patterns, then establish a plan of action to meet goals they had set. Participant 6 stated, "What was your first impression?" You know, um, "What did you do well? What? Where?" I tried to help them find not only where things might have become a block, where it didn't work, it wasn't successful. And then drill down as to why, and, "Was this recurring?" And then they would have to talk about a plan, how they were going to address it.

Participant 9 uses GoReact® (Orem, Utah, USA) to establish their rubric with color codes labeling the various categories. The color coding makes it easier for the students and instructor to see and makes the categories stand out more clearly.

So, I color code them in categories, and they use that same chart from beginning to end. And so, it breaks it down into these, basically, four categories and within them are subcategories. So, if you're looking at target language, it may say, "Additions, omissions, you know, substitutions." And again, inviting them to consider that some of those are controlled and intentional choices, and some of them are errors. So, learn to discern the difference.

So, the rubric is actually very, in some ways, generic. It basically has three categories. And you know, one of which is the management of the interpretation. One of which is the target language, one adj- of which is, um, meeting analysis. And sort of looking at, you know, what if that is showing up? I keep this rubric kind of generic, knowing that the different samples I choose may play to different types of language challenges.
**Process-based self-assessment**

In this study there were only two participants who taught both product-based and process-based self-assessment as required by the CCIE. When teaching process-based self-assessment, participants used interpreting models for students to reference. One participant chose the model that they wanted their students to use. The other participant allowed students to choose their preferred interpreting model to self-assess their interpreting process.

Participant 1 stated that they do not directly reference Taylor’s books “because they focus on the ASL [product] and much less on the interpreting process.” Participant 1, who is a program coordinator, revamped their program so all of the instructors used the same model for teaching self-assessment. They required each of their instructors to take a 100-hour training course on Colonomos’ interpreting model, the Integrated Model of Interpreting. This model was also referenced as “process mediation,” and it offers a theory of the interpreting process that focuses on understanding both the meaning and intent of the speaker/signer’s message. This allowed all of the instructors in the program to have the same foundation for how the program approached teaching self-assessment. They all use the Integrated Model of Interpreting to engage students in process-based self-assessment. Process-based self-assessment examined the cognitive function taking place during an interpretation. Unlike product-based self-assessment that looks at “the what,” process-based self-assessment looks at how someone arrived at a product. Participant 1 stated, Process mediation, you take a piece of your work, and you talk about it with a mentor. We listen to you talking about your work. And we're looking for various
markers of what you're seeing, what your sense of the process is. And when we get a good sense of where you're at and what you wanna be doing, then we hone in and try to get you to talk about it more. That's the level of assessment. That's the kind of assessment we do.

Participant 1 taught a process-based approach to self-assessment. There is limited information on process-based self-assessment other than having recommendations that it needs to be used (Gile, 2009; Patrie, 2001). Process-based self-assessment is a formative approach to assessment which looks at “the how,” to determine why individuals make product choices. It requires a deeper cognitive analysis to determine why errors are occurring (Gile, 2009). This was demonstrated in one interview when Participant 1 noted that they use Colonomos’ Process Mediation, in the Integrated Model of Interpreting, stating, “So, part of it is looking at an assessment, not of their work, but assessment of their interpreting process, you know, to get to better know their interpreting process for them.”

Participant 1 continued,

If they noticed an error, I try to say, ‘You know, it's really not about where you made the error, because if you caught it, you already know that. I want [them] to back up and look at what was taking [their] cognitive load right before that and assess what's going on there.

Participant 1 noted product errors but did not have students assess them. Rather, they looked beyond the error and tried to determine what caused it. They indicated any patterns they saw in students’ skills and encouraged them to take a deeper look at what is going on, stating, “I see patterns, then they're really encouraged to look more deeply into
what's going on.” Participant 1 wanted the students to have a clear understanding of the interpreting process. The more that students assessed their own process, the better they understood it. While product may come up, Participant 1 steered students to talk about their process because it influences their product.

Participant 5 discussed how they taught students to use terms such as “less effective and more effective” and “less successful and more successful” instead of judgmental terms like, “good, bad, right, and wrong.” These terms are used for product-based self-assessment. Participant 5 noted,

We emphasize looking for patterns when they look at their work instead of flukes or anomalies. If a student points out an error, the instructor will ask if they have ever made that mistake. If they say, ‘no,’ then it is an anomaly.

Participant 5 went on to say, “Patterns [are] things that are repeated; things that you really notice occurring frequently.” Establishing patterns of error should be incorporated in the self-assessment process to help students engage in a deeper level of assessment. Patterns of error allowed the student to think beyond mistakes that “just happen” and delve into deeper critical thinking. Once students discovered their patterns of error (product), then they could look at the process to see why the errors were continuing to happen.

Participant 5 used the Marty Taylor skills books to develop a detailed chart alongside of Interpreter Education Program graduates. The first three columns focused on product and the fourth column focused on process. The participant described the fourth column,
And in the fourth column is for what's called processing notes. And that's where they get to tell me about what was going on. Like what was your process that led to [the first columns]. So, the first two columns are the product, right?

Participant 5 also had their students incorporate interpreting theory.

Do they incorporate theory? Are they picking their favorite process model and kind of weaving that into their self-assessment, making connections between their work and what these researchers think about the work? So, theory is a piece that's scored or graded.

While Participant 5 had students recognize their product errors using the chart, they also had them look for processing errors. They had students look at the reason behind the error, asking themselves what caused the error to happen. One way they did this was by having them pick their favorite interpreting process model/theory and apply it to their self-assessment. There are several interpreting theories, such as Gish, Cokely, and Colonomos, that give a visual representation (interpreting theory diagrams) of the invisible cognitive process that takes place during an interpretation.

They [are] picking their favorite process model and kind of weaving that into their self-assessment, making connections between their work and what these researchers think about the work.

This program asked students to apply an interpreting theory to their self-assessment, but there was no evidence or guidelines of how students were able to make this application. They stated that students are “expected to cite their sources and to include theory.” They went on to say that they wanted the students to cite “the research in ways that they see it tying into their own work.”
The Commission on Collegiate Interpreter Education (CCIE) Standard 7.3 requires that instructors in accredited programs teach product-based and process-based self-assessment. All of the participants in this study teach product-based self-assessment; however, only two are teaching process-based self-assessment. Instructors teaching product-based self-assessment tend to use rubrics and charts either drawn from books or that they developed themselves. Process-based self-assessment also tends to be taught by requiring students to look for patterns of error in their interpretations. Instructors teaching process-based self-assessment tend to use interpreting models as a resource to guide students through the self-assessment process.

Other Findings

Instructors have Limited Experience with Self-assessment as Learners

During the interviews, each participant discussed their experience with self-assessment as a learner. The overall finding was that all nine participants had little experience with self-assessment, or they had not been taught how to self-assess, therefore teaching self-assessment had become a challenge for them. The participants had limited experiences teaching self-assessment at a graduate level. Others had experience working with mentors in a nonformal situation and experience with other people assessing them. In these cases self-assessment was not well guided. On the other hand, there were three participants who did have some experience with self-assessment, but not in a formal learning environment.

Graduate Level Teaching

Participant 1 noted that they had more experience with training interpreters in graduate school to self-assess but had little experience with using self-assessment for
themselves. They had courses in their graduate program that were specific to self-assessment. They stated,

I've done a bunch of things, like guided Self-Assessment trainings. I was trained in the master mentor program. So, it's been kind of a part of what I've done for most of my career. I also teach a three-part graduate course. And the first one is Guided Self-Assessment and talking about the work.

When I asked about their personal experience with self-assessment as a learner, they did not give a clear response.

**Others Assessing Them**

There were two participants discussed their experience with assessment as having people assess them more than using self-assessment. One example was Participant 2 who stated that their experience is “very limited” because

During my prime learning years, you never stop learning, self-assessment was not necessarily a tool available or known about. You had others assessing you, but not doing a self-assessment process. So, it was later, through continuing education, that I began to be exposed to self-assessments.

The interpreting profession is still a young field and self-assessment is under-researched in interpreter education. It is common for individuals to have other people assess them rather than engaging in self-assessment. Participant 7 referred to self-assessment, but it resembled assessment from a mentor to the learner. described how assessment as “working with my mentors who would give me feedback and teach me by example, not necessarily as an intentional thing.” Using mentors as a way of adult
learning is common in the ASL/English interpreting profession. These methods for using self-assessment focused on adult learning as an informal experience.

**Limited and Not Well Guided**

Two participants noted that their experience with self-assessment was limited and not well guided. Participant 8 talked about the limited use of self-assessment as a learner noting, “Self-assessment work as a learner has been pretty limited.” They did not elaborate on what they meant by this limitation. Participant 3 stated that their experience with self-assessment as a learner has not been well guided. Their experience has been with more blanket statements,

Reflect on this, but not necessarily how to reflect or a guided way to reflect. It’s not a separate assignment, or not a separate task. It's supposed to be built in, but it's not always set to be built in, so it's just kind of implied that you would be doing self-assessment, but not necessarily assigned to do so.

In this experience, Participant 3 noted that the expectation for using self-assessment was implied, but never explicitly explained. Someone would tell them to reflect, but they did not explain what reflection meant or how to do it. They also noted that they never received an assignment that told them to self-assess, rather it was assumed that they did self-assess on their own.

**Informal Learning Experience**

There were three participants who engaged in self-assessment, but it was based on their own ideas and not formally taught. For example, Participant 4, who engaged with self-assessment as a learner, noted how they created goals and determined how they would achieve them. They stated, “I was always assessing my skill, because my ultimate
goal was to become a certified interpreter and work in the community.” They did not indicate how they learned to self-assess. Likewise, Participant 5 talked about using self-assessment as a life-long learner.

I'm not engaging in the kinds of activities that we encourage students to do or new interpreters to do that are structured with logs, but a kind of reflection. It starts with self-reflection when I'm looking to improve or learn and then I take that outward and then I'll bring that to colleagues or others that I think can help me think through something that happened or a decision that I made. So, I guess my self-assessment looks more like reflection.

In this instance, the participant described self-assessment as a form of reflection. They informally reflected on their work and determined what areas need improvement. They also used reflection as a way to work through challenging situations.

Participant 9 used self-assessment as a learner in a more reflective practice. Their experience was to informally self-assess their work, typically writing it down. The stated, “a way to sit in the student's seat was to write about our own work.”

These findings are significant to this study because they highlight the reasons instructors are struggling to teach self-assessment. More formal training on self-assessment, what it means, and how to teach it as required. Product-based self-assessment and process-based self-assessment both need to be reviewed and discussed further.

**Chapter Summary**

During the interview process, instructors shared their perspectives on teaching self-assessment, revealing approaches across instructors that participated in this study.
All of the participants in this study taught product-based self-assessment. Two participants taught product-based and process-based self-assessment as required by the CCIE. Instructors who taught product-based self-assessment used materials such as book, rubrics/charts from interpreting books, and some instructors had students look for patterns of errors or developed their own rubrics. Instructors who taught process-based self-assessment referenced interpreting models as a resource for students to use in their self-assessment. In the next chapter, I will continue discussing the findings in more detail, including implications for theory, practice, and future research.
Chapter 5: Discussion and Implications

The purpose of this study was to explore how interpreter educators are teaching students to self-assess their skills in Interpreter Education Programs. In the previous chapters, I have discussed the theoretical framework, the gaps in the literature, the methodology, and the findings from the data. I will discuss the major findings and present their implications in this chapter. I will conclude with directions for future research.

Discussion

This study sought to determine if instructors in Interpreter Education Programs are teaching self-assessment, how they are teaching it, and what types of self-assessment they are teaching, either process-based and/or product-based. In this section, I will discuss each theme, demonstrating how they support, add to, or contradict the current literature. The study found that all instructors are teaching self-assessment. Commonality in thinking included agreement that using self-assessment is crucial to interpreters’ skills development. The commonality of practice was that each instructor required students to self-assess their skills.

Research Question 1: How are instructors in Interpreter Education Programs in higher education teaching students to self-assess? I found that all programs in this study were teaching self-assessment. Themes one, two, and three addressed the first research question on how instructors teach students to self-assess. Theme one is that instructors who participated in this study tended to teach self-assessment by using scaffolding. Theme two is that student engagement in self-assessment is a required part of course assignments in interpreting courses for all nine participants. Each participant agreed that self-assessment was an integral aspect of students’ skills development and included it in
course interpreting assignments, including it in the assignment grade which ultimately affected the course grade. Theme three, the final theme addressing research question one, describes the essential components of self-assessment in interpreter education used by the participants including goal setting, critical reflection, learning without fear, and life-long learning.

Research Question 2: “How are instructors in Interpreter Education Programs teaching the Commission on Collegiate Interpreter Education required product-based and process-based self-assessment?” I found that all of the instructors in this study taught product-based self-assessment. Two instructors taught both product-based and process-based self-assessment. Instructors who teach in Commission on Collegiate Interpreter Education (CCIE) accredited Interpreter Education Programs are expected to use two types of assessment, product-based and process-based assessment (CCIE, 2019). Theme four addresses Research Question 2 on how instructors in CCIE accredited programs are teaching product-based self-assessment, not both. Everyone except the two participants who used both types of self-assessment taught product-based self-assessment. Instructors who taught product-based self-assessment tended to focus on patterns of error rather than errors that occurred only once. When instructors taught process-based assessment, they used interpreting models to guide students through self-assessment. Table 6 (p. 89) shows that Participant 1 and Participant 5 taught both product-based and process-based self-assessment. Participant 1 used one interpreting model, The Integrated Model of Interpreting, but Participant 5 allowed students to choose the interpreting model they wanted to work with in their self-assessment.
The literature demonstrates the need for self-assessment instruction in Interpreter Education Programs (Gile, 2009; Patrie, 2001). Self-assessment is integral to the skills growth and development of interpreting students because it invokes critical thinking skills (Fitzmaurice, 2018a) and students’ engagement in critical thinking about their work is directly connected to their success as interpreters (Russell & Winston, 2014).

**Research Question 1**

**Instructors tend to use scaffolding to teach self-assessment**

One of the purposes of this study was to describe how instructors are teaching students to self-assess their interpreting skills such as ASL sign production, ASL/English grammar, English vocal production, and English word choice and phrasing. I found that all of the participants taught self-assessment and required students to engage in self-assessment. One program introduced it in the language acquisition courses. While this study focused on self-assessment in interpreting courses, it is significant to note the program that introduced it in the language courses because that program began scaffolding self-assessment in the early stages of their program. They then built on it throughout the entire program. Since students generally enter an Interpreter Education Program with limited or no prior knowledge of American Sign Language (ASL) or interpreting, they begin programs with language acquisition courses. Once students reach fluency in ASL, they begin their foundational interpreting courses and spiral their learning from that point. Introducing self-assessment in the language acquisition courses and scaffolding it throughout the program aligns with Walqui (2006) who stated scaffolding promotes language learning. They stated that at the beginning of language courses the instructor is more involved with the student as they build a foundation of the
language. Then the instructor reduces their involvement as the student becomes more fluent in the language.

Scaffolding was clearly used when instructors taught students how to use to self-assessment in their interpreting courses. This finding supports Gish (1993) who discussed the Zone of Proximal Development (ZPD) and the importance to instructors to contribute to the scaffolding process if students are to advance to the next level. Scaffolding is not instructor-based, rather it focuses on students and meeting them where they are in the ZPD. This is also in agreement with Wilson and Devereux (2014) who found that when students are placed in highly challenging situations with low support, they tend to become frustrated. When instructors ask students to self-assess their work without scaffolding it in their learning experience, they create a highly challenging learning environment with low support. Having a guided self-assessment would reduce the inconsistencies of approaches, clarifying how it should be taught and could create a low challenge, high support learning environment.

**Student engagement in self-assessment is a required part of course assignments in interpreting courses**

This study revealed that all instructors required students to engage in self-assessment in various ways including, withholding assignment feedback until students completed a self-assessment and making it a graded requirement for assignments. Gile (2009) argued that students must be motivated to engage in self-assessment. Dangerfield and Napier (2016) also noted that motivation was essential to engaging students in self-assessment. Students need to be both confident and motivated if they are going to learn to accurately self-assess their skills (Fitzmaurice, 2018b). This study found that making
self-assessment a requirement for assignments was the primary motivational factor that
called the primary motivational factor that
all the instructors used to engage students.

**The essential components of self-assessment include goal setting, critical reflection,**
**learning without fear, and life-long learning**

*Goal Setting*

This study revealed the primary factors of self-assessment include goal setting, critical reflection, learning without fear, and life-long learning. Each of these components supports students in their effort to self-assess their skills. Most of the participants required students to establish goals either before or after an assignment. While goal setting prior to an assignment allowed the students to develop a plan to achieve the goal, those who set goals post-assignments used a reflective practice to determine what they wanted to achieve. Goal setting as a component of self-assessment is supported by Andrade & Du (2007) definition of self-assessment which includes goal setting and later reflection on the stated goals. Andrade (2019) and Valdez (2018) also noted that setting goals is an integral part of the self-assessment process as it relates to self-directed learning.

Goal setting is a key component of self-assessment and self-directed learning (Andrade, 2019). According to Panadero, et al. (2016), when students learn to self-assess their skills, they become better self-directed learners because they are empowered to take over their learning and learning outcomes. Instructors required students to establish goals that they wanted to achieve either by establishing them before an assignment or after an assignment. When students set goals after an assignment, it established a baseline from which their skills needed to grow. Then students assessed the assignment to help support
their need for setting a particular goal. Goal setting then becomes a necessary part in the self-directed learning cycle. Wang (2015) supports goal setting because they noted that setting goals is required prior to developing an action plan. Once students established their goals, they could plan what they would do to achieve them. Instructors indicated that goal setting was important because it created a foundation on which students could build their skills.

The participants in this study held strongly to the idea that goal setting for students to assess their own work was important in their courses and programs. This is in alignment with Andrade (2019), who noted that goal setting is a key aspect of self-assessment, especially as it relates to self-directed learning. Andrade (2019) stated that students gain awareness about the product and process of their learning when instructors teach them to engage in formative self-assessment. This is because formative assessment focuses on “the how” rather than “the what.” Focusing on formative assessment allows the student to find the reason behind errors which can ultimately resolve the errors. However, this study was unable to affirm this statement since it focused on interpreter educators instead of interpreting students and is a topic for future research.

**Critical Reflection**

When it came to self-assessment, there was some mention of reflection among the participants. The responses support Stauffer (2011) when she noted that self-assessment is important for interpreters to determine if they were qualified for an interpreting assignment. The findings of this research also support Fitzmaurice (2018a) when he stated that self-assessment is integral to the skills growth and development of interpreting
students because it provokes critical thinking skills. Russell and Winston (2014) noted that critical thinking directly relates to an interpreter’s success in developing their skills.

As was found in the literature review on self-assessment (Hatton & Smith, 1995; McCarthy, 2013), the participants had varying approaches to reflection. Some of the participants viewed self-assessment and reflection as the same concept. This agrees with my theoretical framework where McCarthy (2013) stated that self-assessment and reflection are both deliberately engaging in critical thinking to come to new understandings that lead to change. This links self-assessment and reflection together in the self-directed learning cycle. McCarthy (2013) noted that reflection is what happens after the learning experience is completed. They also stated that reflection impacts how the learner responds to the learning process. Reflection is viewed as a retroactive process at the end of self-assessment rather than an ongoing process within self-assessment. This also supports Hatton and Smith (1995), who speak to the use of reflection as a tool to take action toward improvement.

While some participants viewed reflection to be the same as self-assessment, other participants viewed reflection as a tool to use to sift through their thoughts and emotions about the interpreting product. This is not in alignment with reflection as it relates to self-assessment or with self-assessment as part of my theoretical framework. It is more closely related to Think-Aloud Protocol (TAP) which is a type of reflection that guides students to reflect on their thoughts during an interpretation (Russell & Winston, 2014).
Learning without Fear

Some participants took an approach to self-assessment that allowed students to learn in a “safe space.” This learning without fear approach to instruction is in alignment with Light et al. (2009) who noted that students tend to be fearful when first learning about self-assessment. This “Learning without Fear” approach to teaching self-assessment can eliminate the hesitancy that students tend to experience when it comes to assessing their assignments. When instructors eliminate the fear, students can become more motivated to assess their skills, which breaks down barriers that may inhibit their skills growth.

One way that instructors eliminated fear was to change the terminology they used in reference to assignments. Gile (2009) stated that students who use process-based self-assessment felt less stressed than those who focused on product-based self-assessment. This study did not reveal whether either of the approaches increased or decreased stress. However, some instructors, regardless of the type of self-assessment they used, intentionally chose specific terminology which could help alleviate stress over self-assessment. Terms such as “more effective” or “less effective” can reduce stress by taking away the idea of an error being part of the student’s identity. It allowed them to take a more objective approach to their self-assessment. Another example is when Participant 5 noted that they used the terms “lab” or “experiment” instead of “assignment.” The idea is that labs or experiments allowed room for errors and room for growth, whereas assignments tended to be more finalized when they were graded. Labs or experiments allowed students to fluctuate in their skills development and look for new approaches when one approach was not working.
Life-long Learning

Participants in this study noted that self-assessment was essential for life-long learning. They noted life-long learning as an integral aspect of professionalism through continuous skills development as well as a component of the professional code of conduct. Life-long learning, another important aspect of self-assessment, is crucial for student skills development post-graduation. This aligns with Fitzmaurice (2019b) and Pinazo (2008) who noted that self-assessment promotes life-long learning. Washbourne (2013) stated that instructors should be involved in helping students develop self-directed learning skills. It is important for instructors to be engaged with students as they take on the task of self-assessment. Gish (1993) found that the first step in applying a scaffolding process for students to become self-directed learners is to use self-assessment by way of conversation, which brings meaning to assignments.

Scaffolding and self-assessment are important to interpreters for a variety of reasons, including life-long learning. They support life-long learning because by self-assessing, interpreters can determine where they need improvement and choose continuing education courses based on their skills. Scaffolding enables learners to carry out tasks independently through goal-setting and problem-solving (Smit, et al., 2013). Self-assessment supports the need for life-long learning because interpreters oftentimes find themselves working alone. It is up to them to reflect on their work through self-assessment to determine if they need improvement and where improvements need to be made. Life-long learning is also important because the world is ever-changing and new information is constantly being developed. Life-long learning allows interpreters to learn new information which supports accurate interpretations. Not only was it important for

Self-assessment is an integral part of Self-Directed Learning Theory and the participants in this study noted that self-assessment is crucial for interpreting skills development. Instructors required that students engage in self-assessment by including it as part of course assignments. While some instructors included self-assessment as a graded requirement for coursework, others withheld instructor feedback on assignments until students completed a self-assessment. The key components of self-assessment that ASL/English interpreter educators noted included goal setting, critical reflection, learning without fear, and lifelong learning. Goal setting and critical reflection are aspects of self-assessment which leads to self-directed learning and life-long learning. Instructors in this study also tended to use scaffolding to teach self-assessment (Table 4, p. 59). Scaffolding leads to independent learning which can encourage individuals to become life-long learners. Participants used a variety of tools to assist students through their zone of proximal development, guiding them to become independent learners. Such tools included teaching with rubrics and charts, dialogue, and modeling/demonstrating self-assessments for students.

Life-long learning is important to the ASL/English interpreting profession because there is not enough time in a bachelor’s degree program for students to graduate with the necessary skills to achieve national certification. The school to work/certification gap can take three or more years to fill. If students can graduate from Interpreter
Education Programs (IEPs) with the tools to be independent learners, it may contribute to them becoming life-long learners.

The time gap from graduation to certification also impacts the Deaf community. There are not enough ASL/English interpreters to meet the demand of needed interpreters (RID, 2015-2021d). When qualified interpreters are not available to the Deaf community, access to communication is lost. The Americans with Disabilities Act (ADA) requires entities to provide equal access to communication for Deaf and hard of hearing individuals. When there is an insufficient number of qualified interpreters available to the Deaf community, the ADA law is not met. It may be possible to work to reduce the gap between graduation and certification by using scaffolding to teach self-assessment and using self-assessment to guide students to being self-directed and life-long learners.

Research Question 2

Instructors in Commission on Collegiate Interpreter Education accredited programs are teaching product-based self-assessment

Instructors who teach in the Commission on Collegiate Interpreter Education (CCIE) accredited Interpreter Education Programs are expected to use two types of assessment, product-based and process-based assessment (CCIE, 2019). In product-based self-assessment a student looks at the outcome of an interpretation rather than what they did to arrive at that interpretation. It focuses on “the what” rather than “the how.” Process-based self-assessment looks at “the how” rather than “the what.” The CCIE (2019) wants students to engage in critical reflection on linguistics, culture, interpreter influence on the interpreted message, as well as the human dynamics of the interpretation. Standard 7 of the CCIE accreditation requirements focuses on the skills
competency aspect of the program curriculum. Standard 7.3 states, “The curriculum addresses self-assessment of the process and product of interpretation” (CCIE, 2019). Each participant discussed the types of self-assessment they use, describing it in detail. Most of the instructors in this research tended to use product-based self-assessment; however, two participants used both types of self-assessment. Because there were only two programs teaching both types of self-assessment, not all accredited programs are meeting the accreditation requirements.

Through this research, a key aspect of product-based self-assessment was that students look for patterns of error. The patterns occurred in the interpretation which is the product or outcome of the interpreting process. Instructors found it integral for students to reflect and assess for patterns rather than one-time mistakes. This type of product-based assessment is important because it deters the student from perseverating on mistakes that happened once. When there is a pattern, the students will need to look for the cause of the pattern. This is the type of product-based assessment that the CCIE (2019) encourages, and instructors also found it integral to students’ skills development. This is supported by Fitzmaurice (2018) who found that students tended to score higher on skills assessments when they could analyze their work through critical reflection.

The participants in this study who taught process-based assessment used interpreting models as a reference for students to follow. The instructors either chose a model for the students to use or they had the students choose their preferred model. Instructors should not limit students to one interpreting model. The students would use the models to determine where the breakdown was occurring in the interpreting process. This is supported by Russell & Winston (2014) and their query about critical reflection.
on the cognitive processes of interpreting. Gile (2009) also supports this when noting that process-oriented training requires the student to focus on the interpreting process and how they are cognitively processing information rather than focusing on the product.

**Instructors’ Experience with Self-Assessment as Learners**

During the interviews, each participant discussed their experience with self-assessment as a learner. The overall finding was that all nine participants had little experience with self-assessment, or they had not been taught how to self-assess; therefore, teaching self-assessment was challenging for them. The participants had varying experiences with self-assessment including teaching it at a graduate level, working with mentors in an informal situation and experience with other people assessing their skills, limited, not well guided, experience with self-assessment; however, three participants did have experience with self-assessment, but not in a formal learning environment. None of the nine participants had been formally taught how to self-assess their own skills, limiting their experience with it. This was a new finding, not formerly discussed in the literature on self-assessment in Interpreter Education Programs (IEP). IEP instructors’ formal training on self-assessment is a topic that may be further studied in future research. Training should include the key components of self-assessment: goal setting, dialogue, and learning without fear. These components can form the bases for teaching self-assessment.

**Implications for Theory and Practice**

The theoretical framework for this study included self-assessment, drawn from Self-Directed Learning Theory, and Scaffolding Theory and the Zone of Proximal Development. Although Research Question 1 was centered around self-assessment as it
relates to self-directed learning, there were indications of scaffolding being used to teach self-assessment in ASL/English Interpreter Education Programs. Goal-setting and lifelong learning were key components that repeatedly arose when instructors discussed self-assessment and scaffolding, indicating implications for theory.

There were theoretical implications noted in this study for self-assessment and self-directed learning as well as scaffolding. One implication for Self-Directed Learning Theory that was found in this study which included considerations for key components of self-assessment. It is recommended to include goal setting, critical reflection, learning without fear, and life-long learning as essential aspects of self-assessment and self-directed learning. Instructors may consider teaching these components to guide students to a better understanding of the need for self-assessment and self-directed learning and why it is necessary in interpreter education. Scaffolding is also a useful theory in Interpreter Education Programs because it promotes self-directed learning. Scaffolding also provides a useful lens for future studies on self-assessment and self-directed learning.

**Implications for Interpreter Education and Adult Education**

Research Question 2 asked about the types of self-assessment that instructors are teaching based on the Commission on Collegiate Interpreter Education (CCIE) requirements. The CCIE Standard 7.3 states, “The curriculum addresses self-assessment of the process and product of interpretation” (CCIE, 2019). The primary implication for interpreter education found in this study was to recommend that instructors teach both types of CCIE required self-assessment, product-based and process-based self-assessment. By teaching product-based and process-based self-
assessment programs will meet the accreditation standard. It is recommended that instructors use interpreting models to teach process-based self-assessment and not limit students to using one interpreting model. Other models of interpreting should be included because each student may find one model more applicable to their interpreting process than other models.

It is evident that there needs to be professional training for interpreter educators on self-assessment as it relates to the interpreting profession. Understanding the components of product-based and process-based self-assessment will allow instructors to take an organized approach to teaching self-assessment, creating a high challenge, high support learning environment. This training can be provided through workshops, conferences, or seminars. Developing this type of training would require interpreter educators to look at other skills-based professions to see how they prepare their educators to teach self-assessment. Once there is an understanding about self-assessment, we can then incorporate works by people such as Marty Taylor, Gordon and Magler, and Betty Colonomos to make it applicable to the interpreting profession. Developing training that highlights product-based versus process-based self-assessment, their importance to interpreter education, and how to teach them to students would be highly beneficial to the interpreter education field. Further research should be conducted to determine if curricula on guided process-based and product-based self-assessment can reduce the gap between graduation and certification in the interpreting profession.

ASL/English Interpreter educators currently have limited resources on how to teach self-assessment to their students. One important implication that the data revealed was that programs should be encouraged to publish and disseminate their approaches to
teaching self-assessment. Having a such publications would increase the resources available to instructors which could lead to development of guided self-assessments. From there, we can look at the interpreting process models, such as the Integrated Model of Interpreting (Colonomos, 2015), and modify other professional self-assessments based on the interpreting profession.

**Dialogue**

The use of dialogue is an excellent motivating factor that supports critical reflection for self-assessment. The use of dialogue allows the instructor to guide the student through the Think Aloud Protocol (TAP) which can reveal what is taking place in the students’ mind while they are interpreting (Russell & Winston, 2014). This finding about the use of dialogue in interpretation can then help the instructor guide students to establish goals and action plans to improve their skills. This ties into how dialogue is an aspect of scaffolding and as Merriam and Baumgartner (2020) noted, scaffolding encourages the social aspect of student learning because it allows the student to interact with feedback. This develops a rich learning experience for the students. Instructors should use the TAP to begin dialoging with students about what they are thinking during their interpretation. TAP is a strong beginning step to instructor-student dialogue and can lead to further discussion on assessing both the interpreting process and the interpreting product (Russell & Winston, 2014).

**Goal Setting & Critical Reflection**

Goal setting and critical reflection are key components of the self-directed learning process and should be implemented in both adult education and in Interpreter Education Programs because it is an integral aspect of the self-directed learning cycle.
Instructors should teach students how to set goals and how to develop a plan of action to achieve the goals they set. Students should do a base-line assignment, such as an interpreted video, then reflect on it to establish goals. As students move through a semester, and ultimately a program, they should continuously engage in critical reflection to determine if they are meeting their goals and if their plan of action is successful. If they are not meeting their goals, they may need to modify their plan of action as they move forward in future assignments. It is important for students to continuously engage in critical reflection because once a goal is achieved, they need to move to a new goal by starting the process again. It is also important that instructors check in with students to ensure that students are setting accurate, achievable goals, and determine if their plan of action is practical.

**Learning without Fear**

The way instructors approach requiring self-assessment can impact the way students respond to it. When students’ sole motivating factor is a graded requirement or feedback being withheld until self-assessment is completed, self-assessment can become drudgery. It is critical that instructors establish a “safe space” for students as they learn about self-assessment. Eliminating terminology that seems judgmental and implementing supportive terminology can motivate students to begin looking at their work with deeper cognition. When instructors teach students to view their product as a separate part of themselves, the student can feel more confident to assess their work. Using terms such as “lab” instead of “assignment” allows students to view their work as a process that can be modified rather than something that is static.
Life-long Learning & Self-Directed Learning

Life-long learning is an expectation that is set on all American Sign Language/English interpreters through the Registry of Interpreters for the Deaf (RID) Code of Professional Conduct (CPC). Tenet 7 of the CPC states that interpreters should engage in professional development. The tenet has two sub-tenets which describe the illustrative behaviors:

Illustrative Behavior - Interpreters: 7.1 Increase knowledge and strengthen skills through activities such as: pursuing higher education; attending workshops and conferences; seeking mentoring and supervision opportunities; participating in community events; and engaging in independent studies. 7.2 Keep abreast of laws, policies, rules, and regulations that affect the profession. (RID, 2015-2021b)

Life-long learning is supported by Self-Directed Learning Theory which is indicated in interpreter education and adult education. Self-directed learning is an integral aspect of both adult education and interpreter education as it fosters continual professional growth. Self-assessment is a component of self-directed learning because it promotes a learning cycle that allows adult learners and interpreting students to continuously improve their skills. This is especially important in professions where individuals must continue their skills development post-graduation. With the interpreting profession, the Code of Professional Conduct requires that interpreters stay current with their skills and on the information that drives the world around them. By teaching students how to self-assess their skills, instructors are essentially contributing to students’ understanding of how to become a life-long learner.
**Patterns of Error and Interpreting Models**

It is essential for students to learn to assess their interpreting products for patterns of error rather than mistakes that occur once. When students perseverate on a product error that is outside of a pattern, their skills development can be deterred. The concept of patterns of error combines product and process. The pattern is based on the product, then the process comes in when the student looks at the pattern and takes it back to the process to determine where the breakdown is happening.

It is important for instructors to teach students how to identify a pattern in their critical reflections and then determine why a pattern is occurring. To understand why a pattern is happening, instructors can teach students how to utilize interpreting models. The interpreting models break down the interpreting process from the receipt of a message in the source language to the production of the message in the target language. When students understand these models, they can determine where the breakdown is occurring and then set goals to improve their process. Ultimately, this could improve their product and reduce the occurrence of patterns of error.

There are limited resources available to instructors for teaching self-assessment in ASL/English interpreting programs. There were three primary resources that instructors used when teaching product-base self-assessment, *The Mentor’s Companion* (Gordon & Magler, 2007), *Interpretation Skills: English to American Sign Language* (1993), and *Interpretation Skills: American Sign Language to English* (2002). The instructors who teach process-based self-assessment tended to use interpreting models as a reference. More resources are needed for process-based self-assessment, including instruction on how to self-assess the interpreting process. It is important to develop more resources to
encourage Interpreter Education Programs to include both product-based and process-based self-assessment to satisfy the CCIE Standard 7.

**Recommendations for Future Research**

Self-assessment is recognized as critical to skills development in interpreting students, yet it is under-researched. This was an exploratory study to determine how instructors teach students to self-assess their interpreting skills and what types of CCIE required self-assessments they are teaching. The data analysis led to three recommendations for future research: (a) apply interpreter process theories to self-assessment, (b) develop instructor training on product-based and process-based self-assessment, and (c) conduct a broader study to determine how all accredited Interpreter Education programs teach students to self-assess their skills.

One suggestion for future research is applying interpreter process theories to self-assessment. Instructors tend to teach interpreting theories either in an individual class or throughout the program; however, theoretical application is not evident in most of the ASL/English Interpreter Education Programs in this study. The data analysis points to the use of interpreting process theories to establish a common language by which we talk about interpreting, but they are not used to determine what causes product errors. It is recommended that further research be conducted to determine how to apply interpreting process theories to students' self-assessment, then demonstrate the effectiveness of the application.

Although both product-based and process-based self-assessment are required by the CCIE, there is currently no guide of ways to approach teaching process-based self-assessment. Developing instructor training that highlights product-based versus process-
based self-assessment, its importance to interpreter education, and how to teach them to students through scaffolding could be highly beneficial to the interpreter education field. This type of training could strengthen the instructional foundation necessary to prepare students to successfully self-assess their skills, leading them to become better self-directed learners.

Interpreter educators may also consider developing curricula and guided self-assessments that include both product-based and process-based self-assessment to teach interpreting students. Developing a guided self-assessment could potentially change that and may even begin to bring clarity to how teaching self-assessment can be approached. A recommendation for future research is to develop a guide for teaching self-assessment that is both product-based and process-based to ascertain if teaching it can reduce the time from graduation to certification.

Lastly, a broader study across all accredited four-year interpreting programs would lead to a richer data set. This was an exploratory study that included nine participants from six different accredited programs out of which only three instructors were teaching self-assessment. A broader study would benefit interpreter education because it would determine how all four-year accredited programs teach self-assessment. This would allow for more data to potentially learn a broader variety of approaches that could be tested for further research.

Conclusion

The purpose of this study was to explore how instructors in Interpreter Education Programs are teaching students to engage in self-assessment and learn the types of CCIE required self-assessment instructors are teaching. All of the instructors agreed that self-
assessment is crucial in Interpreter Education Programs because it aids in student skills growth and development. However, most instructors are not meeting the CCIE Standard 7.3 to teach both product-based and process-based self-assessment. Furthermore, it is important for instructors to understand the components of product-based and process-based self-assessment which would allow instructors to take a more standardized approach to teaching self-assessment and to teach both types. This would create a high challenge, high support learning environment and allow instructors to better apply the scaffolding process to the way they teach self-assessment to students.
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Appendix A

RECRUITMENT SCRIPT

My name is Katelyn Wilson and I am a doctoral student at the University of Memphis.

I am doing a research project to explore how interpreter educators are teaching self-assessment to students. The participants in this study will be interpreter educators from accredited Interpreter Education Programs that offer a bachelor’s degree. The participants will be nationally certified interpreters.

I will be conducting my study via Zoom either in my office at UA Little Rock or in the privacy of my home.

I will use pseudonyms for you as well as the names of any individuals, institutions, or organizations mentioned during my observations in any transcribed, written, or published materials based on this research.

If you choose to participate in this study, you will be asked to participate in two (2) one-on-one interviews. The first interview will last approximately one hour and the second interview, a follow-up interview, will last approximately thirty minutes or less. The second interview is to seek clarification and ensure that I accurately interpreted your statements. To honor our conversations, I will record the conversations on Zoom to help when transcribing the interviews via rev.com.

There are no risks in participating in this research beyond those experienced in everyday life. Some of the questions may cause discomfort. Participants are at no point required to answer any question that makes them feel uncomfortable. Should a participant need any mental health support throughout the study, the researcher will make appropriate and immediate on-campus referrals.

The purpose of this study is to explore how interpreter educators are teaching students to self-assess their skills in interpreter education programs. It is important to identify the strategies used for teaching self-assessment as not to make the assumption that it is being taught. This study will determine if Interpreter Education Programs are teaching self-assessment, how they are teaching it, and what types of self-assessment they are teaching.

If you decide to participate in this study, you might learn more about your Interpreter Education Program. You might also better understand how you teach students to self-assess, gaining insight on your teaching experiences.
Your participation in this research is confidential. All files, documents, and recordings will be saved in a secure drive with only myself having access to them. In the event of a publication or presentation resulting from this research, no personal identifiable information will be shared.

You have the right to ask questions about the research. Please contact me, Katelyn Wilson, at kbwlson3@memphis.edu with questions or concerns about this study. You may also call Dr. Edith Gnanadass (my academic advisor), egnanadass@memphis.edu if you have any questions about your rights as a research participant. Refusal to take part in this research will result in no penalty.

There is no cost to you for participating.

Your decision to be in this research is voluntary. You can stop at any time. You do not have to answer any questions you do not want to answer. Refusal to take part in or withdrawing from this study will result in no penalty.

Before you decide to volunteer for this study, please ask any questions that might come to mind. Later, if you have questions, suggestions, concerns, or complaints about the study, you can contact the principal investigator, Katelyn B. Wilson, kbwlson3@memphis.edu or my advisor, Dr. Edith Gnanadass, egnanadass@memphis.edu. If you have any questions about your rights as a volunteer in this research, contact the Institutional Review Board staff at the University of Memphis at 901-678-2705 or email irb@memphis.edu. We will give you a signed copy of this consent to take with you.

This study has also been reviewed and approved by UA Little Rock’s Institutional Review Board (IRB). The IRB has determined that this study meets the ethical obligations required by federal law and University policies. If you have any questions regarding your rights as a research participant, please contact the Research Compliance Officer at 501-916-6207 or irb@ualr.edu.

Thank you for your consideration.

Do you have any questions?

Do you think you would like to participate in this study?

******************************************************************************
APPENDIX B
FOLLOW-UP/REMINDER MESSAGE

My name is Katelyn Wilson, and I am a doctoral student at the University of Memphis. I recently sent you an email requesting your participation in my research study. I am following-up to ask if you have any questions about the study and if you have come to a decision about participating in the study.

Please see the attachment below describing the nature of the study.

Thank you for your consideration.
Appendix C

Interview Protocol

Date:
Time:
Pseudonym:

Research Questions:

1. How are instructors in Interpreter Education Programs in Higher Education teaching students to self-assess?
2. How are instructors in Interpreter Education Programs teaching the Commission on Collegiate Interpreter Education required product-based and process-based self-assessment?

Interview Protocol

INTERVIEW:

Preliminary - “Getting to know you questions” -

1. How long have you been an interpreter educator?
2. What motivated you to become an interpreter educator?
3. What is your role in the program where you teach?
4. What your experiences as learners with self-assessment?

Data Collection Questions -

1. Tell me about the types of student assessment that you use.
   Possible Probe - What do students assess?
   Possible Probe - How are student assessments measured by the instructor?

2. When is self-assessment introduced in your program?
   Possible Probe - How is self-assessment first introduced in your program?

3. How do you get students to engage in self-assessment?
   Possible Probe - How do you use scaffolding to encourage students to engage in self-assessment?
   Possible Probe - In what ways do they stay engaged throughout the program?

4. What types of self-assessment do you teach in your program?
5. Describe a student self-assessment in detail.

6. How important do you think self-assessment is to students’ skill development? **Possible Probe** - What barriers or challenges do students experience when engaging with self-assessment?
Appendix D
Follow-up Interview

Date:
Time:
Pseudonym:

Questions -

1. Did you have any questions about the previous interview?

2. Recap of Previous Interview Responses

3. Are there any comments that came to mind after the previous interview that you would like to add?
## Appendix E

### Interview Questions Chart

<table>
<thead>
<tr>
<th>Primary Research Question</th>
<th>Secondary Research Question</th>
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<tbody>
<tr>
<td><em>How are instructors in Interpreter Education Programs in Higher Education teaching students to self-assess?</em></td>
<td><em>How are instructors in Interpreter Education Programs teaching the Commission on Collegiate Interpreter Education required product-based and process-based self-assessment?</em></td>
</tr>
</tbody>
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<table>
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<tr>
<th>Interview Question</th>
<th>Interview Question</th>
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<tbody>
<tr>
<td>When is self-assessment introduced in your program? <strong>Possible Probe</strong> - How is self-assessment first introduced in your program?</td>
<td>Tell me about the types of student assessment that you use. <strong>Possible Probe</strong> - What do students assess? <strong>Possible Probe</strong> - How are student assessments measured by the instructor?</td>
</tr>
<tr>
<td>How do you get students to engage in self-assessment? <strong>Possible Probe</strong> - How do you use scaffolding to encourage students to engage in self-assessment? <strong>Possible Probe</strong> - In what ways do they stay engaged throughout the program?</td>
<td></td>
</tr>
<tr>
<td>Describe a student self-assessment in detail.</td>
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<tr>
<td>How important do you think self-assessment is to students’ skill development? <strong>Possible Probe</strong> - What barriers or challenges do students experience when engaging with self-assessment?</td>
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</tr>
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APPENDIX F
INFORMED CONSENT

<table>
<thead>
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<th>Title</th>
<th>An Exploratory Study of Self-Assessment Teaching Approaches in ASL/English Interpreter Education Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Researcher</td>
<td>Katelyn B. Wilson, University of Memphis</td>
</tr>
<tr>
<td>Researcher’s Contact Information</td>
<td><a href="mailto:kbwlson3@memphis.edu">kbwlson3@memphis.edu</a></td>
</tr>
</tbody>
</table>

You are being asked to participate in a research study. The box below highlights key information for you to consider when deciding if you want to participate. More detailed information is provided below the box. Please ask the researcher any questions about the study before you make your decision. If you volunteer, you will be one of about 8-10 people to do so.

**Voluntary Consent:** You are being asked to volunteer for a research study. It is up to you whether you choose to participate or not. There will be no penalty or loss of benefit to which you are otherwise entitled if you choose not to participate or discontinue participation.

**Purpose:** The purpose of this study is to explore how interpreter educators are teaching students to self-assess their skills in interpreter education programs. It is important to identify the strategies used for teaching self-assessment as not to make the assumption that it is being taught. This study will determine if Interpreter Education Programs are teaching self-assessment, how they are teaching it, and what types of self-assessment they are teaching.

**Duration:** If you choose to participate in this study, you will be asked to participate in two (2) one-on-one interviews. The first interview will last approximately one hour and the second interview, a follow-up interview, will last approximately thirty minutes or less.

**Procedures and Activities:** In the first interview, you will be asked questions regarding the types of student self-assessment you use and how and when it is introduced. The second interview is to seek clarification and ensure that I accurately interpreted your statements.

**Risk:** There are no risks in participating in this research beyond those experienced in everyday life. Some of the questions may cause discomfort. Participants are at no point required to answer any question that makes them feel uncomfortable. Should a
participant need any mental health support throughout the study, the researcher will make appropriate and immediate on-campus referrals.

**Benefits:** This study might shed light on how future research that may be conducted in self-assessment in Interpreter Education Programs. Another benefit includes that it may shed light on how interpreting programs may improve their approach to teaching self-assessment to students.

**Alternatives:** Participation is voluntary, and the only alternative is to not participate. Your decision to be in this research is voluntary. You can stop at any time. You do not have to answer any questions you do not want to answer. Refusal to take part in or withdrawing from this study will result in no penalty.

**Who is conducting this research?**
Katelyn B. Wilson (Principal Investigator, PI) of the University of Memphis, Department of Leadership is in charge of the study. She is a doctoral student and is being guided by her Faculty Advisor, Dr. Edith Gnanadass. There are no other research team members assisting during the study. No members of the research team have any significant financial interest and/or conflict of interest related to the research.

**What happens if I agree to participate in this Research?**
If you decide to participate in this study, you might learn more about your Interpreter Education Program. You might also better understand how you teach students to self-assess, gaining insight on your teaching experiences. Your participation in this research is confidential. All files, documents, and recordings will be saved in a secure drive with only myself having access to them. In the event of a publication or presentation resulting from this research, no personal identifiable information will be shared.

Your participation in this research is confidential. All files, documents, and recordings will be saved in a secure drive with only myself having access to them. In the event of a publication or presentation resulting from this research, no personal identifiable information will be shared. I will use pseudonyms for you as well as the names of any individuals, institutions, or organizations mentioned during my observations in any transcribed, written, or published materials based on this research. This informed consent document is the only time we will be keeping any personal identifying information about you. However, none of your personal identification information will be linked to the data you provide during the study, as you will be asked to go by a pseudonym.

During the interviews, all participants will be asked to answer questions on the interview protocol. However, if any participant is uncomfortable answering any questions, they can skip any question and can stop the interview at any time. Here is an example of some of the questions you may be asked:

1. Tell me about the types of student assessment that you use.
2. When is self-assessment introduced in your program?
3. How do you get students to engage in self-assessment?

I will be conducting my study via Zoom either in my office at University of Arkansas at Little Rock or in the privacy of my home. Analyses of these transcripts will be made and you will have an opportunity to review the analysis to ensure the interpretation of your information was not misrepresented. To honor our conversations, I will record the conversations on Zoom to help when transcribing the interviews via rev.com.

**What happens to the information collected for this research?**

Information collected for this research will be used as part of my doctoral dissertation collection and analysis. I may publish/present the results of this research. However, I will keep your name and other identifying information confidential and only use the pseudonym you provide me to connect you with your data. The information collected for this research may be shared and used for future research by the researcher.

**How will my privacy and data confidentiality be protected?**

I promise to protect your privacy and security of your personal information as best we can. Although you need to know about some limits to this promise. Measures we will take include:

- Interviews will be done in a private, one-on-one setting with the researcher and the participant
- Confidentiality of your data will be protected, as it will reside on a University of Memphis OneDrive folder only accessible to me and my doctoral advisor (Dr. Edith Gnanadass). The data will only be stored there during the duration of the study.

Individuals and organizations that monitor this research may be permitted access to inspect the research records. This monitoring may include access to your interview and observation data. These individuals and organizations include:

- University of Memphis Institutional Review Board
- University of Arkansas at Little Rock Institutional Review Board
- Dr. Edith Gnanadass (researcher’s advisor)

**What are the risks if I participate in this research?**

The risks or discomforts of participating in this research include:

Data collection will consist of one-on-one semi-structured interviews with my participants. Interview questioning will focus on questions related to how self-assessment is taught in the Interpreter Education Program where you work. **Mitigation:** Participants will have the right to not answer any questions that they deem uncomfortable to discuss. Also, several safeguards will be in place to ensure participants do not feel pressured to respond or respond in a certain way. **Mitigation:** participants will be able to remove themselves from the study at any time. **Mitigation:** I will use Zoom to complete the interviews. **Mitigation:** By using a pseudonym throughout the study and keeping the data you share with me in a private drive, as well as your consent forms locked within my office, I hope to assuage your fears and give
you the confidence knowing that your information will remain private. Having said that, I will work to ensure risk to every participant of the study is minimized in every way.

**What are the benefits of participating in this research?**

Participating has no known direct benefits to you. However, I do believe that this study will add to the scholarship self-assessment in Interpreter Education Programs. Secondly, you might learn more about yourself and your program by participating and, therefore, be better able to shape your practices as an interpreter educator. Thirdly, your participation in this study may support the growth of the interpreter education field as a whole.

**What if I want to stop participating in this research?**

It is up to you to decide whether you want to volunteer for this study. It is also ok to decide to end your participation at any time. The decision to withdraw your participation in this research will result in no penalty. Your decision about participating will not affect your relationship with the researcher, the University of Memphis or the University of Arkansas at Little Rock. If you feel the need to withdraw from the study, simply contact me and I will withdraw your name from the study. I will also destroy your signed consent form and the data we collected so far if you so choose.

**Will it cost me money to take part in this research?**

There are no costs associated with participation in this research study. You do not give up your legal right by signing this document.

**Will I receive any compensation for participating in this research?**

You will not be compensated for taking part in this research.

**Who can answer my question about this research?**

Before you decide to volunteer for this study, please ask any questions that might come to mind. Later, if you have questions, suggestions, concerns, or complaints about the study, you can contact the principal investigator, Katelyn B. Wilson, kbw1son3@memphis.edu or my advisor, Dr. Edith Gnanadass, egnanadass@memphis.edu. If you have any questions about your rights as a volunteer in this research, contact the Institutional Review Board staff at the University of Memphis at 901-678-2705 or email irb@memphis.edu. We will give you a signed copy of this consent to take with you. This study has also been reviewed and approved by UA Little Rock's Institutional Review Board (IRB). The IRB has determined that this study meets the ethical obligations required by federal law and University policies. If you have any questions regarding your rights as a research participant, please contact the Research Compliance Officer at 501-916-6207 or irb@ualr.edu.

**STATEMENT OF CONSENT**
I have had the opportunity to consider the information in this document. I have asked any questions needed for me to decide about my participation. I understand that I can ask additional questions throughout the study.

By signing below, I volunteer to participate in this research. I understand that I am not waiving any legal rights. I have been given a copy of this consent document. I understand that if my ability to consent for myself changes, my legal representative or I may be asked to consent again prior to my continued participation. I understand that my name will not be used in the writings of this study, but a pseudonym of my choice will be used instead.

As described above, I understand that I will be audio and video recorded while performing the activities described above. The recordings will be used for collection and analysis of my personal experiences teaching self-assessment to interpreter education students.

Initial the space below if you consent to the use of audio recordings as described above.

_____ I agree to the use of being audio and video recorded.

<table>
<thead>
<tr>
<th>Name of Adult Participant</th>
<th>Signature of Adult Participant</th>
<th>Date</th>
</tr>
</thead>
</table>

Researcher Signature (To be completed at the time of Informed Consent)

I have explained the research to the participant and answered all of their questions. I believe that they understand the information described in this consent and freely consent to participate.

<table>
<thead>
<tr>
<th>Name of Research Team Member</th>
<th>Signature of Research Team Member</th>
<th>Date</th>
</tr>
</thead>
</table>