

A FRESH CUT: IMPROVING BARBERING EXAMINATION PASS RATES WITH A CURRICULAR INTERVENTION AT JIBCA

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TABLE OF CONTENTS

List of Figures.....	vi
List of Tables.....	vii
Abstract.....	viii
The Disquisition.....	ix
The Problem: Low Passing Rates on Barbering Apprentice Examinations.....	1
Literature Review of the Problem.....	3
Theoretical Framework: Critical Theory Epistemology Discussion	13
The Local Context: A Historical Review of the Problem	17
A Causal Analysis: Factors Contributing to Low Pass Rates of the North Carolina Apprentice Barber Licensure Exam (NC ABLE).....	24
An Improvement Initiative for Jerman’s Institute of Barbering and Cosmetic Arts.....	29
Theory of Improvement & Methodology.....	30
Instructional Design Philosophy: Student-Focused Instruction.....	36
Improvement Initiative Design.....	40
Implementation Plan/Timeline.....	43
Analysis Plan for the Improvement Initiative.....	51
Data Collection.....	53
Data Analysis.....	64
A Discussion of the Results.....	72
A Discussion of Outcomes.....	76
Implications.....	77
Implications for Pedagogical Practice.....	78

Recommendations for Barber Educators.....	79
Implications for Policy and Recommendations.....	81
Directions for Future Research.....	83
Conclusion.....	84
References.....	87
Appendix A: <i>JIBCA’s Course Catalog – Barbering</i>	92
Appendix B: <i>CCC-BIM with Formative and Summative Assessments</i>	93
Appendix C: <i>Knowledge and Skills Acquisition (KASA) Form for Apprentice Barber License</i>	97
Appendix D: <i>Course Schedule, Days, and Times Based on Classification</i>	104
Appendix E: <i>Lesson Plan</i>	105
Appendix F: <i>Exam Schedule: Advanced Students (>/1,170 clock hours)</i>	106
Appendix G: <i>Initial Formative Assessment (IFA): Advanced Students</i>	108
Appendix H: <i>Interim Progress Assessments (IPAs): Advanced Students</i>	128
Appendix I: <i>Final Summative Assessment (FSA): Advanced Students</i>	229
Appendix J: <i>JIBCA Advanced Students’ KASA Forms</i>	250
Appendix K: <i>Advanced Students’ NC ABLE Score Reports</i>	256

LIST OF FIGURES

Figure 1: Root Cause Analysis of Contributions to Low Passing Rates on the NC ABLE.....	25
Figure 2: Addressing the Aim: Driving Toward Improvement.....	32
Figure 3: Acquisition of Knowledge and Skills Progress.....	55
Figure 4: JIBCA Students' Performance: <i>From CCC-BIM to the NC ABLE</i>	66
Figure 5: PLAN, DO, STUDY, ACT: <i>A Continuous Learner-Centered Approach to Improvement</i>	74

LIST OF TABLES

Table 1: Five-Year Apprentice Examination Summary.....19

Table 2: Goals and Objectives for Improved Outcomes.....34

Table 3: Improvement Initiative Design Team.....41

Table 4: Implementation Plan and Timeline for the Improvement Initiative with
JIBCA’s Advanced Students.....45

Table 5: IPA Schedule for Professional Barbering Topics.....58

Table 6: IPA Schedule for Apprentice Examination Prep IV.....59

Table 7: IPA Schedule for Clinical Practicum IV.....60

Abstract

Adequate education experiences and passing licensure examinations are imperative to professional entry and the career success of aspiring barbers. This improvement science initiative addressed low passing rates on the North Carolina Apprentice Barber Licensure Exam (NC ABLE). The initiative aimed to equip students with the knowledge and skills to pass state board examinations and achieve optimal career success. Four contributing factors were identified that negatively impacted licensure attainment and entry into the barbering profession: inadequate educational experience, challenges to taking the exam, lack of resources, and poor/antiquated examination practices. The improvement initiative addresses how barber students who attend Jerman's Institute of Barbering and Cosmetic Arts (JIBCA), a black, family-owned barber college, can overcome systemic barriers to entry into the barbering profession.

A learner-centered approach was implemented through a Comprehensive Curriculum and Competency-Based Instruction Model (CCC-BIM) paired with a Knowledge and Skills Acquisition (KASA) form to record students' progress across competencies. Evaluating this work through regularly scheduled formative assessments benchmarked students' performance after each competency, followed by summative evaluations at the end of the improvement initiative. Quantitative data on JIBCA students' ABLE scores were collected and analyzed to discover if this intervention results in the development of a model that: 1) informs JIBCA of effective barbering pedagogical practices that yield results, 2) increases the probability of JIBCA students passing licensure exams, and 3) ensures that JIBCA students acquire the necessary knowledge and skills to optimize their earning potential upon licensure.

Keywords: Comprehensive Curriculum Competency-Based Instruction Model (CCC-BIM), Knowledge and Skills Acquisition (KASA)

The Disquisition

It is essential to understand the difference between a disquisition and a traditional, research-based dissertation to conceptualize the impact of this improvement initiative. Historically, Executive Doctor of Education (EdD) programs had been designed for school leaders (practitioners), and Doctor of Philosophy (Ph.D.) programs were designed for aspiring professors and researchers. Despite the type of graduate each program was designed to train, both curricula and culminating experiences often require a traditional five-chapter research-based dissertation. Lomotey (n.d.) contends that scholar-practitioners should be able to address the issues they deal with daily in their workplaces. He further posits that most traditional EdD programs do not prepare school leaders to be practical problem solvers.

The disquisition is a capstone experience that focuses on addressing problems of practice experienced by school leaders. Hence, its name speaks to the apparent divergence from the conventional dissertation. The disquisition seeks to extend the boundaries of thinking beyond the traditional five-chapter research dissertation - focusing on problems of practice, appropriate interventions, and their assessments. In this disquisition, I will present:

1. an identified problem of practice in barbering education that impedes students' ability to pass licensure exams,
2. an intervention within the barbering curriculum at Jerman's Institute of Barbering and Cosmetic Arts (JIBCA) to prepare students to pass licensure exams, and
3. formative and summative assessments to ascertain the effectiveness of the intervention.

The Problem: Low Passing Rates on Barbering Apprentice Examinations

There is a low passing rate on barbering apprentice examinations in North Carolina. This is a problem because it negatively impacts licensure attainment and entry into the profession. For over five years, between July 2015 and December 2020, only 51.9% of aspiring barbers who have completed their education at a North Carolina-approved barber school have passed the written portion of the Apprentice Barber Licensure Examination (ABLE). Only 45.23% have passed the practical part (North Carolina Board of Barber Examiners, 2019). While many systemic inequities and other critical causes for low passing rates on licensure exams delay and prevent entry into the barbering profession, such as (a) challenges to take the exam, (b) pervasive poor/antiquate examination practices, and (c) the lack of resources – inadequate education practices impede students' competence, their ability to pass the licensure examination, and optimal career success.

The barbering profession began in the field of medicine with barber surgeons; they were responsible for bloodletting, tooth pulling, minor surgery, and the rendering of tonsorial services. While barbers no longer perform surgical procedures, it is pertinent that barbers are adept at many sanitation, health, and medical circumstances related to barbering practices. Today, barbers are mainly known for men's haircutting and shaving. For barber students, competence is compromised when inadequate education is received. Not only is their ability to pass licensure exams more difficult but their ability to earn optimal wages in the profession is also compromised once they are licensed.

Analyses of data from the 2000 United States Census and the state licensing requirements of barbers in the United States illustrate the effects on barbers' earnings. Data suggest that individuals who completed the combination of formal training in addition to an apprenticeship

earned nearly 22% higher wages (Timmons & Thornton, 2010). Relevant support for reimagining the educational practices in barber schools extends to data reported in this study that reflect the benefit of integrating an explicit, comprehensive curriculum with apprenticeships. Relative to education improvement, the evidence of required barber school hours and apprenticeships having no adverse effect on aspiring barbers entering the profession suggests that these factors will not present barriers to entry (Thornton & Weintraub, 1979). Informing pedagogical practices -- combining theoretical with practical instruction within a Comprehensive Curriculum and Competency-Based Instructional Model (CCC-BIM) will improve the acquisition of knowledge and skills mastery of barbers. The CCC-BIM is an explicit, comprehensive curriculum that targets barbering knowledge and skills that utilizes a competency-based approach to instruction and incorporates progress testing to assess students' proficiency levels. It requires a minimum standard of 80% to determine mastery of theoretical knowledge and practical skills. This intervention aims to translate to an increased prevalence of services rendered beyond haircuts and shaves while increasing earning potential.

Thornton & Timmons (2013) discovered that in the profession of massage therapy (MT), many states increased the required educational training hours to encompass an explicit curriculum and require the completion of ongoing continuing education to improve the professional and public standing of the MT profession. Their study revealed an increase in the wages of massage therapists by nine to 11% in states that increased their educational requirements. Improvements in academic requirements and professional ethics evidenced an increase in the earnings of massage therapists and access to medical insurance reimbursement for rendering MT services. They expanded their services into clinical and medical settings. These findings inform Jerman's Institute of Barbering and Cosmetic Arts (JIBCA) of the benefits of

improving educational standards beyond the employment of curriculum to include competency-based instruction to optimize mastery of knowledge and skills.

Current State of the Problem

The North Carolina Board of Barber Examiners (NCBBE) requires barber colleges to provide their students with 1,528 hours of training to graduate from barber school and take licensure exams to become professional barbers (North Carolina Board of Barber Examiners, 2017; North Carolina Board of Barber Examiners, n.d.a.; North Carolina Board of Barber Examiners, n.d.b.). The propensity of pedagogical practices exercised can be antiquated and present limitations to acquiring the knowledge needed for students to pass state board examinations for licensure and entry into the profession. Factors influenced by barbering education pedagogy contribute to 1) relatively low pass rates on state board exams in North Carolina, 2) perceived knowledge of barbers in the profession, and 3) mastery of knowledge and skills that limit professional practices upon graduation. These factors solidify the need for an improvement initiative to establish a framework committed to improvement in barbering pedagogy. Students must acquire the knowledge and skills to pass state board examinations and achieve optimal career success. In addition to systemic inequities, inadequate education practices significantly contribute to low passing rates on barbering apprentice examinations. This problem negatively impacts aspiring barbers' licensure attainment, entry into the profession, and career success.

Literature Review of the Problem

To fully grasp the purpose of this improvement initiative, it is essential to build a framework upon understanding distributed and participative leadership and how it informs this effort for reform. Wilkes & Reid (2019) declared that when striving for continuous

improvement, participative leadership, such as distributed leadership, is vital because the leadership is emergent and utilizes the strength within social networking and interaction to promote change. It also moves beyond the boundaries of traditional leadership. It involves a wide range of professional and experiential expertise of many who lend a broad perspective for consideration to champion improvement.

While it may be implied that participative and distributed leadership are dichotomous, they are very effective when married. McKenzie & Egea (2017) further extended the contribution and scope of distributed leadership – asserting that it requires a "whole-of-institution" approach that holds the best interest of students as the target for impact and encompasses support for them inside and outside of the curriculum. Additionally, it embraces collaboration and the combination of top-down, bottom-up, and middle-out leadership – recognizing the value of institutional success through the vital contributions made based on contextual expertise. Participative and emergent distributed leadership are altruistic – promoting organizational improvement over self-centered, structural-functional, and interpretivist interests.

It is important to conceptualize the need for reimagining barber education and testing. Systemic barriers in barber education persist, marginalizing many barber students' ability to pass licensure examinations and achieve optimal career success. These barriers include clock-hours-based educational requirements and the absence of tools utilized in barber schools to reflect student progress, proficiency, and mastery of theoretical knowledge and skills. Despite state board educational requirements that prioritize barber students' accrual of hours over competence, barber schools can implement improvement initiatives that dismantle these systemic educational barriers. In this literature review, I have provided research support for how barbering education can improve when attention is paid to these systemic educational barriers.

Employing Distributed Leadership and Improving Pedagogical Practices: The Benefits of Reflective Tools and Social Networking

Institutional improvements can be realized through distributed leadership practices that include strong internal and external support. Internally, educators and leaders are effective when operating in their areas of strength; it supports the institution's mission. Educational experiences are enriched when relationships are established with professionals external to the academy. External support provides opportunities for field experiences, professional shadowing, and apprenticeships for JIBCA students. An implementation that provides opportunities for reflection is instrumental in establishing criteria, dimensions, and values of distributed leadership that identify enabling features and barriers in institutional (i.e., JIBCA) or local contexts. Distributed leadership benchmarking tools that reflect the major tenets of engagement, enablement, enactment, evaluation, and emergence used in this study will benefit improvements in barbering education and assessment of acquired mastery of knowledge and skills. Fostering and cultivating trusting relationships with professionals of various levels of expertise promotes and enables success (McKenzie & Egea, 2017).

Education leaders should employ social networking for initiatives of instructional improvement. An academic department is more likely to be productive when it acknowledges the control it possesses over the design of courses, establishes a culture that values research-based teaching practices, rewards those instructors who employ change, and shares ideas amongst the faculty during daily discussions. Improving pedagogical practices in barbering instruction and training within the 1,528 hours requirement is paramount (Quardokus & Henderson, 2015). The pedagogical and collaborative practices employed at JIBCA and other NC barber schools should

align accordingly. The collection of data that reveals the benefits of this model on the passing of licensure examinations can serve as evidence-based pedagogy that yields improvement.

Utilization of Formative Assessments for Improvement

Progress testing is an innovative formative assessment practice proven to be successful in many educational programs (von Bergmann et al., 2018). Progress testing consists of giving exams to students at regularly scheduled intervals during a curriculum's progression. This type of formative assessment enables instructors and students to benchmark their increase in knowledge. Assessment practices in a competency-based educational model should be designed to reflect the curriculum's specific educational features. According to van der Vlugt & Schuwirth (2005), assessment is a programmatic task that needs to live within any education program. For competency-based educational programs, von Bergmann et al. (2018) assert that assessment system designs should reflect the philosophy and context of the academic program to prepare competent professionals. Informed by their work, I developed the CCC-BIM. I coupled it with a progress testing system to 1) help students assess their acquisition of knowledge and skills throughout their enrollment within the program and 2) inform JIBCA's faculty of areas within the curriculum where students perform well and areas of needed improvement.

von Bergmann et al. (2018) assessed the first two years of results of a progress testing system implemented in a Canadian dental school. As a formative evaluation process, this intervention of progress testing was the first of its kind in North American dental school. Likewise, this intervention was the first time JIBCA had employed this formative assessment method within its barbering training. Students in von Bergmann's (2018) study were permitted three hours to take tests consisting of 200 multiple-choice questions that assessed the cognitive knowledge base expected of a competent dentist by completing the program. Each administration

occurred at the beginning of a semester. Students were provided individualized reports comparing their performance with their class median in each domain. The faculty received the aggregated results from each administration. Analysis revealed that progress was exhibited across all domains in the first two administrations. Progress was evident when compared across the four administrations completed in this study.

Utilization of a Knowledge and Skills Acquisition (KASA) Form

Knowledge and Skills Acquisition (KASA) forms are utilized in speech-language pathology programs to summarize students' acquisition of knowledge and skills delineated in the Standards for the Certificate of Clinical Competence (SCCC). Effective utilization of this tool consists of entries made upon acquisition of the knowledge or skill of each competency within the curriculum. The KASA is not an evaluation. It is a record of knowledge or skills acquired by students (See Knowledge and skills acquisition (KASA) summary form for certification in speech-language pathology, February 2009). An adaptation of this tool for barbering provides an effective way to record and reflect on each student's acquisition of all theoretical and practical skills acquired at JIBCA.

Fostering a Professional Community to Support the Implementation of Instructional Innovations

Barbering education in the United States requires that students complete training hours; however, the training rendered differs and is reflected in state board examinations. Coburn & Russell (2017) revealed the effectiveness of fostering a professional community to realize reform initiatives. Their study showed how district policies influence teachers' social networks in eight elementary schools for improved mathematics curriculums.

Support systems provide opportunities for policy interventions, instructional innovations, and how teachers are afforded opportunities to learn from one another. The role of policy is critical in configuring district reform strategies that include the implementation of curricula. JIBCA benefits from making instructional innovations by implementing a Comprehensive Curriculum and Competency-Based Instructional Model (CCC-BIM) to optimize the acquisition of knowledge and skills mastery of its students. When used conjunctively with the CCC-BIM, the KASA form will reflect students' proficiency levels in each competency area. Social networks build trust that can evoke policy changes and improve education through comprehensive curricula. Additionally, with data to support the need for change, social capital and social networks can contribute to fostering trusting relations in the best interest of students. This type of relationship is needed to garner optimal education and examination policies in North Carolina.

Clock Hours vs. Competency-Based Instruction

A significant problem impacts professions whose educational requirements encompass clock-hours-based instruction -- including the discrepancy in the hours required for entry into the profession. Thornton and Weintraub (1979) reported that the average minimum requirement for the United States to complete barber school was 1,460 hours – approximately nine months of study. Hours-requirements across states vary tremendously. New York is a state that allows barber schools to develop their curriculum and hours requirements; the average across schools in the state is 288 hours (Barber License, n.d.). On the other end of the spectrum is Iowa – requiring a minimum of 2,100 hours of education before taking licensure examinations. With such variance in hours requirements, a few questions warrant addressing:

1. How many hours are necessary to prepare students to pass the licensure examination?

2. How much education is needed for students to acquire sufficient professional barbering knowledge and skills competence?

Similar to the varying discrepancy in hours requirement for barbering education is the disparity in the criteria in massage therapy education. Massage therapy entry-level requirements vary from 500 clock hours to over 3,000 hours in some states across the United States (Lowe, 2013). Nationally, the range in educational hours requirements suggests discrepancies in opinions about the time needed in curricula for students to be prepared to enter a profession.

The effectiveness of clock-hours education on students' ability to pass licensure examinations is concerning. Lowe (2013) reports that some massage therapy programs have begun using competency models. However, there needs to be a broad implementation of competency-based education (CBE). According to Lowe, an effort is underway in the United States with the Entry-Level Analysis Project (ELAP). This project aims to establish a foundation for greater adoption of competency-based education (CBE) in massage therapy education – suggesting that professions such as barbering may need a shift in education requirements from clock-hours-based education (CHBE) to competency-based education (CBE).

The distinction between CHBE and CBE is time. Lowe suggests that clock-hour instruction wastes time instead of achieving specific educational goals. Snell and Frank (2010) refer to this model as the tea bag model used in medical education that emphasizes students' time on a particular subject matter. Snell and Frank's primary concern in supporting the need for competency-based medical education (CBME) was to ensure that graduates were competent.

Snell & Frank (2010) discovered in their systematic review of literature related to CBE that 1) it focuses more on the achievement of predefined outcomes and competencies of knowledge and skills regardless of how the student gets there, and 2) it is more learner-centered

with decreased emphasis placed on time. Training time is viewed as an instructional resource rather than as the structural framework of curricula.

Systemic Barriers that Marginalize Barber Students through Educational Requirements and Testing Practices

The need for reimagining barber education and testing is validated by the areas needing improvement. When the standard educational requirements for adequate education are limited to clock-hour instruction versus competence, it is a barrier to barber students' knowledge and skills. When competence is compromised, the propensity for many to demonstrate sub-standard performance on licensure exams is inevitable. This educational barrier also has the potential to affect professional practice. CHE can create a more significant problem than it is designed to prevent or solve. While CHE intends to serve as a guide for adequate time for foundational preparation, it marginalizes students' educational achievement and professional success.

When state board regulations require barber schools to allocate hours to subject areas, it does not reflect whether students have demonstrated competence. It serves as a time log – not a reflective tool of student performance and competence. Individuals learn various information and skills at different rates and levels of proficiency. While one student may learn a concept in 10 hours, another student may need 15. Practices that subscribe to time are culprits to students' lack of preparation to pass licensure exams. It does not ensure the knowledge and skills for aspiring barbers' implementation in professional practice.

State board requirements and expectations for barber schools to render CHE and utilize content area time logs serve as systemic barriers and undermine the essence of equitable education. These practices are antiquated and inequitable. As barriers to competence and entry into the profession, these practices are systemically marginalizing for many barber students.

Informed by the literature, barber schools may benefit from implementing competency-based instruction, progress testing, and reflective benchmarking tools within the required hours mandated by the state board of barbering. These programmatic implementations are responsive actions that shift the power dynamic to improve institutional curricula, dismantling systemic barriers within their locus of control that pervasively marginalize student outcomes.

Systemic barriers that further marginalize aspiring barbers extend to challenges to take licensure exams, lack of resources, and antiquated examination practices. The lack of testing sites and examination availability is concerning. These barriers contribute to inequities for students. The NCBBE has expanded the offering of the NC ABE from one location in Raleigh, North Carolina, to two: Greensboro and Fayetteville. While the expansion is good because it provides an additional site, inequitable commutes remain problematic, and the examination's availability has not increased. For many students, the commute has increased. This is the case for JIBCA students.

The NC ABE is proctored by NCBBE inspectors who can only be in one place at a time. Therefore, the exam availability and the number of students who can be tested each time it is offered have been considerably reduced. This barrier to the examination has further complicated testing because barber schools are smaller than the original testing site in Raleigh, which accommodated more examinees. When I took the NC ABE, two groups of examinees were tested simultaneously. Approximately 20 examinees took the practical ABE, while the other group of 20 took the written ABE. The groups were swapped after each ABE. That provision accommodated approximately 40 students during the allotted testing time window. At the time of this research study, all the examinees took the written ABE at once, and then they each took the practical ABE. From my observation, the NC ABE change has not improved

examination access and availability. Fewer aspiring barbers may likely be tested, and the availability has been reduced despite access to an additional testing site. The part of the testing that has not changed is the assessment requirement – the need for a written and practical ABE.

My concern is that these problematic issues that I have mentioned are systemic barriers to student education and testing -- ultimately, students' professional entry into barbering.

Improvement science suggests that changes do not guarantee improvements. Improvements are made when the changes are informed by proven results at a smaller scale and then expanded for a more significant impact. To the NCBBE's credit, their change ideas and implementations have been made at a smaller scale, aligning with an improvement initiative. However, systemic barriers remain. Systemic barriers persist because the education and testing policies have not been fashioned for optimal student equity.

Within JIBCA's locus of control, the educational experience is where the most significant impact can be made for its students' benefit. Considering these inequitable barriers, a theoretical framework is necessary to conceptualize why these systemic barriers persist and inform JIBCA of how it can navigate and dismantle them for student equity and better outcomes under the current circumstances. As institutions and the NCBBE improve, each can collaboratively inform the other toward more significant, more equitable improvements for students, schools, and the NCBBE.

Theoretical Framework: Critical Theory Epistemology Discussion

Critical theory provides a lens to conceptualize how JIBCA's students can gain power and emancipation from systemic barriers to entry into the barbering profession. Critical theory epistemology suggests the need for barbering pedagogy to veer from the status quo and charter a new path toward improvement and greater student success. This theory uproots structural-functional and interpretivist epistemologies as the foundation of knowledge for leadership, change, and decision-making (Capper, 2019). From a critical view, the education practices employed in barbering pedagogy must align with facts and values of equity and social justice as a goal to be achieved. Emphasis must be placed on identifying how students have been systemically oppressed and marginalized by current structural-functional practices. Moreover, intentional disruption of inequitable systems must be achieved.

Critiquing education's perpetuation and disruption of power is vital to this improvement initiative (Capper, 2019). JIBCA has identified the need to critique barbering education's perpetuation and distribution of power. Educational leadership must critique historical outcomes: NC ABLE results, requirements, and professional practices. A thorough critical analysis of these areas informs JIBCA of how some barber students in North Carolina can access favorable resources. In contrast, while some students acquire knowledge and skills mastery, others do not. While some students pass licensure examinations, some do not. While specific influences prevail, others do not (Capper, 2019).

JIBCA's leadership must actively engage in meaningful and impactful communication. Capper (2019) asserts that leadership encompasses communication with others' situations. Therefore, JIBCA must discuss barriers that impede barber students' ability to pass licensure exams. It is also essential for leaders to intentionally extend those conversations into strategic

planning for innovations that help students pass their licensure exams and achieve optimal career success. The focus must be on power relationships and how marginalization and oppression can be dismantled. Through a critical lens, social justice leadership acknowledges and prioritizes shifting the power dynamic. This dynamic is vital because it yields an informed and concerted effort to ensure equity for JIBCA's students.

Social Justice Significance

Social justice and equity are paramount to the foundational thrust of educational institutions' practices. Privileged majoritarian stakeholders uphold the status quo in many structural functional organizations. They perpetuate systemic oppression and the marginalization of minorities (e.g., African Americans).

Unfortunately, the barbering industry is fairly segregated. African American clients frequent African American barbershops more commonly, White clients frequent White barbershops more often than others, and individuals of other ethnicities follow the same trend. Moreover, students experience these realities during their barber school matriculation. Therefore, their practical service opportunities and experiences are typically limited to this socio-ethnic construct. This dynamic is hard for barber schools and students to control. While all barber students need to be competent and skilled at performing various types of haircuts and barbering services, it is inequitable for examinees to be required to perform a haircut of the majoritarian preference. Specific to African Americans, the NC ABLE has marginalized many as the practical portion has required them to perform a haircut that does not translate to practice for them. In other words, African Americans are required to perform a haircut during the examination portion that they have had fewer opportunities to practice during their matriculation. Most will only perform minimally in practice, at best.

Additionally, the required examination haircut is one that very few older men wear. As African American men age, they frequent barbershops less, and their haircut decisions change due to hair loss. When African American students were required to perform the haircut on a live model, it was difficult to solicit qualified or willingly participating models. Therefore, the haircut portion of the practical ABLE becomes oppressive and hinders many African American examinees from attaining licensure.

Opportunities should be equally beneficial, equitable, and just. The goal to operate justly and equitably should never waiver. JIBCA's leaders are accountable for employing critically conscious practices to ensure equitable and just operation. Leaders must use their professional authority and power to take strategic actions to achieve better and more consistent student opportunities and outcomes (Mehta, 2014). JIBCA students benefit from administrative staff and faculty who share many of their same experiences and identity backgrounds. This reality grounds JIBCA's work in equitable and just provisions for its students via resources and training to achieve their educational and professional goals.

Just and equitable practices are rooted in: (a) recognizing the needs of those who are disenfranchised and marginalized, (b) identifying opportunities for improvement, and (c) providing a bridge of access to resources that support them with experiencing the world under better circumstances. Educational leaders must positively impact institutions to recognize, identify, and provide access to resources to help the students they serve. JIBCA subscribes to this ideology and strives to continue to improve as an institution of higher education and as a conduit for social justice and equity.

Critical Race Work in Higher Education

Critical race work in higher education calls for a commitment to social justice and dismantling racism, marginalization, and other forms of oppression. hooks (1994) posited that inclusive and engaged pedagogy is a practice of freedom. Moreover, an aspect of our vocation as educators and leaders is sacred and spiritual. It is a calling that can liberate instructors and students – helping them realize and enact human identities more fully. Humanization is an individual and collective effort toward critical consciousness and reflection that prompts actions to challenge inequitable structures.

My calling in higher education is not merely to provide educational access to aspiring barbers but to share in their intellectual and spiritual growth. hooks (1994) asserts that education should be provided in a manner that respects and cares for the souls of the students we serve. Providing conditions where learning can begin most profoundly and intimately is essential. Nurturing positive relationships with students from marginalized communities is vital to their education. Understanding how social identities (e.g., race, ethnicity, social class, gender, sexuality, and schooling background) inform teaching is essential (Carter Andrews & Castillo, 2016). Individuals from various genders, backgrounds, experiences, and identities seek barbering as a professional career. For many, the profession is their first career; others may pursue barbering for a career change or alternative.

Moreover, barbering satisfies a universal necessity in the service industry marketplace that is an attractive profession to individuals of all ethnicities, social classes, and schooling backgrounds. Therefore, effective teaching respects and values the diverse social capital students bring to the learning experience. The profession elevates when students' experiences inform

teaching, leading to advancement in professional practice (e.g., multicultural issues, business, and hairstyling preferences).

Education as a practice of freedom leads to self-actualization: for JIBCA's faculty, administration, and students. The individual and collective fulfillment of the institution's commitment to the needs of the whole JIBCA student will aid in their attainment of quality education, professional advancement, and upward socioeconomic mobility -- despite oppressive systems designed to marginalize them.

The Local Context: A Historical Review of the Problem

JIBCA is a Black, family-owned, private higher education institution that provides barbering training to equip students for licensure and career readiness as professional barbers. My father, Dr. George Marshall Jerman, Sr., founded the institution on October 1, 2019, and the NCBBE licensed it on November 7, 2019. The institution is one of approximately 45 North Carolina schools licensed to provide barbering education and training (North Carolina Board of Barber Examiners, n.d.c.). JIBCA is in the early stages of existence and has a current enrollment of six students. My father and I serve as JIBCA's barber instructors and administrators. I am also responsible for the institution's academic affairs, recruitment and admissions, financial aid program, and community engagement. JIBCA was founded to increase access to higher education in Northampton County. Additionally, JIBCA has been driven to optimize the education experiences of barber students based on a history of poor passing rates on licensure examinations.

North Carolina Board of Barber Examiners (NCBBE)

Table 1 depicts the five-year summary of the rate students pass and fail the apprentice written and practical examinations in North Carolina. Between July 2015 and December 2020,

an average of 51.9% of students passed the written test only, while 27.42% failed. Twenty point sixty-eight percent (20.68%) of students who registered to take the written examination did not appear. During this same period, an average of 45.23% of students passed the practical test, while 8.54% failed. Twenty-one point twenty-five percent (21.25%) did not appear: 13.78% of students still needed a model to take the exam, and 10.23% whose models were rejected by the inspectors on the examination day (North Carolina Board of Barber Examiners, 2019).

Point ninety-six percent (.96%) did not pass due to improper dress, and one point eighty-one percent (1.81%) did not attempt the practical examination. Forty-six point twenty-two percent (46.22%) of students could not take the exam (North Carolina Board of Barber Examiners, 2019). Critical of the data, these students also collectively represent a slightly higher percentage than those who passed. Less than 50% of the applicants pass the practice exam.

Table 1*Five-Year Apprentice Examination Summary*

Apprentice Written Exam 5 Year Summary														
	July 2015 - June 2016		July 2016 - June 2017		July 2017 - June 2018		July 2018 - June 2019		July 2019 - December 2019		20 20		5 Year Summary	
Result	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Total Count	Mean
Pass	365	54.23%	190	52.05%	353	57.31%	361	55.97%	162	52.60%	166	39.24%	1597	51.90%
Did not appear	113	16.79%	65	17.81%	133	21.59%	150	23.26%	80	25.97%	79	18.68%	620	20.68%
Fail	195	28.97%	110	30.14%	130	21.10%	134	20.78%	66	21.43%	178	42.08%	813	27.42%
Total	673		365		616		645		308		423		3030	

Apprentice Practical Exam 5 Year Summary														
	July 2015 - June 2016		July 2016 - June 2017		July 2017 - June 2018		July 2018 - June 2019		July 2019 - December 2019		20 20		5 Year Summary	
Result	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Total Count	Mean
Pass	342	51.51%	182	43.54%	322	42.93%	333	43.36%	147	39.84%	249	50.20%	1575	45.23%
Did not appear	128	19.28%	86	20.57%	160	21.33%	180	23.44%	92	24.93%	89	17.94%	735	21.25%
No Model	115	17.32%	61	14.59%	104	13.87%	102	13.28%	61	16.53%	35	7.06%	478	13.78%
Model Rejected	43	6.48%	45	10.77%	93	12.40%	100	13.02%	37	10.03%	43	8.67%	361	10.23%
Fail	36	5.42%	33	7.89%	66	8.80%	47	6.12%	32	8.67%	71	14.31%	285	8.54%
Improper Dress	-	-	6	1.44%	5	0.67%	6	0.78%	-	-	-	-	17	0.96%
Did Not Take											9	1.81%	9	1.81%
Total	664		418		750		768		369		496		3465	

Note. See North Carolina Board of Barber Examiners, 2019. Board meetings.

Between July 2015 and 2020, the North Carolina Board of Barber Examiners (NCBBE) only offered the examination at its Raleigh office in Central North Carolina. Two significant concerns influence students not appearing for the examination: travel distance and the lack of preparation to pass the exam. An analysis of the data suggests that if 27.42% of the students who did not appear (620 students) failed the exam, a combined 790 students would have likely failed, and the remaining 72.58% of those students would have passed (an additional 450 students). This would have increased the total number of passing students to 2,047 (67.55%) – a 15.65% difference.

Potential factors that negatively impacted students who did not appear are likely consistent with the assumption that travel distance is unreasonable and that students needed to be more skilled to pass. Other considerations include the difficulty of finding a model or the lack of model commitment. Model rejection is also problematic. The hair length required presents a dilemma due to men's styling preferences. Garnering support from men to grow and maintain two inches of hair is difficult. It is even more problematic to get someone with long hair to allow students to cut off their hair and shave their faces with a razor. If the barriers mentioned earlier did not exist, approximately 3,169 students (91.46%) would have passed.

Jerman's Institute of Barbering and Cosmetic Arts (JIBCA)

Located in Jackson, North Carolina, the county seat of rural Northampton County, JIBCA is the first institution of higher education in the county's history. Bordering Northampton County, the nearest higher education institutions are Halifax Community College, located in Weldon, North Carolina (Halifax County), and Chowan University in Murfreesboro, North Carolina (Hertford County). The institution's founding was an intentional initiative to advance access to higher education for residents of Northampton County and surrounding areas. North Carolina

Department of Commerce Labor and Economics Analysis (NCDOCLEA) (2020) reports that the 2018 estimated population of Northampton County was 20,186, a decrease according to the 2010 census total population of 22,099 (-1,913 residents), an 8.656% decline in eight years (1.08% annually). Eighty-nine point four percent of the county is rural, with an urban percentage of 10.6%. As of 2018, the Northampton County population's estimated median age was 49. The county has 4,126 residents between birth to 19 years of age (20.4%), and residents 65 years of age and up, total: 4,901 (24.3%). Data suggest that residents move from the area upon graduating high school or community college to seek employment or better opportunities. Most of the county's residents are lifelong residents or have returned upon retirement.

Forty-four point one percent (3,086) of the county's residents work in the state but find employment outside the county, and 13.1% (917) of residents work outside the state. Due to the proximity of Northampton County to Virginia, many of the residents who work outside of the state likely find employment in the neighboring state, just 27 miles north of JIBCA in Jackson, North Carolina. With only 42.9% (3,002) of Northampton County residents employed in the county, residents find gainful employment options elsewhere (NCDOCLEA, 2020). The data indicate the need for jobs and businesses in the county of Northampton.

The lack of access to education beyond high school contributes to the disparity in attaining a minimum of a bachelor's degree. Only 19.8% of residents take the Scholastic Assessment Test (SAT), contributing to only 12.8% (1,925) attainment of at least a bachelor's degree, while 79.5% complete high school (NCDOCLEA, 2020, p.1). Data suggest that many residents do not find a bachelor's degree beneficial to attaining local employment. The deficiency of financial resources also makes college affordability difficult for many residents.

The estimated median household income is \$37,233. Workers' estimated median earnings are \$26,410, resulting in a per capita income of \$34,185, with 21.4% (4,043 residents) of the population impoverished. Even more devastating is the rate of unemployment. The unemployment rate has increased from five percent (406 residents) in 2019 to seven percent (546) as of November 2020. (NCDOCLEA, 2020, p.1). Two percent (414) of residents are self-employed. This statistic suggests that residents need more education, knowledge, or skills to start and operate successful and profitable businesses.

Considering the demographics and statistics of Northampton County, JIBCA's goal is to equip students with quality education, the knowledge, and the necessary skills to combat the disparities that persist. JIBCA's students are Northampton County and Halifax County natives and residents who can significantly impact local and surrounding changes. The faculty and staff, including the students of JIBCA, are African Americans. As natives of the Roanoke Valley, the faculty and staff relate with the students in various ways - including socioeconomic status, race, and class realities.

My Professional Role and Positionality at JIBCA

My positionality as a Black, Northampton County native, scholar-practitioner, facilitator, and leader of this improvement initiative comes with great responsibility. My positionality empathizes with the needs of JIBCA students and the community we serve. I understand the needs of our students, the barriers they encounter, and the disparities of Northampton County that call for more entrepreneurial and employment opportunities, educational enhancement, and economic improvement. My position holds me responsible for employing an initiative that will enhance the learning experiences of JIBCA students through effective pedagogy, preparing them

to acquire knowledge and skills mastery of theory and practice necessary for optimal career readiness and success.

The problem I seek to address affects people I relate to; therefore, critical race theory provides a lens for viewing the challenging daily realities that Blacks from disparaging communities live with. I resonate with Blackness. I resonate with growing up in a community where educational and economic opportunities are limited. I also resonate with becoming successful despite the limited resources and opportunities present where I was raised.

I was fortunate to have educated parents who moved back to Northampton County after their collegiate matriculation and built successful businesses because jobs were few. They were resourceful and extended opportunities to others through employment and housing. Now, my family's mission is to provide access to higher education. As a result, JIBCA is the first institution of higher education in Northampton County. Through my parents' example, I understand the importance of individuals using their resources to impact others in need – significantly when their influence can positively impact those whose positionalities intersect with theirs.

My interest in executing an improvement initiative in barbering pedagogy stems from my educational experience as a barber student, licensed barber, instructor, barber school founder/owner, and speech-language pathologist informed by my enrollment in graduate school. These experiences have ignited my zeal to improve the educational and vocational outcomes for JIBCA students. I also desire to lead this institute in a manner that serves as the model for barbering pedagogy in North Carolina, nationally, and internationally. While making changes for improvement at JIBCA with global impact is a goal, I want to improve Northampton County. I

genuinely believe that JIBCA has the propensity to positively impact the socioeconomic statuses of many Northampton natives and residents through education.

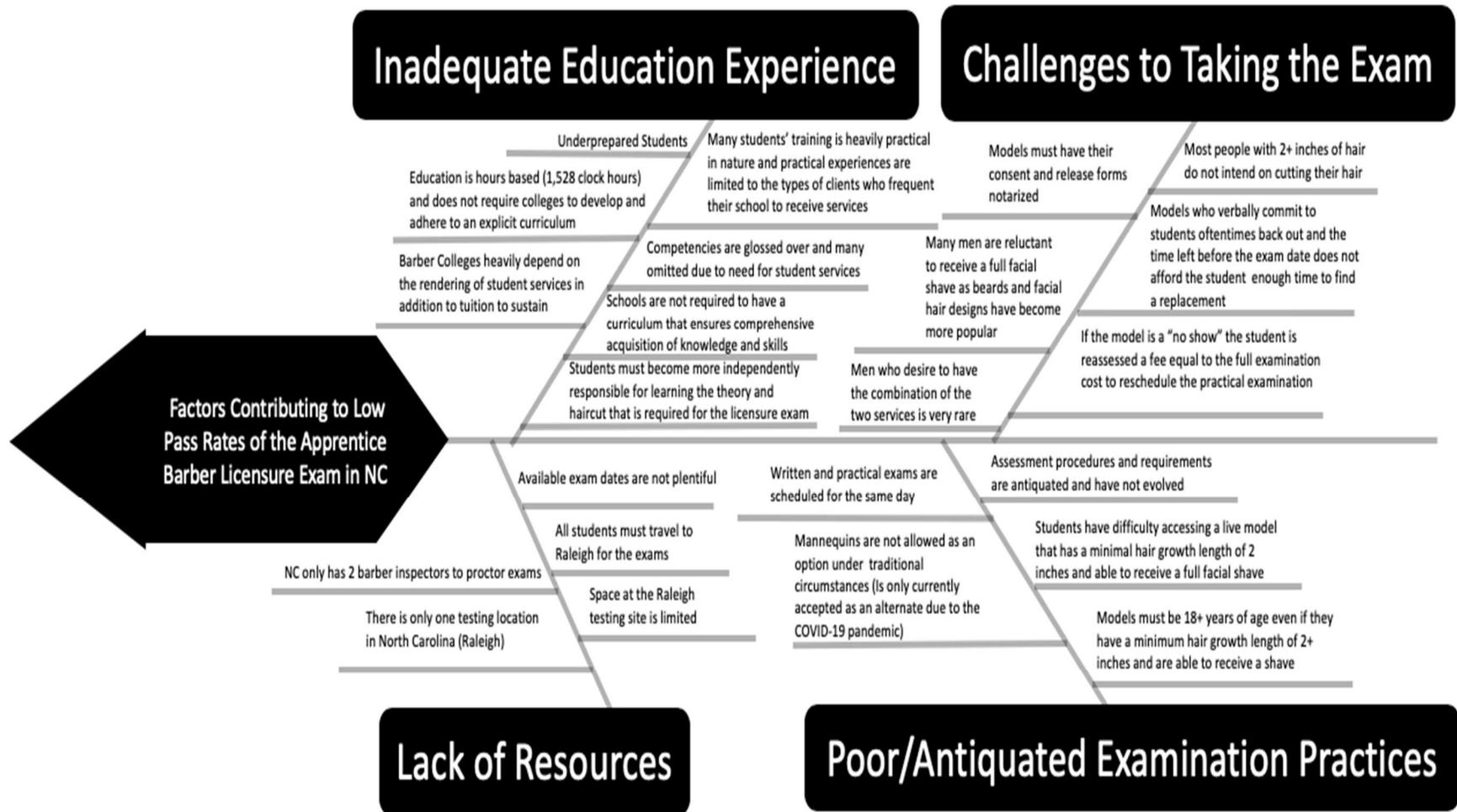
My experience as a barber student included two types of pedagogical models. I witnessed the shortcomings in my experiences during my matriculation at a private barber school that subscribed to pedagogy that prioritized the provision of clock hours over competency-based education. I had a better barbering educational experience at Edgecombe Community College (ECC), which prioritized curriculum instruction. While the pedagogy employed at ECC was a better learning experience, weaknesses in pedagogy were apparent in that all barbering competencies needed to be targeted, and the mastery of the knowledge and skills was optional. Therefore, I bring my personal, professional, and educational experiences as social capital to improve the educational experiences of the students we serve at JIBCA.

A Causal Analysis: Factors Contributing to Low Pass Rates of the North Carolina Apprentice Barber Licensure Exam (NC ABLE)

In this section, I provide a causal analysis of the identified problem, starting with a description of causal analysis as an improvement tool followed by a figure that depicts four primary causes and supporting extant literature. Figure 1 illustrates factors contributing to low passing rates on the ABLE via a causal analysis map. The comprehensive licensure exam consists of two parts: a written and a practical exam. Four main categories contribute to low pass rates. These categories include 1) inadequate education experiences, 2) challenges to taking the exam, 3) students' lack of resources, and 4) poor, antiquated examination practices. The area I addressed in this intervention is *Inadequate Education Experience*.

Figure 1

Root Cause Analysis of Contributions to Low Passing Rates on the NC ABLE



Note. The figure depicts four areas that contribute to low pass rates of the NC Apprentice Barber Licensure Exam (NC ABLE)

Challenges to Taking the Exam

Individuals taking ABLEs face many challenges. The practical portion of the licensure exam is an area under constant review for alteration. Before the COVID-19 pandemic, students were required to bring a model with greater than or equal to two inches of hair and a beard to perform a tapered haircut and a shave. The challenge is presented in African Americans' difficulty finding a model who meets this requirement and intends to cut his hair and receive a shave.

The styling preference of many African American men who wear their hair longer than two inches does not include haircutting as a significant option. They prefer hairstyles such as braids, dreadlocks, and twists. None of these hairstyles require haircutting beyond a perimeter outline. Therefore, garnering the support of men to support African American barber students to take this portion of the exam is highly challenging. Beards are another popular facial hairstyling trend for many African American men.

Additionally, razor shaving places these men at risk for experiencing painful hair bumps. Many African American men have a coarse hair texture and curly hair growth pattern that places them at risk for pseudofolliculitis, a persistent skin irritation resulting from close shaving with a razor. Therefore, a model who supportively accompanies a barber student could potentially be at risk for additional treatment needs to correct the associated dermatological anomaly. This requirement is racially and ethnically biased. It presents inequitable challenges for African American students to take this exam portion. These inequitable challenges may reappear as the current acceptance of a mannequin is only temporary.

The NCBBE has considered the elimination of the use of mannequins once the COVID-19 precautions are fully lifted. Currently, examinees are required to use mannequins. While this

change reduces the challenge for students to perform on a live model, the costs associated with training on mannequins during their matriculation increase. Moreover, suppose a student does not pass the practical examination on the first attempt. In that case, the cost continues to increase due to the student's need to purchase more mannequins for training and reserve one to retake the practical examination.

This improvement initiative also prepared for if students were required or allowed to use live models for the practical ABE. If students were required to use live models for the practical portion of the apprentice barber exam in the future, JIBCA planned to aid students in overcoming this challenge. JIBCA students provide services to the public during their training. In preparation for students being required to use live models, our instructors identified JIBCA clients who meet the NCBBE's hair length and facial hair requirements for practical exam models to accompany JIBCA students during their licensure exams. Proactively helping to identify models, our instructors solicited potential volunteers' support for JIBCA's students during their licensure exams. As a gesture of appreciation for their support, my team planned to provide free services at the institute for our volunteers until students took and passed their practical exams. My team anticipated that students would potentially benefit from establishing familiarity and comfort with volunteer models – increasing students' propensity to pass the practical exam. I recommended providing transportation and accommodations such as food and drinks for models on the exam day to appreciate their commitment to our students' development and licensure attainment if models became required or permitted during the initiative, or if it assisted students with better performances. By providing access to these resources, JIBCA hoped to dismantle the barrier of students' lack of access to appropriate models to take apprentice practical exams.

Lack of Resources

A crucial factor is a need for more testing sites for individuals taking the written and practical licensure exams. The NCBBE has embarked upon an improvement initiative to provide access to more testing locations by soliciting the support of NC barber schools to host the examinations. Currently, two locations are available for testing: Winston Salem Barber School (Greensboro, NC campus) and One Stop Barber Academy (Fayetteville, NC). While this initiative to provide access to the exam and reduce the number of testers in one location will aid in reducing COVID-19 transmission, a significant disparity in access remains. The travel distance for students to take the exams remains inequitable for many.

My team planned to provide transportation for students and volunteer models to the assigned examination location. This provision was designed to afford students: (a) timely arrival to the apprentice barber exam with their tools and qualified models – prepared to take the written and practical exams on the same day; (b) time to rest and eat while in transit; and (c) opportunities to ask questions of the instructors and review test content with classmates. Providing students access to transportation was an act of equitable educational practice to combat the barrier of limited testing sites that demands inequitable commutes for students to take licensure exams.

Poor/Antiquated Examination Practices

The inequities in resources depict the antiquated examination practice that the NCBBE has employed. Antiquated practices, such as requiring each student to take a model to the NCBBE to perform a haircut and a shave for the practical portion of the examination, have not changed since its installation until the COVID-19 pandemic. Male models, >/ 18 years of age were required, limiting examinees' access to available models. To the credit of NCBBE, the idea

of using a mannequin was initiated. However, while support for this provision existed, many barber instructors opposed the idea.

Inadequate Education Experience

Challenges within the education experience present barriers to students acquiring the knowledge and skills necessary to pass licensure exams. Students are more likely to be unprepared when educational requirements are hours-based. The most significant challenge is ensuring that the instructional environment is conducive to students achieving predetermined outcomes instead of attending school to accrue the 1,528-hour requirement to complete barber school and take the apprentice examination for licensure. Many barber schools that are privately owned may resort to their students providing services to the public to remain profitable. As a result, the education experience can be heavily practical and restricted to the type of clientele that frequents the school – increasing the prevalence of potential gaps in practical knowledge and skills acquisition. Additionally, instructional time may be compromised, jeopardizing students' acquisition of theoretical concepts assessed on the written portion of the ABLE.

The primary focus for this improvement initiative centered on inadequate educational experiences because it is an area within JIBCA's locus of control. I asserted that addressing this area would reduce marginalization because students would be provided access to an educational experience that aided in the optimal acquisition of knowledge and skills mastery via implementing a CCC-BIM. Students were prepared to pass ABLEs without delay of entry into the barbering profession, and they were equipped to maximize their earning potential.

An Improvement Initiative for Jerman's Institute of Barbering and Cosmetic Arts

In this section, I introduce an improvement initiative targeted toward improving the educational experience of JIBCA students. This improvement initiative is in response to the data

that depict low passing rates on the NC ABLE. This initiative is a proactive effort to equip JIBCA students with the knowledge and skills necessary to pass their licensure exams.

Theory of Improvement & Methodology

Improvement science is an emergent field that grew to bear organizational improvement processes from two significant industries: business and healthcare. Like business and healthcare, improvement science in the educational realm is a philosophy that utilizes well-defined measures to evaluate efficacy in improvement initiatives in schools and other educational organizations. Many ubiquitous frameworks in improvement science employ process and system mapping tools, including driver diagrams and Plan, Do, Study, Act (PDSA) cycles (Crow et al., 2019).

Intricate to this improvement initiative, driver diagrams were used to map: 1) an ultimate aim, 2) primary and secondary drivers for improvement, and 3) change ideas to improve JIBCA students' knowledge and skills mastery to pass the NC ABLE on the first attempt. PDSA cycles provided a process for executing the improvement methodology mapped in the driver diagram. By developing a PLAN of execution and DOing what was planned, my team could STUDY the outcomes early and often during the initiative, and ACT in response to data generated, collected, and analyzed.

My theory of improvement holds that if we employ a competency-based instruction model (CCC-BIM) that aligns with the state's licensure exam, we may see students pass the ABLEs and attain career success. Three main areas were targeted to drive an improvement in the acquisition of knowledge and skills mastery needed for the career success of JIBCA students in this initiative. These three areas consisted of developing and implementing the use of a CCC-BIM in conjunction with a KASA form to support: 1) the passing of state board examinations for licensure, 2) students' demonstration of mastery level of theoretical knowledge that will be

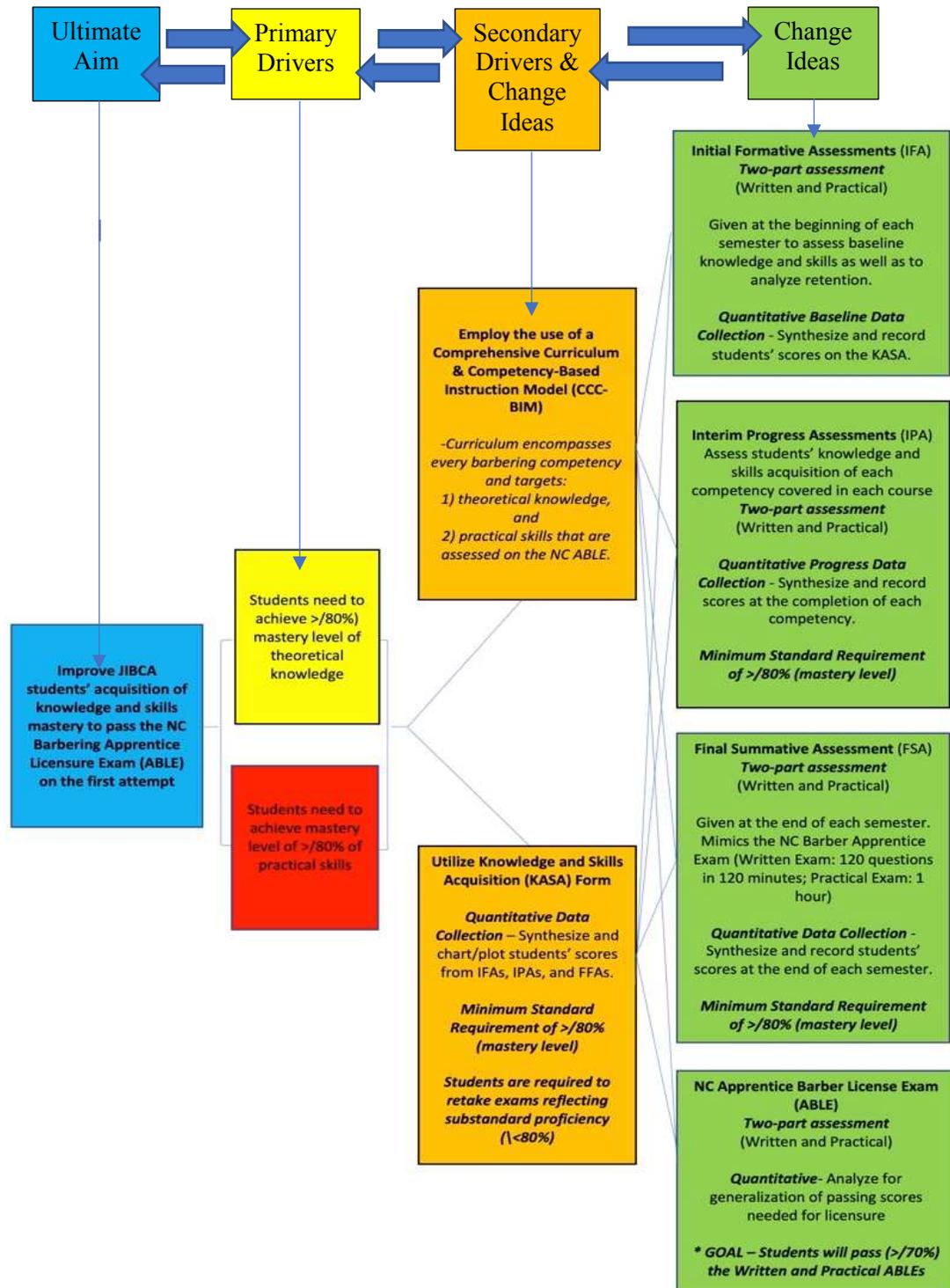
assessed on the Apprentice Written Examination, and 3) achievement of mastery level practical skills that will be assessed on the Apprentice Practical Examination. I theorized that improvements in these areas would contribute to optimal career success in the barbering profession.

Figure 2 depicts an aim for JIBCA students to pass the NC ABLE and a plan with change ideas to drive the improvement initiative. The two primary drivers of the initiative target improving students' mastery of theoretical and practical knowledge and skills. Secondary drivers for improvement include (a) implementing the CCC-BIM, an explicit curriculum that targets all the barbering competencies assessed on the NC ABLE, and (b) utilizing a KASA form to record students' performances on competency exams within the CCC-BIM.

It is essential to understand that this intervention's formative and summative evaluations are vital features of this improvement initiative. They are companions to the CCC-BIM and the KASA form and are instrumental in assessing the effectiveness of the initiative's ability to accomplish the aim. The Initial Formative Assessment (IFA) is a baseline assessment of students' barbering knowledge and practical skills. Benchmark assessments (Interim Progress Assessments) accompany each competency within the CCC-BIM and serve as tools to reflect students' mastery of barbering knowledge and skills. The Final Summative Assessment (FSA) serves as an evaluation of students' cumulative retention of the training and a predictor of students' potential to pass the NC ABLE. The final component of the driver calls for students to take the NC ABLE. Quantitative data collection is vital to determining the success of the improvement initiative.

Figure 2

Addressing the Aim: Driving Toward Improvement



Note. This driver diagram provides a schematic of the improvement aim, drivers, and change ideas.

The Improvement Initiative's Ultimate Aim

This improvement initiative's desired aim was to provide an educational experience that adhered to the needs of JIBCA's advanced students to pass the NC ABLE without delayed entry into the profession. Within the CCC-BIM, I designated four student classifications: beginners, advanced beginners, intermediate, and advanced. The classifications were created to differentiate students based on their accrued hours. Understanding that students do not just accrue hours within the CCC-BIM is essential. They take foundational courses at the start of their barber school matriculation, then progress to those that teach more advanced knowledge and skills.

Beginner students are individuals who have accrued < 390 hours. Individuals who accrued between 391 to 780 hours are classified as *advanced beginner students*. Students who have accumulated between 781 and 1,170 hours are classified as *intermediate*, and *advanced students* have earned more than 1,171 hours. The distinction in classifications points to students' expected acquired barbering knowledge and skills. See Appendices A, B, and C for the courses and competencies that align with each classification. JIBCA student participants were classified as advanced students because they accrued the NCBBE requirement of $> 1,528$ hours [before or during this study] to take the NC ABLE for licensure.

In Table 2, I offer a long-term goal, objectives, short-term goals, and outcomes to achieve during this improvement initiative. The goals and objectives targeted preparing advanced students to pass the NC ABLE on the first attempt by implementing the CCC-BIM and utilizing the KASA form to record students' mastery level proficiency.

Table 2*Goals and Objectives for Improved Outcomes*

Goals, Objectives, and Outcomes	Targeted Aims
<i>Long-term Goal and Outcome</i>	Students will pass apprentice licensure examinations with a score of >/70% (NCBBE requirement for apprentice barber license) on the first attempt with the implementation of a CCC-BIM paired with a KASA. - February 13, 2023
Objectives for the Design Team	<ol style="list-style-type: none"> 1. Develop the CCC-BIM - reflecting comprehensive barbering concepts that include the areas assessed on the NC ABLE. 2. Create a learning standard for the semester as a goal for information students will acquire during the semester. 3. Engineer courses that envelop comprehensive barbering concepts. 4. Develop competencies to accompany each course in the explicit curriculum that guides knowledge and skills acquisition toward the standard. <i>The instructor will teach the lessons in competencies.</i> 5. Create an Initial Formative Assessment (IFA), Interim Progress Assessments (IPAs), and a Final Summative Assessment (FSA). <i>Instructors will administer, proctor, and score each assessment as scheduled.</i> 6. Develop a KASA form that reflects courses, competencies, and assessment scores.
Objectives for Advanced Students	<ol style="list-style-type: none"> 1. Complete the courses and competencies developed. - November 15, 2022 – February 11, 2023 2. Take all formative and summative assessments (IFA, IPAs, and FSA). - November 14, 2022 – February 12, 2023
<i>Short-term Goals and Outcomes for Advanced Students</i>	Students will: <ol style="list-style-type: none"> 1. Achieve >/80% proficiency on IPAs across each competency within the curriculum. 2. Achieve >/80% proficiency on the FSA at the end of the semester.

Note. This is a description of the goals, objectives, and outcomes for the design team and JIBCA's advanced students. The targeted aims are listed in the right column.

As depicted in Table 2, the improvement initiative's goals, objectives, and expected outcomes guided the plan for teaching, learning, and assessment to reach the long-term goal. The goals and objectives speak to this improvement initiative's development and execution. Table 2 explains the objectives of the design team. The table also outlines the objectives, goals (long-term and short-term), and expected outcomes for students, supporting the driver diagram in Figure 2.

The objectives for my team consisted of 1) developing the CCC-BIM and KASA, 2) creating a learning standard for advanced students to demonstrate academic and professional readiness by the end of the initiative, 3) engineering formative and summative assessments to assess students' improvement and NC ABLE readiness, 4) teaching course competencies, and 5) assessing knowledge and skills acquisition. This aim for my design team was established so that a strategic improvement initiative could be employed to help students achieve the long-term goal. My team was able to accomplish all the objectives.

Two objectives were established for transitioning from advanced students to taking the NC ABLE. The objectives consisted of students 1) completing the designed courses and competencies and 2) taking the IFA, IPAs for each competency, and the FSA before taking the NC ABLE. The short-term goals were for students to pass the IPAs and the FSA with $>/80\%$ proficiency. Advanced students met those goals. Students were enrolled in three courses during the initiative: 1) Professional Barbering Topics, 2) Apprentice Exam Prep IV, and 3) Clinical Practicum IV. The classes ran for 13 consecutive weeks, from November 15, 2022, until February 11, 2023. Students attended classes five days weekly on Tuesdays through Fridays from five o'clock (5 pm) until 10 o'clock (10 pm) nightly. Saturday classes were from eight o'clock (8 am) in the morning until two o'clock (2 pm) in the afternoon. The only day students

did not attend classes was Thanksgiving, November 24, 2022. Competencies for each class and all formative (IFA and IPAs) and summative assessments (FSA) were completed by February 12, 2023. JIBCA's advanced students were provided an NC ABLE review and preparation session on February 12, 2023.

Short-term goals were used to indicate students' projected performance on the NC ABLE. I projected that if these objectives were accomplished and the short-term goals were met, students may pass their NC ABLEs on the first attempt. On February 13, 2023, the advanced students took the NC ABLE. The long-term goal for all students to pass their NC ABLEs on the first attempt was not completely met within the confines of this improvement initiative. However, significant progress was made toward the goal. I provide an in-depth explanation and review later in the *Data Analysis and A Discussion of the Results* sections.

Instructional Design Philosophy: Student-Focused Instruction

My instructional design philosophy holds that interventions and their assessments must remain student-focused – supporting students needed to attain academic and career success. JIBCA is not interested in merely assigning grades to students. We desire to equip students with the knowledge and skills required to pass licensure exams and attain career success. The CCC-BIM paired with a KASA was developed; students' success was the goal and the foundation of this improvement initiative. Informed by Schmidt (2021), establishing required minimum grades in the core courses boosts student effort. By assigning a >/80% proficiency level criterion for each theoretical and practical barbering competency in the curriculum, JIBCA aims to assure JIBCA students that their academic and career aspirations are the institution's priority.

As a frequently recurring feature of the instructional model, testing prepares students to be more comfortable and confident with testing environments. Administering mock ABLEs

throughout the program that simulates the conditions and procedures enforced by the NCBBE on exam day intends to increase students' familiarity and success without overwhelming testing anxiety (Khodabakhshzadeh & Zardkanloo, 2017).

Providing opportunities for remediating challenging subject areas shows JIBCA students that the institution is committed to each student receiving support for academic and career success (Fairchild, 2022; Wallace, 2021). Collectively, the features of the CCC-BIM stated speak to how focused we are on being a conduit for our students' entry into the barbering profession with rewarding careers.

Remediation for Sub-Standard Performance

Opportunities for remediation were built into this intervention. The KASA form records students' mastery levels at the end of each competency. Sub-standard performance (<80%) on competency Interim Progress Assessments (IPAs) indicates to the instructor which student(s) need remediation. Students' performances are analyzed after the completion of each IPA. This feature in the improvement initiative places the STUDY phase early and often during this improvement initiative. I believe this part of the instructional design provides vital information for the instructor to ACT early so that the instruction aligns with how students learn best – providing an optimal educational experience. A review of students' scores and individual and classroom consultations inform -- the need for -- and the types of instructional alterations necessary for students to master theoretical knowledge and practical skills.

Indication of the Need for Instructional Alterations and Enhancements or Additional Supports for Learners with Sub-standard Performance

IPA performance data reflect areas of collective challenges for students. Areas where more than one student or the entire class demonstrated sub-standard proficiency signaled the

need for instructional alterations or additional support to aid learners in acquiring the knowledge and skills taught in a specific competency. Sub-standard performance can alert instructors that the concepts may be challenging to master if most students demonstrate sub-standard performance in the same subject areas. Classroom consultations were built into this intervention to identify the support students needed to achieve mastery (Dupras et al., 2012). Students discussing their specific individual support needs in the classroom (a) creates an atmosphere conducive to the sharing of needed support, (b) informs their peers that they are not alone, and (c) demonstrates the instructor's commitment to collective efficacy. In response, informed instructional adjustments can be made going forward during instruction. During the improvement initiative, these students retook the corresponding IPA after remediation and review of the competency utilizing student-informed strategies to provide students another opportunity to demonstrate mastery. Informed by critical theory epistemology, these efforts align with equity – providing students the support they need to be successful.

Individual Challenges to Mastering Theoretical Knowledge and Practical Skills

Solo exhibitions of sub-standard performance indicate that a student may need accommodations or support to attain mastery. Critical theory informs educational leaders of the impact of meaningful and impactful communication with other's situations as it is a practice of equity-oriented work. In this improvement initiative, the instructor consulted a student who demonstrated sub-standard proficiency to address challenges that impeded their learning (Dupras et al., 2012). In these instances, one-to-one instructor-student consultations provided a safe space for students to share. It created an empathetic bond and trusting relationship that catalyzed learning (Klipfel & Brecher Cook, 2017). Upon completing the remediation, review, and

implementation of student-informed instructional accommodations, the student could retake the corresponding IPA to demonstrate mastery.

Institutional Efforts to Eliminate Barriers: Students' Access to Models & Transportation

The NCBBE's testing requirements have been subjected to alteration since the COVID-19 pandemic. One feature subject to change is the requirement for students to bring a live model for the practical portion of the exam versus a mannequin. Identifying volunteer models to assist students taking practical apprentice exams and soliciting their commitment to accompany students for licensure exams speaks to JIBCA's willingness to exhaust efforts to eliminate barriers that could impede JIBCA students' success. Informed by critical theory epistemology, I critiqued historical occurrences of examinees' model rejection for the practical ABLE. Model rejection has perpetuated an inequity that has marginalized aspiring barbers from taking this portion of the NC ABLE. Therefore, I implemented this approach.

Whether students were permitted or required to use live models for the practical portion of the apprentice barber exam, this instructional design called for JIBCA to aid students in overcoming this challenge. JIBCA students provide services to the public during their training. Instructors identified JIBCA clients who meet the NCBBE's hair length and facial hair requirements to serve as practical exam models. Students potentially benefit from establishing familiarity and comfort with volunteer models – increasing students' propensity to pass the practical ABLE. As an act of equitable support, the institution planned to provide transportation and accommodations such as food and drinks for models on the exam day to show appreciation for their commitment to student development and licensure attainment within this improvement initiative.

Transportation to the examination location is also extended to JIBCA students. This provision affords students: (a) timely arrival to the apprentice barber exam with their tools and qualified models [if required or allowed] – prepared to take the written and practical exams on the same day; (b) time to rest and eat while in transit; and (c) opportunities to review test content with classmates and to ask questions of the instructors. Providing students access to transportation is an act of equitable educational practice intended to combat the barrier of limited testing sites that demand inequitable commutes for students to take licensure exams.

Equitable educational practices require the whole of institutions to provide access to available resources to students – unique to their individual needs to be successful. By providing JIBCA students access to these resources, JIBCA could secure students' (a) access to appropriate models to accompany them for ABLEs, (b) transportation to the licensure exams, and (c) preparation and proper rest to perform their best on the ABLE.

Improvement Initiative Design

In this section, I provide a detailed description of the employed improvement initiative design. A critical aspect of the improvement initiative included assembling a design team to support its execution. I will discuss the completed implementation plan and address the barriers my team encountered.

Design Team

The design team consisted of barbering professionals who contributed to impactful change ideas and methods for this improvement initiative. Their expertise as practitioners in barbering and barbering education complemented the understanding needed to define problems in barbering pedagogy that impact students' entry into the barbering profession. Additionally, these stakeholders were critical to the design and development of solutions to propel this

improvement initiative that afforded JIBCA students the acquisition of knowledge and skills to pass ABLEs, and optimal career success.

Table 3 provides a list of the stakeholders who comprised the design team of this improvement initiative, along with their roles and credentials.

Table 3

Improvement Initiative Design Team

Design Team Members	Roles and Credentials
George M. Jerman, Jr.	Internal Expert: Facilitator, Scholar-Practitioner, JIBCA Barber Instructor
Dr. George M. Jerman, Sr.	Internal Expert: Founder of Jerman’s Institute of Barbering & Cosmetic Arts, JIBCA Lead Instructor of Barbering and Cosmetology, Barbershop and Salon Owner, Licensed Registered Barber, and Cosmetologist
Mr. Sherrod Holloway	External Expert: Vice Chairman of the North Carolina Board of Barber Examiners (NCBBE), Licensed Registered Barber, Barber Instructor, Barbershop Owner
Mr. Rudy McKoy	External Expert: Licensed Registered Barber, Barber Instructor
Mr. Antonio Mitchell	External Expert: Licensed Registered Barber, Barbershop Owner

Note. Design team members for this improvement initiative are listed to the left. Their roles and credentials are listed in the right column.

The diversity and commonality of the design team members directly correlated with the goal of this improvement initiative. This affluent collection of knowledge and experience reflects the diversity of thought needed to develop the best improvement for this initiative (Hinnant-Crawford, 2020). The experts on this design team possess experience in barbering education, NCBBE regulations, and professional practice.

Facilitator, Scholar-Practitioner. I designed an improvement initiative with stakeholders – a team of individuals responsible for its development and implementation. As a

scholar-practitioner, I understand improvement, systems, and variation (Hinnant-Crawford, 2020). My efforts were essential in operationalizing the improvement initiative by leading the design team through various activities with the necessary tools to arrive at decisions that facilitate improvement. As the developer of the CCC-BIM, the accompanying formative and summative assessments, and the KASA, I consulted and collaborated with the collective to strengthen the engineering of these culminating tools and features.

Barber Instructors. Four of the five stakeholders on this design team are licensed barber instructors. Two of the four instructors are JIBCA barber instructors, Dr. George Jerman, Sr., and George Jerman, Jr., who implemented the CCC-BIM with JIBCA students. Dr. George Jerman, Sr.'s expertise includes barbering and cosmetology practices, entrepreneurship, and barbering and cosmetology instruction in private and public institutions. He is the lead instructor and founder of Jerman's Institute of Barbering and Cosmetic Arts. Rudy McKoy has experience as a barber instructor at private and public institutions. He is currently a barber instructor at Edgecombe Community College. Sherrod Holloway's experience as a barber instructor extends to NCBBE rules and regulations, curriculum development, instruction, and participation in completing institutional self-studies for barber school accreditation processes. There was diversity in knowledge, skills, and years of experience. These barber instructors contributed to developing and implementing interventions that have yielded success for them. They provided insight into methods that did not deliver success and offered alternatives. Each barber instructor contributed insight via consultation for developing the CCC-BIM and the formative and summative assessments used during this improvement initiative.

External Experts. External experts are unbiased parties who are impartial to the interests of JIBCA. Input and support from experts outside of the organization provided additional

validity. They offered a broader perspective beyond the landscape of JIBCA. The external experts on this design team possess commonalities and additional professional expertise in specific areas. While all the design team members are licensed registered barbers, the external experts' area of concentrated focus encompassed 1) barbering instruction (Rudy McKoy); 2) NCBBE state board policy, barbering instruction, licensure examination procedures, and strategic planning (Sherrod Holloway); 3) barbering practices and barbershop ownership (Antonio Mitchell). Antonio Mitchell's input was instrumental in developing the curriculum related to barbering business practices, income generation (earning potential), and career success.

Implementation Plan/Timeline

Table 4 depicts the implementation plan and timeline for this improvement initiative. The development of the improvement initiative began in December 2021. Throughout March 2022, I consulted each design team member to garner insight for developing the course catalog (see Appendix A), CCC-BIM (see Appendix B), and KASA (see Appendix C) that would be used to record students' baseline scores, competency proficiency, and cumulative competence at the end of the semester. Consultations continued from April 2022 through October 2022 for the creation of the IFA (baseline assessment), IPAs (competency assessments), and the FSA (cumulative competence assessment) used during this improvement initiative. The construction of formative and summative evaluations required much consultation with design team members so that each examination strategically aligned with each competency within the curriculum. Collaborating with Dr. Jerman, Sr., JIBCA's lead instructor, the class schedule (see Appendix D) and the associated lesson plan (Appendix E) were mapped. I assigned roles and responsibilities for the implementation of the intervention. From October 2022 until November 2022, implementation

planning was completed. This process included confirming all design team members' commitments, roles, and responsibilities.

The initial plan for executing the initiative was for external design team members to administer, proctor, and score the IFA and the FSA. Unfortunately, this plan was altered due to other responsibilities and obligations (e.g., teaching schedules at their respective institutions and business operations) that prevented them from executing this part of the plan as intended. Therefore, I adjusted the plan for completing these components to maintain the initiative's intent. I assumed the responsibility of administering, proctoring, and scoring students' IFAs and FSAs and committed to not teaching any of the courses – assigning the full responsibility of teaching, administering, and scoring IPAs to Dr. Jerman, Sr.

Table 4*Implementation Plan and Timeline for the Improvement Initiative with JIBCA's Advanced Students*

Meetings	Improvement Initiative Activities
December 2021 - March 2022	<ul style="list-style-type: none"> ● Scholar-practitioner consulted design team members. ● Developed the CCC-BIM and KASA
April 2022 – October 2022	<ul style="list-style-type: none"> ● Created IFA, IPAs, and FSA ● Mapped the schedule for courses and assessments ● Coordinated with design team members' roles and responsibilities
October 2022 – November 12, 2022	<ul style="list-style-type: none"> ● Improvement initiative implementation planning ● Professional development and in-service with the lead instructor ● Confirmed design team members' commitments to roles and responsibilities
November 14 – February 12, 2022	<ul style="list-style-type: none"> ● CCC-BIM was implemented. ● IFA administered by the scholar-practitioner at JIBCA
- November 14, 2022	
- November 15, 2022 – February 12, 2023 (<i>as scheduled</i>)	<ul style="list-style-type: none"> ● Classes commenced at JIBCA. The lead instructor administered and scored IPAs administered by the lead instructor as scheduled at JIBCA
- February 12, 2023	<ul style="list-style-type: none"> ● Internal design team members ensured students were in Greensboro to take licensure exams. ● Scholar-practitioner proctored and administered the FSA to advanced students. ● Scholar-practitioner scored and analyzed students' mastery levels. ● Scholar-practitioner updated KASAs. ● Scholar-practitioner prepared students for the ABLE (2/12/23).
February 13, 2022	<ul style="list-style-type: none"> ● Scholar-practitioner completed a brief review with students before the exam. ● Advanced students took the NC ABLE.
February 24 – March 4, 2023	<ul style="list-style-type: none"> ● Students NC ABLE scores were received and analyzed by the scholar-practitioner

Note. Timeline of meeting dates and activities for the improvement initiative

Professional Development and In-service. From October 2022 until November 12, 2022, I completed professional development and in-services with the lead JIBCA instructor, Dr. George M. Jerman, Sr. The sessions focused on the instructional implementation of the CCC-BIM, which included the development of a lesson plan to accompany the explicit curriculum, formative and summative assessment administration, and utilization of the KASA form. A notebook was developed that housed the assessments that would be given to the students, and another notebook was created that contained the answer key for all the assessments. I provided a schedule of the classes and competencies to teach; all assessments were reviewed and provided to the lead instructor. It included the dates, the competencies that would be assessed, the answer key for written examinations, and the scoring rubrics for each practical evaluation. The schedule of the classes, competencies, and assessments was posted in JIBCA's classroom as a guide for the lead instructor and the students. Included on the agenda were the chapters and pages from *Milady Standard: Barbering* textbook and supporting literature targeted each week.

On November 12, 2022, I met with Dr. Jerman, Sr., to finalize preparations for commencing the intervention with JIBCA's advanced students and to ensure efficacy for executing the intervention. We reviewed:

- 1) The courses, their associated competencies, and the sequence of teachings
- 2) The formative and summative assessments that aligned with the competencies and the dates they would be administered
- 3) When and how to consult students when substandard performance was demonstrated
- 4) Remediation, review, and examination retake procedures, and

- 5) The utilization of the KASA forms for recording students' performance on assessments.

See Appendix E for a figure that illustrates the developed lesson plan that included the class schedule, sequence of competencies taught, and the formative and summative assessment dates.

November 14, 2022, commenced the implementation of the improvement initiative with JIBCA's advanced students. Students were assigned pseudonyms in privacy during check-in for the IFA. I instructed the students not to disclose this information to secure their anonymity. I administered the IFA and scored each student's examination after completion. Results were added to their respective KASA forms, and students were consulted individually regarding their performances. I consulted Dr. Jerman, Sr. regarding students' performances and underscored areas to monitor and pay special attention to during instruction. Classes began the following day, November 15, 2022, and continued until February 11, 2023. On February 13, 2023, students appeared before the NCBBE to take the NC ABLE. Students received their scores from the NCBBE between February 24 - 27, 2023, and delivered them to the internal design team members for review and analysis.

Challenges and Barriers

In this section, I discuss the challenges and barriers encountered during this improvement initiative. Challenges and barriers included: 1) developing assessments for the CCC-BIM, 2) securing the participation of external design team members to administer, proctor, and score the IFA and FSA, and 3) coordinating the timeline of the CCC-BIM with the NCBBE's apprentice exam availability.

Developing Assessments for the CCC-BIM

Developing the assessments for this improvement initiative was challenging. To warrant the comprehensiveness of the CCC-BIM, I developed thorough assessments that would assess knowledge and skills frequently. Many assessments had to be developed. The construction of these assessments required me to ensure that the quality of questions aligned with the improvement initiative's intent and mission to prepare students to pass the ABLE on the first attempt. My goal was to generate many questions. It is impossible to know which questions may be on licensure exams; all that is known is the content. Therefore, the developed multiple-choice questions had to cover as much as possible for each competency to ensure that students had a great chance to acquire the knowledge needed to correctly answer as many questions on the ABLE as possible.

The practical portions accompanying each multiple-choice question assessment aligned with the competencies covered. This was a challenge because I had to be creative in developing rubrics to assess practical skills. While this was challenging, I anticipated the students could reference their practical demonstrations during instruction and on the practical exams during the CCC-BIM to answer multiple choice questions they may have encountered on the ABLE. Licensure exams often include application questions, requiring students to answer practice-related questions.

While the challenge of generating these assessments was rigorous, I anticipated it would equip students to perform effectively and proficiently on the written portion of the ABLE. I did not consider this challenge a barrier because it did not hinder students' acquisition of knowledge and skills. The students benefitted from being thoroughly prepared and having comprehensive references to support their ability to answer licensure exam questions correctly.

Coordinating External Design Team Members' Availability to Administer the IFA and FSA

The original design of this improvement initiative was planned for external design team members to proctor, administer, and grade all IFAs and FSAs. However, due to the need to change the commencement of the improvement initiative and considering their availability, I had to alter the administration, proctoring, and scoring plan. Scheduling was mainly complicated by changes in awareness of available NC ABLE dates and the inability to secure definite exam dates for JIBCA's advanced students. Due to this challenge, I could not give the external design team enough notice of actual dates to confirm participation. I will discuss this challenge in further detail in the next section. I assumed this responsibility to closely replicate the original plan as I was not the students' instructor during this improvement initiative. Therefore, I did not consider this challenge a barrier.

Ideally, I would not have proctored or graded students' IFAs and FSAs to provide students with experiences as close to the ABLE as possible. I contend that students must exhibit the ability to perform well in the presence of unfamiliar evaluators. Unfortunately, my team could not accomplish this part of the intervention as planned. This feature would have provided JIBCA faculty data that reflect students' performance through the lens of other barber professionals qualified to proctor and administer ABLEs.

While the written piece of the assessment is straightforward [due to the answers provided via an answer bank], the practical part features some degree of subjectivity despite the intent to optimize objectivity. JIBCA students would have benefitted from becoming accustomed to being evaluated by unbiased barbering professionals, instructors, and NCBBE affiliates to maximize their preparedness and comfortability to perform practical ABLEs. Their familiarity with JIBCA students' performance history would not have influenced their feedback.

Coordinating the Comprehensive Curriculum and Competency-Based Instruction Model (CCC-BIM) with the North Carolina Apprentice Barber Licensure Exam (NC ABLE):

Resistance to Equity-Oriented Work and a Logistical Challenge and Barrier

Coordinating the completion of the improvement initiative to flow into the students' assigned ABLE date was challenging. I also considered this challenge a barrier. JIBCA students' inability to select exam dates and the uncertainty of knowing the exam date they would be assigned compromised the complete execution of the CCC-BIM as constructed.

In the past, the NCBBE provided dates on its website for the available dates for all exams – including apprentice barber, registered barber, and barber instructor exams. Since the development and commencement of this improvement initiative, this information was not available. This challenge presented a barrier to planning; barber schools, instructors, and students could not project and plan because of this change. Acting proactively, I contacted the NCBBE to inquire about the exam availability to discover that students would have to apply and would be scheduled on a *first-come, first-served basis*. Probing further, I was informed that the only available date that could most align with the CCC-BIM's execution and afford JIBCA's students an equitable opportunity for preparation without delay was February 13, 2023. An additional caveat was that the NCBBE could not guarantee that this date would be assigned to JIBCA students.

As the facilitator of this improvement initiative, I encouraged our students to apply for the apprentice exam in early January in hopes of receiving a February 13, 2023, assignment. JIBCA's advanced students received confirmation from the NCBBE with the exam date secured for 8:30 in the morning, February 13, 2023, at Winston-Salem Barber School (Greensboro Satellite Campus).

I considered this challenge of coordinating the CCC-BIM completion with the apprentice exam availability a logistical barrier and resistance to equity-oriented work because the improvement initiative ended prematurely by two weeks according to the initially planned timeline. Accelerating the administration of the FSA and eliminating two weeks of intense preparation for the NC ABLE compromised the students' outcomes.

Analysis Plan for the Improvement Initiative

This improvement initiative utilized an iterative research approach that deliberately brought educators into regular interaction with various academic and professional experiences to address a specific problem: low passing rates on the barbering apprentice exam. Bryk et al. (2015) posit that improvement science is learning to improve and demands educators' active, full engagement. Improvement science catalyzes continuous improvement; it calls for measurable, individualized changes that address organizational issues. Continuous improvement is effective because of the quantitative power derived from incremental, upward shifting of production -- even if the improvement is slight (Cohen-Vogal et al., 2015). The inductive and deductive approach combined with the cyclical component of improvement science encompasses planning, doing, studying, and acting (PDSA).

Langley et al. state that deductive and inductive learning is built into Plan-Do-Study-Act (PDSA) Cycles (2009). PDSA cycles provided my team continuous opportunities to PLAN and DO deductively, then STUDY and ACT inductively. Improvement science initiatives embody life-long work that does not end because of change. It is informed by data supporting incremental improvement and a commitment to continue the improvement. With PDSA cycles woven into the fabric of the improvement initiatives, my team learned what worked. Knowing what works

for small groups supports initiatives to scale more remarkable and impactful change in larger organizations and systems.

Improvement science and PDSA cycles translate to continuous learning to improve the pass rate on ABLEs. By embarking upon this improvement initiative at JIBCA, I hoped to positively impact the institution's students and identify effective barbering pedagogical practices that can be adopted on a larger scale. Data must support the initiatives that are employed.

Practical Measures

Improvement initiatives call for measures embedded in the regular work of teaching and learning and inform improvement. Bryk et al. (2015) advise that data should be collected frequently to create opportunities for change. Frequent data collection provides improvers opportunities to assess whether positive changes occur in the work. The goal is to predict critical future consequences before they occur so that actions can be taken to realize positive outcomes.

This improvement initiative utilized systematic data collection. Data were collected on students' baseline barbering knowledge and skills at the beginning of the CCC-BIM, after each competency [including assessment retakes], and at the end of the intervention to assess students' cumulative acquisition. By collecting baseline data at the start of the intervention, I was able to establish a foundational understanding of students' comprehensive proficiency. Through administering IPAs at the end of each competency, my team learned what information was challenging for our students and where students needed more support. At the end of the CCC-BIM, the FSA provided predictable insight into students' performance on the ABLE.

Four practical measures are vital to guiding improvement initiatives: outcome, driver, process, and balancing (Hinnant-Crawford, 2019). Information about key immediate outcomes that sit at critical junctures in the working improvement theory is known as driver measures.

Process measures provide feedback and valuable information about the specific changes attempted in the PDSA cycles. Outcome measures, both leading and lagging, define and assess accomplishments made during an improvement initiative. The other system parts that may change due to the improvement initiative are known as balancing measures. (Bryk, et al., 2015).

During this improvement initiative, the IFA and students' KASA forms served as driver measures and provided immediate data for analysis during the intervention. Students' IPAs and the instructor-student consultations were identified as process measures because of the valuable feedback they provided to my team about changes that occurred. Students' FSA and NC ABLE scores served as outcome measures as they evaluated the interventions' effectiveness. The lead instructor's time commitment to the remediation process due to substandard student performances on IPAs was primarily identified as a balancing measure because this was a feature of the intervention that yielded unforeseeable changes that impacted the improvement initiative. In the following sections, I explain each measure's data collection and analysis in greater depth.

Data Collection

Embedding frequent data collection opportunities into this initiative gave my team valuable data to analyze, instructional adjustment alerts, and moments to assess improvement. Data collection in improvement research provides scholar-practitioners with practical measures that operationalize a theory of improvement specific to the work processes subject to change. Bryk et al. (2015) indicate that those measures have a formative value that signals consideration for subsequent action; they are framed in language that is meaningful to those engaged in the work. Improvement also requires measurements that secure the trust needed for sustainable and meaningful improvement initiatives (Bryk et al., 2015). This improvement initiative embraced formative and summative data collection. (Refer to Appendices B and F for a schematic

depicting formative and summative assessments within the CCC-BIM. Appendix B4 illustrates advanced students' courses and how the IFA, IPAs, and FSA were incorporated into the CCC-BIM during this improvement initiative. See Appendix F for a comprehensive schedule of the administered assessments.)

Formative Evaluation: Identifying Driver and Process Measures Within the Intervention

The North Carolina apprentice written examination consists of 120 multiple-choice questions on barbering theory. Individuals are given 120 minutes to take the entire test. The one-hour practical portion of the apprentice examination consists of a shave, a businessman's tapered haircut, and the exhibition of proper decontamination and sanitation. I considered this information a guide for establishing students' expectations, understanding the requirements, and preparing to pass the licensure examination's written portion.

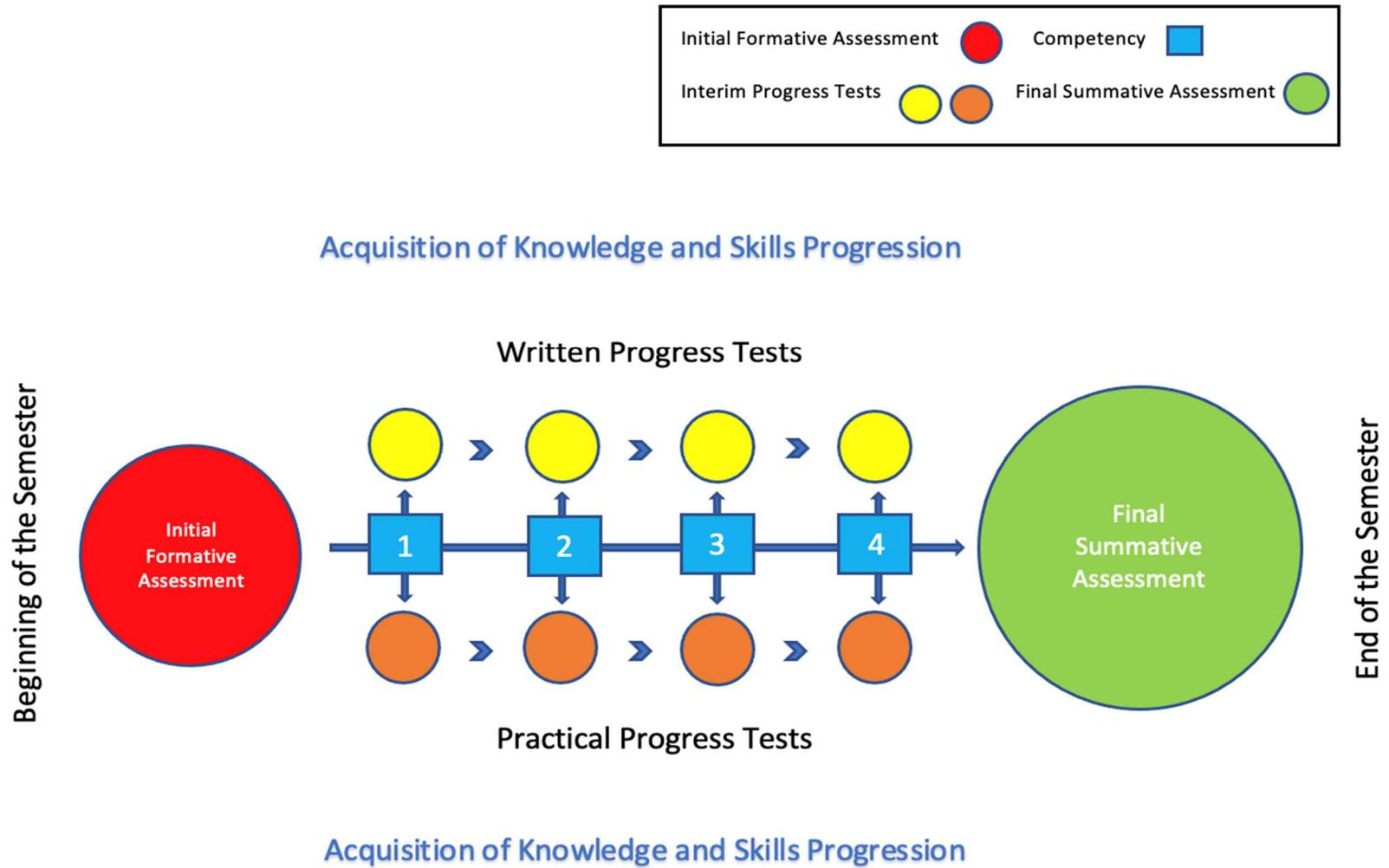
The formative assessment intervention depicted in Figure 3 illustrates 1) an Initial Formative Assessment (IFA) – a test at the beginning of the intervention to gauge JIBCA's advanced students' baseline knowledge and skills retention, and 2) Interim Progress Assessments (IPA) – written and practical evaluations given after each competency was completed. These formative assessments served as driver and process measures during this improvement intervention because they informed my team about critical outcomes:

1. at the beginning of the intervention (knowledge acquired before the improvement initiative on the IFA) and
2. throughout the improvement initiative (increased knowledge and skills acquisition on IPAs).

These measures also provided feedback about the interventions employed (e.g., competency-based instruction; instructional enhancements informed by instructor-student consultations).

Figure 3

Acquisition of Knowledge and Skills Progress



The Initial Formative Assessment: A Driver Measure. The initial formative assessment was a driver measure within this improvement initiative. Baseline data were critical to allowing my team to evaluate students' improvement in barbering knowledge and practical skills. The IFA consisted of 120 multiple-choice questions that reflected completed competencies. Students were given 120 minutes to take the exam. Accompanying the written portion was a one-hour practical exam. The exam mocked the NC ABLE. Students' IFA results benchmarked their baseline knowledge and skills and provided the instructor insight into students' testing abilities. The intent was to assess student participants' learning progress and provide them with experiences consistent with the apprentice examination. The lead instructor was able to evaluate students' proficiency across barbering content areas at the beginning of the semester. Predictions were made about their potential success under licensure examination conditions. Students' performance indicated to the instructor information about students' acquired knowledge, test-taking ability, and possible success on the apprentice examination. See Appendix G for the IFA administered to JIBCA's advanced students.

Incorporating the CCC-BIM and KASA Forms to Identify Driver Measures. Driver measures are vital outcomes at crucial junctures in the working theory of improvement initiatives (Bryk et al., 2015). With this improvement initiative, I aimed to identify what can be done to enhance barber students' educational experiences to acquire the knowledge and skills necessary to pass the NC ABLE on the first attempt. Implementing the CCC-BIM and utilizing the KASA form to record students' proficiency served to identify driver measures. The CCC-BIM and KASA form was designed to determine if progress was made in the intervention's primary drivers. By targeting barbering competencies and assessing students immediately after completing each competency to ascertain their proficiency, I determined if the intervention

(CCC-BIM) effectively contributed to students acquiring the knowledge and skills necessary to pass the licensure exam.

The Interim Progress Assessments: Process Measures. I identified the Interim Progress Assessments (IPAs) as process measures because these assessments fed back valuable information about the specific changes that took place during this improvement initiative. IPAs consisted of shorter examinations of 30 multiple-choice questions that assessed students' knowledge acquisition of competencies covered in each course. Students were given 30 minutes to take these written exams. A brief practical portion accompanied the written examination to assess students' acquisition of practical skills covered within the competencies. Students were required to pass the examinations with >/80% accuracy. The time designated for these practical evaluations varied slightly depending on the skills assessed. IPAs assessed students' current content knowledge and skills and provided the instructor and students with benchmarking information. The instructor assessed the need to remediate and review competency content or instructional approaches to increase students' knowledge and skills at these junctures.

Related competencies were combined to establish more substantive IPAs (e.g., hair coloring and lightening) and to eliminate redundant testing. This feature was also applied to written and practical assessments. Refer to Appendix H for all IPAs administered to JIBCA's advanced students.

Professional Barbering Topics. Advanced students were required to take three IPAs for this course. Table 5 depicts the dates and competencies assessed on each IPA. The first IPA covered employment, job interviews, income management, accounting, and taxes. The second IPA targeted effective product sales, retail ethics, marketing, and establishing clientele. The last IP for this course included questions regarding barbers' compensation (services, booth rental,

commission, et cetera), entrepreneurship, management in barbering, and the use of technology in the barbering business. Each IPA consisted of a 30-question multiple-choice written test and a practical examination demonstrating proficiency in these areas.

Table 5

IPA schedule for Professional Barbering Topics

IPA schedule	Competencies completed and assessed
Tuesday, December 6, 2022	<ul style="list-style-type: none"> • Employment and Job interviews • Income Management, Accounting, and Taxes
Tuesday, January 10, 2023	<ul style="list-style-type: none"> • Effective Product Sales and Retail Ethics • Marketing and Establishing Clientele
Tuesday, February 7, 2023	<ul style="list-style-type: none"> • Compensation (Services, Booth Rental, Commission, et cetera) • Entrepreneurship • Management in Barbering • The Use of Technology in the Barbering Business

Note. Competencies completed and Interim Progress Assessment dates for Professional

Barbering Topics course

Apprentice Examination Prep IV. The Apprentice Exam Prep IV course was designed to review all the courses within the CCC-BIM and prepare them to pass licensure exams. Table 6 depicts the dates and competencies assessed on each IPA in this course. Advanced students were required to complete an IPA targeting the following: (1) Intro to Barbering & Cosmetic Arts; (2) General Barbering & Cosmetic Sciences I; (3) Foundations of Haircutting, Styling & Shaving I; (4) General Barbering & Cosmetic Sciences II; (5) Anatomy & Physiology of Barbering & Cosmetics; (6) Trichology & Dermatology of Barbering & Cosmetics; (7) Advanced Haircutting, Styling, & Shaving; (8) Chemical Texture Services; (9) Hair coloring & Lightening; (10) NCBBE Examination; and (11) Test Taking Skills. Each IPA consisted of 30 multiple-choice questions and a practical assessment of skills associated with each course area. While advanced

students did not take these courses, the course content was covered during their barber school matriculation before the construction of the CCC-BIM.

Table 6

IPA schedule for Apprentices Examination Prep IV

IPA schedule	Competencies completed and assessed
Thursday, December 1, 2022	Intro to Barbering & Cosmetic Arts
Thursday, December 8, 2022	General Barbering & Cosmetic Sciences I
Thursday, December 15, 2022	Foundations of Haircutting, Styling & Shaving
Thursday, December 22, 2022	General Barbering & Cosmetic Sciences II
Thursday, January 5, 2022	Anatomy & Physiology of Barbering & Cosmetics
Thursday, January 12, 2022	Trichology & Dermatology of Barbering & Cosmetics
Thursday, January 19, 2022	Advanced Haircutting, Styling, & Shaving
Thursday, January 26, 2022	Chemical Texture Services
Thursday, February 2, 2022	Haircoloring & Lightening
Thursday, February 9, 2023	NCBBE Examination
Thursday, February 12, 2023	Test-Taking Skills

Note. Competencies completed and Interim Progress Assessment dates for Apprentices Exam

Prep IV Course

Clinical Practicum IV. The Clinical Practicum IV course extended practical skills acquired during the barbering program. This course featured six IPAs, as depicted in Table 7. The first IPA included questions from the following competencies: Handwashing, Hygiene, Personal Grooming, and Proper Ergonomics. The second IPA for this course covered Human Relations and Communication Skills. Cleaning and Disinfecting (Equipment, Tools, Implements, Clippers, and Outliners/Trimmers) were targeted on the third IPA. The fourth IPA included questions from competencies: Honing and Stropping Razors; Towel Wrapping; Handling Clippers, Shears, Razors, and Combs; 14 Areas and Movements of a Shave; and Handling of Exposure Incidents. The fifth IPA targeted draping, hair cutting, styling, facials, and shampoos. The final IPA for this course covered Chemical Texture Services and Haircoloring & Lightening

Services. Advanced students completed a 30-question multiple-choice assessment and demonstrated related practical skills mastery on each IPA.

Table 7

IPA schedule for Clinical Practicum IV

IPA schedule	Competencies completed and assessed
Saturday, December 3, 2022	<ul style="list-style-type: none"> • Handwashing; Hygiene; Personal Grooming • Proper Ergonomics
Saturday, December 17, 2022	<ul style="list-style-type: none"> • Human Relations and Communication Skills
Saturday, January 7, 2023	<ul style="list-style-type: none"> • Cleaning and Disinfecting (Equipment, Tools, Implements, Clippers, and Outliners/Trimmers)
Saturday, January 14, 2023	<ul style="list-style-type: none"> • Honing and Stropping Razors • Towel Wrapping • Handling Clippers, Shears, Razors, and Combs • 14 Areas and Movements of a Shave • Handling of Exposure Incidents
Saturday, January 21, 2023	<ul style="list-style-type: none"> • Draping • Hair Cutting • Styling • Facials • Shampoos
Saturday, February 11, 2023	<ul style="list-style-type: none"> • Chemical Texture Services • Haircoloring and Lightening Services

Note. Competencies completed and Interim Progress Assessment dates for Clinical Practicum

IV course.

Instructor-Student Consultations: Identifying Process Measures. Process measures provide valuable feedback about how the specific changes implemented in the PDSA cycles are performing (Bryk et al., 2015). Consultations with students served as a process measure. Consultations informed my team of supports that the lead instructor could employ to assist students with acquiring the information taught to achieve >/80% proficiency on IPAs (formative assessment) and the FSA (summative assessment). Competency remediations and IPA retakes provided valuable information in addition to student consultations. The lead instructor implemented student-informed supports learned during instructor-student talks when students demonstrated sub-standard performances on competency assessments (IPAs). During those consultations, my team learned critical features instrumental to this improvement initiative's effectiveness.

Summative Evaluation of Improvement Methodology. The goal of implementing the CCC-BIM coupled with using a KASA to document students' demonstration of >/80% knowledge and skills acquisition was to optimize students' preparation and ability to pass the apprentice examination for licensure. While the formative evaluations identified students' incrementally acquired knowledge and skills during the intervention, summative assessments of students' cumulative learning progress were completed to predict performance before they took the licensure exam.

Figure 3 provides a schematic of when summative evaluations were completed and how they supported students' knowledge and skills acquisition on the continuum of evaluating progress. As students advanced through each competency in the curriculum, their knowledge and skills were anticipated to increase -- represented by the size of the symbols. The size of the symbols also represents the comprehensiveness of the evaluations.

JIBCA's advanced students were required to take the FSA. The exam consisted of (a) a 120-question multiple-choice written assessment and (b) a one-hour practical examination. The FSA was designed to simulate the NC ABLE – providing another opportunity for students to become acquainted with the NCBBE process. Students were permitted 120 minutes (2 hours) to take the written portion of the FSA. The exam assessed students' cumulative knowledge and practical skills. (Refer to Appendix I for the FSA administered to JIBCA's advanced students.)

Students were required to use a mannequin for the practical exam portion because the NCBBE's requirement at the time of administration did not permit live models. Passing scores for all students at >/80% on the final comprehensive summative evaluation at the end of the program served as a predictor of student participants' ability to pass the ABLE examination.

Balancing Measures. Balancing measures are critical elements of improvement initiatives. This measure keeps an eye on other parts of the intervention that may change due to the features of the initiative (Bryk et al., 2015). During this improvement initiative, I identified two balancing measures: 1) time committed to remediation, review, and retesting, and 2) the need to employ student-informed instructional enhancements.

These factors were identified as balancing measures because although the course competencies targeted specific areas at a time, they did not ensure students' demonstration of mastery on all of their competency IPAs on the first attempt. Therefore, due to the initial absence of incorporating the student-informed supports as a part of the instruction in the areas where students demonstrated sub-standard performance, additional instructional time was allocated for remediation. This feature was employed to provide students with the necessary remediation and opportunities to reach the minimum standard proficiency of >/80% (mastery level) on IPAs. Additionally, the lead instructor assigned homework as a part of students' remediation.

Examination retakes were also offered before classes commenced for the day or immediately after class. The instructor's additional time commitment also included retesting and scoring IPA second attempts. Although remediation was a feature built into the intervention, the lead instructor's offering of additional time for remediation did not compromise scheduled course instructional time for the following competencies. As an act of equity-oriented education, the lead instructor required students to come to class early or stay after class to receive remediation and complete IPA retakes.

These balancing measures informed my team of factors that contributed to remediation, retesting, and IPA scoring. The need for remediation possibly delayed students' mastery acquisition and compromised the instructor's time committed to the intervention. The lead instructor worked extremely hard to provide JIBCA's advanced students with the necessary remediation to support their competency knowledge and skills to pass those IPAs on the second attempt. As a result of this effort, students scored >/80% on the second attempt.

Outcome Measures. Students' summative assessments and ABLÉ scores served as outcome measures for this improvement initiative. Outcome measures help improvers to assess what is being accomplished by the improvement initiative. Outcome measures include leading and lagging (Bryk et al., 2015). Leading outcome measures tend to show up at short-term intervals. At short-term intervals (i.e., the end of each competency) during the improvement initiative, my team was able to ascertain that formative and summative assessments allowed us to know what incremental knowledge and skills students acquired as a result of teaching in competencies and setting a minimum required standard of >/80%. Lagging measures typically show up at long-term intervals. I identified two lagging outcome measures. The first lagging outcome measure was students' FSA scores. By identifying this as a lagging measure, my team

could determine if the FSA effectively evaluated cumulative retention. I identified students' NC ABLE scores as the second lagging outcome measure. This lagging measure provided further evidence of how the improvement initiative generalized to student success on the NC ABLE on the first attempt.

Data Analysis

The thrust of this improvement initiative centered around quantitative data generated and collected from formative and summative assessments taken by JIBCA students at critical junctures during the implementation of the CCC-BIM. In this section, I analyze data collected during this improvement initiative. Four critical groups of data essential to understanding the effectiveness of the initiative include each student's:

1. Initial Formative Assessment (IFA) score,
2. scores on Interim Progress Assessments (IPAs),
3. Final Summative Assessment (FSA) scores, and
4. scores, and outcomes from the NC ABLE.

Each of these assessments provided quantitative data for analysis. It is essential to understand that these data provide key information about JIBCA's advanced students' baseline knowledge and skills, their increased knowledge and skills acquisition, and whether it was generalized to the ABLE for apprentice barber licensure attainment. Since the students' scores tell the story of improvement in this initiative, I used descriptive statistics to analyze the data.

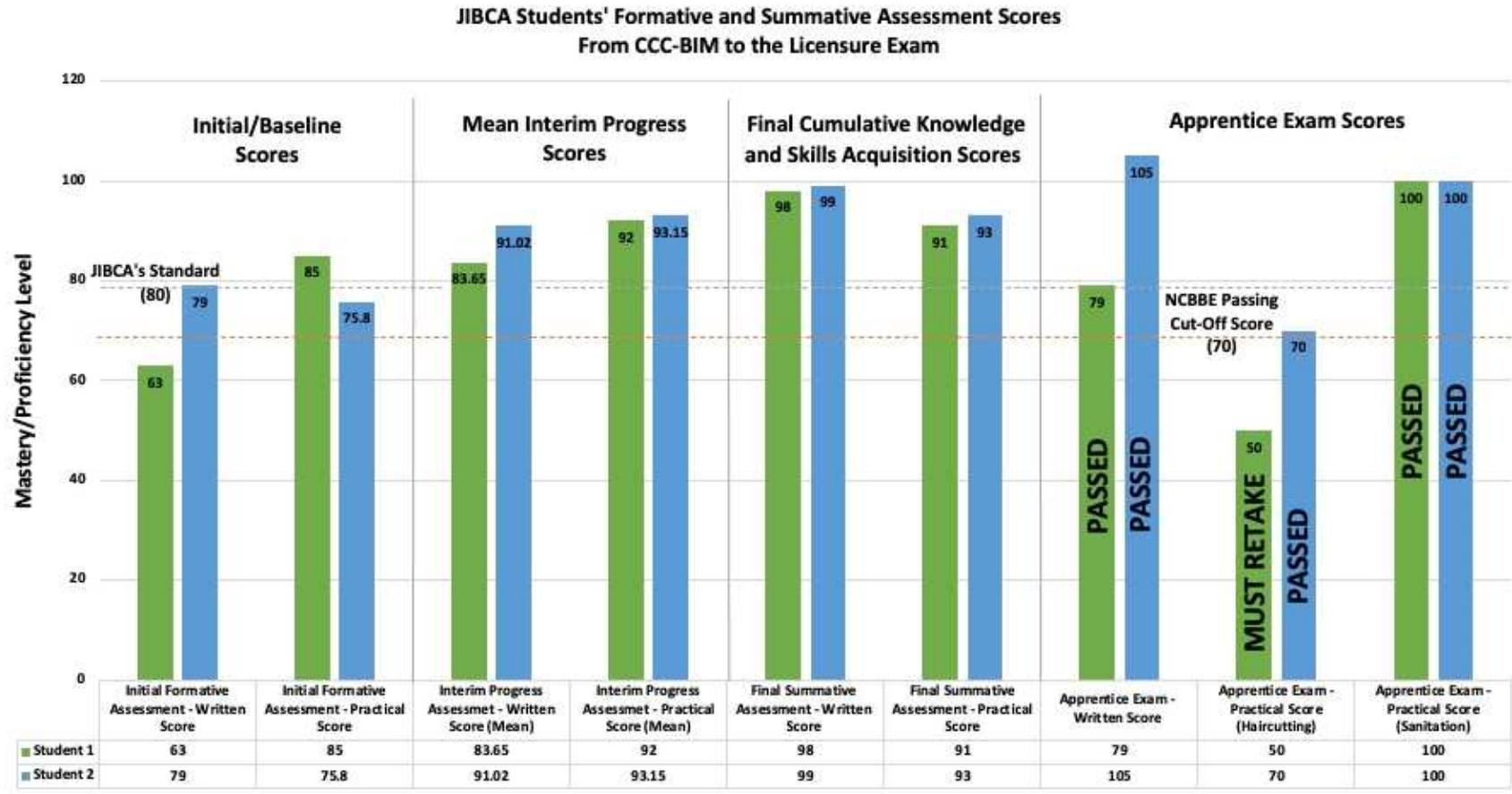
Descriptive statistics allow improves a way to summarize the characteristics of a data set – utilizing a figure to represent the data visually to aid understanding (Tanner, 2012). This improvement initiative required collecting and synthesizing a great deal of quantitative data. I

chose this form of statistical data analysis to ensure that the essential characteristics of the data collected during this initiative would be easily understood without referring to each measure.

Figure 4 shows and tells how JIBCA students performed throughout this improvement initiative. The foremost requirement of the initiative consisted of students taking an IFA. Broad in its construction, this formative assessment allowed my team to begin learning about JIBCA's advanced students' baseline knowledge of various barbering concepts. The IFA also evaluated their performance of the practical skills assessed during the ABLE.

Figure 4

JIBCA Students' Performance: From CCC-BIM to the NC ABLE



Note. Column one: IFA scores; Column two: Mean IPA scores; Column three: FSA scores; Column four: NC ABLE scores

Initial Formative Assessment (IFA) Data Analysis. Two (2) JIBCA students took the IFA at the commencement of the CCC-BIM to assess their baseline barbering knowledge and skills. They will be referenced as Student One and Student Two to differentiate the students. The first column in Figure 4 depicts students' performance on the IFA that was administered. Student One demonstrated 63% proficiency on the written portion and an 85 on the practical part of the assessment. Student Two demonstrated 79% proficiency on the written piece and 75.8% on the practical exam. The practical assessed sanitation, shaving, and tapered haircutting. The students' scores represented the average of these practical skills. Data from the students' IPAs informed my team that the students possessed the potential to improve and pass the ABL by the completion of the CCC-BIM. See Appendix J for a detailed breakdown of students' scores on each assessed practical skill.

Interim Progress Assessments (IPAs) Data Analysis. During the CCC-BIM, IPAs were used to assess students' knowledge and skills on barbering competencies taught during the initiative. The second column of Figure 4 represents students' mean scores on each competency's written and practical assessments. Means are one of descriptive statistics' most common central tendency measures. Central tendencies indicate what is most typical in a data set (Tanner, 2012). The IPA data set is most appropriately represented by the mean because advanced students completed 20 competencies and corresponding written and practical assessments. Student One's mean proficiency of 83.65% was achieved across all written assessments and 92% proficiency on practical assessments. Student Two averaged 91.02% proficiency on written examinations and 93.15% proficiency across practical IPAs.

Depicted in Figure 4 is an increase in students' exhibition of acquired knowledge and skills compared to their baseline performances. Measures of variability are the statistical

companions to central tendency values. Variability can be described by the range between values (Tanner, 2012). Figure 4 depicts a 20.65% proficiency increase in Student One's acquisition of barbering knowledge since baseline – represented by an 83.65% mean performance on written IPAs. Likewise, Student One improved their practical performance by an average of seven percent. Student Two exhibited a mean increase in barbering concepts knowledge by 12.02% compared to their baseline performance on written exams and a 17.55% practical skills improvement.

FSA Data Analysis. The third column of data in Figure 4 represents students' Final Summative Assessment (FSA) scores. A recurring improvement exhibition is characterized by increased proficiency demonstrated on written and practical assessments since completing all barbering competencies within the CCC-BIM. Student One's FSA written score of 98 reflects a 14.35% increase in assessment performance. A one-percent decrease in practical performance was demonstrated on the FSA compared to Student One's mean IPA practical skills performance. However, I analyzed the relationship between Student One's IFA performance at baseline and FSA practical scores. Student One's 91% proficiency score on the FSA depicts a six percent improvement. Compared to Student One's baseline performance on the written IFA (63% proficiency), a 35% improvement was demonstrated on the written FSA.

Student Two demonstrated 99% proficiency on the written FSA. This improvement represents a seven point ninety-eight percent (7.98%) improvement compared to their mean IPA proficiency of 91.02% on written assessments. Compared to a baseline performance of 79% proficiency on the written IFA, Student Two exhibited a 20% improvement on the written FSA. Like Student One, Student Two demonstrated a slight decrease (.15%) in practical skills exhibition on the FSA compared to their mean IPA performance. Nonetheless, both students'

mean practical proficiency remained relatively consistent from their IPAs to FSAs. Student Two's practical skills performance on the FSA (93%) reflected a 17.2% improvement compared to a baseline score of 75.8%.

Primary Driver Measure Data Analysis. Analysis of formative assessments provided data along the way during this improvement initiative. Students' IPA and FSA scores informed my team when the interventions moved the initiative forward. It also alerted my team when there was a need for adjustments to maintain the momentum. The KASA form provided a place for my team to record the data and analyze whether students were progressing toward grasping the necessary concepts to pass the ABLE on the first attempt. I determined that the initiative was effective because students collectively met the minimum standard proficiency (mastery level of >80%) on IPAs, on the first attempt 80% of the time. Student One demonstrated mastery level 14 out of 20 times (70%), and Student Two achieved mastery proficiency 18 out of 20 times (90%).

Process Measure Data Analysis. Instructor-student consultations followed by remediation and ongoingly employing student-informed instructional alterations in response to sub-standard performances on IPAs were effective in aiding students to achieve mastery proficiency. My team learned that these critical features helped this improvement initiative's effectiveness. After consultations with students, remediation, and employing student-informed instructional support, students scored significantly higher on exam retakes. When students took the FSA at the intervention's end, they performed significantly better than their mean proficiency on IPAs. Student One's written FSA score of 98 was considerably higher than their mean written IPA proficiency of 83.65%. Student One's practical performance on the FSA was consistent with their IPA mean proficiency of 91%. Student Two increased from 91% mean written IPA

proficiency to 99% mastery of the FSA. Student Two's practical scores reflected the same trend as Student One, maintaining a mean proficiency of 93% across both measures.

NC ABLE Scores Analysis. My team analyzed the data set to ascertain students' ability to pass the NC ABLE. After analyzing students' IFA, IPA, and FSA scores, we were confident that they would perform well enough to pass the ABLE's written and practical portions on the first attempt. However, we could not accurately predict their scores. The fourth column of Figure 4 represents JIBCA's advanced students' scores and outcomes. (See Appendix K for advanced students' NC ABLE score reports.)

As depicted, Student One passed the written exam on the first attempt with a score of 79%. This score was just shy of the institutional performance standard of $\geq 80\%$ required of students participating in this improvement initiative. The score accounts for a one percent variability. The practical ABLE evaluated and scored two areas – haircutting and sanitation. Student One passed the sanitation portion of the practical assessment with a score of 100. Unfortunately, Student One did not pass the haircutting part. The outlier score of 50% was not anticipated as it was considered significantly lower than any valuations recorded on their assessments during the improvement initiative. Student Two passed the written portion of the ABLE on the first attempt with a score of 105 and passed the sanitation portion of the practical assessment with a score of 100 – significantly high scores. The haircutting score of 70 met the NCBBE's requirement for passing.

Outcome Measure Data Analysis. Providing remediation and employing ongoing student-informed instructional support during the improvement initiative was revealed to be effective. Establishing a minimum standard proficiency requirement of $\geq 80\%$ and frequently assessing students' acquisition of competency content aided students' knowledge and skills

retention. Advanced students' FSA scores indicated that the intervention was instrumental in them retaining the knowledge and skills they acquired in their courses. This measure was evidenced by students exceeding the requirement for >/80% proficiency on the FSA. Collectively, students demonstrated a mean written proficiency score of 98.5% and 92% on the FSA. The leading measure suggested that the knowledge and skills students acquired would translate to 100% of JIBCA's advanced students passing the NC ABLE on the first attempt. The improvement initiative accomplished a 100% passing rate on the written portion of the ABLE. Unfortunately, one of the two advanced students did not pass the practical part of the licensure exam. The lagging outcome measure indicated that the improvement initiative was effective in students passing the written portion of the exam on the first attempt. However, it did not ensure that all advanced students would pass the practical part of the licensure exam.

Balancing Measure Analysis. The balancing measures identified during this initiative indicated whether the additional time allocated to remediation and instructional enhancements was beneficial to students' knowledge and skills acquisition and retention. The lead instructor's time commitment to 1) remediating, reviewing, and retesting and 2) employing student-informed instructional enhancements was effective. Most of the student-informed instructional supports were provided to assist Student One with acquiring the necessary knowledge and skills to pass the practical ABLE. If these features were not incorporated into the improvement initiative, it is likely that this student would not have passed the practical portion of the NC ABLE. This analysis is supported by the KASA form that reflects that the IPAs where this student demonstrated sub-standard performance were on written assessments. The additional time spent assisting this student was worth the outcome of a passing written NC ABLE score of 79. Student Two did not require as much additional time for remediation, IPA retakes, and instructional

accommodations. However, due to this feature being a part of the improvement initiative, Student Two applied themselves more, resulting in improved performance on IPAs, the FSA, and the NC ABLE. The data indicated that Student Two did not have to attend remediation or retake IPAs after two remedial sessions.

A Discussion of the Results

In this section, I offer an overview of the PDSA methodology and results incorporated during this improvement. The thrust of this initiative was grounded in equity and learner-centered instruction. The PDSA methodology employed during this improvement was led by the aim to provide JIBCA students with the knowledge and skills they need to pass the NC ABLE on the first attempt. PDSA cycles are critical to equity-oriented work because it drives improvement and enables results by:

1. Devising a *PLAN*,
2. Planning to *DO* what has been designed,
3. *STUDY*ing what has been done according to the plan, and
4. *ACT*ing upon the findings and improving the *PLAN*.

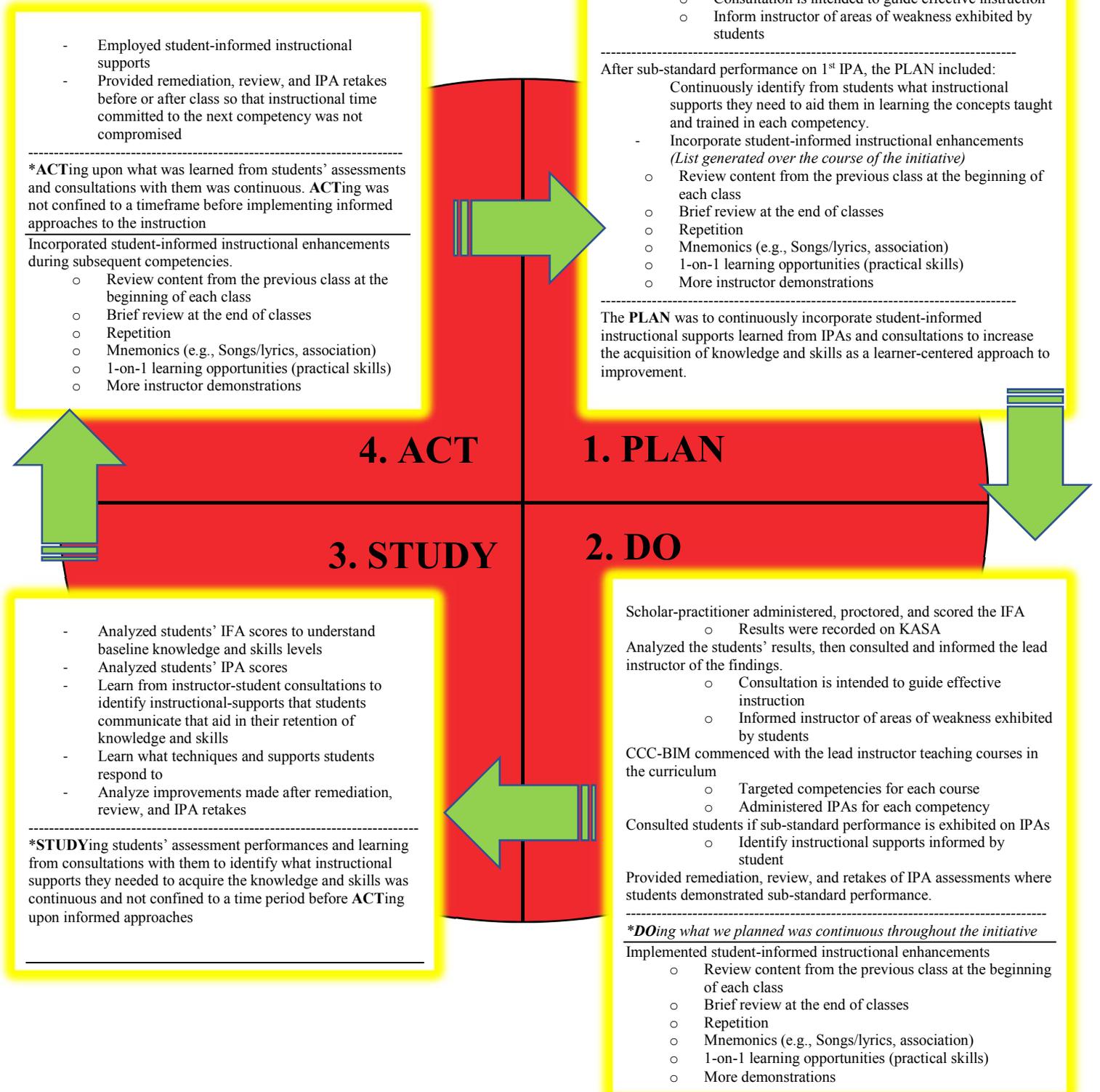
These four features are not mutually exclusive. I assert that they work together, often simultaneously. These features are the wheels of improvement that allow initiatives to keep moving forward to new and better destinations. I developed a plan (CCC-BIM) for improvement, and a part of the plan was to learn early and often how to equip JIBCA's students to pass licensure exams to become apprentice barbers.

Figure 5 provides a visual representation of the PDSA approach my team employed to prepare students to acquire the knowledge and skills they need to pass the NC ABLE. This improvement initiative incorporated comprehensive competency-based instruction. The

formative and summative assessments are the most vital components of the CCC-BIM that evaluate improvement and the effectiveness of the intervention. Students' performances identify results. My team learned how to best serve JIBCA's students individually and collectively by studying (analyzing) each student's assessment results after each administration. This was the need for student-informed, learner-specific instructional modifications to aid their improvement. Therefore, planning, doing, studying, and acting continuously, was built into the initiative. These periods were not separated; they were responsively integrated and constantly at work within the initiative. Through this approach, the lead instructor was able to (a) constantly enhance the plan, (b) study students' individual assessment results, (c) learn from each student how they best learn to master new information and skills, and (d) incorporate those student-informed enhancements into the instruction immediately to help them acquire the knowledge and skills to pass ABLEs.

Figure 5

PLAN, DO, STUDY, ACT: A Continuous Learner-Centered Approach to Improvement



Improvers seek to learn to improve. The lead instructor learned from students that they acquire and retain knowledge and skills best when (a) content from the previous day is reviewed at the beginning of each class, (b) content that is taught in a class session is re-visited and reviewed at the end of each class, (c) repetition is implemented, (d) mnemonics like songs, lyrics, and associations are utilized to help them understand and remember easily, (e) opportunities for one-on-one, instructor-student teaching, and training is implemented during practical skills training, and (f) the instructor performs more demonstrations so they can watch, process techniques, and learn in addition to hands-on learning. Through planning the instruction, evaluating students' competency performance, and addressing sub-standard performance through instructor-student consultations to identify what instructional supports they need to succeed, my team discovered and received confirmation about pedagogical techniques to enhance the planning, doing, and acting.

Extending the DO phase of the initiative would have delayed my team's ability to STUDY and ACT timely. My team could have compromised the students' learning if scheduled timeframes for each PDSA cycle had been incorporated. Rather than being confined to longer, pre-determined cycles (e.g., four to six weeks) before learning to improve the approach, students' IPA performances and subsequent consultations guided the PDSA methodology in this initiative. Learning to enhance effective instruction to aid students' knowledge and skills acquisition was ongoingly woven into the operative fabric of the initiative. Most fitting for this improvement initiative, the ultimate plan in the PDSA was to immediately respond to sub-standard performances (individual and collective) so that improvement was exhibited and maintained. This form of responsive pedagogy ingrained into the PDSA methodology supported progressive and sustained improvement.

A Discussion of Outcomes

This PDSA approach resulted in a significant reduction in examination retakes after the first four weeks. During the first month of the intervention, Student One was required to retake four IPAs. The number of retakes was reduced to two in the remaining eight weeks of the initiative. Student One was administered an IPA retake five weeks later. The next IPA retake administered to Student One was three weeks later. This leading outcome measure identified and defined the accomplishments that this PDSA approach contributed to Student One's progress and the overall improvement initiative.

Further evidence was exhibited by Student Two. Student Two was required to retake two IPAs during the first three weeks. As a result of this PDSA approach, Student Two was not administered any more retakes -- demonstrating >/80% on all remaining IPAs. Student One and Student Two's reduction in retakes served as process and lagging outcome measures that pointed to the longer-termed effectiveness of the PDSA approach on the improvement initiative. These measures helped to indicate that students achieved greater knowledge and skills proficiency maintenance during the initiative. Additionally, students' scores increased significantly in response to the combined incorporation of (a) instructor-student consultations, (b) implementing student-informed instructional enhancements, and (c) providing opportunities for remediation, review, and IPA retakes. See Appendix J for students' KASA forms to view their IPA scores.

Students' FSA and NC ABLE scores served as driver measures. These two assessments informed my team if the working theory of this improvement initiative aligned with the outcomes. Both students exhibited mastery-level on the FSA. I predicted that the students would also pass the NC ABLE. Student One and Two's passing of the written ABLE revealed that the improvement initiative effectively equipped them to pass the written ABLE on the first attempt.

Student Two passed the practical ABLE the first time, but Student One must retake this portion of the NC ABLE. These driver measures suggest that the number of Student One's IPA retakes can serve as a predictor of a student's likelihood of retaking an ABLE – even if the portion of the NC ABLE the student did not pass is unrelated to their IPA retakes. To identify a balancing measure for the PDSA, Student One's shortcoming on the haircutting portion of the practical ABLE may have resulted from the employed PDSA methodology. However, I did not consider this a balancing measure because most of the student-informed instructional supports were incorporated in response to Student One's sub-standard performance. This student most likely benefitted from this PDSA approach.

The provisions define the essence of improvement science and equity-oriented work to help students succeed. This work extends from the classroom beyond. This improvement initiative strived to be learner-centered and learner-informed. I embarked upon a calling to provide students with what they need to acquire barbering knowledge and skills to pass the ABLE on the first attempt, enter the profession without delay, and attain optimal career success. It is essential to understand this because this mission helped to guide this improvement approach. Although all of JIBCA's advanced students did not meet all the requirements for licensure, one of the students passed every part of the NC ABLE, and the other passed every assessment except one. That student has not given up, nor has JIBCA given up on that student. I assert that this ideology drives methodology that yields results. This ideology was the catalyst for the PDSA methodology employed and the positive student outcomes from this initiative.

Implications

This improvement initiative resulted in much success. Nevertheless, while striving to improve barbering pedagogy to prepare students to gain the knowledge and skills necessary to

pass the North Carolina ABLE on the first attempt, much work still needs to be done. The shortcomings of this intervention provided opportunities to learn more about initiatives barber schools can employ to combat persistent barriers that delay aspiring barbers' entry into the profession. This improvement initiative highlighted the need for constantly improving pedagogy and collaboration between barber schools and the NCBBE.

Implications for pedagogical practices through the lens of critical theory epistemology suggest that it is imperative that barbering educational leaders chart a new path toward improvement by critiquing the perpetuation of systemic barriers that marginalize many aspiring barbers. Equity must remain at the helm of improvement initiatives focusing on students' success. I contend that barber educators must remain critically conscious about the systems that regulate barbering education and their pedagogical practices. This critical consciousness will continue to identify areas needing improvement and, hopefully, ignite a constant fire to improve barbering pedagogy for student success.

Implications for Pedagogical Practice

Barbering educators must reimagine pedagogical practice to seek new ways to prepare students to pass licensure exams and improve their skills for optimal career success simultaneously. Within the clock hours that are required in barbering education, it is essential for educators to continuously seek ways to improve their curricula so that the educational experience is optimal and efficient. Curricula should be comprehensive and not only equip students to pass their licensure exams without delayed entry into the profession but to prepare them for optimal career success.

This improvement initiative and its results suggest that the institution of comprehensive competency-based instruction combined with progress testing effectively increases students'

acquisition of trained knowledge and skills. However, it does not ensure students' success on licensure examinations on their first attempt. This phenomenon was a shortcoming of the improvement work completed during this study. However, it does not dismiss students' ability to perform proficiently – or significantly better than they would without the prescribed instruction model.

The CCC-BIM employed during this improvement initiative provides a strategic approach to equipping students to acquire all barbering concepts and the skills needed for optimal success in the barbering profession. Inserting progress testing (formative and summative) into the CCC-BIM and marrying the intervention with a KASA form to record and track performance proficiency effectively gauges students' progress.

A challenge for students passing the practical examination on the first attempt lies within *subjective objectivity*. I use this term to describe the propensity for objective assessments of haircutting performances to become subjectively evaluated. Despite the practical training dedicated to students performing the required haircut on the ABLE, the inspector objectively scored them differently than the barber school instructors. This nuance significantly impacts students' outcomes on ABLEs, their licensure attainment, and the timeline for entry into the barbering profession.

Recommendations for Barber Educators

A vital part of barber schools' success rests upon constant engagement with the state's barber board and inspectors. Examinations, how they are evaluated, and other rules have the propensity to change. I recommend that barber instructors proactively communicate with the state board of barber examiners and its officials to remain aware of their expectations, updates, and alterations to assessment procedures. Critical theory suggests the need for meaningful and

impactful communication about others' situations. As it pertains to barber education, barber educators must engage in talks with state board officials about the support that students need to be successful. These consultations should turn into respected and valued collaborations that yield success by dismantling oppressive systems and requirements that do not benefit students or the profession.

Barber schools and their instructors are responsible for the adequate preparation and success of the students they serve. Equitable interest in students' success extends beyond providing the required clock hours of training. Leading through an equity lens calls for educators to reach beyond rendering classroom instruction and practical training; it requires a commitment to learning how students learn, remaining aware of pervasive barriers that marginalize them, and welcoming the obligation of improving the conditions for their success in barber school, on licensure exams, and in professional practice. The calling is to assume the responsibility of seeing students through.

I offer the following recommendations:

1. Communicate with the state board of barber examiners before the start of each semester to identify changes in the written and practical assessments of the ABLE.
2. Request the most recent rubrics that will be used to score both portions of the NC ABLE.
3. Informed by the information received, incorporate pedagogy within curricula that target those changes.
4. Consult with students early and often to identify the supports they need to acquire and master theoretical concepts and practical skills. Embrace the iterative process of

learning from students how to aid their success and incorporate their feedback into how instruction is rendered.

5. Establish a minimum proficiency criterion higher than the standard of the evaluating board to account for the probability of performance variability. By setting a higher standard, the likelihood of students passing the written assessment of the ABLE increases.
6. Implement a comprehensive curriculum with competency-based instruction (CCC-BIM) to prepare students for the ABLE and optimal career success upon licensure. Dedicate a concentrated focus on specific content areas so that teaching is not scattered – affording students the benefit of grasping concepts without content interference from unrelated subjects.
7. Utilize progress testing (formative and summative) to evaluate students' knowledge and skills acquisition. Mock the conditions of the state board of barbers so that students are familiar with the procedures and expectations.
8. Utilize a KASA that includes the competencies covered within curricula to guide the instruction and record students' proficiency. Reference the tool to identify areas of students' strengths and weaknesses and to track their progress.

Implications for Policy and Recommendations

During this improvement initiative, the NCBBE experienced some challenges. Related to the findings of this improvement initiative, the NCBBE experienced a significant turnover of its inspectors. When I embarked upon this research during the COVID-19 pandemic, the NCBBE's previous inspectors provided a video of the haircut students were expected to perform on the

ABLE. This resource was helpful because it gave the school a guide and established expectations.

Haircutting is not an easy skill to teach all students and is challenging for many. Additionally, the perception of effective haircutting and presentation quality can be subjective. While the practical portion of the NC ABLE is intended to be assessed objectively -- subjective, personal influence is virtually inescapable. Barber schools would benefit from receiving pictures of the required haircut, videos of the evaluating inspector performing the service, and the most current scoring rubric used. I recommend that this happen every time there is an inspector change who is tasked with evaluating the practical examination. This recommendation considers equitable efforts for schools to improve and render effective, informed instruction to its students, and it objectifies the subjective propensity of practical evaluations.

JIBCA students' practical examination results during this improvement study inform this recommendation. Both of JIBCA's advanced students demonstrated passing proficiency on the written exam. In contrast, one of the two did not pass the practical exam, despite the students' consistent demonstration of proficient execution of the tapered haircut during the improvement initiative. During the improvement initiative, the lead instructor used the videos provided by the NCBBE [before inspector turnover] as a training tool to equip students to perform the required haircut assessed on the ABLE.

I assert that equity in education calls for all stakeholders to engage in continuous improvement work. The relationship between the state board of barber examiners and barber schools is critical to student outcomes. Educational equity calls for providing the resources necessary to aid in this effort. The provided recommendation creates a collaborative relationship ripe for barber educators, the policy at the state board level, and students to improve together.

Directions for Future Research

The research conducted during the improvement initiative indicates that further research is necessary to determine if practical licensure examinations create barriers to professional entry. Practical skills training is a part of the educational training in many professions like speech-language pathology, occupational therapy, physical therapy, plumbing, electrical, and heating and air -- to name a few. These professions require students to become adept at many services, far more than barbering requires. While these professions require individuals to pass a written licensure exam, students of these programs are not required to take practical examinations in addition to their training to satisfy state board requirements for professional licensure attainment.

Many countries outside the United States (U.S.) do not require individuals to complete formal training to enter the barbering profession. More knowledge is needed regarding the quality of services [including sanitation and safety], the number of services offered, and the career success of barbers in other countries. While this type of research would be extensive, it is essential to identify if practical examinations potentially serve as a significant barrier to entry into the profession nationally.

Barbering encompasses more than just haircutting and sanitation. Some state boards of barbering within the U.S. require more comprehensive practical demonstrations than haircutting, shaving, and sanitation. Research focusing on how those boards evaluate and score their licensure exams, and the effects of their assessment and scoring processes on aspiring barbers' entry into the profession, will inform the benefits of examination-scoring reform or the elimination of practical examinations. These two elements may provide credence if practical assessments represent inequity and unnecessary barriers to entry into the barbering profession.

Conclusion

Low passing rates on the ABLE have delayed entry into the barbering profession. While many examination practices and lackluster educational experiences have historically served as barriers to entry into the profession, low passing rates persist. Critical theory provided a lens to view the systemic barriers in education and licensure testing that have marginalized barbering students and perpetuated low passing scores on the North Carolina Apprentice Barber Licensure Exam (NC ABLE). In this improvement initiative, I embarked upon an intervention informed by extant literature to equip two advanced students attending Jerman's Institute of Barbering and Cosmetic Arts (JIBCA) with the knowledge and skills to pass the North Carolina ABLE. I developed and led the implementation of the following:

- a Comprehensive Curriculum and Competency-Based Instruction Model (CCC-BIM) that subscribed to curricular and competency-based instruction over clock-hours education
- Formative and summative assessments to evaluate barber students' baseline barbering knowledge and skills, progress after completing competencies, and retention at the end of the initiative
- a Knowledge and Skills Acquisition (KASA) form to record and monitor performance and proficiency

Students were required to achieve >/80% proficiency on all competency assessments. When students did not reach the minimum standard, the lead instructor engaged in instructor-student consultations to identify student-centered, student-informed instructional supports and enhancements to improve pedagogy. The lead instructor provided students competency remediation, examination review, and reassessed their competence – providing students as much

time as they needed to achieve mastery of the knowledge and skills that were imparted. Students demonstrated >80% mean proficiency levels during the initiative.

The intervention was effective in increasing students' barbering knowledge and skills. Data collected at baseline, across formative progress assessments, and on the summative evaluation indicated an increase in students' proficiency due to the intervention. Following the initiative's completion, the student participants appeared before the North Carolina Board of Barber Examiners to take the NC ABE. Both students passed the written exam on the first attempt. Both students passed the sanitation assessment, but one did not pass the haircutting evaluation of the practical ABE. The other student passed both portions of the practical ABE on the first attempt.

Both students' written ABE scores were relatively consistent with their proficiency demonstrated during the improvement initiative. Their sanitation scores on the practical ABE were identical to those achieved during the intervention. The limitations of the findings indicated that despite students' exhibition of >80% proficiency during the intervention across all competencies, one student did not pass the entire practical portion of the NC ABE. An analysis of students' practical scores indicated that although one student passed the practical assessment and the other did not, their haircutting scores were considerably lower than they demonstrated during the improvement initiative. This phenomenon raised concerns about what JIBCA can do to improve student outcomes.

Future equity-related work relating to this problem in the local context calls for ways the institution can enhance its haircutting curriculum and instruction. There is also work that is necessary beyond improving haircutting training. The additional equity work calls for increased collaboration with the NCBBE. I am concerned that other barber students are experiencing

similar results regarding the haircutting assessment. Informed by JIBCA students' scores, I contend that JIBCA would benefit from requesting support from the NCBBE by way of asking the NCBBE to provide the following:

- The most recent, currently used haircutting scoring rubric
- Pictures of the required haircut performed by the evaluating inspector
- A video of the evaluating inspector performing the required haircut

These requests are rooted in providing JIBCA's barber students the resources needed to pass the practical ABLE's haircutting portion on the first attempt. This equity work will not only benefit JIBCA students, but it will also benefit other barber schools to equip their students better.

Revolutionary thinking and leadership lead to dramatic educational changes (Crow et al., 2019). I assert that improvement work in education commands revolutionary thinking and equity-oriented leadership. True improvement work is continuous and does not negate the equity work that calls for leaders' selfless commitment to ensuring that students achieve success through these initiatives. As a leader and scholar-practitioner, I am committed to equity for barber schools and students and to revolutionary work to improve educational experiences, licensure examinations, and state board policies and procedures.

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Appendix A

JIBCA's Course Catalog – Barbering

Semester 1 (*Beginner*)

Introduction to Barbering & Cosmetic Arts
General Barbering & Cosmetic Sciences I
Foundations of Haircutting, Styling, & Shaving
Clinical Practicum I
Apprentice Exam Prep I

Semester 2 (*Advanced Beginner*)

General Barbering & Cosmetic Sciences II
Anatomy & Physiology of Barbering & Cosmetics
Trichology & Dermatology of Barbering & Cosmetics
Clinical Practicum II
Apprentice Exam Prep II

Semester 3 (*Intermediate*)

Advanced Haircutting, Styling, & Shaving
Chemical Texture Services
Haircoloring & Lightening
Clinical Practicum III
Apprentice Exam Prep III

Semester 4 (*Advanced*)

Professional Barbering Topics
Clinical Practicum IV
Apprentice Exam Prep IV

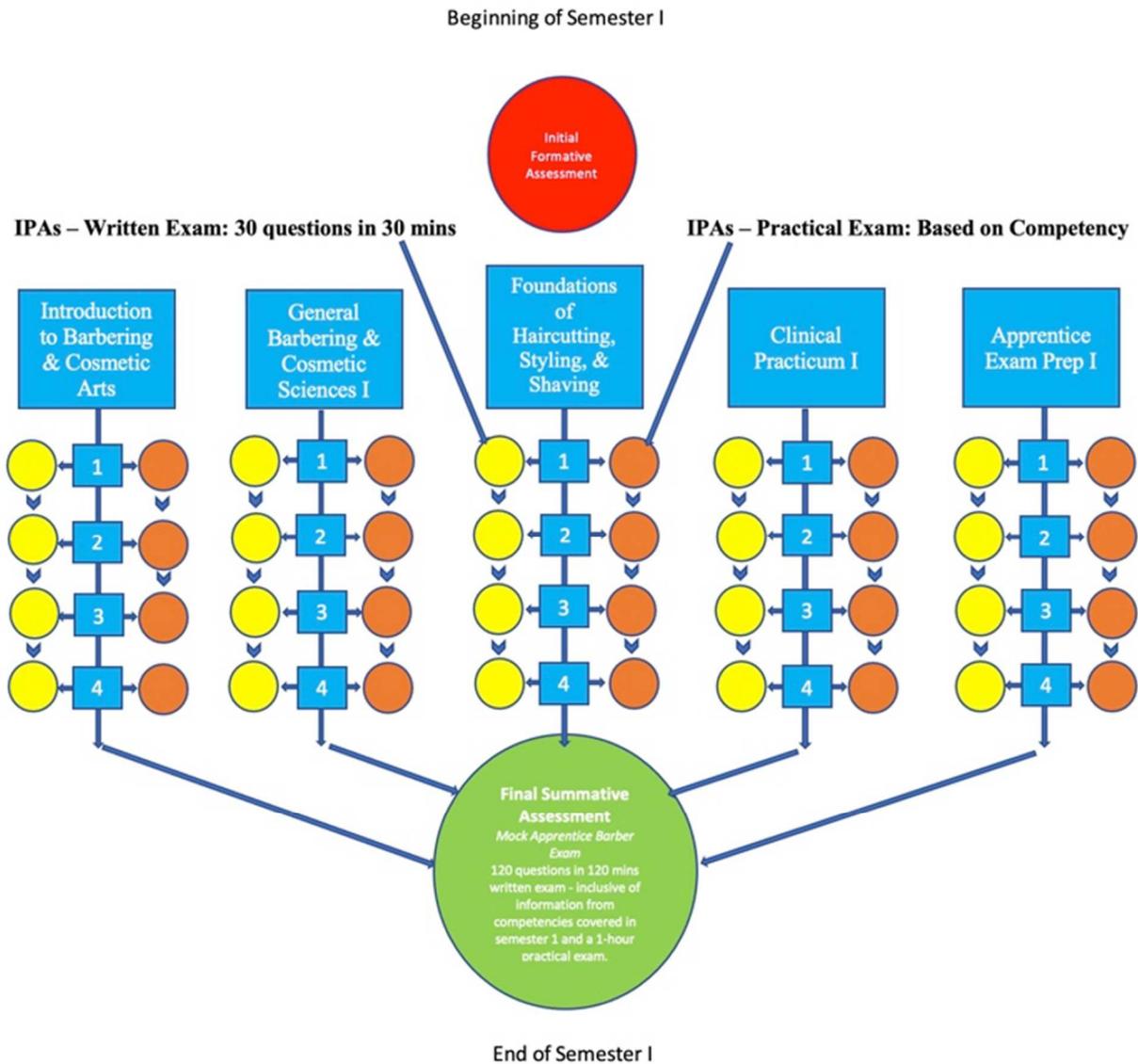
← Classification targeted during this improvement initiative

Appendix B

Comprehensive Curriculum and Competency-Based Instruction Model (CCC-BIM) With Formative and Summative Assessments

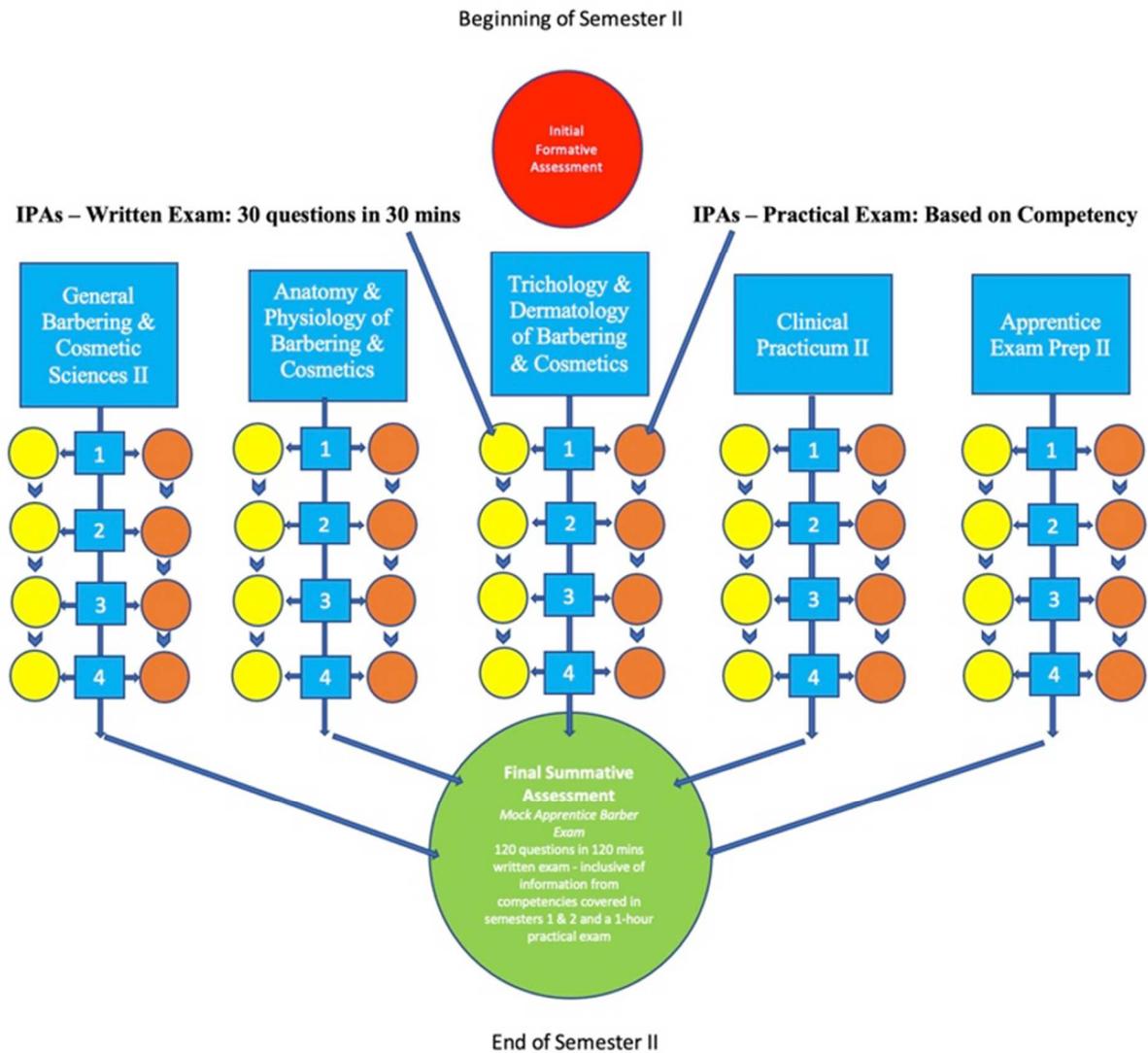
Appendix B1

Incorporation of Initial Formative Assessments (IFAs), Interim Progress Assessments (IPAs), and Final Summative Assessments in the Comprehensive Curriculum and Competency-Based Instruction Model (CCC-BIM) for Beginner Students



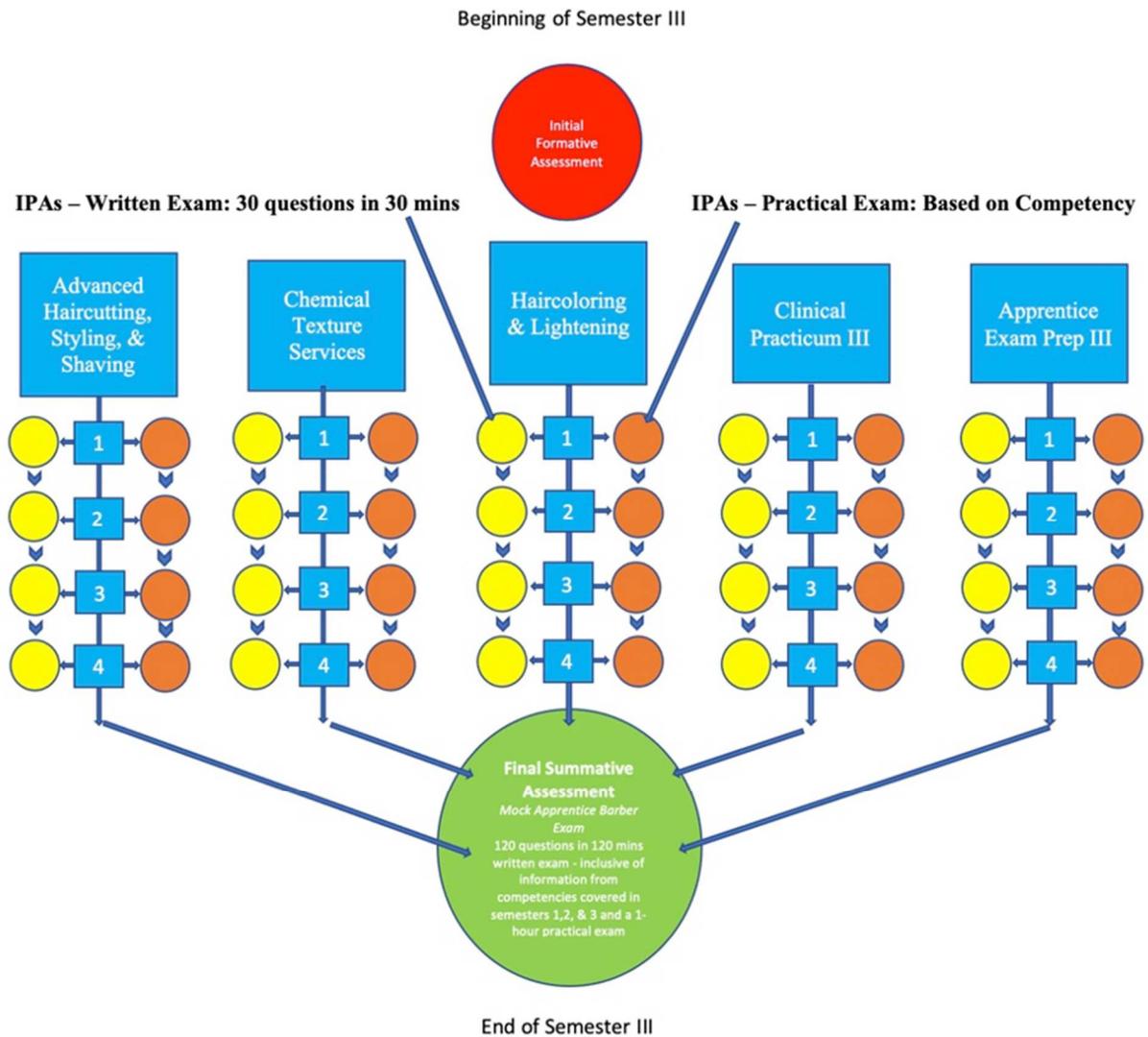
Appendix B2

Incorporation of Initial Formative Assessments (IFAs), Interim Progress Assessments (IPAs), and Final Summative Assessments in the Comprehensive Curriculum and Competency-Based Instruction Model (CCC-BIM) for Advanced Beginner Students



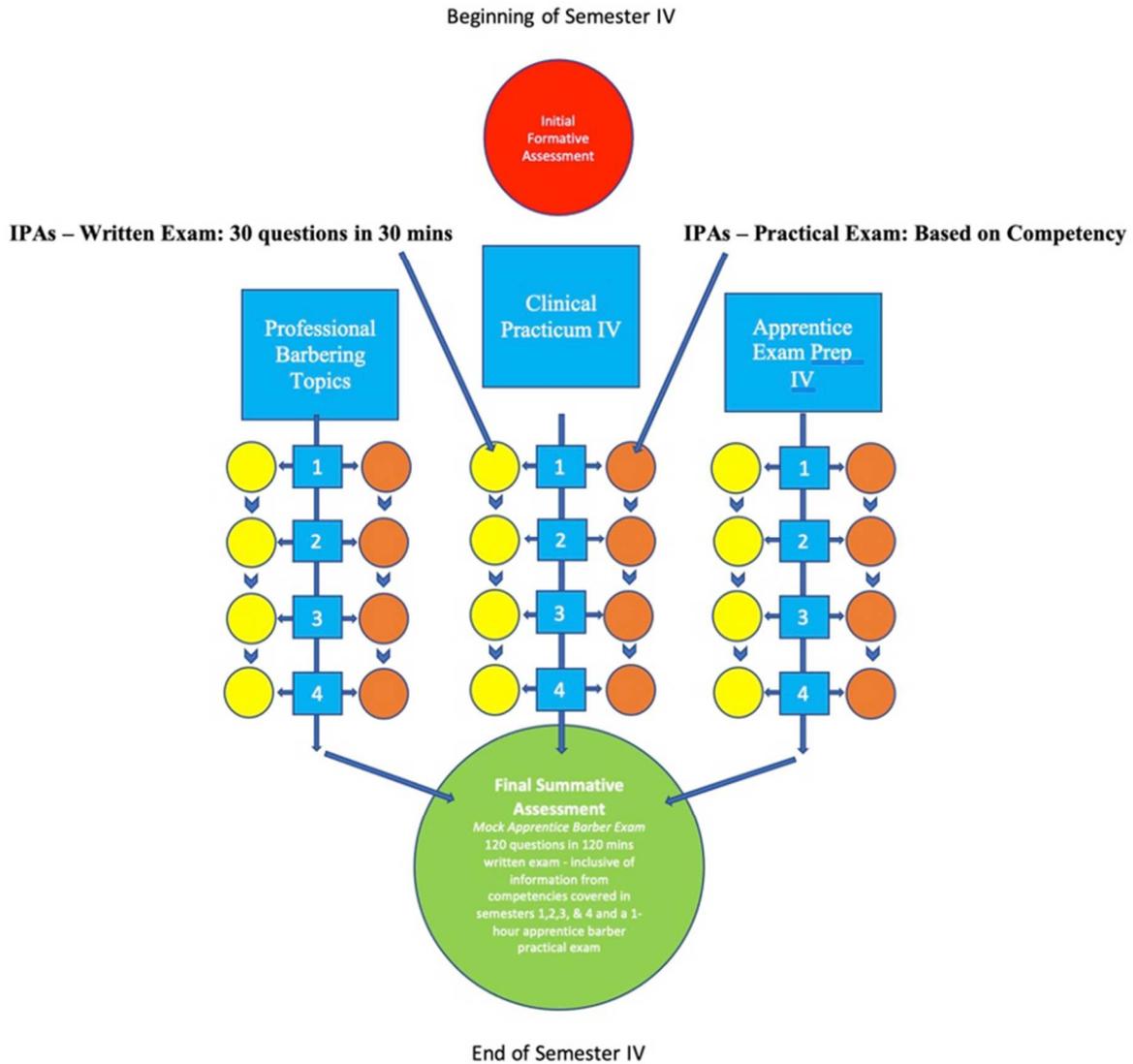
Appendix B3

Incorporation of Initial Formative Assessments (IFAs), Interim Progress Assessments (IPAs), and Final Summative Assessments in the Comprehensive Curriculum and Competency-Based Instruction Model (CCC-BIM) for Intermediate Students



Appendix B4

Incorporation of Initial Formative Assessments (IFAs), Interim Progress Assessments (IPAs), and Final Summative Assessments in the Comprehensive Curriculum and Competency-Based Instruction Model (CCC-BIM) for Advanced Students



Note. This track of the CCC-BIM relates to the improvement initiative.

Appendix C

Knowledge and Skills Acquisition (KASA) Form for Apprentice Barber License

Comprehensive Curriculum and Competency-Based Instruction Model (CCC-BIM) and Knowledge and Skills Acquisition (KASA) Form for Apprentice Barber License					
<p>The KASA form is intended to document the acquisition of theoretical and practical skills mastery in preparation for the apprentice barber license examination. The barber instructor will update the KASA as frequently as competencies are completed. The instructor is permitted to document any pertinent information regarding the activities completed and any material covered in addition to the primary textbook (Milady, 2017). Instructors will document any supporting information that will aid student with achieving knowledge and skills mastery. Each student is permitted to review the KASA form at the beginning of the barbering program, periodically during their studies, and at the completion of the barbering program.</p>					
CCC-BIM and KASA Legend		STUDENT PROFILE			
<p>Courses, and Competencies</p> <p>Initial Formative Assessment (IFA) Score - Baseline Assessments</p> <p>Interim Progress Assessment (IPA) Score - Competency Assessments</p> <p>Final Summative Assessment (FSA) Scores</p>		<p>Student: _____</p>		<p>Student Permit #: _____</p>	
		<p>Instructor: _____</p>		<p>DOB: / / </p>	
				<p>Start Date: / / </p>	
<p>Courses and Competencies</p> <p><i>Objective 1: Student must demonstrate an understanding of the foundational concepts of barbering and cosmetic arts and sciences. It is for students to exercise safe and healthy practices to protect themselves and their clients. Student will achieve >80% proficiency for each competency to satisfy the criterion for Objective 1 of this CCC-BIM.</i></p>		<p>IFA Score (%)</p> <p>Date: / / </p> <p>____ / 120 = ____ %</p>	<p>Theoretical Knowledge (check)</p> <p>Instructor will initial each competency once completed. The activity/task completed in during instruction can be documented.</p>	<p>IPA Score (%)</p> <p>Document % of proficiency on written IPA for each competency.</p>	<p>Practical Skills (check)</p> <p>Instructor will initial each competency once completed. The activity/task completed in during instruction can be documented.</p>
<p>Intro to Barbering & Cosmetic Arts</p> <ul style="list-style-type: none"> History of Barbering Life Skills Professional Image North Carolina Law NCBBE Rules and Regulations 					
<p>General Barbering & Cosmetic Sciences I</p> <ul style="list-style-type: none"> Infection Control: Principles and Practices Implements, Tools, and Equipment 					
<p>Foundations of Haircutting, Styling & Shaving</p> <ul style="list-style-type: none"> Shaving and Facial-Hair Designing Shaving Fundamentals Shaving Related Infection Control and Safety Precautions Shaving Procedures Client Consultations for Haircutting, Styling, and Shaving Services Principles of Men's Haircutting and Styling Describe Haircutting Techniques Recognizing Basic Haircut Styles Explaining Haircut Finish Work Identifying Styling Techniques Haircutting and Styling Safety Precautions 					

Clinical Practicum I					
Handwashing			%		%
Hygiene and Personal Grooming			%		%
Proper Ergonomics			%		%
Human Relations and Communication Skills			%		%
Cleaning and Disinfecting: Equipment, Tools, Implements, Clippers and Outliners			%		%
Draping (Wet and Dry)			%		%
Handling of Exposure Incidents			%		%
Honing and Stropping Razors			%		%
Towel Wrapping			%		%
Handling Clippers, Shears, Razors, and Combs			%		%
Basic Hair Cutting			%		%
14 Areas and Movements of a Shave			%		%
Shampoo			%		%
Apprentice Examination Prep I					
Sanitation & Disinfection			%		%
Haircutting			%		%
Shaving			%		%
Theory (Content Covered in the Curriculum)			%		%
Test-Taking Skills			%		%
Median Proficiency			%	Median Proficiency	
Date: / /			FSA Scores: Written /120 = %	Practical %	
Notes:					
Clock Hours:					
<i>Objective II: Student must demonstrate an understanding of general anatomy and physiology for the provision of barbering services. Student must be able to identify normal and abnormal hair, scalp, and skin. Student will demonstrate an understanding of basic electricity needed for the operation of tools and equipment used for barbering and cosmetic arts services. Student will demonstrate an advanced understanding of disordered hair, scalp, and skin etiologies. Student will exhibit the ability to provide treatments for hair loss, scalp disorders, and skin diseases. Student will achieve >80% proficiency for each competency to satisfy the criterion of Objective II of this CCC-BIM.</i>	IFA Score (%) Date: / / ____/120 = ____ %	Theoretical Knowledge (check) Instructor will initial each competency once completed. The activity/task completed in during instruction can be documented.	IPA Score (%) Document % of proficiency on written IPA for each competency.	Practical Skills (check) Instructor will initial each competency once completed. The activity/task completed in during instruction can be documented.	IPA Score (%) Document % of proficiency on practical IPA for each competency.
General Barbering & Cosmetic Sciences II					
Basic Chemistry			%		%
Chemical Properties			%		%
Properties of Water and pH			%		%
Cosmetic Preparations Used in Barbering			%		%
Basics of Electricity			%		%
Safe Electrical Equipment Practices			%		%
Electrotherapy Terminology			%		%
Light Energy and Light Therapy			%		%

Anatomy & Physiology of Barbering & Cosmetics					
General Anatomy and Physiology			%		%
Types of Tissue			%		%
Body Systems and Associated Organs			%		%
Skin Anatomy and Physiology			%		%
Scalp Anatomy and Physiology			%		%
Hair Anatomy and Physiology			%		%
Trichology & Dermatology of Barbering & Cosmetics					
Skin Structure, Disorders, and Diseases			%		%
Skin Health and Maintenance			%		%
Disorders of Sebaceous and Sudoriferous Glands			%		%
Pigment Disorders and Hypertrophies of the Skin			%		%
Properties of the Hair and Scalp			%		%
Hair and Scalp Disorders and Diseases			%		%
Hair Structure			%		%
Chemical Composition of Hair			%		%
Hair Growth			%		%
Hair Loss and Treatment			%		%
Hair, Scalp and Skin Analysis			%		%
Hair, Scalp and Skin Treatment			%		%
Types of Shampoo Services			%		%
Facial Massage and Treatments (Preventative, Corrective, and Maintenance)			%		%
Subdermal Systems			%		%
Massage Theory			%		%
Treatment Equipment and Modalities			%		%
Clinical Practicum II					
Handwashing			%		%
Hygiene and Personal Grooming			%		%
Proper Ergonomics			%		%
Human Relations and Communication Skills			%		%
Cleaning and Disinfecting: Equipment, Tools, Implements, Clippers and Outliners			%		%
Draping (Wet and Dry)			%		%
Handling of Exposure Incidents			%		%
Honing and Stropping Razors			%		%
Towel Wrapping			%		%
Handling Clippers, Shears, Razors, and Combs			%		%
Basic Hair Cutting			%		%
14 Areas and Movements of a Shave			%		%
Facials			%		%
Shampoos			%		%
Apprentice Examination Prep II					
Sanitation & Disinfection			%		%
Haircutting			%		%
Shaving			%		%
Theory (Content Covered in the Curriculum)			%		%
Test-Taking Skills			%		%
		Median Proficiency	%	Median Proficiency	%
Date: / /		FSA Scores: Written	/120 = %	Practical	%

Clinical Practicum III					
Handwashing			%		%
Hygiene and Personal Grooming			%		%
Proper Ergonomics			%		%
Human Relations and Communication Skills			%		%
Cleaning and Disinfecting: Equipment, Tools, Implements, Clippers and Outliners			%		%
Draping (Wet and Dry)			%		%
Handling of Exposure Incidents			%		%
Honing and Stropping Razors			%		%
Towel Wrapping			%		%
Handling Clippers, Shears, Razors, and Combs			%		%
Basic Hair Cutting			%		%
14 Areas and Movements of a Shave			%		%
Facials			%		%
Shampoos			%		%
Chemical Texture Services			%		%
Haircoloring & Lightening Services			%		%
Apprentice Examination Prep III					
Sanitation & Disinfection			%		%
Haircutting			%		%
Shaving			%		%
Theory (Content Covered in the Curriculum)			%		%
Test-Taking Skills			%		%
Median Proficiency			%	Median Proficiency	
Date: / /		FSA Scores:	Written	/120 = %	Practical: %
Notes:					
Clock Hours: _____					
<p>Objective IV: Students will demonstrate proficient knowledge and skills of all competencies. This standard will encompass an intensive apprentice licensure examination preparation. Students will exhibit preparedness for the transition of being a student to becoming a professional barber. Student will achieve >80% proficiency for each competency to satisfy the criterion for Objective IV of this CCC-BIM.</p>		<p>IFA Score (%)</p> <p>Date: / /</p> <p>____/120 = ____ %</p>	<p>Theoretical Knowledge (check)</p> <p>Instructor will initial each competency once completed. The activity/task completed in during instruction can be documented.</p>	<p>IPA Score (%)</p> <p>Document % of proficiency on written IPA for each competency.</p>	<p>Practical Skills (check)</p> <p>Instructor will initial each competency once completed. The activity/task completed in during instruction can be documented.</p>
<p>Professional Barbering Topics</p>					
Employment			%		%
Job Interviews			%		%
Income Management			%		%
Accounting and Taxes			%		%
Effective Product Sales and Retail Ethics			%		%
Marketing and Establishing Clientele			%		%
Compensation (Services, Booth Rental, Commission, et cetera)			%		%
Entrepreneurship and Management in Barbering			%		%
Use of Technology in Barbering Business			%		%

Apprentice Examination Prep IV			
Intro to Barbering & Cosmetic Arts		%	%
General Barbering & Cosmetic Sciences I		%	%
Foundations of Haircutting, Styling & Shaving		%	%
General Barbering & Cosmetic Sciences II		%	%
Anatomy & Physiology of Barbering & Cosmetics		%	%
Trichology & Dermatology of Barbering & Cosmetics		%	%
Advanced Haircutting, Styling, & Shaving		%	%
Chemical Texture Services		%	%
Haircoloring & Lightening		%	%
NCBBE Examination		%	%
Test Taking Skills		%	%
Clinical Practicum IV			
Handwashing		%	%
Hygiene and Personal Grooming		%	%
Proper Ergonomics		%	%
Human Relations and Communication Skills		%	%
Cleaning and Disinfecting: Equipment, Tools, Implements, Clippers and Outliners		%	%
Draping (Wet and Dry)		%	%
Handling of Exposure Incidents		%	%
Honing and Stropping Razors		%	%
Towel Wrapping		%	%
Handling Clippers, Shears, Razors, and Combs		%	%
Basic Hair Cutting		%	%
14 Areas and Movements of a Shave		%	%
Facials		%	%
Shampoos		%	%
Chemical Texture Services		%	%
Haircoloring & Lightening Services		%	%
	Median Proficiency	%	Median Proficiency %
Final Mock NCBBE Apprentice Barber Licensure Exam	Date: / /	FSA Scores: Written: /120 = %	Practical: %
Notes:			
The student whose name is listed above has demonstrated >80% proficiency on all competencies. The student has completed the minimal requirement of 1,528 hours of training in barbering to take the North Carolina apprentice barber licensure exam.			
Instructor's Signature: _____		Student's Signature: _____	Clock Hours: _____

Note. This document was developed to align barbering curricula with the documentation of students' theoretical knowledge and practical skills acquisition. The creation of this CCC-BIM and KASA form was informed by the Knowledge and skills acquisition (KASA) summary form for certification in speech-language pathology (February 2009) and Milady Standard: Barbering (Milady, (Authors) Scali-Sheahan, M. et al., 2017). Provided is a link to view the entire document:

<https://docs.google.com/spreadsheets/d/1op68iACf9QnH41z0PmmQmmv4ZlkxCeds/edit#gid=518959721>

Appendix D

Course Schedule, Days, and Times Based on Classification

Barbering & Cosmetic Arts Course Schedule			
Semester 1: Beginner Courses		Course Meeting Days	Start End
Clinical Practicum I	Tuesdays, Wednesdays, Thursdays, & Fridays		5:00 PM 8:00 PM
	Saturdays		8:00 AM 2:00 PM
Introduction to Barbering and Cosmetics Arts	Tuesdays		8:30 PM 10:00 PM
General Barbering and Cosmetic Sciences I	Wednesdays		8:30 PM 10:00 PM
Foundations of Haircutting, Styling, and Shaving	Thursdays		8:30 PM 10:00 PM
Apprentice Exam Prep I	Fridays		8:30 PM 10:00 PM
<i>*Courses will run concurrently for 14 weeks.</i>		Projected Hours Accrual	390 semester clock hours
		Projected Cummulative Hours	390/1528 required hours
Semester 2: Advanced Beginner Courses		Course Meeting Days	Start End
Clinical Practicum II	Tuesdays, Wednesdays, Thursdays, & Fridays		5:00 PM 8:00 PM
	Saturdays		8:00 AM 2:00 PM
Anatomy and Physiology of Barbering and Cosmetics	Tuesdays		8:30 PM 10:00 PM
General Barbering and Cosmetic Sciences II	Wednesdays		8:30 PM 10:00 PM
Trichology and Dermatology of Barbering and Cosmetics	Thursdays		8:30 PM 10:00 PM
Apprentice Exam Prep II	Fridays		8:30 PM 10:00 PM
<i>*Courses will run concurrently for 14 weeks.</i>		Projected Hours Accrual	390 semester clock hours
		Projected Cummulative Hours	780/1528 required hours
Semester 3: Intermediate Courses		Course Meeting Days	Start End
Clinical Practicum III	Tuesdays, Wednesdays, Thursdays, & Fridays		5:00 PM 8:00 PM
	Saturdays		8:00 AM 2:00 PM
Advanced Haircutting, Styling, and Shaving	Tuesdays		8:30 PM 10:00 PM
Chemical Texture Services	Wednesdays		8:30 PM 10:00 PM
Haircoloring and Lightening	Thursdays		8:30 PM 10:00 PM
Apprentice Exam Prep III	Fridays		8:30 PM 10:00 PM
<i>*Courses will run concurrently for 14 weeks.</i>		Projected Hours Accrual	390 semester clock hours
		Projected Cummulative Hours	1170/1528 required hours
Semester 4: Advanced Courses		Course Meeting Days	Start End
Clinical Practicum IV	Tuesdays, Wednesdays, Thursdays, & Fridays		5:00 PM 8:00 PM
	Saturdays		8:00 AM 2:00 PM
Apprentice Exam Prep IV	Tuesdays, Wednesdays, & Thursdays		8:30 PM 10:00 PM
Professional Barbering Topics	Fridays		8:30 PM 10:00 PM
<i>*Courses will run concurrently for 14 weeks.</i>		Projected Hours Accrual	390 semester clock hours
		Projected Cummulative Hours	1560/1528 required hours

Note. The original plan was for the courses to run for 14 weeks before review and preparation for the North Carolina Apprentice Barber Licensure Exam (NC ABLE). The intervention was cut by two weeks due to the available NC ABLE dates. Students took the NC ABLE on February 13, 2023. The anticipated date was February 28, 2023. See the Advanced courses as these are pertinent to this improvement initiative.

Appendix E

Lesson Plan

Lesson Plan - Advanced Students					
Professional Barbering Topics					
F (8:30 - 10pm)	Tuesday	Wednesday	Thursday	Friday (8:30pm - 10:00pm)	Saturday
Week 1 (11/15 - 19/22)				Employment and Job interviews (Chapter 19)	
Week 2 (11/22 - 26/22)				Income Management (pp. 742 - 745)	
Week 3 (11/29 - 12/03/22)				Accounting and Taxes	
Week 4 (12/06 - 12/10/22)	EXAM - 12/06/22			Effective Product Sales (pp 746 - 749)	
Week 5 (12/13 - 17/22)				Retail Ethics (pp 746 - 749)	
Week 6 (12/20 - 12/24/22)				Marketing	
Week 7 (12/27 - 31/22)				Establishing Clientele (pp. 750 - 755)	
Week 8 (01/03 - 07/23)				Compensation (pp. 756 - 767)	
Week 9 (01/10 - 14/23)	EXAM - 01/10/23			Entrepreneurship (pp. 768 - 775)	
Week 10 (01/17 - 21/23)				Management in Barbering (Chapter 21)	
Week 11 (01/24 - 28/23)				Technology in the Barbering Business	
Week 12 (01/31 - 02/04/23)				Exam Prep - What supports are needed?	
Week 13 (02/07 - 11/23)	EXAM - 02/07/23			Use time to support Exam Prep IV course	
Week 14 (02/14 - 18/23)				Use time to support Exam Prep IV course	
Apprentice Examination Prep IV					
T, W, TH (8:30-10pm)	Tuesday (8:30pm - 10:00pm)	Wednesday (8:30pm - 10:00pm)	Thursday (8:30pm - 10:00pm)	Friday	Saturday
Week 1 (11/15 - 19/22)			Chapter 1		
Week 2 (11/22 - 26/22)	Chapter 2	Chapter 3	NCBBE Rules & Regs; NC Law		
Week 3 (11/29 - 12/03/22)	Chapter 4 (1st half)	Chapter 4 (2nd half)	EXAM - 12/01/22	*Exam Days will be used to review competency content prior to the exam.	
Week 4 (12/06 - 12/10/22)	Chapter 5 (1st half)	Chapter 5 (2nd half)	EXAM - 12/08/22	Review: 8:30 - 9pm	
Week 5 (12/13 - 17/22)	Chapter 13 (pp. 336 - 348)	Chapter 14	EXAM - 12/15/22	Exam: 9pm - 10pm	
Week 6 (12/20 - 12/24/22)	Chapter 7	Chapter 8	EXAM - 12/22/22		
Week 7 (12/27 - 31/22)	Chapter 6 (pp. 142 - 148)	Chapter 6 (pp. 149 - 150; 152 -154)	Chapter 6 (pp. 157-167)		
Week 8 (01/03 - 07/23)	Chapter 9	Chapter 10	EXAM - 01/05/23		
Week 9 (01/10 - 14/23)	Chapter 11	Chapter 12	EXAM - 01/12/23		
Week 10 (01/17 - 21/23)	Chapter 13 (pp. 349 - 383)	Chapter 16	EXAM - 01/19/23		
Week 11 (01/24 - 28/23)	Chapter 17 (1st half), Chapter 7 Review	Chapter 17 (2nd half)	EXAM - 01/26/23		
Week 12 (01/31 - 02/04/23)	Chapter 18 (1st half)	Chapter 18 (2nd half)	EXAM - 02/02/23		
Week 13 (02/07 - 11/23)	NCBBE Examination	NCBBE Examination	EXAM - 02/09/23		
Week 14 (02/14 - 18/23)	Test-Taking Skills	Test-Taking Skills	EXAM - 02/16/23		
Clinical Practicum IV					
T, W, TH, F (5-8pm); Sat (8am-2pm)	Tuesday (5:00pm - 8:00pm)	Wednesday (5:00pm - 8:00pm)	Thursday (5:00pm - 8:00pm)	Friday (5:00pm - 8:00pm)	Saturday (8:00am - 2:00pm)
Week 1 (11/15 - 19/22)		**Decontamination and Sanitation, Shave, and Haircut Daily (1st thing daily - 5pm Sharp)			
Week 2 (11/22 - 26/22)	***Featured Competencies will be covered during the designated week in addition to daily practical review of sanitation, the shave, and the haircut.				
Week 3 (11/29 - 12/03/22)	Featured Competencies: Handwashing; Hygiene; Personal Grooming; and Proper Ergonomics (pp. 41 - 47; 72 -73; 79, and 93 -94)				EXAM - 12/03/22
Week 4 (12/06 - 12/10/22)	Featured Competencies: Human Relations and Communication Skills (pp. 36, 47 - 50, and 716)				EXAM - 12/17/22
Week 5 (12/13 - 17/22)	Featured Competencies: Cleaning and Disinfecting - Equipment, Tools, Implements, Clippers, and Outliners/Trimmers (pp. 60 - 98)				EXAM - 01/07/23
Week 6 (12/20 - 12/24/22)	Featured Competencies: Honing and Stropping Razors; Towel Wrapping; Handling Clippers, Shears, Razors, and Combs (pp. 78, 122 -124, 133 - 135)				EXAM - 01/14/23
Week 7 (12/27 - 31/22)	Featured Competencies: 14 Areas and Movements of a Shave; and Handling of Exposure Incidents (pp. 278; 338 - 380)				EXAM - 01/21/23
Week 8 (01/03 - 07/23)	Featured Competencies: Draping; Hair Cutting; Styling; Facials; and Shampoos (pp. 309 - 333)				EXAM - 01/21/23
Week 9 (01/10 - 14/23)	Featured Competencies: Chemical Texture Services (pp. 678 - 702)				
Week 10 (01/17 - 21/23)	Featured Competencies: Haircoloring and Lightening Services (pp. 678 - 702)				
Week 11 (01/24 - 28/23)					EXAM - 02/11/23
Week 12 (01/31 - 02/04/23)					
Week 13 (02/07 - 11/23)					
Week 14 (02/14 - 18/23)					

Note. This is the lesson plan that was developed for the improvement initiative. Test-Taking Skills unit was moved up one week ahead of schedule due to the NC ABE available date. NCBBE/NC ABE review was condensed.

Appendix F

Exam Schedule: Advanced Students (>/1,170 clock hours)

November 14, 2022 -- **Initial Formative Assessment (IFA)**

<u>Courses and Dates</u>	<u>Interim Progress Assessments (IPAs)</u>
<i>Professional Barbering Topics</i>	
- Tuesday, December 6, 2022	Employment; Job interviews; Income Management; Accounting and Taxes
- Tuesday, January 10, 2023	Effective Product Sales; Retail Ethics; Marketing; and Establishing Clientele
- Tuesday, February 7, 2023.....	Compensation (Services, Booth Rental, Commission, et cetera); Entrepreneurship; Management in Barbering, and The Use of Technology in the Barbering Business
<i>Apprentice Examination Prep IV</i>	
- Thursday, December 1, 2022	Intro to Barbering & Cosmetic Arts
- Thursday, December 8, 2022	General Barbering & Cosmetic Sciences I
- Thursday, December 15, 2022	Foundations of Haircutting, Styling & Shaving
- Thursday, December 22, 2022	General Barbering & Cosmetic Sciences II
- Thursday, January 5, 2023	Anatomy & Physiology of Barbering & Cosmetics
- Thursday, January 12, 2023	Trichology & Dermatology of Barbering & Cosmetics
- Thursday, January 19, 2023	Advanced Haircutting, Styling, & Shaving
- Thursday, January 26, 2023	Chemical Texture Services
- Thursday, February 2, 2023	Hair coloring & Lightening
- Thursday, February 9, 2023	NCBBE Examination
- Thursday, February 12, 2023	Test-Taking Skills
<i>Clinical Practicum IV</i>	
- Saturday, December 3, 2022	Handwashing; Hygiene; Personal Grooming; and Proper Ergonomics
- Saturday, December 17, 2022	Human Relations and Communication Skills
- Saturday, January 7, 2023	Cleaning and Disinfecting (Equipment, Tools, Implements, Clippers, and Outliners/Trimmers)
- Saturday, January 14, 2023	Honing and Stropping Razors; Towel Wrapping; Handling Clippers, Shears, Razors, and Combs; 14 Areas and Movements of a Shave; and Handling of Exposure Incidents
- Saturday, January 21, 2023	Draping; Hair Cutting; Styling; Facials; and Shampoos

- Saturday, February 11, 2023 Chemical Texture Services, Haircoloring and Lightening Services

February 12, 2023 -- **Final Summative Assessment (FSA)**

February 13, 2023 -- NCBBE Apprentice Barber License Exam (NC ABLE)

Note. This Appendix reflects the revised exam schedule.

Appendix G

Initial Formative Assessment (IFA): Advanced Students

Initial Formative Assessment

Mock Written Exam

1. In _____, the Roman Catholic Church abolished the practice of tonsure.
 - a. 1335
 - b. 1576
 - c. 2001
 - d. 1972
2. _____ involves taking the time to really listen to others.
 - a. Receptivity
 - b. Self-care
 - c. Diplomacy
 - d. Assertiveness
3. The _____ of modern barber poles represents the basin that was used as a vessel to catch the blood during bloodletting.
 - a. round shape
 - b. colors
 - c. bottom end-cap
 - d. top
4. When you recommend products that clients do not really need, you are demonstrating what type of behavior?
 - a. Unethical
 - b. Discrete
 - c. Ethical
 - d. Positive
5. The barber-surgeons formed their first organization in _____ in 1096AD.
 - a. France
 - b. England
 - c. Italy
 - d. Germany
6. As the most learned and educated people of the Middle Ages, _____ become the physicians of the period.
 - a. Barbers
 - b. tradesmen
 - c. kings and queens
 - d. monks and priests
7. In Egypt, the work of barber Meryma'at _____.
 - a. was held in high esteem
 - b. denoted status within the tribe
 - c. was groomed with intricately carved combs
 - d. was held in low esteem
8. Which of the following means being compassionate to other people?
 - a. Diplomacy
 - b. Assertiveness
 - c. Sensitivity
 - d. Discretion
9. The Macedonians troops of _____ lost several battles to the Persians as a result of the warriors' beards.
 - a. Moses
 - b. Pharaoh
 - c. Ticinus
 - d. Alexander the Great
10. The Egyptians' coloring agents were made from berries, bark, minerals, and other natural materials and were used on the _____.
 - a. nails
 - b. hair
 - c. skin
 - d. all of the above

11. Being helpful and caring to others will help you _____.
- a. get the best grade in the class
 - b. become a well-rounded person
 - c. earn more money
 - d. be creative
12. Maintaining a(n) _____ attitude is a life skill that can help you be a productive and well-rounded person.
- a. perfectionist
 - b. cooperative
 - c. self-critical
 - d. aggressive
13. What topics should not be discussed in a business setting?
- a. Religion and politics
 - b. Appointment bookings
 - c. The client's preferences
 - d. Products and services
14. Effective human relations skills help you build _____ with clients and coworkers.
- a. an image
 - b. a social media presence
 - c. self-esteem
 - d. rapport
15. _____ is a mechanical process (scrubbing) using soap and water or detergent and water.
- a. Sanitizing
 - b. Cleaning
 - c. Disinfection
 - d. Sterilization
16. Laws are also called _____.
- a. rules
 - b. guidelines
 - c. statutes
 - d. regulations
17. Which of the following conveys an image of confidence and can prevent fatigue?
- a. Good listening skills
 - b. Good human relations
 - c. Good posture
 - d. Good work habits
18. Establishing a/an _____ image is an essential image-building attribute.
- a. relaxed
 - b. professional online
 - c. attractive
 - d. poised
19. Fire extinguishers should be placed where they are _____ in the barbershop.
- a. near ventilation
 - b. away from clients
 - c. locked in a safe place
 - d. readily accessible
20. A professional barber's clothing should be _____.
- a. comfortable
 - b. loose
 - c. excessively baggy
 - d. tight
21. Every solution, liquid, cream, powder, paste, gel, and other substance should be properly _____.
- a. cleaned
 - b. labeled
 - c. diluted
 - d. disinfected

22. Tuberculocidal disinfectants are often referred to as _____.
- a. wet sanitizers
 - b. quats
 - c. hand sanitizer
 - d. phenolics
23. _____ may contain antirust ingredients.
- a. Quat solutions
 - b. Phenol
 - c. Bleach
 - d. Petroleum distillates
24. _____ is the process that destroys all microbial life, including spores.
- a. Sanitizing
 - b. Cleaning
 - c. Sterilization
 - d. Disinfection
25. Bacteria multiply best in what type of places?
- a. Warm
 - b. Dry
 - c. Cold
 - d. Clean
26. Bacteria with flagella move in what type of motion?
- a. Snakelike
 - b. Rowing-like
 - c. Vertical
 - d. Sudden
27. Bleach solution should be stored _____.
- a. away from other solutions
 - b. somewhere damp
 - c. away from heat and light
 - d. near heat and light
28. Beveled-edge blades typically have what type of edge?
- a. Corrugated (serrated)
 - b. Dull
 - c. Concaved
 - d. Diamond
29. The razor of choice for professional barbering is the _____ razor.
- a. detachable-blade
 - b. cordless
 - c. safety
 - d. straight
30. Avoid judging a razor based on _____.
- a. other barbers' opinions
 - b. its company
 - c. color or design
 - d. quality
31. Do not allow children to play _____.
- a. in the reception area
 - b. on the waiting room chairs
 - c. on the floor
 - d. on the hydraulic chairs
32. What is it called when certain chemical reactions release energy in the form of heat?
- a. Exothermic reaction
 - b. Endothermic reaction
 - c. Oxidation
 - d. Reduction

33. Moisturizing creams are designed to treat _____.
- a. oiliness
 - b. dandruff
 - c. acne
 - d. dryness
34. The basic units of all living things are _____.
- a. bacteria
 - b. cytoplasm
 - c. cells
 - d. protoplasm
35. What type of muscle is not duplicated anywhere else in the body?
- a. Nonstriated
 - b. Cardiac
 - c. Voluntary
 - d. Smooth
36. A yellow light on an LED _____.
- a. reduces hyperpigmentation
 - b. improves lymphatic flow
 - c. reduces acne
 - d. improves collagen production
37. When using therapeutic lamps, the client's _____ must be protected.
- a. ears
 - b. eyes
 - c. skin
 - d. hair
38. Which of the following is an apparatus found within a power supply or adapter that converts AC to DC?
- a. Rheostat
 - b. Resistor
 - c. Rhambos
 - d. Rectifier
39. Which of the following is characterized by a high rate of oscillation that produces heat?
- a. Iontophoresis
 - b. Galvanic current
 - c. Microcurrent
 - d. Tesla high-frequency current
40. A light-emitting diode is a medical device used to _____.
- a. reduce acne
 - b. remove hair
 - c. decrease collagen content
 - d. decrease skin circulation
41. When _____, the blades are kept open, and only the portion of the blade near the pivot is used for cutting.
- a. Notching
 - b. Slithering
 - c. Slicing
 - d. Point cutting
42. The blunt cut is also known as a _____ cut.
- a. one-length
 - b. stacked
 - c. wedge
 - d. uniform-layered

43. Finger waving is the process of shaping and directing the hair into what type of pattern?
- Contoured
 - Spiral
 - S-shaped
 - Circular
44. _____ washes out or fades within a few weeks.
- Permanent
 - Temporary
 - Semi-permanent
 - Demi-permanent
45. A client with brown hair has red highlights. Brown is the _____, and red is the _____.
- hue; tone
 - tone; primary color
 - tone; hue
 - hue; secondary color
46. What is the most common neutralizer in permanent waving?
- Hydrogen peroxide
 - Mercaptamine
 - Ammonium bisulfite
 - Ammonium sulfite
47. Avoid large blockings on thin hair growth in permanent waves as the strain may cause _____.
- hair that tangles easily
 - breakage
 - sponginess
 - limpness
48. _____ shampoos help to rebalance and restore the pH level of the hair by neutralizing and alkali or unwanted residues that remain in the hair after chemically relaxing the hair.
- Clarifying
 - Conditioning
 - ph-balanced
 - Neutralizing
49. A light, continuous movement that should be applied in a slow and rhythmic manner when performing a facial massage.
- Petrissage
 - Percussion
 - Friction
 - Effleurage
50. A deep rubbing movement in which pressure is applied on the skin with the fingers or palms while moving over an underlying structure when performing a facial massage.
- Petrissage
 - Percussion
 - Friction
 - Effleurage
51. _____ shampoos often contain anti-fungal agents such as pyrithione zinc, selenium sulfide, or ketoconazole to suppress the growth of malassezia, the fungus that controls dandruff.
- Clarifying
 - Conditioning
 - ph-balanced
 - Medicated

52. The T-zone is the section of the face that incorporates the _____.
- Forehead, nose, and chin area
 - Nose, cheeks, and chin area
 - Forehead, nose and upper lip area
 - Chin, cheeks, and nose area
53. _____ are waterproof capes made of vinyl used to protect the client's skin and clothing from water, liquids, and chemical processed.
- Shampoo capes
 - Haircutting capes
 - Shaving capes
 - None of the above
54. _____ shampoos are made of a mild cream that contains moisturizing agents such as humectants designed to "lock in" moisture into the hair.
- Clarifying
 - Conditioning
 - ph-balanced
 - Medicated
55. Which muscle(s) is/are stimulated when the sides to the top of the head are massaged or manipulated during a shampoo or facial service?
- Frontalis
 - Aponeurosis
 - Occipital
 - Trapezius
56. _____ shampoos are made of a mild cream that contains moisturizing agents such as humectants designed to "lock in" moisture into the hair.
- Clarifying
 - Conditioning
 - ph-balanced
 - Medicated
57. Detachable-blade clippers utilize removable blades in a variety of sizes to _____.
- create tension when cutting
 - achieve different hair lengths
 - reduce noise while cutting
 - achieve a flat-top style
58. Outliners require very _____ against the skin.
- little pressure
 - hard pressure
 - firm pressure
 - hot blades
59. Transferring the comb to the opposite hand after combing to facilitate haircutting is called _____.
- manipulating the comb
 - palming the shears
 - palming the comb
 - holding the comb

60. Petroleum distillates are excellent for removing _____ from metals.
- a. oil
 - b. rust
 - c. spores
 - d. scratches
61. Chemical products approved by the Environmental Protection Agency (EPA) designed to destroy most bacteria, fungi, and viruses on surfaces are _____.
- a. sanitizers
 - b. sterilizers
 - c. disinfectants
 - d. virucides
62. The Latin word means the cutting, clipping, or trimming of hair with shears or a razor.
- a. barba
 - b. artisan
 - c. tonsure
 - d. tonsorial
63. To promote better long-term memory, try to associate new information with prior knowledge by _____.
- a. using repetition
 - b. using short-term memory
 - c. writing the information down 100 times
 - d. using word associations
64. _____ is/are the key to avoiding posture problems.
- a. Repetitive motions
 - b. Prevention
 - c. Relaxation
 - d. Preparation
65. To avoid ergonomic-related injuries, your wrists should be in what position?
- a. Erect.
 - b. At a right angle.
 - c. Straight or neutral.
 - d. At a 60-degree angle.
66. When working behind the chair, your neck should be _____.
- a. elongated
 - b. tilted backward
 - c. relaxed
 - d. tilted forward
67. Which of the following conveys an image of confidence and can prevent fatigue?
- a. Good listening skills
 - b. Good human relations
 - c. Good posture
 - d. Good work habits
68. Barbers can determine which shampoo and conditioning products to use by _____.
- a. completing a hair and scalp analysis
 - b. taking the client's blood pressure
 - c. completing a skin analysis
 - d. dampening the client's hair thoroughly

69. During the late 1800s, employer organizations of barbers were known as _____ barber groups.
- a. master
 - b. Protective
 - c. senior
 - d. journeymen
70. _____ are made of nylon or other synthetic materials used to protect the client's skin during haircutting services.
- a. Shampoo capes
 - b. Haircutting capes
 - c. Shaving capes
 - d. None of the above
71. Regular physical activity benefits the body by improving _____.
- a. blood circulation
 - b. temperament
 - c. your appearance
 - d. your personality
72. What should you use to cushion the client's neck at the shampoo bowl?
- a. Cape
 - b. Folded towel
 - c. Neck strip
 - d. Pillow
73. Some tribes believed good and bad spirits entered through hairs on the head and the only way to exorcise bad spirits was to _____ the hair.
- a. cut
 - b. never cut
 - c. dye
 - d. braid
74. Where should you test the water temperature before applying to a client's hair or scalp?
- a. Inside of your wrist
 - b. Back of your hand
 - c. Your fingers
 - d. Palm of your hand
75. Alcohol should only be used as a cleaner or a(n) _____.
- a. Sterilizer
 - b. Disinfectant
 - c. antiseptic
 - d. bleach
76. The majority of contaminants and pathogens can be removed from the surfaces of tools and implements through proper _____.
- a. mixing of disinfectants
 - b. handwashing
 - c. guidelines
 - d. cleaning
77. The _____ warriors wove their front hair into three sections of tiny braids and the rest of the hair into a queue down the back.
- a. Roman
 - b. Greek
 - c. Masai
 - d. Egyptian

78. When standing behind the chair, you should keep your spine in what position?
- b. Straight
 - c. Relaxed
 - c. Tilted forward
 - d. Slouched
79. What is the process of caring for parts of the body and maintaining a polished look?
- a. Professional image
 - c. Personal hygiene
 - b. Personal grooming
 - d. Physical presentation
80. An average of how many hours of sleep is recommended each night?
- a. 7 or 8
 - c. 12
 - b. 10
 - d. 5 or 6
81. Due to the drying effect of alcohol, hand sanitizers should not be _____.
- a. cleaners
 - c. diluted
 - b. overused
 - d. used as an antiseptic
82. Alcohol should only be used as a cleaner or _____.
- a. sterilizer
 - c. antiseptic
 - b. disinfectant
 - d. bleach
83. The term _____ is used when describing a cutting tool measuring less than 6 inches.
- a. trimmers
 - c. shears
 - b. scissors
 - d. clippers
84. The basic considerations for performing a shampoo service includes _____.
- a. scalp manipulations
 - c. proper draping
 - b. the client's position
 - d. all of the above
85. Strict _____ practices should be used with all clients.
- a. surgical
 - c. emergency
 - b. infection control
 - d. first-aid
86. What blocks the creative mind from exploring ideas and discovering solutions to challenges?
- a. Procrastination
 - c. Criticism
 - b. Self-actualization
 - d. Perfectionism
87. The purpose of shampooing the hair before cutting ensures that barbers are: _____.
- a. Treating the client's hair before cutting too much hair
 - b. Working with clean hair free from oils or products that can interfere with the quality of the haircut
 - c. Maintaining the strength and health of the hair
 - d. All of the above

88. When cutting a child's hair, hold the child's head _____.
- a. at the nape of the neck
 - b. loosely
 - c. gently but firmly
 - d. with force
89. What is a negatively charged ion called?
- a. Anion
 - b. Proton
 - c. Cation
 - d. Neutron
90. In an oil-in-water (O/W) emulsion, droplets of oil are dispersed in water, where they are surrounded by _____.
- a. suspensions
 - b. solvents
 - c. surfactants
 - d. solutes
91. To enhance your short-term memory, try _____.
- a. putting information in a broader context
 - b. forgetting the information
 - c. categorizing the information into smaller segments
 - d. studying right before bed
92. Which of the following is an example of a bloodborne virus?
- a. Conjunctivitis
 - b. Cystic fibrosis
 - c. Otitis media.
 - d. HIV
93. What type of hepatitis is the most difficult to kill on a surface?
- a. Hepatitis B
 - b. Hepatitis C
 - c. Hepatitis A
 - d. Hepatitis E
94. In hair design, the form occupies _____ space.
- a. disproportional
 - b. positive
 - c. negative
 - d. proportional
95. Blood may carry dangerous _____, so you should never touch an open sore or a wound.
- a. pathogens
 - b. allergens
 - c. nonpathogens
 - d. nutrients
96. How long should an item remain submerged in the disinfectant?
- a. 20 minutes
 - b. 60 minutes
 - c. 10 minutes
 - d. 2 minutes
97. Rings should not be worn on the _____, as they might interfere with haircutting accuracy.
- a. pinky fingers
 - b. index fingers
 - c. thumbs
 - d. ring fingers

98. Avoid _____ as the skin may be sensitive after the shave service.
- pH-balance toner
 - hot towels
 - moisturizing cream
 - warm water
99. The shaving movement for a left-handed barber _____ is reverse freehand and up.
- beneath the lower lip
 - across the chin from right to left
 - left jawbone to grain change
 - under the chin to grain change
100. For beard designs on curly textured facial hair, you will trim excess hair using what technique?
- Clipper-over-comb
 - Taper and blend
 - Outliner-over-comb
 - Shear-over-comb
101. On average, hair grows at the rate of about _____ inch per month.
- 1
 - $\frac{1}{2}$
 - $\frac{3}{4}$
 - $1\frac{1}{2}$
102. What type of tension would you use on straight hair to create precise lines?
- No tension
 - Maximum
 - Minimum
 - Moderate
103. What type of shampoo should never be given prior to a chemical service?
- Dry or powder
 - Liquid-dry
 - Cream
 - Clear liquid
104. When using therapeutic lamps, the client's _____ must be protected.
- ears
 - eyes
 - skin
 - hair
105. _____ are unstable uniform mixtures of two or more substances.
- Solutions
 - Solutes
 - Solvents
 - Suspensions
106. What devices have surge protectors and must be installed properly to operate as intended?
- Cathodes
 - Ground fault interrupters
 - Grounded plugs
 - Anodes
107. Which of the following is an apparatus found within a power supply or adapter that converts AC to DC?
- Fuse
 - Rheostat
 - Rectifier
 - Resistor
108. The human body is considered a(n) _____.
- complete electric circuit
 - nonconductor
 - conductor
 - insulator

109. All acids owe their chemical reactivity to what ion?
- a. Nitrogen
 - b. Hydroxide
 - c. Hydrogen
 - d. Oxygen
110. Desincrustation is used to _____.
- a. introduce water-soluble products into the skin
 - b. facilitate deep pore cleansing
 - c. infuse alkaline products into the tissues
 - d. infuse acidic substances into the deeper tissues
111. _____ is a personality trait that barbers can consciously improve by speaking more softly or more clearly.
- a. Diplomacy
 - b. Sensitivity
 - c. Receptivity
 - d. A pleasing tone of voice
112. Stress-free standing posture behind the chair includes _____.
- a. keeping the soles of your feet on the floor directly under your knees
 - b. keeping your head up and chin parallel to the floor
 - c. keeping your torso erect
 - d. flexing your knees slightly and positioning them over your feet
113. When should barbers and cosmetic artists thoroughly wash their hands?
- a. before and after using hand sanitizer
 - b. before and after each service
 - c. before and after greeting clients
 - d. before and after combing the client's hair to the desired style
114. To avoid problems and work more effectively, barbers and cosmetic artists should practice which of the following?
- a. Grip or squeeze tools and implements too firmly
 - b. Adjust the height of the barber/styling chair so that the client's head is at a comfortable working level.
 - c. Try to position your arms at less than a 90-degree angle while working
 - d. all of the above
115. When barbers and cosmetic artists display interest in their clients and are responsive to their opinions, feelings, and ideas, they are employing _____.
- a. diplomacy
 - b. emotional stability
 - c. receptivity
 - d. a pleasing tone of voice
116. Disease-causing microorganisms carried in the body by blood or body fluids:
- a. Bloodborne pathogens
 - b. Allergens
 - c. Fungi
 - d. Bacteria

- 117.Round-shaped bacteria that appear alone or in groups:
- a. Flagella
 - b. Diplococci
 - c. Cocci
 - d. Bacilli
- 118.Disinfectants are designed to destroy all of the following *except* _____.
- a. spores
 - b. influenza
 - c. HIV
 - d. fungi
- 119.Spiral or corkscrew-shaped bacteria that causes diseases such as syphilis and Lyme:
- a. Spirilla
 - b. Diplococci
 - c. Cocci
 - d. Flagella
- 120.Implements should be immersed in an appropriate disinfection container holding a/an _____ disinfectant.
- a. OSHA regulated
 - b. Detergent-based
 - c. EPA registered
 - d. water-based

Initial Formative Assessment

Mock Practical Exam

Decontamination and Sanitation Practices Assessment

(10 pts max for each properly demonstrated)

Pre-Exam Station Setup ____

Wet and Dry Sanitation ____

Tools

Clippers ____

Implements

Shears ____

Razors ____

Combs ____

Equipment

Station ____

Chair ____

Headrest ____

Post-Exam Station Cleanup ____

Comments: _____

Recommendations: _____

Decontamination and Sanitation Practices Score: ____/100

Shaving Assessment

Pre-Shave Procedures *(1 pt for each procedure demonstrated properly)*

- Handwashing _____
- Draping _____
- Headrest Cover _____
- Linen and Wiping Pad Setup _____
- Chair Operation _____
- Steam Towel Application _____
- Shaving Cream Application _____
- Towel Storage and Disposal _____
- Razor Decontamination/Sanitation _____
- Store Razor _____

_____/10

Shaving Demonstration

3 Shaving Movements/Strokes *(1 point for each procedure properly demonstrated)*

Require the student to state and demonstrate the following.

1. Freehand _____
2. Backhand _____>>>>>...//.

3. Reverse Freehand _____

If the student has a different response: _____

What is the 4th razor movement?

Reverse Backhand _____ *If not, response:* _____

Where is it used?

Behind the Right ear _____ *If not, response:* _____

Demonstrated Correctly: Y/N *(circle one)*

If not, what was student's demonstration? _____

14 Area Shave *(1 point for each properly demonstrated)*

Require the student to state and demonstrate each step of the shaving procedure.

- | | | |
|---------------------------|------------------|------------------|
| 1. Freehand _____ | 9 o'clock _____ | Razor Wipe _____ |
| 2. Backhand _____ | 9 o'clock _____ | Razor Wipe _____ |
| 3. Freehand _____ | 9 o'clock _____ | Razor Wipe _____ |
| 4. Freehand _____ | 9 o'clock _____ | Razor Wipe _____ |
| 5. Reverse Freehand _____ | 12 o'clock _____ | Razor Wipe _____ |

Re-lather: Y/N *(Circle one)*

Palm the Razor _____

- | | | |
|-------------------|------------------|------------------|
| 6. Backhand _____ | 9 o'clock _____ | Razor Wipe _____ |
| 7. Backhand _____ | 12 o'clock _____ | Razor Wipe _____ |

- | | | |
|------------------------------------|-----------------|-----------------|
| 8 Freehand ____ | 9 o'clock ____ | Razor Wipe ____ |
| 9. Backhand ____ | 12 o'clock ____ | Razor Wipe ____ |
| 10. Reverse Freehand ____ | 12 o'clock ____ | Razor Wipe ____ |
| 11. Freehand ____ | 9 o'clock ____ | Razor Wipe ____ |
| 12. Freehand ____ or Backhand ____ | 9 o'clock ____ | Razor Wipe ____ |
| 13. Reverse Freehand ____ | 12 o'clock ____ | Razor Wipe ____ |
| 14. Reverse Freehand ____ | 12 o'clock ____ | Razor Wipe ____ |

____/50

Exposure Incident Demonstration (5 points for each properly demonstrated)

- Blood Spill Kit Check ____
- Client Notification ____
- Demonstration ____
- Biohazard Disposal ____

____/30

Post-Shave Procedures (1 point for each properly demonstrated)

- Store Razor ____
- Astringent Application ____
- Moisturizer Application ____
- Tepid Towel Application ____
- Talcum/Powder Mitt ____
- Talcum/Powder Application ____
- Chair Operation ____
- Towel Disposal ____
- Decontamination/Sanitation ____
- Handwashing ____

____/10

Comments: _____

Recommendations: _____

Shaving Score: ____/100

Tapered Haircut Assessment

Model's Pre-Haircut Hair Measurements *(2.5 points for each)*

Crown: _____ inches (>/2 inches)
Temple: _____ inches (>/2 inches)
Occipital: _____ inches (>/ 2 inches)
Nape: _____ inches (>/1 inch)

_____/10

Taper/Blend Quality *(0 -20 points for each area)*

Scalp exposure and hard line-ups will result in an automatic fail

Crown: _____/20
Temple: _____ 20
Occipital: _____/20
Nape: _____/20

_____/80

Model's Post-Haircut Hair Measurements *(2 points for each)*

Crown: _____ inches (>/2 inches)
Temple: _____ inches (>/2 inches)
Occipital: _____ inches (>/ 2 inches)
Nape: _____ inches (>/1 inch)

_____/10

Comments: _____

Recommendations: _____

Tapered Haircut Score _____/100

**Initial Formative Assessment (IFA):
Mock NCBBE Apprentice Barber License Exam Results**

Written Exam	____/120 ____%
Results	PASS/FAIL
Practical Exam	
Decontamination and Sanitation Practices	____/100
Shaving	____/100
Tapered Haircut	____/100
	____/300 ____%
Results	PASS/FAIL

Record the results for the IFA. Transfer results to the Comprehensive Curriculum and Competency-Based Instruction Model (CCC-BIM) with Knowledge and Skills Acquisition (KASA) for Apprentice Licensure form.

Appendix H

Interim Progress Assessments (IPAs): Advanced Students

Interim Progress Assessments (IPAs)
Advanced Student Exams

Professional Barbering Topics

Employment; Job Interviews; Income Management; Accounting; and Taxes

1. For an interview, it is permissible to _____.
 - a. arrive early
 - b. criticize former employers
 - c. come to an interview with a cup of coffee
 - d. chew gum

2. On your resume, you should focus on _____.
 - a. Duties
 - b. salary requirements
 - c. responsibilities
 - d. achievements

3. What types of skills are mastered at other jobs that can be put to use in a new position?
 - a. Transferable
 - b. Technological
 - c. Basic
 - d. Accomplished

4. What should you always include with your resume?
 - a. Technical skills inventory.
 - b. Cover letter.
 - c. Business plan.
 - d. Personal inventory.

5. Where should you include before-and-after photographs of services you have performed on clients or models?
 - a. Letters of reference
 - b. Printed portfolio
 - c. Resume
 - d. Training certificates

6. Which of the following is a written summary of a person's education and work experience?
 - a. Checklist
 - b. Employment portfolio
 - c. Resume
 - d. Cover letter

7. If you wear perfume or cologne to an interview, how should it smell?
 - a. Strongly scented
 - b. Expensive
 - c. Subtle
 - d. Noticeable

8. Noncompete agreements prohibit you from _____.
 - a. seeking employment within a given time period
 - b. consulting with a labor-law attorney
 - c. obtaining training
 - d. your right to work

9. How long should your resume be?
 - a. Two pages
 - b. A few paragraphs
 - c. One page
 - d. No limit on length

10. Your _____ is crucial, especially since you are applying for a position in the barbering industry.
 - a. medical history
 - b. geographical location
 - c. native language
 - d. appearance

11. When writing your resume, you should avoid _____.
- a. past accomplishments
 - b. web development knowledge
 - c. concise sentences
 - d. flowery language
12. Any time that you are applying for any position, you will be required to complete a(n) _____.
- a. Application
 - b. contract
 - c. medical examination
 - d. work permit
13. What is the best source for making a list of your area barbershops?
- a. Advertisements
 - b. Newspaper
 - c. Telephone book
 - d. Internet
14. Which of the following terms means you are committed to a strong code of moral and artistic values?
- a. Motivation
 - b. Enthusiasm
 - c. Work ethic
 - d. Integrity
15. How long should you wait after submitting your resume for a potential barbershop position before making a follow-up contact?
- a. Two weeks
 - b. One week
 - c. A few days
 - d. One month
16. Choosing a barbershop that is the best match for your _____ will increase your chances of success.
- a. time management ability
 - b. psychological state
 - c. skills
 - d. overall style
17. Barbers should resist the temptation to _____ in the professional and personal spaces.
- a. gossip
 - b. listen to your coworkers
 - c. resolve problems
 - d. share
18. The most difficult part of being in a business or personal relationship is _____.
- a. when conflict arises
 - b. being loyal
 - c. sharing
 - d. team building
19. Many clients prefer to book appointments _____.
- a. on the telephone
 - b. on Facebook
 - c. via e-mail
 - d. in person

20. When you become a barbershop employee, you will be _____.
- expected to put the needs of the barbershop and its clients ahead of your own
 - able to take time off whenever you have something else you'd like to do
 - given the chance to do certain procedures over and over until you get them right
 - able to make your own schedule so that you can arrive and leave when it is convenient for you
21. In a(n) _____ compensation structure, the employer pays you a percentage of the gross service sales you generate.
- hourly salary
 - tipping
 - straight salary
 - commission
22. _____ wages are accrued hourly and can provide you with a fixed income while you build a clientele?
- Tips
 - Guarantee
 - Straight salary
 - Commission
23. Tips must be tracked and reported on your _____.
- paycheck
 - business plan
 - contract
 - income tax return
24. Who is responsible for withholding employees' income and Medicare taxes?
- IRS
 - Independent contractor
 - Employer
 - Employee
25. The best way for employees to record their tips and additional income is to keep a _____.
- budget
 - client card
 - monthly worksheet
 - daily log
26. When you become a barbershop employee, you will be expected to put the needs of the barbershop and its clients ahead of your _____.
- school
 - family
 - friends
 - own
27. Which of the following outlines all the duties and responsibilities of a particular position in a barbershop?
- Vision statement
 - Job description
 - Resume
 - Business plan
28. What day is the peak workday in most barbershops?
- Friday
 - Holidays
 - Saturday
 - Wednesday
29. Not paying back your loans is called _____.
- deducting
 - coasting
 - borrowing
 - defaulting

30. _____ is the act of recommending and selling products to your clients for at-home use.
- a. Hard selling
 - b. Ticket upgrading
 - c. Retailing
 - d. Upselling

Employment; Job Interviews; Income Management; Accounting; and Taxes
Practical Exam

Preparedness (*1 point each*)

Arrived >30 minutes before the exam _____
Supplies are accessible and organized _____
Model/Mannequin present _____

Preparedness Score ____/3

Hygiene and Personal Grooming (*1 point each*)

Professional attire
Collar Shirt/Blouse _____
Pants _____
Casual/Dress Shoes _____
Smock _____
Clean clothing _____

Personal Care

Haircut/Styled _____
No foul odor (smoke, excessive cologne/perfume, body odor) _____

Hygiene and Personal Grooming Score ____/7

Interview Skills (*5 points each*)

Confident (abilities, self) _____
Sought to bring value to the business _____
Eager to learn _____
Integrity _____
Good oral communication skills _____
Strong work ethic _____

Interview Skills Score ____/30

Tapered Haircut (*10 points each*)

Draping _____
Handling of tools, implements, and equipment _____
Effective cutting (tapered, blended, balanced haircut – no outline required) _____
Debris removal from client _____
Sanitation and decontamination _____
Confidence _____

Tapered Haircut Score ____/60

**Employment; Job Interviews; Income Management;
Accounting; and Taxes Score** ____/100

Professional Barbering Topics

Effective Product Sales; Retail Ethics; Marketing; and Establishing Clientele.

1. _____ is the act of recommending and selling products to your clients for at-home use.
 - a. Hard selling
 - b. Ticket upgrading
 - c. Retailing
 - d. Upselling

2. Every client is a potential purchaser of _____.
 - a. additional services
 - b. merchandise
 - c. recommended products
 - d. all of the above

3. Why do some barbers shy away from sales?
 - a. They feel that selling is being pushy
 - b. They feel like barbers are not licensed to sell products
 - c. They feel like clients cannot afford upsells
 - d. They feel that barbers are only licensed to cut hair

4. Local business referrals, utilizing social media, and using email are _____.
 - a. effective ways for rebooking clients
 - b. giving discounts to current and potential clients
 - c. effective ways to build a client base
 - d. none of the above

5. Unless your barbershop has a lounge, _____.
 - a. clients should only have to wait a maximum of 15 mins
 - b. clients should be in the barbershop only as long as it takes to receive their service(s)
 - c. clients should only have to wait a maximum of 30 mins
 - d. clients should be in the barbershop only 15 minutes longer than it takes to receive their service(s)

6. The first step to success in selling is to _____.
 - a. master the art of hard-selling
 - b. sell yourself
 - c. both a and b
 - d. neither a or b

7. The practice of recommending and selling additional services is known as _____.
 - a. retailing
 - b. upselling and ticket upgrading
 - c. hard-selling
 - d. soft-selling

8. If a client gives a strong price objection, _____.
 - a. acknowledge the price, reiterate the benefit, and offer a free sample
 - b. reiterate the benefit of the product
 - c. acknowledge it and reiterate the benefit of the product
 - d. offer a free sample

9. To sell a product or service, it is important to _____.
- load your delivery with information about the product or service
 - deliver your sales talk in a relaxed and friendly manner
 - focus on convincing the client to buy
 - communicate how much you sell the product to other clients
10. The best time to strategically get your clients back into the barbershop or salon is _____.
- While the client is still in the shop
 - One week from the last service
 - Two weeks from the last service date
 - One month from the last service date
11. Do not oversell a product or service; once the client has offered to buy, _____.
- assess whether to continue to upsell
 - continue to upsell
 - commence to introducing additional products and services
 - quit selling
12. _____ is the act of barbers recommending and selling products to their clients for at-home use.
- | | |
|-----------------------------------|-----------------|
| a. retailing | c. hard-selling |
| b. upselling and ticket upgrading | d. soft-selling |
13. When selling products and services in the barbershop, it is your job to _____.
- figure out what motivates your client to buy
 - figure out what your client's budget is to spend on services and products
 - both a and b
 - neither a or b
14. To overcome a client's objection to your recommendation of a product or service, _____.
- give away the product or service for free in hopes that they will buy later
 - reword the objection in a way that addresses the client's need
 - ask the client what they currently use
 - place the product in the client's hand and close the sell
15. Always state things in terms of _____.
- the barbershop's need to increase retail and service revenue
 - the barber's need to increase sells to increase their income
 - the client's benefit based on the information you gathered during the consultation
 - all of the above

16. If a client gives a moderate price objection, _____.
- acknowledge the price and offer a free sample
 - reiterate the benefit of the product
 - acknowledge it and reiterate the benefit of the product
 - offer a free sample
17. An important aspect of the barbershop's financial success revolves around _____.
- upselling services
 - cross promoting
 - retailing products and merchandise
 - all of the above
18. Many clients prefer to book appointments _____.
- on the telephone
 - on Facebook
 - via e-mail
 - in person
19. Supplies to be sold to clients are _____.
- retail supplies
 - miscellaneous supplies
 - general inventory
 - consumption supplies
20. Barbers need _____ to be successful in sales.
- ambition
 - leasing personality
 - determination
 - all of the above
21. It is important for barbers to be _____ because sometimes clients try to make your relationship more personal than it should.
- reliable
 - respectful
 - positive
 - professional
22. Being _____ means being courteous, thoughtful and professional by not keeping clients waiting.
- reliable
 - respectful
 - positive
 - professional
23. Supplies to be used in the daily business operation are _____.
- retail supplies
 - miscellaneous supplies
 - general inventory
 - consumption supplies
24. Barbers who are _____ do not engage in gossip or making fun of clients or anything related to the barbershop.
- reliable
 - respectful
 - positive
 - professional

25. Talking with your client about their hair's condition, their styling habits at home, and the benefits of regular, specialized, professional maintenance _____.
- provides clues as to what is happening in their lives
 - communicates to the client that you are concerned about the well-being of their grooming goals
 - informs the barber of services and product recommendations that will help them achieve their grooming goals
 - all of the above
26. One of the most basic things a barber can do to retain and gain clients is to _____.
- consistently provide good service
 - give discounts when you are running late for appointments
 - give away free services when you are running late for appointments
 - all of the above
27. Utilizing social media tools can _____.
- establish your credibility
 - showcase your work
 - provide a space for satisfied clients to recommend your services
 - all of the above
28. Through the use of the internet, barbers can establish credibility and increase their clientele by _____.
- encouraging clients to leave reviews on Yelp that reflect their experience
 - leaving bad reviews on other barbers' and barbershops' online pages
 - word of mouth
 - none of the above
29. Providing clients accurate information about treatments and products exhibits professional _____.
- | | |
|--------------|---------------------|
| a. integrity | c. ethical behavior |
| b. self-care | d. communication |
30. Making yourself available for _____ at local groups, organizations, and events that will put you in front of potential clients will aid in generating new clientele.
- | | |
|----------------------------|-------------------------|
| a. public speaking | c. after-hours services |
| b. providing free services | d. none of the above |

Effective Product Sales; Retail Ethics; Marketing; and Establishing Clientele
Practical Exam

Preparedness (3 points each)

- Arrived >30 minutes before the exam _____
- Supplies are accessible and organized _____
- Model/Mannequin present _____

Preparedness Score ____/9

Hygiene and Personal Grooming (3 point each)

- Professional attire
 - Collar Shirt/Blouse _____
 - Pants _____
 - Casual/Dress Shoes _____
 - Smock _____
 - Clean clothing _____

Personal Care

- Haircut/Styled _____
- No foul odor (smoke, excessive cologne/perfume, body odor) _____

Hygiene and Personal Grooming Score ____/21

Perform a scalp analysis for a client who is experiencing severe dandruff. Ethically recommend a service(s) and products. (7 points each)

- Scalp Analysis _____
- Consultation _____
 - Reports findings _____
 - Explains the typical cause(s) _____
 - Asks questions about client's current course of treatment _____
 - Listen _____
 - Offer a Solution _____
- Sales Pitch
 - Connects the product(s) with the client's problem _____
 - Connects the service(s) with the client's problem _____
 - Compels the client to purchase _____

**Effective Product Sales; Retail Ethics;
Marketing; and Establishing Clientele Score ____/100**

Professional Barbering Topics

Compensation (Services, Booth Rental, Commission, et cetera); Entrepreneurship; Management in Barbering; and The Use of Technology in the Barbering Business

1. Booth rental is a desirable situation for many barbers who have _____.
 - a. a large, steady clientele
 - b. employees
 - c. a small clientele
 - d. just received their license
2. With what type of business ownership do you individually assume expenses, receive profits, and bear all the losses?
 - a. LLC
 - b. Sole proprietor
 - c. Corporation
 - d. Partnership
3. Every barbershop sells haircuts, so you should think beyond the obvious to create _____.
 - a. a tipping policy
 - b. a comfortable reception area
 - c. your brand identity
 - d. barbershop policies
4. The first goal of every business should be to _____.
 - a. Upsell
 - b. maintain current clients
 - c. cross promote services
 - d. attract new clients
5. A majority of barbershop business is handled _____.
 - a. via the Internet
 - b. by mail
 - c. in person
 - d. over the telephone
6. Which of the following business structures offers the advantage of a known name and brand recognition?
 - a. Corporation
 - b. Limited Liability Company
 - c. Franchise
 - d. Partnership
7. A barber should be booked at least _____ of the time to make booth rental advantageous.
 - a. 60 percent
 - b. 50 percent
 - c. 95 percent
 - d. 70 percent
8. Barbershop owners typically continue to work behind the chair while they _____.
 - a. establish credit
 - b. rent a booth
 - c. guarantee profits
 - d. manage the business
9. Booth rental is not allowed in which states?
 - a. New York and Massachusetts
 - b. Florida and Washington
 - c. Pennsylvania and New Jersey
 - d. North and South Carolina
10. When operating your own barbershop, you should make it your top priority to _____.
 - a. meet your payroll obligations
 - b. create a tipping policy
 - c. schedule employee evaluations
 - d. put your entire pay plan in writing

11. When physically laying out a barbershop, what should be your primary concern?
- a. Handicap accessibility
 - b. Decoration
 - c. Maximum efficiency
 - d. Sufficient electrical outlets
12. Tips must be tracked and reported on your _____.
- a. paycheck
 - b. business plan
 - c. contract
 - d. income tax return
13. Who is responsible for withholding employees' income and Medicare taxes?
- a. IRS
 - b. Independent contractor
 - c. Employer
 - d. Employee
14. Which of the following lays the foundation for how your company's strategies are created?
- a. Mission statement.
 - b. Goals
 - c. Vision statement.
 - d. Business name.
15. An advertising budget should not exceed _____ of your gross income.
- a. 8 percent
 - b. 10 percent
 - c. 3 percent
 - d. 15 percent
16. _____ wages are accrued hourly and can provide you with a fixed income while you build a clientele?
- a. Tips
 - b. Guarantee
 - c. Straight salary
 - d. Commission
17. Noncompete agreements prohibit you from _____.
- a. seeking employment within a given time period
 - b. consulting with a labor-law attorney
 - c. obtaining training
 - d. your right to work
18. Which of the following terms means you are committed to a strong code of moral and artistic values?
- a. Motivation
 - b. Enthusiasm
 - c. Work ethic
 - d. Integrity
19. An important aspect of the barbershop's financial success revolves around _____.
- a. upselling services
 - b. cross promoting
 - c. retailing products and merchandise
 - d. all of the above
20. Many clients prefer to book appointments _____.
- a. on the telephone
 - b. on Facebook
 - c. via e-mail
 - d. in person
21. In a(n) _____ compensation structure, the employer pays you a percentage of the gross service sales you generate.
- a. hourly salary
 - b. tipping
 - c. straight salary
 - d. commission

22. A _____ is an ownership structure controlled by one or more stockholders and can protect their personal assets.
- partnership
 - corporation
 - sole proprietorship
 - franchise
23. To run a people-oriented business, the ownership must _____.
- exercise excellent business sense and aptitude
 - exercise good judgment and diplomacy
 - have knowledge of sound business practices
 - all of the above
24. Using a(n) _____ is the most efficient way to keep track of service records that describe services rendered, products sold and used, and the results obtained to each client.
- barbershop-specific software program
 - appointment book
 - client cards
 - client journal
25. The best barbershops employ _____ to handle the operations center of the business such as answering the phones, scheduling appointments, greeting clients, and attending to clients' needs.
- policies and procedures
 - professional receptionists
 - professional barbers
 - people
26. Barbershops must consider which of the following concerning social media?
- Post regularly to gain the attention of followers and potential clients
 - Get permission from clients before assuming that it is alright to use their image in posts
 - Both a and b
 - Neither a or b
27. Supplies to be used in the daily business operation are _____.
- retail supplies
 - miscellaneous supplies
 - general inventory
 - consumption supplies
28. _____ are responsible for their own clientele, supplies, record keeping, and accounting; they have the ability to be their own boss with very little capital investment.
- Booth renters
 - Salaried employees
 - Commission employees
 - Barbershop owners
29. Human resources not only covers personnel management but also _____.
- what can be said or asked when hiring, managing, or firing.
 - what cannot be said or asked when hiring, managing, or firing.
 - Both a and b
 - Neither a or b

30. Smooth business management depends on _____.
- a. sufficient investment capital, good business procedures, and properly pricing services
 - b. strong computer skills, trained and experienced personnel, and excellent customer service
 - c. Both a and b
 - d. Neither a or b

**Compensation (Services, Booth Rental, Commission, et cetera); Entrepreneurship;
Management in Barbering; and The Use of Technology in the Barbering Business**
Practical Exam

Perform a haircut or style. Post to your social media using professional language and appealing pictures to market your services. The post must funnel potential clients to schedule appointments. Demonstrate the ability to use technology in the barbering business.

Haircut *(10 points each)*

- Draping _____
- Handling of tools, implements, and equipment _____
- Effective cutting (tapered, blended, balanced haircut – no outline required) _____
- Debris removal from client _____

Haircut Score ____/40

Social Media Post *(10 points each)*

- Photography _____
- Caption _____
- Professionalism _____
- Funnel to Appointment booking _____

Social Media Post ____/40

Appointment Funnel *(10 points each)*

- Link to app _____
- Easy scheduling _____

Appointment Funnel Score ____/20

**Compensation, Entrepreneurship, Management, and the
Use of Technology in the Barbering Business** ____100

Apprentice Examination Prep IV
Intro to Barbering & Cosmetic Arts

1. During the late 1800s, employer organizations of barbers were known as _____ barber groups.
 - a. master
 - b. Protective
 - c. senior
 - d. journeymen

2. The _____ warriors wove their front hair into three sections of tiny braids and the rest of the hair into a queue down the back.
 - a. Roman
 - b. Greek
 - c. Masai
 - d. Egyptian

3. Mesopotamians of 3000 BC were shaving with _____.
 - a. safety razors
 - b. straight razors
 - c. tweezers
 - d. obsidian blades

4. _____ are measured in larger increments of time.
 - a. Mission statements
 - b. Long-term goals
 - c. Game plans
 - d. Short-term goals

5. According to Leviticus, _____ was told to command those who had recovered from leprosy to shave all their body hair as part of ritual cleansing.
 - a. Leviticus
 - b. Moses
 - c. Alexander
 - d. Ezekiel

6. The Latin word means the cutting, clipping, or trimming of hair with shears or a razor.
 - a. barba
 - b. artisan
 - c. tonsure
 - d. tonsorial

7. In Rome, clean-shaven faces were the trend until _____ came into power in 117AD.
 - a. Ticinus
 - b. Hadrian
 - c. Mena
 - d. Alexander

8. Awareness of the importance of cleaning practices in preventing disease became so widespread that the terminal methods system was enacted in 1916 in _____.
 - a. Chicago
 - b. New York City
 - c. London
 - d. North Carolina

9. Some tribes believed good and bad spirits entered through hairs on the head and the only way to exorcise bad spirits was to _____ the hair.
 - a. cut
 - b. never cut
 - c. dye
 - d. braid

10. What blocks the creative mind from exploring ideas and discovering solutions to challenges?
- a. Procrastination
 - b. Self-actualization
 - c. Criticism
 - d. Perfectionism
11. To enhance your short-term memory, try_____.
- a. putting information in a broader context
 - b. forgetting the information
 - c. categorizing the information into smaller segments
 - d. studying right before bed
12. Which of the following is not a mnemonic?
- a. Rhymes
 - b. Mind mapping
 - c. Word associations
 - d. Songs
13. To promote better long-term memory, try to associate new information with prior knowledge by _____.
- a. using repetition
 - b. using short-term memory
 - c. writing the information down 100 times
 - d. using word associations
14. You should learn to _____ by ordering tasks on your to-do list from most important to least important.
- a. categorize
 - b. prioritize
 - c. study
 - d. visualize
15. When building a social-media website, you should _____.
- a. forward spam
 - b. participate in arguments online
 - c. manage your personal pages
 - d. post embarrassing photographs
16. _____ is/are the key to avoiding posture problems.
- a. Repetitive motions
 - b. Prevention
 - c. Relaxation
 - d. Preparation
17. When standing behind the chair, you should keep your spine in what position?
- a. Straight
 - b. Tilted forward
 - c. Relaxed
 - d. Slouched
18. Regular physical activity benefits the body by improving _____.
- a. blood circulation
 - b. temperament
 - c. your appearance
 - d. your personality
19. To avoid ergonomic-related injuries, your wrists should be in what position?
- a. Erect.
 - b. At a right angle.
 - c. Straight or neutral.
 - d. At a 60-degree angle.

20. Your work wardrobe should complement the image of your _____.
- a. clients
 - b. barbershop
 - c. lifestyle
 - d. peers
21. It would be a breach of confidentiality to _____.
- a. reveal negative emotions
 - b. arrive late
 - c. tell off-color stories
 - d. discuss other clients
22. _____ will help the tone of your voice to be more pleasing.
- a. Listening
 - b. Smiling
 - c. Visualizing
 - d. Building self-esteem
23. Which of the following is an example of a long-term goal?
- a. Finishing reading a chapter by the end of the day.
 - b. Getting through an exam successfully.
 - c. Graduating from barbering school.
 - d. Becoming a barbershop owner in five years.
24. What is the process of caring for parts of the body and maintaining a polished look?
- a. Professional image
 - b. Personal grooming
 - c. Personal hygiene
 - d. Physical presentation
25. A(n) _____ establishes the purpose and values by which an individual or institution lives and works.
- a. organization
 - b. game plan
 - c. ethic
 - d. mission statement
26. Negative body language includes which of the following?
- a. Talking
 - b. Facial grimaces
 - c. Humor
 - d. Smiling
27. When working behind the chair, your neck should be _____.
- a. elongated
 - b. tilted backward
 - c. relaxed
 - d. tilted forward
28. An average of how many hours of sleep is recommended each night?
- a. 7 or 8
 - b. 10
 - c. 12
 - d. 5 or 6
29. Which of the following conveys an image of confidence and can prevent fatigue?
- a. Good listening skills
 - b. Good human relations
 - c. Good posture
 - d. Good work habits

30. Establishing a/an _____ image is an essential image-building attribute.
- a. relaxed
 - b. professional online
 - c. attractive
 - d. poised

Intro to Barbering and Cosmetic Arts
Practical Exam

Preparedness (2 points each)

- Arrived >30 minutes before the exam _____
- Identification verification (picture card, driver's license) _____
- Supplies are accessible and organized _____
- Model/Mannequin present _____

Preparedness Score ____/8

Hygiene and Personal Grooming (1 points each)

- Professional attire
 - Collar Shirt/Blouse _____
 - Pants _____
 - Casual/Dress Shoes _____
 - Smock _____
 - Clean clothing _____

Personal Care

- Haircut/Styled _____
- No foul odor (smoke, excessive cologne/perfume, body odor) _____

Hygiene and Personal Grooming Score ____/7

Demonstrate proper handwashing. (2 points each)

- Turn on water and wet hands _____
- Pump soap _____
- Rub hands together for 20 seconds _____
- Clean nail, disinfected nail brush _____
- Brush horizontally and vertically _____
- Brush for approximately 60 seconds _____
- Rinse until all soap is removed _____
- Dry with clean paper towel _____
- Turn off water with paper towel _____
- Dispose of paper towel in trash _____

Handwashing Score ____/20

Tapered Haircut (10 points each)

- Draping _____
- Handling of tools, implements, and equipment _____
- Effective cutting (tapered, blended, balanced haircut – no outline required) _____
- Debris removal from client _____

Tapered Haircut Score ____/40

Demonstrate appropriate cleaning and disinfection. *(5 points each)*

Tools, Implements, and Surfaces

Debris removal _____

Use of appropriate cleaning solution _____

Use of EPA regulated disinfectant solution _____

Disinfected stowing _____

Drying Time/Wipe down _____

Cleaning and Disinfection Score _____/25

Intro to Barbering & Cosmetic Arts Score _____/100

Apprentice Examination Prep IV
General Barbering & Cosmetic Sciences

1. _____ is a mechanical process (scrubbing) using soap and water or detergent and water.
 - a. Sanitizing
 - b. Cleaning
 - c. Disinfection
 - d. Sterilization
2. Barbers should always be prepared for _____ in the barbershop.
 - a. emergencies
 - b. tool repair
 - c. unattended children
 - d. unprofessionalism
3. Due to the drying effect of alcohol, hand sanitizers should not be _____.
 - a. cleaners
 - b. overused
 - c. diluted
 - d. used as an antiseptic
4. Alcohol should only be used as a cleaner or _____.
 - a. sterilizer
 - b. disinfectant
 - c. antiseptic
 - d. bleach
5. Which of the following is an example of a bloodborne virus?
 - a. Conjunctivitis
 - b. Cystic fibrosis
 - c. Otitis media.
 - d. HIV
6. The majority of contaminants and pathogens can be removed from the surfaces of tools and implements through proper _____.
 - a. mixing of disinfectants
 - b. handwashing
 - c. guidelines
 - d. cleaning
7. What type of hepatitis is the most difficult to kill on a surface?
 - a. Hepatitis B
 - b. Hepatitis C
 - c. Hepatitis A
 - d. Hepatitis E
8. Petroleum distillates are excellent for removing _____ from metals.
 - a. oil
 - b. rust
 - c. spores
 - d. scratches
9. Which of the following is used to temporarily straighten curly or wavy hair?
 - a. Electric massager
 - b. Blowdryer
 - c. Electric flat iron
 - d. Electric curling iron
10. The _____ refers to the inside construction of the blade.
 - a. cutting edge
 - b. bumper
 - c. grind
 - d. set

11. _____ combs are made are antistatic and stiff.
- | | |
|-----------|----------------|
| a. Metal | c. Graphite |
| b. Carbon | d. Hard rubber |
12. To palm the razor for hair combing, roll the razor into your hand with the blade facing _____ the comb.
- | | |
|----------------|--------------|
| a. toward | c. away from |
| b. in front of | d. behind |
13. The French-style shear has a finger rest or tang for the _____.
- | | |
|------------------|-----------------|
| a. little finger | c. index finger |
| b. thumb | d. ring finger |
14. The term _____ is used when describing a cutting tool measuring less than 6 inches.
- | | |
|-------------|-------------|
| a. trimmers | c. shears |
| b. scissors | d. clippers |
15. When cutting a child's hair, hold the child's head _____.
- | | |
|----------------------------|----------------------|
| a. at the nape of the neck | c. gently but firmly |
| b. loosely | d. with force |
16. _____ introduce water-soluble products into the skin during facials.
- | | |
|--------------------------|----------------------------|
| a. Galvanic machines | c. High-frequency machines |
| b. Thermal styling tools | d. Come done extractors |
17. Razor shapers are also known as _____.
- | | |
|--------------------|-----------------|
| a. blending shears | c. outliners |
| b. edgers | d. hair shapers |
18. A vented brush is designed to _____.
- | | |
|------------------------------|-----------------------------------|
| a. create volume | c. avoid snagging wet hair |
| b. facilitate quicker drying | d. create curl in blowdry styling |
19. One of the structural parts of the straight razor is the _____.
- | | |
|----------|---------------|
| a. tail | c. pivot |
| b. teeth | d. thumb grip |
20. Paper neck strips are used for, but may not facilitate, a thorough _____.
- | | |
|-----------------|------------------|
| a. dusting | c. sterilization |
| b. disinfecting | d. cleaning |
21. What type of hone cuts faster than the water hone?
- | | |
|----------------|--------------|
| a. Combination | c. Synthetic |
| b. Natural | d. Belgium |

22. If you accidentally cut a client, what should you do first?
- | | |
|---------------------------------------|----------------------|
| a. Stop the service immediately. | c. Wash your hands. |
| b. Apply slight pressure to the area. | d. Calmly apologize. |
23. It is important to wear _____ and gloves while disinfecting nonelectrical tools.
- | | |
|-------------|-------------------|
| a. a cape | c. safety glasses |
| b. earplugs | d. an apron |
24. When cutting a child's hair, try to anticipate the child's _____.
- | | |
|-----------------------|---------------------|
| a. sudden moves | c. moods |
| b. inquisitive nature | d. hairstyle choice |
25. Staphylococci cause which of the following?
- | | |
|------------|--------------------|
| a. Tetanus | c. Pneumonia |
| b. Boils | d. Blood poisoning |
26. Which of the following does not spread the HIV virus?
- | | |
|--------------------------------|---------------------------------|
| a. Unprotected sexual contact. | c. Contact with cuts and sores. |
| b. Sharing of needles. | d. Sharing food. |
27. Phenolics are known _____.
- | | |
|-----------------|----------------|
| a. Pathogens | c. carcinogens |
| b. Contaminants | d. allergens |
28. Blood may carry dangerous _____, so you should never touch an open sore or a wound.
- | | |
|--------------|-----------------|
| a. pathogens | c. nonpathogens |
| b. allergens | d. nutrients |
29. How long should an item remain submerged in the disinfectant?
- | | |
|---------------|---------------|
| a. 20 minutes | c. 10 minutes |
| b. 60 minutes | d. 2 minutes |
30. Strict _____ practices should be used with all clients.
- | | |
|----------------------|--------------|
| a. surgical | c. emergency |
| b. infection control | d. first-aid |

General Barbering and Cosmetic Sciences I
Practical Exam

Formulate a completely immersible disinfecting solution. (4 points each)

Solute (Barbicide) _____

Solvent (water) _____

Disinfecting time (10 minutes or manufacturer's instruction) _____

Demonstrate appropriate cleaning.

Tools

Debris removal _____

Use of appropriate cleaning solution _____

Disinfected stowing _____

Implements

Debris removal _____

Use of appropriate cleaning solution _____

Disinfected stowing _____

Surfaces

Debris removal _____

Use of appropriate cleaning solution _____

Drying (wipe down) _____

Demonstrate proper disinfection.

Nonelectrical Tools and Implements

Debris removal _____

Use of appropriate cleaning solution _____

Submersion _____

Disinfecting time (10 minutes or manufacturer's instruction) _____

Use of disinfectant solution _____

Disinfected stowing (closed sanitizer) _____

Electrical Tools

Debris removal _____

Blade wash _____

Use of EPA regulated disinfectant solution _____

Disinfected stowing (closed sanitizer) _____

Surfaces and Equipment

Debris removal _____

Use of EPA regulated disinfectant solution _____

Disinfecting time (10 minutes or manufacturer's instruction) _____

General Barbering and Cosmetic Sciences I ____/100

Apprentice Examination Prep IV
Foundations of Haircutting, Styling & Shaving

1. Rings should not be worn on the _____, as they might interfere with haircutting accuracy.
 - a. pinky fingers
 - b. index fingers
 - c. thumbs
 - d. ring fingers

2. A flat handle comb with evenly spaced teeth works best for _____.
 - a. trimming mustaches
 - b. general haircutting and styling
 - c. achieving a flat-top style
 - d. sectioning longer hair

3. To practice opening and closing the shears, you should use only the _____ to manipulate the moving blade of the shears.
 - a. index finger
 - b. thumb
 - c. little finger
 - d. ring finger

4. During a shave service, you should _____.
 - a. refrain from stretching the client's skin
 - b. use gliding strokes with the point leading
 - c. keep your fingers wet
 - d. never shift your body position

5. For a shave service, you should test the temperature of the hot towel with _____.
 - a. the palm of your hand
 - b. your forearm
 - c. the back of your hand
 - d. your wrist

6. Observe the hair growth pattern and shave _____ it.
 - a. with
 - b. around
 - c. opposite
 - d. against

7. Avoid _____ as the skin may be sensitive after the shave service.
 - a. pH-balance toner
 - b. hot towels
 - c. moisturizing cream
 - d. warm water

8. What type of stroke will you use around the mouth, over the ears, and in other tight areas?
 - a. Modified backhand
 - b. Long
 - c. Shorter
 - d. Reverse backhand

9. What type of stroke should you use to shave the nape area?
 - a. Reverse freehand
 - b. Backhand
 - c. Reverse backhand
 - d. Freehand

10. When finishing the shave service, apply light facial cream or moisturizing lotion with _____ movements.
 - a. rotary
 - b. effleurage massage
 - c. pétrissage massage
 - d. brisk

11. For a shave service, you should keep the client's skin _____.
- hot
 - steamed
 - dry
 - moist
12. The shaving movement for a left-handed barber _____ is reverse freehand and up.
- beneath the lower lip
 - across the chin from right to left
 - left jawbone to grain change
 - under the chin to grain change
13. What type of hair is often the result of improper hair removal by a razor, tweezers, or trimmer?
- Ingrown
 - Unshaven
 - New
 - Curly
14. Check the proportion and shape of the beard in the mirror when client is in a(n) _____ position.
- standing
 - reclining
 - angled
 - sitting
15. For a shave service, right-handed barbers stand _____.
- at the client's left side
 - in front of the client
 - behind the client
 - at the client's right side
16. For beard designs on curly textured facial hair, you will trim excess hair using what technique?
- Clipper-over-comb
 - Taper and blend
 - Outliner-over-comb
 - Shear-over-comb
17. When performing a beard trim, gently comb through the beard and check for _____.
- gray hair
 - ingrown hairs
 - hidden moles
 - freckles
18. On average, hair grows at the rate of about _____ inch per month.
- 1
 - $\frac{1}{2}$
 - $\frac{3}{4}$
 - $1\frac{1}{2}$
19. In hair design, the form occupies _____ space.
- disproportional
 - positive
 - negative
 - proportional
20. Trim the mustache to a desired length with _____.
- scissors
 - a straight razor
 - an outliner
 - haircutting shears

21. For clients with round faces, beards should be styled to make the face appear more _____.
- a. oblong
 - b. oval
 - c. pear-shaped
 - d. square
22. _____ can be symmetrical or asymmetrical depending on the cutting lines and the ratio of length to width in the overall shape of the style.
- a. Design texture
 - b. Space
 - c. Proportion
 - d. Balance
23. _____ is the term used when the hair is left to air-dry.
- a. Freeform blowdrying
 - b. Blowdrying
 - c. Natural drying
 - d. Diffuser drying
24. Asking questions during a consultation will help you properly complete the process of _____.
- a. summarizing
 - b. explaining
 - c. discovering
 - d. envisioning
25. Before beginning _____, check to determine if one sideburn is longer than the other.
- a. lathering
 - b. arching
 - c. draping
 - d. outlining
26. Elevation is also known as _____.
- a. overdirection
 - b. position
 - c. projection
 - d. proportion
27. What type of cut is a variation of the crew cut?
- a. Flat top
 - b. Taper cut
 - c. Butch cut
 - d. Precision cut
28. What type of tension would you use on straight hair to create precise lines?
- a. No tension
 - b. Maximum
 - c. Minimum
 - d. Moderate
29. What type of shave involves shaving the bottom of the sideburns, around and behind the ears, down the sides of the neck, and the nape area?
- a. Arching
 - b. Front hairline
 - c. Head
 - d. Outline
30. What should you use as a barrier between the cape and the client's neck?
- a. Warm, moist towel
 - b. Paper towels
 - c. Neck strip
 - d. Moisturizing lotion

Foundations of Haircutting, Styling & Shaving
Practical Exam

Perform a 14-area facial shave. (1 point each)

Draping _____	Linen setup _____	Headrest cover _____
Palm razor _____	Lather _____	Steam towel _____
Relather _____	Disinfect razor _____	Stowe razor _____
Razor handling _____	Razor wipe after each stroke/movement or area _____	

State the position, area, and movement for each step of the facial shave. (1 point each)

- | | | |
|---|-------------------------|--------------------------------|
| 1. 9 o'clock (RH)/3 o'clock (LH) _____ | Freehand _____ | Sideburn to jawbone _____ |
| 2. 9 o'clock (RH)/3 o'clock (LH) _____ | Backhand _____ | Mid jaw to corner of lip _____ |
| 3. 9 o'clock (RH)/3 o'clock (LH) _____ | Freehand _____ | Side of mustache _____ |
| 4. 9 o'clock (RH)/3 o'clock (LH) _____ | Freehand _____ | Jawline to grain change _____ |
| 5. 12 o'clock _____ | Reverse Freehand _____ | Neck to grain change _____ |
| | Relather _____ | |
| 6. 9 o'clock (RH)/3 o'clock (LH) _____ | Backhand _____ | Other side of mustache _____ |
| 7. 12 o'clock _____ | Backhand _____ | Sideburn to jawbone _____ |
| 8. 9 o'clock (RH)/3 o'clock (LH) _____ | Freehand _____ | Mid jaw to corner of lip _____ |
| 9. 12 o'clock _____ | Backhand _____ | Jawline to grain change _____ |
| 10. 12 o'clock _____ | Reverse Freehand _____ | Neck to grain change _____ |
| 11. 9 o'clock (RH)/3 o'clock (LH) _____ | Freehand _____ | Across chin (3 strokes) _____ |
| 12. 9 o'clock (RH)/3 o'clock (LH) _____ | Backhand/Freehand _____ | Chin to grain change _____ |
| 13. 12 o'clock _____ | Reverse Freehand _____ | Neck to grain change _____ |
| 14. 12 o'clock _____ | Reverse Freehand _____ | Under lip _____ |

Perform a second-time-over shave. (1 point each)

Moistens fingertips and feels face to check for stubble _____
Shaves residual hair (with or across the grain) _____

Perform after-shave care. (1 point each)

Palm razor _____	Tepid towel applications _____	Disinfect razor _____
Stowe razor _____	Moisturizer Application _____	
Astringent Application _____	Talcum mitt _____	Talcum application _____

Shaving Score _____/64

Haircut (6 points each)

Draping _____
Handling of tools, implements, and equipment _____
Effective cutting (tapered, blended, balanced haircut – no outline required) _____
Debris removal from client _____
Sanitation and decontamination _____
Confidence _____

Haircut Score _____/36

Foundations of Haircutting, Styling, & Shaving Score _____/100

Apprentice Examination Prep IV
General Barbering & Cosmetic Sciences II

1. When acids and alkalis are mixed together in equal proportions, they neutralize each other to form _____.
 - a. salt and hydrogen
 - b. water and alcohol
 - c. sodium hydroxide and water
 - d. water and a salt
2. What type of shampoo should never be given prior to a chemical service?
 - a. Dry or powder
 - b. Liquid-dry
 - c. Cream
 - d. Clear liquid
3. _____ is an example of a physical mixture.
 - a. Acid
 - b. Alkali
 - c. Powder
 - d. Oxide
4. Ice is water in which state of matter?
 - a. Gas
 - b. Liquid
 - c. Plasma
 - d. Solid
5. Where do conditioners typically range on the pH scale?
 - a. 4.5 to 5.5
 - b. 3.0 to 5.5
 - c. Above 7.0
 - d. 2.0 to 3.0
6. Astringent scalp tonics _____.
 - a. promote healing of the scalp
 - b. help remove oil accumulation on the scalp
 - c. are prescribed by a physician
 - d. soften the scalp
7. What is a negatively charged ion called?
 - a. Anion
 - b. Proton
 - c. Cation
 - d. Neutron
8. In an oil-in-water (O/W) emulsion, droplets of oil are dispersed in water, where they are surrounded by _____.
 - a. suspensions
 - b. solvents
 - c. surfactants
 - d. solutes
9. An example of a physical change is _____.
 - a. temporary haircolor
 - b. oxidation of haircolor products
 - c. burning wood
 - d. rusting iron
10. Which of the following are used during facials and shaves in the barbershop?
 - a. Epilators
 - b. Cleansing creams
 - c. Massage creams
 - d. Depilatories

11. _____ are unstable uniform mixtures of two or more substances.
- | | |
|--------------|----------------|
| a. Solutions | c. Solvents |
| b. Solutes | d. Suspensions |
12. Therapeutic lamps that use ultraviolet light can treat _____.
- | | |
|------------------------|-----------|
| a. dandruff conditions | c. pain |
| b. muscles | d. nerves |
13. When using therapeutic lamps, the client's _____ must be protected.
- | | |
|---------|---------|
| a. ears | c. skin |
| b. eyes | d. hair |
14. Microcurrents _____.
- | | |
|-------------------------------|-------------------------|
| a. decrease lymph circulation | c. lessen elasticity |
| b. improve blood circulation | d. decrease muscle tone |
15. Which rays are used for nuclear power plants?
- | | |
|----------------|---------------|
| a. Radio waves | c. Gamma rays |
| b. X-rays | d. Microwaves |
16. Anaphoresis _____.
- | | |
|------------------------------|---------------------|
| a. decreases blood supply | c. opens the pores |
| b. hardens and firms tissues | d. closes the pores |
17. Direct current produces what type of reaction?
- | | |
|---------------|-------------|
| a. Mechanical | c. Chemical |
| b. Neutral | d. Magnetic |
18. Visible light makes up what percentage of natural sunlight?
- | | |
|---------------|---------------|
| a. 5 percent | c. 25 percent |
| b. 95 percent | d. 35 percent |
19. What devices have surge protectors and must be installed properly to operate as intended?
- | | |
|------------------------------|-------------------|
| a. Cathodes | c. Grounded plugs |
| b. Ground fault interrupters | d. Anodes |
20. Which of the following is an apparatus found within a power supply or adapter that converts AC to DC?
- | | |
|-------------|--------------|
| a. Fuse | c. Rectifier |
| b. Rheostat | d. Resistor |
21. A light-emitting diode is a medical device used to _____.
- | | |
|------------------------------|------------------------------|
| a. reduce acne | c. remove hair |
| b. decrease collagen content | d. decrease skin circulation |

22. Which of the following medical devices uses electromagnetic radiation and a medium?
- | | |
|----------------------|----------------------|
| a. Lasers | c. LEDs |
| b. Therapeutic lamps | d. Ultraviolet light |
23. The human body is considered a(n) _____.
- | | |
|------------------------------|--------------|
| a. complete electric circuit | c. conductor |
| b. nonconductor | d. insulator |
24. Exposure time for therapeutic lamps that use infrared light should not exceed _____.
- | | |
|---------------|-------------------|
| a. 15 minutes | c. 2 to 3 minutes |
| b. 30 minutes | d. 5 minutes |
25. Galvanic current uses _____.
- | | |
|--|-------------------------|
| a. neither negative nor positive poles | c. only a positive pole |
| b. both negative and positive poles | d. only a negative pole |
26. What type of rays are used in tanning booths and penetrate deeply into skin tissue?
- | | |
|------------------|-------------------|
| a. Visible light | c. UVC |
| b. UVA | d. Infrared light |
27. Which of the following is a switch that automatically interrupts or shuts off an electric circuit at the first indication of an overload?
- | | |
|-----------------------------|--------------------|
| a. Ground fault interrupter | c. Fuse box |
| b. Fuse | d. Circuit breaker |
28. Which shampoo is a good choice for color-treated and chemically treated hair?
- | | |
|------------------|-----------------|
| a. Neutralizing | c. Sulfate-free |
| b. Dry or powder | d. Balancing |
29. All acids owe their chemical reactivity to what ion?
- | | |
|--------------|-------------|
| a. Nitrogen | c. Hydrogen |
| b. Hydroxide | d. Oxygen |
30. Desincrustation is used to _____.
- | |
|---|
| a. introduce water-soluble products into the skin |
| b. facilitate deep pore cleansing |
| c. infuse alkaline products into the tissues |
| d. infuse acidic substances into the deeper tissues |

General Barbering and Cosmetic Sciences II
Practical Exam

Formulate a completely immersible disinfecting solution. (3 points each)

Solute (Barbicide) _____

Solvent (water) _____

Disinfecting time (10 minutes or manufacturer's instruction) _____

Demonstrate appropriate cleaning.

Tools

Debris removal _____

Use of appropriate cleaning solution _____

Disinfected stowing _____

Implements

Debris removal _____

Use of appropriate cleaning solution _____

Disinfected stowing _____

Surfaces

Debris removal _____

Use of appropriate cleaning solution _____

Drying (wipe down) _____

Demonstrate proper disinfection.

Nonelectrical Tools and Implements

Debris removal _____

Use of appropriate cleaning solution _____

Submersion _____

Disinfecting time (10 minutes or manufacturer's instruction) _____

Use of disinfectant solution _____

Disinfected stowing (closed sanitizer) _____

Electrical Tools

Debris removal _____

Blade wash _____

Use of EPA regulated disinfectant solution _____

Disinfected stowing (closed sanitizer) _____

Surfaces and Equipment

Debris removal _____

Use of EPA regulated disinfectant solution _____

Disinfecting time (10 minutes or manufacturer's instruction) _____

Cleaning and Disinfection Score _____75

Identify the following Electrotherapy and Light Therapy Equipment: (5 points each)

1. Scalp electrodes (rake) _____
2. Facial electrodes (flat) _____
3. Tesla high-frequency current device _____
4. Microcurrent device _____
5. Therapeutic lamp _____

Electrotherapy and Light Therapy Equipment Identification Score _____/25

General Barbering and Cosmetic Sciences II _____/100

Apprentice Examination Prep IV
Anatomy & Physiology of Barbering & Cosmetics

1. The word ending with the suffix *-ology* means _____.
 - a. "part of"
 - b. "study of"
 - c. "science of"
 - d. "map of"

2. An example of a hormone is _____.
 - a. estrogen
 - b. oil
 - c. blood
 - d. sweat

3. The _____ bone joins all of the bones of the cranium together.
 - a. zygomatic
 - b. frontal
 - c. ethmoid
 - d. sphenoid

4. What artery supplies blood to the brain?
 - a. Facial
 - b. External carotid
 - c. Submental
 - d. Internal carotid

5. An example of connective tissue would be _____.
 - a. lymph
 - b. glands
 - c. neurons
 - d. the lining of the heart

6. What color is blood in the veins?
 - a. Light pink
 - b. Bright red
 - c. Dark red
 - d. Dark pink

7. Motor nerves carry impulses from the brain to the _____.
 - a. nose
 - b. muscles
 - c. brain
 - d. skin

8. A _____ is the connection between two or more bones of the skeleton.
 - a. joint
 - b. tendon
 - c. ligament
 - d. muscle

9. What type of glands release hormonal secretions directly into the bloodstream?
 - a. Oil
 - b. Exocrine
 - c. Endocrine
 - d. Duct

10. Lymph nodes filter the lymphatic vessels, which helps _____.
 - a. body movement
 - b. produce both white and red blood cells
 - c. regulate the body's temperature
 - d. fight infection

11. The orbicularis oculi muscle _____.
- can easily be damaged during makeup application
 - wrinkles the forehead vertically
 - enables you to close your eyes
 - draws the eyebrows down
12. Which of the following brings nutrients to the cells and carries away waste materials?
- Venules
 - Capillaries
 - Arterioles
 - Arteries
13. What body system controls and coordinates the functions of all the other systems?
- Muscular
 - Circulatory
 - Nervous
 - Endocrine
14. The middle part of a muscle is called the _____.
- belly
 - origin
 - insertion
 - nuclei
15. What does the word integument mean?
- Map
 - Natural covering
 - System
 - Bone
16. The muscular system comprises what percentage of the body's weight?
- 15 to 20 percent
 - 40 to 50 percent
 - 25 percent
 - 80 percent
17. One of the functions of the lymphatic/immune system is to _____.
- act as a defense against toxins and bacteria
 - pass on the genetic code
 - stimulate functional activity
 - supply oxygen and eliminate carbon dioxide
18. How many bones are in the body?
- 230
 - 206
 - 130
 - 126
19. Reflexes do not have to be learned because they are _____.
- automatic
 - voluntary
 - superficial
 - permanent
20. An oval, bony case that protects the brain is the _____.
- maxillae
 - thorax
 - cranium
 - mandible
21. An oval, bony case that protects the brain is the _____.
- mandible
 - cranium
 - maxillae
 - thorax

22. What U-shaped bone(s) is located at the base of tongue?
a. Thorax
b. Hyoid
c. Phalanges
d. Zygomatic
23. What nervous system in the body includes the brain?
a. Peripheral nervous system
b. Autonomic nervous system
c. Somatic nervous system
d. Central nervous system
24. Keeping the wrist in what position will help to prevent injuries?
a. Straight
b. Bent
c. Locked
d. Flexed
25. What body system stores most of the body's calcium supply?
a. Endocrine
b. Respiratory
c. Circulatory
d. Skeletal
26. A normal adult heart beats about how many times per minute?
a. 100 to 110
b. 60 to 80
c. 90 to 120
d. 40 to 50
27. What type of tissue is bone composed of?
a. Nerve
b. Muscle
c. Connective
d. Epithelial
28. Which of the following is the process of cell reproduction when the cell divides into two identical cells?
a. Aponeurosis
b. Adipose
c. Mitosis
d. Metabolism
29. The seventh cranial nerve is also known as the _____ nerve.
a. facial
b. accessory
c. trigeminal
d. trifacial
30. Nonstriated muscles are found where in the body?
a. Heart
b. Intestines
c. Face
d. Hands

Anatomy and Physiology
Practical Exam

Identify and state a tissue example of the following on a human subject or on a skeleton:

- Connective Tissue (bone) _____
- Epithelial Tissue (skin) _____
- Muscle Tissue (facial muscles) _____
- Nerve Tissue (brain, spinal cord) _____

Tissue Identification Score ____/16

Identify the following bones and cranial lobes on a human subject or on a skeleton:

1. Occipital bone _____
2. Occipital lobe _____
3. Parietal bone _____
4. Parietal lobe _____
5. Frontal bone _____
6. Frontal lobe _____
7. Temporal bone _____
8. Temporal lobe _____
9. Ethmoid bone (spongy bone between the eye sockets leading to the nasal cavities) _____
10. Sphenoid bone (sides of the eyes the joins the bones of the cranium) _____
11. Nasal bone (bridge of the nose) _____
12. Zygomatic bone (cheekbones) _____
13. Maxillae (upper jaw bone) _____
14. Mandible (lower jaw bone) _____
15. Hyoid (U-shaped bone under the chin) _____

Bones and Cranial Lobes Identification Score ____/60

Identify the following muscles on a human subject or on a skeleton

1. Epicranium Muscles (scalp/covers the top of the skull) _____
2. Frontalis (near the frontal bone and lobe) _____
3. Occipitalis (near the occipital bone and lobe) _____
4. Sternocleidomastoid (muscle along the side of the neck) _____
5. Buccinator (cheek muscle) _____
6. Orbicularis oculi (ring muscle around the eyes) _____

Muscles Identification Score ____/24

Total Score ____/100

Apprentice Examination Prep IV
Trichology & Dermatology of Barbering & Cosmetics

1. Using sunscreen with an _____ when being in the sun is necessary to reduce the risk of cell and tissue damage.
 - a. SPF15
 - b. SPF25
 - c. SPF30
 - d. SPF75

2. Rosacea is a chronic condition that appears primarily _____.
 - a. on the scalp
 - b. on the cheeks and nose
 - c. on the back
 - d. below the waist

3. A possible side effect of finasteride is _____.
 - a. weight gain
 - b. weight loss
 - c. increasing the rate of hair loss
 - d. increase in sexual function

4. During which stage of life are the endocrine glands most active?
 - a. Old age
 - b. Adolescence
 - c. Middle age
 - d. Infancy

5. How long does the telogen phase last?
 - a. 3 to 6 months
 - b. 10 years
 - c. 1 to 2 weeks
 - d. 3 to 5 years

6. During what hair phase are new cells manufactured in the hair follicle?
 - a. Telogen
 - b. Catagen
 - c. Resting
 - d. Anagen

7. Total exposure time for infrared rays should not exceed _____.
 - a. 1 hour
 - b. 10 minutes
 - c. 5 minutes
 - d. 30 minutes

8. What should a barber do if he or she recognizes that a client has a skin disease?
 - a. Prescribe an over-the-counter remedy.
 - b. Refer the client to a physician.
 - c. Perform a medical diagnosis of the condition.
 - d. Provide medical treatment.

9. An infrared device is a type of _____ modality.
 - a. nerve impulse
 - b. moist heat
 - c. electric current
 - d. light ray

10. The high-frequency machine can benefit the client's skin by _____.
 - a. decreasing cell metabolism
 - b. deoxygenating the skin
 - c. stimulating blood circulation
 - d. decreasing glandular activity

11. What shampooing method would you use for a client who is disabled or wheelchair-bound?
- European-style
 - Special needs
 - Inclined
 - Reclined
12. Massage manipulations should be _____.
- fast and rhythmic
 - light in pressure
 - firm and fast
 - slow and rhythmic
13. Hair porosity is the ability of the hair to _____.
- return to its original length without breaking
 - have an odor
 - stretch
 - absorb moisture
14. What layer of hair may be absent in very fine and naturally blond hair?
- Dermal papilla
 - Medulla
 - Cortex
 - Cuticle
15. What type of hair has a hard, glassy finish?
- Medium
 - Coarse
 - Wiry
 - Fine
16. Which of the following is an indication of the strength of the side bonds in the hair?
- Porosity
 - Elasticity
 - Density
 - Texture
17. A flat spot or discoloration on the skin is a _____.
- vesicle
 - wart
 - nodule
 - macule
18. What causes a wheal?
- Cancer
 - Impetigo
 - Poison ivy
 - Mosquito bite
19. The _____ system controls the activity of sweat glands.
- nervous
 - lymphatic/immune
 - endocrine
 - circulatory
20. _____ is a type of skin cancer that has a 90% survival rate with early diagnosis and treatment.
- Basal melanoma
 - Squamous cell carcinoma
 - Malignant melanoma
 - Basal cell carcinoma
21. Recent research suggests that _____ disorder is part of an autoimmune disease?
- Chloasma
 - Tan
 - Vitiligo
 - Stain

22. Hair is composed chiefly of a fibrous protein called _____.
- a. Eumelanin
 - b. Keratin
 - c. melanin
 - d. cysteine
23. Oily skin is characterized by _____.
- a. not enough sebum production
 - b. loosening of the elastic skin fibers
 - c. excess sebum production
 - d. depressions in the skin
24. One reason a client might find fault with a shampoo service would be _____.
- a. water that is too hot
 - b. water that runs onto the client's neck
 - c. too long of a scalp massage
 - d. hair blotting
25. The number of hairs on a client's head can be estimated by their _____.
- a. length
 - b. color
 - c. style
 - d. texture
26. Disorders or conditions of a clients' _____ can prohibit a service from being performed.
- a. hair
 - b. skin
 - c. scalp
 - d. hair texture
27. A scalp analysis includes checking for _____, _____, and _____.
- a. hypertrophies, abrasions, parasites
 - b. texture, porosity, elasticity
 - c. porosity, elasticity, and abrasions
 - d. hypertrophies, abrasions, porosity
28. Hair that has a low porosity is considered _____.
- a. receptive
 - b. overly porous
 - c. resistant
 - d. overprocessed
29. The average hair density is approximately _____ strands per square inch.
- a. 100
 - b. 2,200
 - c. 200
 - d. 100,000
30. Hair with high porosity is considered to be _____.
- a. receptive
 - b. overly porous
 - c. resistant
 - d. underprocessed

Trichology & Dermatology of Barbering & Cosmetics
Practical Exam

Identify the following skin pigmentations, disorders, and diseases: (2 points each)

1. Acne _____
2. Cyst _____
3. Macule _____
4. Nodule _____
5. Papule _____
6. Tumor _____
7. Wheal _____
8. Crust _____
9. Keloid _____
10. Scale _____
11. Ulcer _____
12. Scar _____
13. Basal cell carcinoma _____
14. Squamous cell carcinoma _____
15. Malignant melanoma _____
16. Vitiligo _____
17. Albinism _____
18. Port-wine stain _____
19. Eczema _____
20. Herpes Simplex I _____
21. Rosacea _____
22. Milia _____
23. Comedone _____
24. Bulla _____
25. Seborrheic dermatitis _____

Skin Pigmentations, Disorders, and Diseases Score _____/50

Perform a minoxidil treatment (5 points each)

- Draping _____
- Scalp Analysis _____
- Appropriate Shampoo Service _____
- Minoxidil Application _____
- Sanitation and Disinfection _____

Minoxidil Treatment Score _____/25

Perform a dandruff treatment (5 points each)

- Draping _____
- Scalp Analysis _____
- Dandruff extraction _____
- Astringent Application, Medicated Shampoo, and Conditioning _____
- Sanitation and Disinfection _____

Dandruff Treatment Score _____/25

Trichology and Dermatology of Barbering & Cosmetics _____/100

Apprentice Examination Prep IV
Advanced Haircutting, Styling, & Shaving

1. What helps to create strong, consistent foundations in haircutting?
 - a. Graduations
 - b. Parts
 - c. Design lines
 - d. Angles

2. _____ is most often used to create design lines at the perimeter of the haircut.
 - a. Cutting palm-to-palm
 - b. Cutting below the fingers
 - c. Cutting above the fingers
 - d. Shear-over-comb

3. What is the widest section of the head?
 - a. Reference point
 - b. Occipital bone
 - c. Apex
 - d. Parietal ridge

4. Some men choose to cover their thinning or bald areas because they feel it makes them look _____.
 - a. Successful
 - b. Natural
 - c. younger
 - d. fashionable

5. What should be done prior to fitting any hair solution?
 - a. Scalp reduction.
 - b. Contour analysis.
 - c. Reconditioning treatments.
 - d. Tapering and blending of the hair.

6. A potential side effect of finasteride is _____.
 - a. weight gain
 - b. weight loss
 - c. hair loss
 - d. high blood pressure

7. Take the time during the consultation to explain the finer points of hair restoration, _____, bonding methods, and different hair solutions.
 - a. transport
 - b. upkeep
 - c. styling
 - d. storage

8. Facial hair solutions are attached with _____.
 - a. spirit gum
 - b. alcohol
 - c. double-sided adhesive tape
 - d. lightweight elastic

9. _____ is an oral medication that is prescribed only for men to stimulate hair growth.
 - a. Cover-up hair
 - b. Finasteride
 - c. Minoxidil
 - d. Rogaine

10. Which of the following is a disadvantage associated with a human hair solution?
 - a. It possesses a high gloss.
 - b. It tends to mat and tangle easily.
 - c. It is difficult to blend the piece with the client's natural hair.
 - d. It reacts to climate changes.

11. Brush and comb hair solutions with a(n) _____ movement.
- | | |
|-------------|-------------|
| a. Sideways | c. upward |
| b. Brisk | d. downward |
12. _____ may be used at the front hairline to create a softer and more natural look.
- | | |
|-----------------|-------------|
| a. Sheep's wool | c. Angora |
| b. Horse hair | d. Yak hair |
13. _____ are the best evidence of pleased and satisfied clients.
- | | |
|------------------------|--------------------------------|
| a. Personal referrals | c. Hard-sell approaches |
| b. Personal approaches | d. Social networking fan pages |
14. Low-light laser therapy stimulates _____ in the hair follicles.
- | | |
|----------------------|--------------------|
| a. cell regeneration | c. reconditioning |
| b. restoration | d. transplantation |
15. In today's world, it is extremely important to master which of the following?
- | | |
|---------------------------|----------------------------|
| a. Modeling | c. Newspaper advertising |
| b. Social media marketing | d. Hard-selling techniques |
16. When discussing hair replacement with your client, be sure to take a very personal and _____ approach.
- | | |
|--------------|--------------|
| a. slow | c. technical |
| b. hard-sell | d. private |
17. Stock systems are also known as _____.
- | | |
|--------------------------|------------------------|
| a. contoured systems | c. custom-made systems |
| b. custom hair solutions | d. pre-custom systems |
18. After cutting and blending a full head bonded replacement system, the client should allow how long before shampooing?
- | | |
|-------------|-------------------|
| a. One week | c. Two weeks |
| b. 72 hours | d. 24 to 48 hours |
19. Razor cuts are not recommended on what type of hair?
- | | |
|------------------|-----------------|
| a. Coarse, thin | c. Fine, thin |
| b. Medium, thick | d. Fine, medium |
20. Which of the following are secured with a hair clip, dried, and styled?
- | | |
|-------------------|--------------------|
| a. Velcro rollers | c. Plastic rollers |
| b. Pin curls | d. Hot rollers |
21. Curly hair tends to graduate naturally due to the _____ and curl pattern.
- | | |
|---------------|------------|
| a. Porosity | c. Texture |
| b. Elasticity | d. Density |

22. Thermal hair straightening is also known as _____.
- a. hair molding
 - b. hair wrapping
 - c. hair pressing
 - d. thermal waving
23. What is the most common elevation for a graduated cut?
- a. 0 degrees.
 - b. 90 degrees.
 - c. 45 degrees.
 - d. 180 degrees.
24. Which of the following are used to temporarily straighten hair?
- a. Electric flat irons
 - b. Electric thermal irons
 - c. Marcel irons
 - d. Blowdryer
25. Once the long-layered haircut is dry, detail the interior and perimeter using _____.
- a. slithering
 - b. notching
 - c. deep point cutting
 - d. carving
26. _____ is a technique used to keep curly hair smooth and straight while retaining a beautiful shape.
- a. Hair wrapping
 - b. Blowdry styling
 - c. Finger waving
 - d. Thermal waving
27. What type of hair is easier to cut with clippers?
- a. Curly hair of medium density.
 - b. Extremely curly hair.
 - c. Clean damp hair.
 - d. Thick, coarse hair.
28. What type of cut builds weight and volume along the perimeter of the hairstyle?
- a. Long-layered
 - b. Graduated
 - c. Blunt
 - d. Uniform-layered
29. Which of the following occurs when the hair is combed away from its natural fall position?
- a. Slithering
 - b. Texturing
 - c. Overdirection
 - d. Notching
30. On-base roller placement sits directly on the base and produces what type of curl?
- a. Loose
 - b. Tight
 - c. Pin
 - d. Full volume

Advanced Haircutting, Styling, & Shaving
Practical Exam

Perform a 14-area facial shave. (1 point each)

Draping _____	Linen setup _____	Headrest cover _____
Palm razor _____	Lather _____	Steam towel _____
Relather _____	Disinfect razor _____	Stowe razor _____
Razor handling _____	Razor wipe after each stroke/movement or area _____	

State the position, area, and movement for each step of the facial shave. (1 point each)

1. 9 o'clock (RH)/3 o'clock (LH) _____	Freehand _____	Sideburn to jawbone _____
2. 9 o'clock (RH)/3 o'clock (LH) _____	Backhand _____	Mid jaw to corner of lip _____
3. 9 o'clock (RH)/3 o'clock (LH) _____	Freehand _____	Side of mustache _____
4. 9 o'clock (RH)/3 o'clock (LH) _____	Freehand _____	Jawline to grain change _____
5. 12 o'clock _____	Reverse Freehand _____	Neck to grain change _____
	Relather _____	
6. 9 o'clock (RH)/3 o'clock (LH) _____	Backhand _____	Other side of mustache _____
7. 12 o'clock _____	Backhand _____	Sideburn to jawbone _____
8. 9 o'clock (RH)/3 o'clock (LH) _____	Freehand _____	Mid jaw to corner of lip _____
9. 12 o'clock _____	Backhand _____	Jawline to grain change _____
10. 12 o'clock _____	Reverse Freehand _____	Neck to grain change _____
11. 9 o'clock (RH)/3 o'clock (LH) _____	Freehand _____	Across chin (3 strokes) _____
12. 9 o'clock (RH)/3 o'clock (LH) _____	Backhand/Freehand _____	Chin to grain change _____
13. 12 o'clock _____	Reverse Freehand _____	Neck to grain change _____
14. 12 o'clock _____	Reverse Freehand _____	Under lip _____

Perform a second-time-over shave. (1 point each)

Moistens fingertips and feels face to check for stubble _____
Shaves residual hair (with or across the grain) _____

Perform after-shave care. (1 point each)

Palm razor _____	Tepid towel applications _____	Disinfect razor _____
Stowe razor _____	Moisturizer Application _____	
Astringent Application _____	Talcum mitt _____	Talcum application _____

Shaving Score _____/64

Nonsurgical Cranial Prosthetic Installation with Haircut (6 points each)

Balding desired installation location _____
Product application (scalp protectant, adhesives, etc.) _____
Installation _____
Handling of tools, implements, and equipment _____
Effective cutting (tapered, blended, balanced haircut – no outline required) _____
Debris removal from client _____

Nonsurgical Cranial Prosthetic Installation with Haircut Score _____/36
Advanced Haircutting, Styling, & Shaving Score _____/100

Apprentice Examination Prep IV
Chemical Textured Services

1. A(n) _____ service partially straightens the hair with the intent that it will be picked out and cut.
 - a. texturizing
 - b. keratin-based straightening treatment
 - c. chemical blowout
 - d. curl reformation

2. Permanent waves are performed on hair that has been _____.
 - a. Relaxed
 - b. blown dry
 - c. freshly shampooed
 - d. freshly cut

3. When using chemical relaxers, you should _____.
 - a. use additional product to relax excessively damaged hair
 - b. use a hydroxide relaxer on thio-treated hair
 - c. apply relaxer cream to the least resistant area first
 - d. save any unused product that you mixed

4. What type of wrapping/rodding technique is the hair wound from the hair ends toward the scalp?
 - a. Croquignole perm wrap.
 - b. Water wrap.
 - c. Bookend wrapping.
 - d. Spiral wrap.

5. Proper _____ is key to a perm.
 - a. rinsing
 - b. reapplication
 - c. reconditioning
 - d. appearance

6. Never use a(n) _____ product on hair that has been previously relaxed with a thio product.
 - a. Sulfite
 - b. ammonia
 - c. peroxide
 - d. hydroxide

7. _____ is an extremely alkaline product and may process hair too quickly where a blowout cannot be performed.
 - a. Ammonium bisulfate
 - b. Sodium hydroxide
 - c. Formaldehyde
 - d. Hydrogen peroxide

8. Which is a characteristic of ammonium thioglycolate relaxer?
 - a. Contains lye
 - b. Low pH
 - c. Odorless
 - d. Compatible with soft-curl permanent waves

9. Avoid large blockings on thin hair growth in permanent waves as the strain may cause _____.
 - a. hair that tangles easily
 - b. breakage
 - c. sponginess
 - d. limpness

10. During curl reformation, the hair is neutralized and it rehardens the bonds in the _____ into a new, wavy pattern.
- | | |
|------------|------------|
| a. Medulla | c. cortex |
| b. Keratin | d. cuticle |
11. Tight wrapping can result in hair _____.
- | | |
|-------------------------------------|--------------------------|
| a. breakage | c. limpness |
| b. in a straighter, less curly form | d. uneven curl formation |
12. What wrapping/rodding technique involves winding the hair from the hair ends toward the scalp?
- | | |
|---------------------------|-----------------|
| a. Bookend wrapping. | c. Water wrap. |
| b. Croquignole perm wrap. | d. Lotion wrap. |
13. _____ are not compatible with thio relaxers because they use a different chemistry.
- | | |
|-----------------|-----------------------|
| a. Neutralizers | c. Hydroxide relaxers |
| b. Conditioners | d. Moisturizers |
14. What is the most common neutralizer in permanent waving?
- | | |
|----------------------|-----------------------|
| a. Hydrogen peroxide | c. Ammonium bisulfite |
| b. Mercaptamine | d. Ammonium sulfite |
15. What wrapping pattern is one of the best to use for men's styles?
- | | |
|---------------------------|------------------------|
| a. Croquignole perm wrap. | c. Basic wrap. |
| b. Curvature perm wrap | d. Piggyback perm wrap |
16. Signs of poor elasticity include _____.
- | |
|---|
| a. hair that tangles easily |
| b. hair that requires a more alkaline solution |
| c. hair that is neither resistant nor overly porous |
| d. hair slowly contracts after stretching |
17. Which of the following would be a benefit associated with alkaline perms?
- | |
|---|
| a. Strong curl patterns. |
| b. Slower, but more controllable processing time. |
| c. Softer curl patterns. |
| d. Gentler treatment for delicate hair types. |
18. The _____ of the relaxer reflects the concentration of hydroxide in its formulation.
- | | |
|-------------|----------------|
| a. Volume | c. color |
| b. Strength | d. consistency |
19. Mild strength relaxers are recommended for what type of hair?
- | | |
|-------------------------|--------------------|
| a. Coarse | c. Fine |
| b. Normal hair textures | d. Extremely curly |

20. The _____ wrap is used with alkaline (cold) waves to make it easier to wrap resistant, straight hair types.
- a. water
 - b. spiral
 - c. croquignole perm
 - d. lotion
21. Hair with _____ holds the curl from wet sets and permanent waves.
- a. sponginess
 - b. normal elasticity
 - c. low elasticity
 - d. average length
22. The client consultation helps to _____.
- a. inspire the client's confidence
 - b. boost your confidence as a barber
 - c. determine if the scalp has any cuts or abrasions
 - d. determine the hair's porosity
23. Half off-base placement results from wrapping the hair at an angle of _____ to its base section.
- a. 90 degrees
 - b. 45 degrees
 - c. 180 degrees
 - d. 30 degrees
24. Thio relaxing products require the use of a(n) _____ to chemically oxidize the hair.
- a. Activator
 - b. Alkanolamine
 - c. neutralizer
 - d. sulfite
25. What types of rods are usually used for a spiral wrap?
- a. Loop
 - b. Bender
 - c. Concave
 - d. Straight
26. What type of rod shape produces a tighter curl in the center and a larger curl on the sides of the hair?
- a. Concave
 - b. Circle
 - c. Straight
 - d. Bender
27. Hair develops and maintains its natural form by physical and chemical cross-bonds in the _____ layer.
- a. Cuticle
 - b. Medulla
 - c. protein
 - d. cortex
28. The activator in an _____ contains an oxidizing agent that causes a rapid release of heat when mixed with the waving solution.
- a. endothermic waves
 - b. acid-balanced waves
 - c. exothermic waves
 - d. ammonia-free waves

29. _____ require the use of an outside heat source to activate chemical reactions and processing.

- a. Endothermic waves
- b. Acid-balanced waves
- c. Exothermic waves
- d. Ammonia-free waves

30. Thio-free waves have a pH range of _____ while low-pH waves have a pH range of 6.5 to 7.0.

- a. 7.0 to 9.6
- b. 7.8 to 8.2
- c. 9.0 to 9.6
- d. 9.6 to 11.0

Chemical Textured Services
Practical Exam

Perform a scalp analysis and state procedures (2.5 points each)

- Sanitation and Decontamination _____
- Consultation _____
- Comb through hair (thin sections; no scraping of the scalp) _____
- Check scalp for:
 - Cuts, abrasions, open sores, scalp disease _____
 - Smell/odor _____
 - Feel _____
- Identification of the disorder or disease and diagnosis _____
- Post-Service Consultation _____
- Recommended treatment (none, barber or physician) _____
- Sanitation and Disinfection _____

Scalp Analysis Score ____/25

Hair Analysis (2.5 points each)

- Hair Texture Test (feel a hair strand) _____
 - Determine Hair Texture (coarse, medium, fine) _____
- Hair Density Test (estimate based on the color and areas of thickness and thinness) _____
 - Determine Hair Density (thick, average, thin) _____
- Hair Porosity Test (hold a patch of hair and slide the thumb and forefinger of the opposite hand towards the scalp) _____
 - Determine Hair Porosity (resistant, normal, overly porous) _____
- Hair Elasticity Test (stretch a few clean hair strands and release them) _____
 - Determine Hair Elasticity (%; high, medium, low; breakage) _____

Hair Analysis Score ____/20

Perform a relaxer service. (2.5 points each)

- Wet chemical draping (2 towels) _____
- Scalp and perimeter prep (oil base) _____
- Sectioning (4 sections, minimal tension on hair and scalp) _____
- Base scalp (oil application) _____
- Application
 - (start at the most resistant area, center, apply to new-growth, ¼ inch from the scalp) _____
- Processing and inspection _____
- Rinsing (warm water until all is removed) _____
- Neutralizing shampoo (>/2 cycles until completely cleansed) _____
- Conditioning _____
- Drying (thermal protectant application, blow dry) _____

Relaxer Service Score ____/25

Perform a reformation curl service. (2.5 points each)

Wet chemical draping (2 towels) _____

Shampoo _____

Scalp and perimeter prep (oil base, install cotton around the perimeter) _____

Sectioning (9 sections, minimal tension on hair and scalp) _____

Application (start at the most resistant area, center, on-base) _____

Book-end wrapping _____

Rod placement _____

Processing and inspection (check for S-curl pattern) _____

Rinsing (until all is removed) _____

Neutralizing _____

Reformation Curl Service _____/25

Chemical Texture Service Score _____/100

Apprentice Examination Prep IV
Haircoloring & Lightening

1. Lighteners are not designed to _____.
 - a. remove unwanted artificial haircoloring products from the hair
 - b. dissolve or remove the hair's natural color pigment
 - c. both a and b
 - d. neither a or b

2. Demipermanent products require the use of _____ developer to deposit color or when less lightening is desired.
 - a. 10-Volume
 - b. 30-Volume
 - c. 20-Volume
 - d. 40-Volume

3. _____ are the mixture of primary and secondary colors positioned directly opposite each other on the color wheel.
 - a. Primary colors
 - b. Tertiary colors
 - c. Secondary colors
 - d. Complimentary colors

4. A client has brown hair with a red undertone. Red is considered the _____.
 - a. natural hair color
 - b. primary color
 - c. secondary color
 - d. contributing color

5. _____ covers gray hair, creates bright or natural-looking haircolor.
 - a. Permanent
 - b. Temporary
 - c. Semi-permanent
 - d. Demi-permanent

6. Haircoloring results depend on the combination of _____.
 - a. natural hair color
 - b. artificial hair color product
 - c. both a and b
 - d. neither a or b

7. _____ is known as a developer that produces a relatively mild lightening of the natural hair color.
 - a. Sodium hydroxide
 - b. Ammonia thioglycolate
 - c. Hydrogen peroxide
 - d. Guanidine hydroxide

8. Blue, red, and yellow are _____.
 - a. primary colors
 - b. tertiary colors
 - c. secondary colors
 - d. complimentary colors

9. _____ developer is the standard volume used with many permanent color products.
 - a. 10-Volume
 - b. 30-Volume
 - c. 20-Volume
 - d. 40-Volume

10. It is important to note that lighteners are designed to _____.
- remove unwanted artificial haircoloring products from the hair
 - dissolve or remove the hair's natural color pigment
 - remove wanted artificial haircoloring products from the hair
 - none of the above
11. _____ fall into a category of permanent color and are aniline derivative products of pale, delicate shades designed for use on pre-lightened hair.
- Toners
 - Haircolor sprays
 - Semi-permanent
 - Demi-permanent
12. Temporary and semipermanent hair colors are types of _____ products.
- nonoxidative
 - temporary
 - permanent
 - oxidative
13. _____ hair color washes out with one shampoo.
- Permanent
 - Temporary
 - Semi-permanent
 - Demi-permanent
14. When complimentary colors are mixed, they _____.
- Create a secondary color
 - Create a tertiary color
 - neutralize each other
 - intensifies the color they produce
15. Tint or dye removers are designed to _____.
- remove unwanted artificial haircoloring products from the hair
 - dissolve or remove the hair's natural color pigment
 - remove wanted artificial haircoloring products from the hair
 - none of the above
16. Using the level system, 1 is _____ and 10 is _____.
- black; blond
 - blond; red
 - red; blond
 - blond; black
17. The equal mixing of yellow and blue to create green is an example of a _____.
- primary colors
 - tertiary color
 - secondary color
 - complimentary color
18. _____ washes out or fades within a few weeks.
- Permanent
 - Temporary
 - Semi-permanent
 - Demi-permanent
19. A client with brown hair has red highlights. Brown is the _____, and red is the _____.
- hue; tone
 - tone; primary color
 - tone; hue
 - hue; secondary color

20. _____ are created when a colorist mixes equal amounts of red dye (a primary color) with violet dye (red's adjacent secondary color).
- Primary colors
 - Tertiary colors
 - Secondary colors
 - Complimentary colors
21. On the level system, 1 is the _____ and 10 is the _____.
- hue; tone
 - lightest; darkest
 - darkest; lightest
 - tone; hue
22. _____ blends gray hair, enhances natural color, and tones pre-lightened hair.
- Permanent
 - Temporary
 - Semi-permanent
 - Demi-permanent
23. _____ hair will appear to have more red, yellow, or orange than the intended color.
- Overlightened
 - Pre-lightened
 - Underlightened
 - Damaged
24. What should you do with leftover tint?
- Pour it back into its original container.
 - Store it in a sealed bag.
 - Discard it.
 - Set it aside for a future retouch.
25. Cream lighteners contain conditioning agents called _____.
- bluing agents
 - drabbers
 - tints
 - alkaline swelling agents
26. Which of the following provides natural black and brown pigment to hair?
- Eumelanin
 - Protein
 - Pheomelanin
 - Lanolin
27. Hair with uneven color distribution or pre-lightened hair may benefit from a _____ application.
- color filler
 - toner
 - virgin
 - retouch
28. You should avoid breathing in vapors caused by mixing _____ and haircolor products.
- hydrogen peroxide
 - alkaline swelling agents
 - surfactants
 - ammonia
29. As soon as hydrogen peroxide is mixed into the lightener formula, it begins to release _____.
- oxygen
 - hydrogen
 - irritants
 - toxins
30. Which of the following is an example of a single-process coloring?
- Fillers and tints.
 - Pre-softener and tint applications.
 - Lightener and toner applications.
 - Virgin tint applications.

Haircoloring & Lightening
Practical Exam

Perform a scalp analysis and state procedures (1 point each)

- Sanitation and Decontamination _____
- Consultation _____
- Comb through hair (thin sections; no scraping of the scalp) _____
- Check scalp for:
 - Cuts, abrasions, open sores, scalp disease _____
 - Smell/odor _____
 - Feel _____
- Identification of the disorder or disease and diagnosis _____
- Post-Service Consultation _____
- Recommended treatment (none, barber or physician) _____
- Sanitation and Disinfection _____

Scalp Analysis Score ____/10

Hair Analysis (1.25 points each)

- Hair Texture Test (feel a hair strand)_____
 - Determine Hair Texture (coarse, medium, fine)_____
- Hair Density Test (estimate based on the color and areas of thickness and thinness) _____
 - Determine Hair Density (thick, average, thin)_____
- Hair Porosity Test (hold a patch of hair and slide the thumb and forefinger of the opposite hand towards the scalp) _____
 - Determine Hair Porosity (resistant, normal, overly porous) _____
- Hair Elasticity Test (stretch a few clean hair strands and release them) _____
 - Determine Hair Elasticity (%; high, medium, low; breakage) _____

Hair Analysis Score ____/10

Divide the mannequin's hair into 4 quadrants. Perform the following on each quadrant.

Quadrant I: Perform a semi-permanent color service. (2 points each)

- Product selection _____
- Wet chemical draping (2 towels) _____
- Shampoo (>/2 cycles until completely cleansed)_____
- Rinsing (warm water until all is removed) _____
- Perimeter prep (oil base) _____
- Sectioning (4 sections, minimal tension on hair and scalp) _____
- Application (start at the most resistant area, center, apply 1/4 inch from the scalp) _____
- Endothermic heat application _____
- Processing and inspection _____
- Drying (thermal protectant application, blow dry) _____

Semi-Permanent Color Service Score ____/20

Quadrant II: Perform a demi-permanent color service. (2 points each)

- Product mixing (color:developer ratio, 10 volume developer) _____
- Wet chemical draping (2 towels) _____
- Perimeter prep (oil base) _____
- Sectioning (4 sections, minimal tension on hair and scalp) _____
- Application (start at the most resistant area, center, apply ¼ inch from the scalp) _____
- Processing and inspection _____
- Rinsing (warm water until all is removed) _____
- Shampooing _____
- Conditioning _____
- Drying (thermal protectant application, blow dry) _____

Demi-Permanent Color Service Score _____/20

Quadrant III: Perform a permanent color service. (2 points each)

- Product mixing (color:developer ratio, 20 volume developer) _____
- Wet chemical draping (2 towels) _____
- Perimeter prep (oil base) _____
- Sectioning (4 sections, minimal tension on hair and scalp) _____
- Application (start at the most resistant area, center, apply ¼ inch from the scalp) _____
- Processing and inspection _____
- Rinsing (warm water until all is removed) _____
- Shampooing _____
- Conditioning _____
- Drying (thermal protectant application, blow dry) _____

Permanent Color Service Score _____/20

Quadrant IV: Perform a hair lightening service. (2 points each)

- Product mixing (bleach:developer:oil ratio, 20/30/40 volume developer) _____
- Wet chemical draping (2 towels) _____
- Perimeter prep (oil base) _____
- Sectioning (4 sections, minimal tension on hair and scalp) _____
- Application (start at the most resistant area, center, apply ¼ inch from the scalp, foil) _____
- Processing and inspection _____
- Rinsing (warm water until all is removed) _____
- Shampooing _____
- Conditioning _____
- Drying (thermal protectant application, blow dry) _____

Hair Lightening Service Score _____ 20

Haircoloring & Lightening Score _____/100

Apprentice Examination Prep IV
NCBBE Examination

1. How many questions are on the written portion of the North Carolina Board of Barber Examiners (NCBBE) apprentice barber licensure examination?
 - a. 100
 - b. 120
 - c. 110
 - d. 150

2. How many parts are test candidates required to pass to become an apprentice barber in North Carolina?
 - a. 1
 - b. 3
 - c. 2
 - d. 4

3. How many areas are scored on the NCBBE apprentice barber licensure examination?
 - a. 1
 - b. 3
 - c. 2
 - d. 4

4. What areas are scored on the NCBBE apprentice barber licensure examination?
 - a. Written, Practical, and Sanitation/Decontamination
 - b. Written and Practical
 - c. Written and Sanitation
 - d. Written, Practical, and Sanitation/Decontamination/Sterilization

5. How many questions on the NCBBE apprentice barber licensure examination are about North Carolina law, rules, and regulations?
 - a. 10
 - b. 30
 - c. 20
 - d. 40

6. The basic function of the NCBBE is to _____?
 - a. inspect barbershops for compliance with appropriate sanitation practices
 - b. proctor and assess licensure examinations
 - c. protect the health, safety, and welfare of the public as it relates to barbering
 - d. inspect barber schools for compliance with the NCBBE's rules and regulations

7. The written portion of the NCBBE apprentice barber licensure examination is divided into how many subtests?
 - a. 8
 - b. 4
 - c. 6
 - d. 2

8. What is the dress code for taking the NCBBE apprentice barber licensure examination?
 - a. Dress shirt, dress pants, tie, and dress shoes
 - b. Collar shirt, khakis/trousers, dress/casual shoes, and a smock
 - c. Collar shirt, Jeans, sneakers, and a smock
 - d. Scrubs, sneakers, and a smock

9. How many minutes are test candidates permitted to take the written portion of the exam?
- a. 60
 - b. 120
 - c. 90
 - d. 180
10. How many inspectors enforce the laws, rules, and regulations for licensure, barbershop practices, sanitation, and barber school operations in the state of North Carolina?
- a. 1
 - b. 2
 - c. 3
 - d. 4
11. How many members serve on the NCBBE?
- a. 5
 - b. 10
 - c. 6
 - d. 7
12. NCBBE members are _____.
- a. appointed by the NCBBE's executive director
 - b. elected by North Carolina residents
 - c. selected by the NCBBE when a member completes a term
 - d. appointed by the governor
13. North Carolina law mandates that the NCBBE consists of _____ licensed North Carolina registered barber(s).
- a. 1
 - b. 2
 - c. 3
 - d. 4
14. What is the minimum square footage required for a barbershop in North Carolina?
- a. 144
 - b. 168
 - c. 196
 - d. 121
15. North Carolina law mandates that the NCBBE consists of _____ North Carolina resident(s).
- a. 1
 - b. 2
 - c. 3
 - d. 4
16. How many minutes are test candidates permitted to take the practical portion of the exam?
- a. 60
 - b. 120
 - c. 90
 - d. 180
17. The practical portion of the NCBBE apprentice barber licensure examination is divided into how many subtests?
- a. 8
 - b. 4
 - c. 6
 - d. 2

18. How many areas are scored on the practical portion of the NCBBE apprentice barber licensure examination?
- a. 1
 - b. 3
 - c. 2
 - d. 4
19. Which area(s) is/are scored on the practical portion of the NCBBE apprentice barber licensure examination?
- a. Tapered Businessman's Haircut
 - b. Sanitation/Decontamination
 - c. Shave
 - d. All of the above
20. Which razor movement is not used when performing of a face shave?
- a. Freehand
 - b. Backhand
 - c. Reverse backhand
 - d. Reverse freehand
21. Clean towels should be _____ until used.
- a. kept away from haircutting services
 - b. stowed in a closed cabinet
 - c. stowed on the stand
 - d. kept in a separate room
22. In no event will a temporary license be issued or renewed if the candidate has _____.
- a. failed the apprentice licensure exam
 - b. failed the apprentice licensure exam twice
 - c. a misdemeanor
 - d. a felony
23. How long is a temporary permit to work valid?
- a. 30 days
 - b. until the candidate passes the NCBBE apprentice exam
 - c. 60 days
 - d. until the next succeeding NCBBE apprentice exam
24. What is the first razor movement used when performing a face shave?
- a. Freehand
 - b. Backhand
 - c. Reverse backhand
 - d. Reverse freehand
25. Every individual providing barbering services is required to _____ before serving each patron.
- a. speak and greet
 - b. wash their hands
 - c. speak, greet, and shake hands
 - d. wipe their hands with a towel
26. What is the last razor movement performed during a face shave?
- a. Freehand
 - b. Backhand
 - c. Reverse backhand
 - d. Reverse freehand

27. How many consecutive terms can NCBBE members serve?
- a. 1
 - b. 3
 - c. 2
 - d. 4
28. What are the qualifications for becoming a registered barber in North Carolina?
- a. Graduation from an approved barber school , completing a minimum of 1,528 hours of training
 - b. Completion of a 12-month apprenticeship under the supervision of a licensed registered barber
 - c. Passed a clinical exam conducted by the NCBBE
 - d. All of the above
29. How many years is a NCBBE member term?
- a. 1
 - b. 3
 - c. 2
 - d. 4
30. What individuals are permitted to directly or indirectly practice barbering in North Carolina?
- a. Healthcare providers (e.g. doctors, nurses, etc.)
 - b. Active and inactive/retired military and armed forces veterans
 - c. Licensed apprentice and registered barbers
 - d. All of the above

NCBBE Examination
Practical Exam

Preparedness (2 points each)

- Arrived >30 minutes before the exam _____
- Identification verification (picture card, driver's license) _____
- Supplies are accessible and organized _____
- Model/Mannequin present _____

Preparedness Score ____/8

Hygiene and Personal Grooming (1 points each)

- Professional attire
 - Collar Shirt/Blouse _____
 - Pants _____
 - Casual/Dress Shoes _____
 - Smock _____
 - Clean clothing _____

Personal Care

- Haircut/Styled _____
- No foul odor (smoke, excessive cologne/perfume, body odor) _____

Hygiene and Personal Grooming Score ____/7

Demonstrate proper handwashing. (1 point each)

- Turn on water and wet hands _____
- Pump soap _____
- Rub hands together for 20 seconds _____
- Clean nail, disinfected nail brush _____
- Brush horizontally and vertically _____
- Brush for approximately 60 seconds _____
- Rinse until all soap is removed _____
- Dry with clean paper towel _____
- Turn off water with paper towel _____
- Dispose of paper towel in trash _____

Handwashing Score ____/10

Demonstrate and state the position, area, and movement for each step of the facial shave.

(1 point each)

- | | | |
|---|-------------------------|--------------------------------|
| 1. 9 o'clock (RH)/3 o'clock (LH) _____ | Freehand _____ | Sideburn to jawbone _____ |
| 2. 9 o'clock (RH)/3 o'clock (LH) _____ | Backhand _____ | Mid jaw to corner of lip _____ |
| 3. 9 o'clock (RH)/3 o'clock (LH) _____ | Freehand _____ | Side of mustache _____ |
| 4. 9 o'clock (RH)/3 o'clock (LH) _____ | Freehand _____ | Jawline to grain change _____ |
| 5. 12 o'clock _____ | Reverse Freehand _____ | Neck to grain change _____ |
| 1. Relather _____ | | |
| 6. 9 o'clock (RH)/3 o'clock (LH) _____ | Backhand _____ | Other side of mustache _____ |
| 7. 12 o'clock _____ | Backhand _____ | Sideburn to jawbone _____ |
| 8. 9 o'clock (RH)/3 o'clock (LH) _____ | Freehand _____ | Mid jaw to corner of lip _____ |
| 9. 12 o'clock _____ | Backhand _____ | Jawline to grain change _____ |
| 10. 12 o'clock _____ | Reverse Freehand _____ | Neck to grain change _____ |
| 11. 9 o'clock (RH)/3 o'clock (LH) _____ | Freehand _____ | Across chin (3 strokes) _____ |
| 12. 9 o'clock (RH)/3 o'clock (LH) _____ | Backhand/Freehand _____ | Chin to grain change _____ |
| 13. 12 o'clock _____ | Reverse Freehand _____ | Neck to grain change _____ |
| 14. 12 o'clock _____ | Reverse Freehand _____ | Under lip _____ |

Perform a second-time-over shave.

Moistens fingertips and feels face to check for stubble _____

Shaves residual hair (with or across the grain) _____

Facial Shave Score _____/45

Basic Haircut (5 points each)

Handling of tools, implements, and equipment _____

Effective cutting (tapered, blended, balanced haircut – no outline required) _____

Debris removal from client _____

Basic Haircut Score _____/15

Demonstrate appropriate cleaning and disinfection. (3 points each)

Tools, Implements, and Surfaces

Debris removal _____

Use of appropriate cleaning solution _____

Use of EPA regulated disinfectant solution _____

Disinfected stowing _____

Drying Time/Wipe down _____

Cleaning and Disinfection Score _____/15

NCBBE Examination _____/100

Apprentice Examination Prep IV
Test-Taking Skills

1. _____ is the process of reaching logical conclusions by employing logical reasoning.
 - a. Deductive reasoning
 - b. Common sense
 - c. Logic
 - d. Inductive reasoning

2. Eliminate options that are _____.
 - a. too long
 - b. too short
 - c. known to be incorrect
 - d. lack key words

3. Watch for _____ that guide you to selecting the correct answer.
 - a. keywords and statements
 - b. terms and qualifying conditions
 - c. both a and b
 - d. neither a or b

4. The _____ refers to the basic question or problem.
 - a. key word
 - b. premise
 - c. stem
 - d. term

5. The most important strategy of test-taking is to _____.
 - a. read the question and the choices carefully
 - b. know the material
 - c. look for the best answer because more than one choice may be true
 - d. all of the above

6. _____ clues can lead to the process of eliminating incorrect answer choices.
 - a. Grammatical
 - b. Physiological
 - c. Anatomical
 - d. Biological

7. Similar or related questions _____ that can better your chances of identifying and selecting the correct answer.
 - a. may distract you from identifying choices
 - b. may provide clues
 - c. will not provide clues
 - d. will distract you from identifying choices

8. When encountering a question that includes a paragraph(s) to read followed by a question to answer, it is beneficial to _____ to assist you with identifying the important information.
 - a. read the paragraph first
 - b. read the answer choices first
 - c. read the question first
 - d. none of the above

9. If the stem ends with the indefinite article an, the answer must _____.
- a. begin with a vowel sound
 - b. begin with a consonant sound
 - c. end with a vowel sound
 - d. end with a consonant sound
10. When two answer choices are identical, _____.
- a. both answer choices are correct
 - b. both answer choices must be incorrect
 - c. one is probably correct, and the other is probably incorrect
 - d. none of the above
11. When encountering questions that cause uncertainty, _____.
- a. do not answer the question
 - b. answer b
 - c. guess or estimate
 - d. focus until you can answer correctly
12. _____ before answering a question.
- a. Carefully read the question
 - b. Choose c as your go-to choice
 - c. Scan the entire test.
 - d. Choose d as your go-to choice
13. When two answer choices are opposites, _____.
- a. both answer choices are correct
 - b. both answer choices must be incorrect
 - c. one is probably correct, and the other is probably incorrect
 - d. none of the above
14. It is important that you _____ on the day of the exam.
- a. answer the difficult questions first
 - b. answer the easy questions first
 - c. relax and try to slow down
 - d. work quickly
15. When two answer choices are similar, _____.
- a. both answer choices are correct
 - b. both answer choices must be incorrect
 - c. one is probably correct, and the other is probably incorrect
 - d. the answer is between those two choices or both are incorrect
16. _____ the questions you skip so that you can find them later.
- a. Make a written note of
 - b. Read all of
 - c. Do not answer
 - d. Make a mental note of
17. _____ before beginning the exam.
- a. Calm down
 - b. Look at how much time you have
 - c. Pop your knuckles
 - d. Scan the entire test

18. If you do not understand something on the examination, _____.
- do not hesitate to ask the examiner a question
 - do not hesitate to ask the examinee sitting next to you
 - do not attempt to answer the question
 - do not hesitate to skip the question
19. When you have finished taking the examination _____.
- Look over the test to ensure you have read all the questions correctly
 - Make sure you answered all of the questions to the best of your ability
 - Both a and b
 - Neither a or b
20. Answer _____ first to save time for _____.
- the easiest questions; the more difficult
 - all the questions you can; reviewing the questions you skipped
 - the more difficult questions; the easiest
 - the more difficult questions; reviewing the questions left
21. When should you change your answers on the exam?
- Only if there is a good reason to do so
 - Because most of the answers that you know you answered correctly was *b*
 - Your gut is telling you that the answer is *c*
 - All of the above
22. Practical examinations are the best way to _____.
- Evaluate a person's ability to perform a haircut and a shave
 - Evaluate a person's ability to perform sanitation
 - Earn the state barbering board additional revenue
 - Evaluate a person's competency in barbering techniques and safety
23. In preparation for the practical exam, it is important to _____.
- Practice the correct skills required for the test
 - Participate in mock licensing exams
 - Prepare a bag that contains all of the tools, equipment, and implements needed
 - All of the above
24. The answer to one question _____.
- will not be in the stem of another
 - may be in the stem of another
 - will lead you to an incorrect answer
 - will not help you answer others
25. The answer choice "all of the above" is _____.
- never the correct answer
 - often the correct answer
 - never the incorrect answer
 - often the incorrect answer

26. To better prepare yourself for the practical exam, you should _____.
- Familiarize yourself with the content in the exam bulletin
 - Practice the state board-required haircut and shave only
 - Practice the proper sanitation techniques
 - Practice the state board-required haircut, shave, and sanitation only
27. During the practical examination, it is important to _____.
- be aware of what students are doing so that you are doing things correctly
 - keep track of time so you can work swiftly
 - listen carefully and follow the examiner's instructions explicitly
 - skip the procedures you are not comfortable performing and come back to them later
28. _____; do not concern yourself with _____.
- Focus on the time; perfection
 - Focus on your own knowledge; time
 - Focus on your own knowledge; other test candidates
 - Focus on the time; other test candidates
29. What should a test candidate wear to take the practical examination?
- Dress shirt, dress pants, tie, and dress shoes
 - Collar shirt, khakis/trousers, dress/casual shoes, and a smock
 - Collar shirt, Jeans, sneakers, and a smock
 - Scrubs, sneakers, and a smock
30. If allowed by the regulatory or licensing agency, it is beneficial to _____.
- take your practical and written exams on different days
 - observe the practical examinations of candidates taking it prior to yours
 - take the written exam first, then take the practical exam
 - take the written exam a week prior to taking the practical exam

Test-Taking Skills
Practical Exam

Preparedness (2 points each)

- Arrived >30 minutes before the exam _____
- Identification verification (picture card, driver's license) _____
- Supplies are accessible and organized _____
- Model/Mannequin present _____

Preparedness Score ____/8

Hygiene and Personal Grooming (1 points each)

- Professional attire
 - Collar Shirt/Blouse _____
 - Pants _____
 - Casual/Dress Shoes _____
 - Smock _____
 - Clean clothing _____

Personal Care

- Haircut/Styled _____
- No foul odor (smoke, excessive cologne/perfume, body odor) _____

Hygiene and Personal Grooming Score ____/7

Demonstrate proper handwashing. (1 point each)

- Turn on water and wet hands _____
- Pump soap _____
- Rub hands together for 20 seconds _____
- Clean nail, disinfected nail brush _____
- Brush horizontally and vertically _____
- Brush for approximately 60 seconds _____
- Rinse until all soap is removed _____
- Dry with clean paper towel _____
- Turn off water with paper towel _____
- Dispose of paper towel in trash _____

Handwashing Score ____/10

Demonstrate and state the position, area, and movement for each step of the facial shave.

1. 9 o'clock (RH)/3 o'clock (LH) _____ Freehand _____ Sideburn to jawbone _____
2. 9 o'clock (RH)/3 o'clock (LH) _____ Backhand _____ Mid jaw to corner of lip _____
3. 9 o'clock (RH)/3 o'clock (LH) _____ Freehand _____ Side of mustache _____
4. 9 o'clock (RH)/3 o'clock (LH) _____ Freehand _____ Jawline to grain change _____
5. 12 o'clock _____ Reverse Freehand _____ Neck to grain change _____
Relather _____
6. 9 o'clock (RH)/3 o'clock (LH) _____ Backhand _____ Other side of mustache _____
7. 12 o'clock _____ Backhand _____ Sideburn to jawbone _____
8. 9 o'clock (RH)/3 o'clock (LH) _____ Freehand _____ Mid jaw to corner of lip _____
9. 12 o'clock _____ Backhand _____ Jawline to grain change _____
10. 12 o'clock _____ Reverse Freehand _____ Neck to grain change _____
11. 9 o'clock (RH)/3 o'clock (LH) _____ Freehand _____ Across chin (3 strokes) _____
12. 9 o'clock (RH)/3 o'clock (LH) _____ Backhand/Freehand _____ Chin to grain change _____
13. 12 o'clock _____ Reverse Freehand _____ Neck to grain change _____
14. 12 o'clock _____ Reverse Freehand _____ Under lip _____

Perform a second-time-over shave.

- Moistens fingertips and feels face to check for stubble _____
Shaves residual hair (with or across the grain) _____

Facial Shave Score _____/45

Basic Haircut (5 points each)

- Handling of tools, implements, and equipment _____
Effective cutting (tapered, blended, balanced haircut – no outline required) _____
Debris removal from client _____

Basic Haircut Score _____/15

Demonstrate appropriate cleaning and disinfection. (3 points each)

Tools, Implements, and Surfaces

- Debris removal _____
Use of appropriate cleaning solution _____
Use of EPA regulated disinfectant solution _____
Disinfected stowing _____
Drying Time/Wipe down _____

Cleaning and Disinfection Score _____/15

Test-Taking Skills _____/100

Clinical Practicum IV

Handwashing; Hygiene; Personal Grooming; and Proper Ergonomics

1. Which of the following is the most powerful and important way to prevent the spread of infection?
 - a. Use of heat
 - b. Use of an autoclave
 - c. Use of EPA-registered disinfectant
 - d. Handwashing

2. Which of the following should not be worn at work?
 - a. A smock.
 - b. Jewelry.
 - c. A wristwatch.
 - d. Cologne and perfume.

3. When working behind the chair, your neck should be _____.
 - a. Elongated
 - b. tilted backward
 - c. relaxed
 - d. tilted forward

4. _____ is/are the key to avoiding posture problems.
 - a. Human relations
 - b. Empathetic relationships
 - c. Prevention
 - d. Repetitive motions

5. Barbers and cosmetic artists should wear shoes that are polished, in good repair, and _____.
 - a. Waterproof
 - b. a specific color
 - c. up-to-date
 - d. supportive

6. Which of the following conveys an image of confidence and can prevent fatigue?
 - a. Good listening skills.
 - b. Good work habits.
 - c. Good human relations.
 - d. Good posture.

7. To avoid ergonomic-related injuries, you should keep your back and neck _____.
 - a. Neutral
 - b. curved
 - c. straight
 - d. twisted

8. An average of how many hours of sleep is recommended each night?
 - a. 7 or 8
 - b. 12
 - c. 10
 - d. 4

9. _____ for male barbers is of utmost importance.
 - a. Wearing cologne
 - b. Wearing jewelry
 - c. Applying makeup
 - d. Facial grooming

10. Barbers and cosmetic artists should select clothing that is _____.
 - a. tight
 - b. flattering
 - c. not unique
 - d. excessively baggy

11. Flip-flops and open-toed shoes are not safe to wear around _____.
- a. water
 - b. clients
 - c. shampoo bowls
 - d. sharp implements
12. Good hygiene throughout the day includes _____.
- a. handwashing
 - b. not smoking during work hours
 - c. brushing and flossing your teeth
 - d. all of the above
13. Raising your arms to work at the top of the client's head can _____.
- a. keep you loose
 - b. help you work more efficiently
 - c. create physical stress
 - d. decrease the risk of work discomfort
14. Bending over at the shampoo bowl can _____.
- a. keep you loose
 - b. help you work more efficiently
 - c. create physical stress
 - d. decrease the risk of work discomfort
15. _____ is/are important to a professional's ability to work and their body's wellness.
- a. Ergonomics
 - b. Professionalism
 - c. Economics
 - d. None of the above
16. _____ can have a cumulative effect on the muscles and joints.
- a. Sitting down all day
 - b. Proper ergonomics
 - c. Repetitive motions
 - d. All of the above
17. Certain tools and implements are designed to _____.
- a. eliminate hand fatigue
 - b. accommodate barbers of different heights
 - c. both a and b
 - d. neither a or b
18. _____ is the science of designing the workplace as well as its equipment and tools to make specific body movements more comfortable, efficient, and safe.
- a. Ergonomics
 - b. Professionalism
 - c. Economics
 - d. None of the above
19. When washing hands, use liquid soaps in pump containers because _____.
- a. antimicrobial and antibacterial soaps can dry the skin
 - b. they are more effective than regular soaps
 - c. they are true detergents
 - d. bacteria can grow on bar soaps

20. Stress-free standing posture behind the chair includes _____.
- keeping the soles of your feet on the floor directly under your knees
 - keeping your head up and chin parallel to the floor
 - keeping your torso erect
 - flexing your knees slightly and positioning them over your feet
21. Proper handwashing _____
- removes germs from the folds and grooves of the skin and from under the nail plate
 - includes the use of very hot water
 - both a and b
 - neither a or b
22. Medical studies suggest that antimicrobial and antibacterial soaps _____.
- are more effective than regular soaps and detergents
 - destroy microbial spores
 - are no more effective than regular soaps and detergents
 - require the use of very hot water to be effective
23. When should barbers and cosmetic artists thoroughly wash their hands?
- before and after using hand sanitizer
 - before and after each service
 - before and after greeting clients
 - before and after combing the client's hair to the desired style
24. The true benefit of handwashing comes from _____.
- the friction created by the soap bubbles that pull pathogens off the skin's surface
 - the friction created by your hands to pull pathogens off the skin's surface
 - the friction created by your hands to pull nonpathogenic organisms off the skin's surface
 - the friction created by the soap to pull nonpathogenic organisms off the skin's surface
25. Proper handwashing is _____.
- required in every state before beginning any service.
 - not required by every state before beginning services in the barbershop.
 - is one of the most important procedures in making sure that your tools and implements perform effectively
 - only became a requirement since the COVID-19 pandemic
26. After barbers and cosmetic artists have washed and dried their hands with paper towels, they should _____.
- immediately disposing of it into the trash
 - turn off the water with the towel
 - immediately dispose of it after turning off the water
 - dispose of it after using the paper towel to turn off the water and opening the door to exit the restroom.

27. Use _____ for proper handwashing.
- a. soap and warm water
 - b. soap and running hot water
 - c. soap and hot water
 - d. soap and running hot water
28. Mechanically correct sitting posture includes _____.
- a. keeping your neck elongated
 - b. keeping your head up and chin parallel to the floor
 - c. holding your shoulders level and relaxed
 - d. flexing your knees slightly and positioning them over your feet
29. Unwashed hands _____.
- a. can be swarming with pathogens
 - b. are guaranteed to possess nonpathogenic organisms
 - c. both a and b
 - d. neither a or b
30. To avoid problems and work more effectively, barbers and cosmetic artists should practice which of the following?
- a. Grip or squeeze tools and implements too firmly
 - b. Adjust the height of the barber/styling chair so that the client's head is at a comfortable working level.
 - c. Try to position your arms at less than a 90-degree angle while working
 - d. all of the above

Handwashing, Hygiene, Personal Grooming, & Proper Ergonomics
Practical Exam

Hygiene and Personal Grooming (5 pts each)

Professional attire

Collar Shirt/Blouse _____

Pants _____

Casual/Dress Shoes _____

Smock _____

Personal Care

Haircut/Styled _____

No foul odor (smoke, excessive cologne/perfume, body odor) _____

Hygiene and Personal Grooming Score _____/30

Demonstrate proper handwashing. (5 pts each)

Turn on water and wet hands _____

Pump soap _____

Rub hands together for 20 seconds _____

Clean nail, disinfected nail brush _____

Brush horizontally and vertically _____

Brush for approximately 60 seconds _____

Rinse until all soap is removed _____

Dry with clean paper towel _____

Turn off water with paper towel _____

Dispose of paper towel in trash _____

Handwashing Score _____/50

Demonstrate proper ergonomics while rendering a basic haircut service. (5 pts each)

Appropriate posture

Upright position _____

Position of tools and equipment (height of chair, compromising posture) _____

Body Movement

Fluid use of tools (nonrestricted movement) _____

Appropriate use of equipment _____

Proper Ergonomics Score _____/20

Handwashing, Hygiene, Personal Grooming, & Proper Ergonomics Score _____/100

Clinical Practicum IV
Human Relations and Communication Skills

1. What topics should not be discussed in a business setting?
 - a. Religion and politics
 - b. Appointment bookings
 - c. The client's preferences
 - d. Products and services
2. Effective human relations skills help you build _____ with clients and coworkers.
 - a. an image
 - b. a social media presence
 - c. self-esteem
 - d. rapport
3. Which of the following conveys an image of confidence and can prevent fatigue?
 - a. Good listening skills
 - b. Good human relations
 - c. Good posture
 - d. Good work habits
4. Professionals maintain their _____ by aligning their professional behavior and actions with core beliefs and values.
 - a. integrity
 - b. emotional stability
 - c. self-care
 - d. values and goals
5. Establishing a/an _____ image is an essential image-building attribute.
 - a. relaxed
 - b. professional online
 - c. attractive
 - d. poised
6. Your professional image is _____.
 - a. an impression you project to others
 - b. unrelated to your conduct
 - c. shaped by others
 - d. unrelated to your appearance
7. Your work wardrobe should complement the image of your _____.
 - a. clients
 - b. barbershop
 - c. lifestyle
 - d. peers
8. Professionals should deal with all disputes and differences _____.
 - a. to your satisfaction
 - b. in private
 - c. only when necessary
 - d. in public
9. _____ describes the interactions and relationships between two or more people.
 - a. Rapport
 - b. Empathy
 - c. Human relations
 - d. Self-esteem
10. A barber's professional attitude is expressed through their _____.
 - a. rapport
 - b. empathy
 - c. human relations
 - d. self-esteem

11. Good human relations will help barbers to _____.
- a. gain confidence
 - b. become a successful professional
 - c. deal courteously with clients
 - d. all of the above
12. _____ is the act of successfully sharing information between a barber and their clients.
- a. Professionalism
 - b. Rapport
 - c. Human relations
 - d. Effective communication
13. Determining a client's service expectations requires barbers to _____.
- a. organize their thoughts
 - b. repeat to the client your interpretation
 - c. clarify what a client is saying
 - d. all of the above
14. Effective human relations skills help professionals to _____.
- a. build a rapport with clients
 - b. build confidence
 - c. both a and b
 - d. neither a or b
15. _____ involves establishing a close and empathetic relationship with clients that foster agreement and harmony between individuals.
- a. Rapport
 - b. Empathy
 - c. Human relations
 - d. Self-esteem
16. Desirable qualities for effective client relations include _____.
- b. Talking less and listening more
 - c. Emotional control, positive approach, and good manners
 - d. Both a and b
 - e. Neither a or b
17. Barbers can display _____ by being compassionate and responsive to the clients.
- a. diplomacy
 - b. sensitivity
 - c. receptivity
 - d. discretion
18. Professionals take care of all problems within their business _____.
- a. Promptly
 - b. tactfully
 - c. to the client's satisfaction
 - d. all of the above

19. Good habits and practices acquired during your education _____.
- ensures that you will receive tips for the student services you provide
 - lays the foundation for a successful career in barbering
 - Both a and b
 - Neither a or b
20. Barbers can _____ by looking the part of a successful professional.
- make a good impression
 - increase their prices
 - build a large clientele
 - work less and make more money
21. _____ is the key to understanding a client's needs and wants.
- Professionalism
 - Rapport
 - Human relations
 - Effective communication
22. It is important for professional barbers and cosmetic artists to develop _____ to reach the level of success they desire.
- good technical skills
 - both a and c
 - good communicational skills
 - neither a or c
23. _____ refers to learning how to handle a confrontation and how to share feelings in a professional manner.
- Diplomacy
 - Emotional stability
 - Receptivity
 - A pleasing tone of voice
24. Barbering professionals must remain conscious of their _____.
- nonverbal communications
 - both and c
 - verbal communications
 - neither a or c
25. It is essential that professional barbers and cosmetic artists _____.
- never breach clients' confidentiality
 - discuss the specific services that certain clients receive
 - refrain from discussing with a client the issues identified during the analysis portion of the service
 - discuss clients' personal information
26. _____ is a personality trait that barbers can consciously improve by speaking more softly or more clearly.
- Diplomacy
 - Sensitivity
 - Receptivity
 - A pleasing tone of voice
27. The impression a professional projects through both outward appearance and their conduct in the workplace contributes to one's _____.
- personal image
 - physical presentation
 - human relations
 - professional image

28. _____ guide(s) an individual's behavior and gives direction.
- a. Integrity
 - b. Values and goals
 - c. Diplomacy
 - d. Professional image
29. _____ is a frequent form of communication that can easily be misunderstood and has a serious impact upon a professional's business.
- a. Client consultations
 - b. Both a and c
 - c. Online communication
 - d. neither a or c
30. When barbers and cosmetic artists display interest in their clients and are responsive to their opinions, feelings, and ideas, they are employing _____.
- a. diplomacy
 - b. emotional stability
 - c. receptivity
 - d. a pleasing tone of voice

Human Relations and Communication Skills

Practical Exam

Demonstrate effective communication skills during the consultation of a basic haircut service. (20 pts each)

Welcoming greeting _____

Active listening _____

Organization of thoughts _____

Clarification of client's desires _____

Repeating what the client communicated _____

Human Relations and Communication Skills ____/100

Clinical Practicum IV

Cleaning and Disinfecting (Equipment, Tools, Implements, Clippers, and Outliners/Trimmers)

1. Alcohol should only be used as a cleaner or a(n) _____.
 - a. Sterilizer
 - b. Disinfectant
 - c. antiseptic
 - d. bleach

2. The majority of contaminants and pathogens can be removed from the surfaces of tools and implements through proper _____.
 - a. mixing of disinfectants
 - b. handwashing
 - c. guidelines
 - d. cleaning

3. Petroleum distillates are excellent for removing _____ from metals.
 - a. oil
 - b. rust
 - c. spores
 - d. scratches

4. Chemical products approved by the Environmental Protection Agency (EPA) designed to destroy most bacteria, fungi, and viruses on surfaces are _____.
 - a. sanitizers
 - b. sterilizers
 - c. disinfectants
 - d. virucides

5. _____ is the process of completely destroying all microbial life.
 - a. Sanitation
 - b. Sterilization
 - c. Disinfection
 - d. Cleaning

6. Slender, hairlike extensions used by bacilli and spirilla for locomotion:
 - a. Flagella
 - b. Diplococci
 - c. Cocci
 - d. Bacilli

7. _____ is a mechanical process such as scrubbing using soap or detergent and water to remove visible dirt, debris, and disease-causing germs.
 - a. Sanitation
 - b. Sterilization
 - c. Disinfection
 - d. Cleaning

8. Disease-causing microorganisms carried in the body by blood or body fluids:
 - a. Bloodborne pathogens
 - b. Allergens
 - c. Fungi
 - d. Bacteria

9. Round-shaped bacteria that appear alone or in groups:
 - a. Flagella
 - b. Diplococci
 - c. Cocci
 - d. Bacilli

10. Human Immunodeficiency Virus (HIV) is an example of a _____.
 - a. Bloodborne pathogen
 - b. Allergen
 - c. Fungi
 - d. Bacteria

11. _____ is a chemical process that uses specific products to destroy harmful organisms on environmental surfaces.
- Sanitation
 - Sterilization
 - Disinfection
 - Cleaning
12. Disinfectants are designed to destroy all of the following *except* _____.
- spores
 - influenza
 - HIV
 - fungi
13. Spiral or corkscrew-shaped bacteria that causes diseases such as syphilis and Lyme:
- Spirilla
 - Diplococci
 - Cocci
 - Flagella
14. Spherical bacteria that grow in pairs and causes diseases such as pneumonia:
- Flagella
 - Diplococci
 - Cocci
 - Bacilli
15. The disinfection of _____ requires a different approach than non-electric tools and _____.
- electrical tools; implements
 - clippers; outliners
 - shavers; clippers
 - combs; razors
16. Implements should be immersed in an appropriate disinfection container holding a/an _____ disinfectant.
- OSHA regulated
 - Detergent-based
 - EPA registered
 - water-based
17. It is important to wear _____ and gloves while disinfecting _____ and implements.
- an apron; electrical tools
 - safety glasses; electrical tools
 - safety glasses; nonelectrical tools
 - an apron; nonelectrical tools
18. All cleaning solutions should be prepared according to _____.
- manufacturer's directions
 - historical practices
 - both a and b
 - neither a or b
19. Implements must be _____ before they are _____.
- cleaned; disinfected
 - disinfected; cleaned
 - immersed into a wet disinfectant; cleaned
 - none of the above
20. _____ are powerful disinfectants known as tuberculocidal.
- Quaternary ammonium compounds
 - Bleaches
 - Sodium hydroxides
 - Phenolic disinfectants

21. Clipper blades disinfected with _____ solutions.
- a. OSHA regulated
 - b. Detergent-based
 - c. EPA registered
 - d. water-based
22. Short rod-shaped bacteria:
- a. Flagella
 - b. Diplococci
 - c. Cocci
 - d. Bacilli
23. _____ is a chemical process for reducing the number of disease-causing germs on cleaned surfaces to a safe level.
- a. Sanitation
 - b. Sterilization
 - c. Disinfection
 - d. Cleaning
24. Disinfectants that are designed for disinfecting nonporous surfaces, are appropriate for use in noncritical environments, and are effective against most pathogens of concern in barbershops and salons.
- a. Quaternary ammonium compounds
 - b. Bleaches
 - c. Sodium hydroxides
 - d. Phenolic disinfectants
25. Hepatitis is an example of a _____.
- a. Bloodborne pathogens
 - b. Allergens
 - c. Fungi
 - d. Bacteria
26. Electrical tools must be disinfected with _____.
- a. OSHA regulated solutions
 - b. Detergent-based distillates
 - c. EPA registered petroleum distillates
 - d. water-based solutions
27. Products like Barbicide's germicide, pseudomonacide, fungicide, and virucide disinfectant is an example of a _____ solution.
- a. quat
 - b. bleach
 - c. sodium hydroxide
 - d. phenol
28. Disinfectant containers must be large enough to contain all items to be _____.
- a. cleaned and covered
 - b. sanitized and covered
 - c. disinfected and covered
 - d. sterilized and covered
29. Effective sterilization typically requires the use of a/an _____.
- a. autoclave
 - b. disinfecting container and an EPA registered solution
 - c. hot water
 - d. none of the above
30. EPA registers disinfectants must be labeled as _____.
- a. virucidal
 - b. fungicidal
 - c. bactericidal
 - d. all of the above

**Cleaning and Disinfecting (Equipment, Tools, Implements, Clippers, and
Outliners/Trimmers)**
Practical Exam

Formulate a completely immersible disinfecting solution. (4 points each)

Solute (Barbicide) _____

Solvent (water) _____

Disinfecting time (10 minutes or manufacturer's instruction) _____

Demonstrate appropriate cleaning.

Tools

Debris removal _____

Use of appropriate cleaning solution _____

Disinfected stowing _____

Implements

Debris removal _____

Use of appropriate cleaning solution _____

Disinfected stowing _____

Surfaces

Debris removal _____

Use of appropriate cleaning solution _____

Drying (wipe down) _____

Demonstrate proper disinfection.

Nonelectrical Tools and Implements

Debris removal _____

Use of appropriate cleaning solution _____

Submersion _____

Disinfecting time (10 minutes or manufacturer's instruction) _____

Use of disinfectant solution _____

Disinfected stowing (closed sanitizer) _____

Electrical Tools

Debris removal _____

Blade wash _____

Use of EPA regulated disinfectant solution _____

Disinfected stowing (closed sanitizer) _____

Surfaces and Equipment

Debris removal _____

Use of EPA regulated disinfectant solution _____

Disinfecting time (10 minutes or manufacturer's instruction) _____

Cleaning and Disinfecting _____/100

Clinical Practicum IV

Honing and Stropping Razors; Towel Wrapping; Handling Clippers, Shears, Razors, and Combs; 14 Areas and Movements of a Shave; and Handling of Exposure Incidents

1. _____ the razor refers to a special heat treatment included in the manufacturing process.
 - a. Balancing
 - b. Sizing
 - c. Grinding
 - d. Tempering
2. Beveled-edge blades typically have what type of edge?
 - a. Corrugated (serrated)
 - b. Dull
 - c. Concaved
 - d. Diamond
3. _____ combs can retain heat to help set hairstyles?
 - a. Hard rubber
 - b. Carbon
 - c. Metal
 - d. Graphite
4. In what type of handle design are the finger and thumb grips positioned directly across from each other?
 - a. Opposing
 - b. Offset
 - c. Standard
 - d. Crane
5. What style of comb is preferable for detangling?
 - a. Wide-toothed
 - b. Tail
 - c. Metal
 - d. Narrow-toothed
6. The razor is stroked _____ diagonally across the hone.
 - a. edge-last
 - b. right to left
 - c. edge-first
 - d. left to right
7. A general rule to follow is to hold the clippers in a manner that permits _____.
 - a. access to the area being cut
 - b. both a and c
 - c. free wrist movement
 - d. neither a or c
8. When holding the clippers, typically the thumb will be placed _____.
 - a. on the top of the clipper
 - b. on the side of the clipper
 - c. both a and b
 - d. neither a or b
9. The two types of straight razors used in barbering are the _____ razors.
 - a. Changeable blade and conventional
 - b. French and German
 - c. American and African
 - d. Combination and synthetic

10. When shaving with a razor, the _____ and first two fingers are positioned on the flat side of the shanks with the handle pivoted up to allow the little finger to rest on the tang.
- a. tip of the thumb
 - b. Middle finger
 - c. index finger
 - d. ball of the thumb
11. _____ of a conventional straight razor refers to the weight and length of the blade relative to that of the handle.
- a. Razor balance
 - b. Razor grind
 - c. Razor temper
 - d. Razor style
12. When honing a razor, the first position and stroke begins with _____.
- a. the razor on its back on the upper far left corner of the hone
 - b. the razor on its face on the upper far right corner of the hone
 - c. the razor on its face on the upper far left corner of the hone
 - d. the razor on its back on the upper far right corner of the hone
13. Crocus refers to a type of conventional _____ that discriminating barbers prefer.
- a. razor finish
 - b. razor style
 - c. razor size
 - d. razor care
14. A _____ is an abrasive material that has the ability to cut through steel.
- a. hone
 - b. strop
 - c. conventional straight razor
 - d. changeable blade razor
15. Which is not the most common razor size?
- a. 5/8 inches
 - b. 9/16 inches
 - c. 6/8 inches
 - d. all of the above
16. If a barber accidentally cuts a client, what is the first step that should be taken?
- a. Dispose of the blade in a sharps container.
 - b. Stop the service immediately.
 - c. Place the razor in a container designated for cleaning and disinfection.
 - d. Face your client and calmly apologize for the incident.
17. _____ is a special heat treatment included in the manufacturing process of a conventional straight razor that provides the razor its degree of hardness required for a good cutting edge.
- a. Razor balance
 - b. Razor Grind
 - c. Razor temper
 - d. Razor style
18. The way a barber holds a straight razor will depend on _____.
- a. the procedure
 - b. the client's request
 - c. the type of razor
 - d. the hone

19. _____ is the shape of the blade after it has been ground.
- Razor balance
 - Razor Grind
 - Razor temper
 - Razor style
20. A _____ is a leather and canvas accessory used to smooth and align the cutting teeth of the razor edge.
- hone
 - strop
 - conventional straight razor
 - changeable blade razor
21. When honing a razor, the second position and stroke begins _____ and facing away from you.
- at the lower left corner of the hone with the blade edge at a 45-degree angle
 - at the upper left corner of the hone with the blade edge at a 45-degree angle
 - at the upper right corner of the hone with the blade edge flat against the hone
 - at the lower left corner of the hone with the blade edge flat against the hone
22. Which movement is not used during the performance of a shave?
- Freehand
 - Backhand
 - Reverse backhand
 - Reverse freehand
23. When stropping a razor the first stroke starts at the _____.
- top edge of the strop furthest away from the hand
 - bottom edge of the strop furthest away from the hand
 - top edge of the strop closest to the hand
 - bottom edge of the strop closest to the hand
24. Which procedure should not be performed when considering a shaving services?
- Deep cleansing facial immediately after a shave
 - Use hot towels on chapped, blistered, thin, or sensitive skin.
 - Neither a or b
 - Both a and c
25. How should a razor be positioned and stroked on the skin's surface?
- Angled approximately 30 degrees and stroked in a forward gliding movement lead by the point of the razor
 - Angled approximately 45 degrees and stroked in a forward gliding movement lead by the point of the razor
 - Angled approximately 30 degrees and stroked in a backwards gliding movement lead by the heel of the razor
 - Angled approximately 45 degrees and stroked in a backwards gliding movement lead by the heel of the razor
26. When stropping a razor the second stroke consists of turning the razor on the _____.
- back of the blade by rolling it between the fingers without turning the hand
 - back of the blade by rolling it between the fingers and turning the hand

- c. face of the blade by rolling it between the fingers without turning the hand
 - d. face of the blade by rolling it between the fingers and turning the hand
27. During the performance of a facial shave service, areas 1, 3, 4, 8, 11, and 12 require the use of which position and stroke?
- a. Freehand stroke
 - b. Backhand stroke
 - c. Reverse backhand stroke
 - d. Reverse freehand stroke
28. Where is the reverse backhand stroke used?
- a. Areas 1, 3, 4, 8, 11, and 12
 - b. During a neck shave
 - c. Areas 5, 10, 13, and 14
 - d. Area 12
29. The primary shave in a standard shave service performed on lathered facial hair refers to _____.
- a. a first-time-over shave
 - b. a once-over shave
 - c. a second-time-over shave
 - d. chose shaving
30. The use of steam during a shave service helps to _____.
- a. soften the hair cuticle and provide lubrication by stimulating the oil glands
 - b. relaxes the client
 - b. neither a or b
 - c. both a and b

Honing and Stropping Razors; Towel Wrapping; Handling Clippers, Shears, Razors, and Combs; 14 Areas and Movements of a Shave; and Handling of Exposure Incidents
Practical Exam

Perform a 14-area facial shave. (1 point each)

Draping _____	Linen setup _____	Headrest cover _____
Palm razor _____	Lather _____	Steam towel _____
Relather _____	Disinfect razor _____	Stowe razor _____
Razor handling _____	Razor wipe after each stroke/movement or area _____	

State the position, area, and movement for each step of the facial shave. (1 point each)

- | | | |
|---|-------------------------|--------------------------------|
| 1. 9 o'clock (RH)/3 o'clock (LH) _____ | Freehand _____ | Sideburn to jawbone _____ |
| 2. 9 o'clock (RH)/3 o'clock (LH) _____ | Backhand _____ | Mid jaw to corner of lip _____ |
| 3. 9 o'clock (RH)/3 o'clock (LH) _____ | Freehand _____ | Side of mustache _____ |
| 4. 9 o'clock (RH)/3 o'clock (LH) _____ | Freehand _____ | Jawline to grain change _____ |
| 5. 12 o'clock _____ | Reverse Freehand _____ | Neck to grain change _____ |
| | Relather _____ | |
| 6. 9 o'clock (RH)/3 o'clock (LH) _____ | Backhand _____ | Other side of mustache _____ |
| 7. 12 o'clock _____ | Backhand _____ | Sideburn to jawbone _____ |
| 8. 9 o'clock (RH)/3 o'clock (LH) _____ | Freehand _____ | Mid jaw to corner of lip _____ |
| 9. 12 o'clock _____ | Backhand _____ | Jawline to grain change _____ |
| 10. 12 o'clock _____ | Reverse Freehand _____ | Neck to grain change _____ |
| 11. 9 o'clock (RH)/3 o'clock (LH) _____ | Freehand _____ | Across chin (3 strokes) _____ |
| 12. 9 o'clock (RH)/3 o'clock (LH) _____ | Backhand/Freehand _____ | Chin to grain change _____ |
| 13. 12 o'clock _____ | Reverse Freehand _____ | Neck to grain change _____ |
| 14. 12 o'clock _____ | Reverse Freehand _____ | Under lip _____ |

Perform a second-time-over shave. (1 point each)

Moistens fingertips and feels face to check for stubble _____
Shaves residual hair (with or across the grain) _____

Perform after-shave care. (1 point each)

Palm razor _____	Tepid towel applications _____	Disinfect razor _____
Stowe razor _____	Moisturizer Application _____	
Astringent Application _____	Talcum mitt _____	Talcum application _____

Shaving Score _____/64

Perform exposure-incident care. (4 points each)

Immediately stop the service _____	Notify the client that he/she has been cut _____
Gloves _____ Clot the cut _____	Apply styptic powder _____ Bandage _____
Place contents in biohazard bag _____	Insert biohazard bag in trash bag _____
Dispose bag in trash _____	

Facial Shaving and Handling of Exposure Incidents Score _____/100

Clinical Practicum IV

Draping; Hair Cutting; Styling; Facials; and Shampoos

1. _____ introduce water-soluble products into the skin during facials.
 - a. Galvanic machines
 - b. Thermal styling tools
 - c. High-frequency machines
 - d. Come done extractors

2. What should you use to cushion the client's neck at the shampoo bowl?
 - a. Cape
 - b. Folded towel
 - c. Neck strip
 - d. Pillow

3. Where should you test the water temperature before applying to a client's hair or scalp?
 - a. Inside of your wrist
 - b. Back of your hand
 - c. Your fingers
 - d. Palm of your hand

4. Shampoo capes are waterproof drapes made of _____.
 - a. nylon
 - b. wool
 - c. vinyl
 - d. cotton

5. Detachable-blade clippers utilize removable blades in a variety of sizes to _____.
 - a. create tension when cutting
 - b. achieve different hair lengths
 - c. reduce noise while cutting
 - d. achieve a flat-top style

6. Outliners require very _____ against the skin.
 - a. little pressure
 - b. hard pressure
 - c. firm pressure
 - d. hot blades

7. Transferring the comb to the opposite hand after combing to facilitate haircutting is called _____.
 - a. manipulating the comb
 - b. palming the shears
 - c. palming the comb
 - d. holding the comb

8. The purpose of shampooing the hair before cutting ensures that barbers are _____.
 - a. Treating the client's hair before cutting too much hair
 - b. Working with clean hair free from oils or products that can interfere with the quality of the haircut
 - c. Maintaining the strength and health of the hair
 - d. All of the above

9. _____ are made of nylon or other synthetic materials used to protect the client's skin during haircutting services.
 - a. Shampoo capes
 - b. Haircutting capes
 - c. Shaving capes
 - d. None of the above

10. The basic considerations for performing a shampoo service includes _____.
- a. scalp manipulations
 - b. the client's position
 - c. proper draping
 - d. all of the above
11. Barbers can determine which shampoo and conditioning products to use by _____.
- a. completing a hair and scalp analysis
 - b. taking the client's blood pressure
 - c. completing a skin analysis
 - d. dampening the client's hair thoroughly
12. _____ shampoos are acid-balanced are often contain citric, lactic, and phosphoric acid.
- a. Clarifying
 - b. Conditioning
 - c. ph-balanced
 - d. Neutralizing
13. A basic facial includes _____.
- a. cleansing
 - b. massage manipulations
 - c. exfoliating
 - d. all of the above
14. _____ have a pH that typically ranges from 3.0 to 5.5, moisturize the hair, and help to restore some of its oils and/or proteins.
- a. Shampoos
 - b. Relaxers
 - c. Conditioners
 - d. None of the above
15. Clients with straight, medium textured hair would best benefit from which type of shampoo?
- a. Volumizing
 - b. Moisturizing
 - c. pH-balanced
 - d. None of the above
16. _____ shampoos are made of a mild cream that contains moisturizing agents such as humectants designed to "lock in" moisture into the hair.
- a. Clarifying
 - b. Conditioning
 - c. ph-balanced
 - d. Medicated
17. Which muscle(s) is/are stimulated when the sides to the top of the head are massaged or manipulated during a shampoo or facial service?
- a. Frontalis
 - b. Aponeurosis
 - c. Occipital
 - d. Trapezius
18. _____ shampoos are made of a mild cream that contains moisturizing agents such as humectants designed to "lock in" moisture into the hair.
- a. Clarifying
 - b. Conditioning
 - c. ph-balanced
 - d. Medicated

19. Clients with coarse, dry, and damaged hair would best benefit from which type of shampoo and conditioning service?
- A deep-moisturizing shampoo and conditioning treatment followed with the use of a leave-in conditioner
 - A volumizing shampoo, detangling service, and protein treatment
 - A pH balanced shampoo, moisturizing treatment, and leave-in-conditioning services
 - A gentle cleansing shampoo and light leave-in conditioning services
20. _____ are waterproof capes made of vinyl used to protect the client's skin and clothing from water, liquids, and chemical processed.
- Shampoo capes
 - Haircutting capes
 - Shaving capes
 - None of the above
21. Depending on the client's needs, hair and scalp treatment services may include _____
- The use of an autoclave
 - The use of infrared and/or ultraviolet lamps, or high-frequency current
 - Both a and b
 - Neither a or b
22. _____ shampoos often contain anti-fungal agents such as pyrithione zinc, selenium sulfide, or ketoconazole to suppress the growth of malassezia, the fungus that controls dandruff.
- Clarifying
 - Conditioning
 - ph-balanced
 - Medicated
23. The T-zone is the section of the face that incorporates the _____.
- Forehead, nose, and chin area
 - Nose, cheeks, and chin area
 - Forehead, nose and upper lip area
 - Chin, cheeks, and nose area
24. _____ shampoos contain an active chelating agent that bonds to metals such as iron and copper and removes them from the client's hair – providing hair a thorough cleansing by cutting through product buildup that can coat and fatten hair.
- Clarifying
 - Conditioning
 - ph-balanced
 - Medicated
25. A client schedules an appointment for a haircut and a facial service. Upon completion of the skin analysis, the barber discovers that the client's skin is significantly sensitive and dehydrated. The barber ascertains that the client needs a service that will hydrate, soothe, and add moisture to the client's skin. What type of mask would be most appropriate for the barber to use?
- A clay mask
 - A gel mask
 - A cream mask
 - A paraffin wax mask

26. _____ shampoos help to rebalance and restore the pH level of the hair by neutralizing and alkali or unwanted residues that remain in the hair after chemically relaxing the hair.
- a. Clarifying
 - b. Conditioning
 - c. ph-balanced
 - d. Neutralizing
27. What type of mask is most appropriate for clients who has oily or combination skin types because it stimulates circulation and temporarily contracts the skin pores?
- a. A clay mask
 - b. A gel mask
 - c. A cream mask
 - d. A paraffin wax mask
28. A light, continuous movement that should be applied in a slow and rhythmic manner when performing a facial massage.
- a. Petrissage
 - b. Percussion
 - c. Friction
 - d. Effleurage
29. When used during a facial massage, applying gentle but direct pressure to the _____ for approximately 30 secs, followed by stroking movements can relieve pain.
- a. motor point
 - b. belly of the muscle
 - c. trigger point
 - d. none of the above
30. A deep rubbing movement in which pressure is applied on the skin with the fingers or palms while moving over an underlying structure when performing a facial massage.
- a. Petrissage
 - b. Percussion
 - c. Friction
 - d. Effleurage

Draping, Hair Cutting, Facials, and Shampoos
Practical Exam

Perform a basic haircut, standard shampoo, and basic facial. Demonstrate appropriate draping for each part of the service. (4 points each)

Preservice Procedures

- Handwashing _____
- Sanitation and disinfection _____
- Gather all supplies _____
- Dry draping _____
- Consultation _____

Tapered, Blended Businessman's Haircut

- Handling of tools, implements, and equipment _____
- Effective cutting of hair two inches or greater
(tapered, blended, balanced haircut – no hard design lines or bottom of neck) _____
- Debris removal from client _____

Standard Shampoo

- Handwashing _____
- Wet draping _____
- Equipment management (chair, water hose) _____
- Shampoo (twice) _____
- Conditioning _____

Scientific Rest Facial

- Cleansing _____
- Steam towel applications _____
- Exfoliation _____
- Massage/Moisturizing cream application _____
- Massage (state and demonstrate each)
 - Effleurage _____
 - Petrissage _____
 - Tapotement _____
 - Vibration _____
 - Friction _____
- Mask/Pack application _____
- Tepid towel application _____
- Toner application _____

Draping, Basic Hair Cutting, Facials, and Shampoos Score ____/100

Clinical Practicum IV

Chemical Texture Services and Haircoloring, and Lightening Services

1. Avoid large blockings on thin hair growth in permanent waves as the strain may cause _____.
 - a. hair that tangles easily
 - b. breakage
 - c. sponginess
 - d. limpness

2. During curl reformation, the hair is neutralized and it rehardens the bonds in the _____ into a new, wavy pattern.
 - a. Medulla
 - b. Keratin
 - c. cortex
 - d. cuticle

3. What wrapping/rodding technique involves winding the hair from the hair ends toward the scalp?
 - a. Bookend wrapping.
 - b. Croquignole perm wrap.
 - c. Water wrap.
 - d. Lotion wrap.

4. _____ are not compatible with thio relaxers because they use a different chemistry.
 - a. Neutralizers
 - b. Conditioners
 - c. Hydroxide relaxers
 - d. Moisturizers

5. What is the most common neutralizer in permanent waving?
 - a. Hydrogen peroxide
 - b. Mercaptamine
 - c. Ammonium bisulfite
 - d. Ammonium sulfite

6. Half off-base placement results from wrapping the hair at an angle of _____ to its base section.
 - a. 90 degrees
 - b. 45 degrees
 - c. 180 degrees
 - d. 30 degrees

7. Thio relaxing products require the use of a(n) _____ to chemically oxidize the hair.
 - a. Activator
 - b. Alkanolamine
 - c. neutralizer
 - d. sulfite

8. What type of rod shape produces a tighter curl in the center and a larger curl on the sides of the hair?
 - a. Concave
 - b. Circle
 - c. Straight
 - d. Bender

9. Hair develops and maintains its natural form by physical and chemical cross-bonds in the _____ layer.
 - a. cuticle
 - b. medulla
 - c. protein
 - d. cortex

10. The activator in an _____ contains an oxidizing agent that causes a rapid release of heat when mixed with the waving solution.
- endothermic waves
 - acid-balanced waves
 - exothermic waves
 - ammonia-free waves
11. _____ require the use of an outside heat source to activate chemical reactions and processing.
- Endothermic waves
 - Acid-balanced waves
 - Exothermic waves
 - Ammonia-free waves
12. Thio-free waves have a pH range of _____ while low-pH waves have a pH range of 6.5 to 7.0.
- 7.0 to 9.6
 - 7.8 to 8.2
 - 9.0 to 9.6
 - 9.6 to 11.0
13. Never use a(n) _____ product on hair that has been previously relaxed with a thio product.
- Sulfite
 - ammonia
 - peroxide
 - hydroxide
14. _____ is an extremely alkaline product and may process hair too quickly where a blowout cannot be performed.
- Ammonium bisulfate
 - Sodium hydroxide
 - Formaldehyde
 - Hydrogen peroxide
15. Which is a characteristic of ammonium thioglycolate relaxer?
- Contains lye
 - Odorless
 - Compatible with soft-curl permanent waves
 - Low pH
16. Tint or dye removers are designed to _____.
- remove unwanted artificial haircoloring products from the hair
 - dissolve or remove the hair's natural color pigment
 - remove wanted artificial haircoloring products from the hair
 - none of the above
17. Using the level system, 1 is _____ and 10 is _____.
- black; blond
 - blond; red
 - red; blond
 - blond; black
18. The equal mixing of yellow and blue to create green is an example of a _____.
- primary colors
 - tertiary color
 - secondary color
 - complimentary color

19. _____ washes out or fades within a few weeks.
- | | |
|--------------|-------------------|
| a. Permanent | c. Semi-permanent |
| b. Temporary | d. Demi-permanent |
20. A client with brown hair has red highlights. Brown is the _____, and red is the _____.
- | | |
|------------------------|-------------------------|
| a. hue; tone | c. tone; hue |
| b. tone; primary color | d. hue; secondary color |
21. _____ are created when a colorist mixes equal amounts of red dye (a primary color) with violet dye (red's adjacent secondary color).
- | | |
|--------------------|-------------------------|
| a. Primary colors | c. Secondary colors |
| b. Tertiary colors | d. Complimentary colors |
22. On the level system, 1 is the _____ and 10 is the _____.
- | | |
|----------------------|----------------------|
| a. hue; tone | c. darkest; lightest |
| b. lightest; darkest | d. tone; hue |
23. _____ blends gray hair, enhances natural color, and tones pre-lightened hair.
- | | |
|--------------|-------------------|
| a. Permanent | c. Semi-permanent |
| b. Temporary | d. Demi-permanent |
24. _____ hair will appear to have more red, yellow, or orange than the intended color.
- | | |
|------------------|-------------------|
| a. Overlightened | c. Underlightened |
| b. Pre-lightened | d. Damaged |
25. What should you do with leftover tint?
- Pour it back into its original container.
 - Discard it.
 - Store it in a sealed bag.
 - Set it aside for a future retouch.
26. Cream lighteners contain conditioning agents called _____.
- | | |
|------------------|-----------------------------|
| a. bluing agents | c. tints |
| b. drabbers | d. alkaline swelling agents |
27. Which of the following provides natural black and brown pigment to hair?
- | | |
|--------------|----------------|
| a. Eumelanin | c. Pheomelanin |
| b. Protein | d. Lanolin |
28. Hair with uneven color distribution or pre-lightened hair may benefit from a _____ application.
- | | |
|-----------------|------------|
| a. color filler | c. virgin |
| b. toner | d. retouch |

29. You should avoid breathing in vapors caused by mixing _____ and haircolor products.
- a. hydrogen peroxide
 - b. alkaline swelling agents
 - c. surfactants
 - d. ammonia
30. As soon as hydrogen peroxide is mixed into the lightener formula, it begins to release_____.
- a. oxygen
 - b. hydrogen
 - c. irritants
 - d. toxins

Chemical Texture Services and Haircoloring and Lightening Services
Practical Exam

Chemical Texture Service

Perform a scalp analysis and state procedures (2 points each)

- Sanitation and Decontamination _____
- Consultation _____
- Comb through hair (thin sections; no scraping of the scalp) _____
- Check scalp for:
 - Cuts, abrasions, open sores, scalp disease _____
 - Smell/odor _____
 - Feel _____
- Identification of the disorder or disease and diagnosis _____
- Post-Service Consultation _____
- Recommended treatment (none, barber or physician) _____
- Sanitation and Disinfection _____

Scalp Analysis Score ____/20

Hair Analysis (2.5 points each)

- Hair Texture Test (feel a hair strand) _____
 - Determine Hair Texture (coarse, medium, fine) _____
- Hair Density Test (estimate based on the color and areas of thickness and thinness) _____
 - Determine Hair Density (thick, average, thin) _____
- Hair Porosity Test (hold a patch of hair and slide the thumb and forefinger of the opposite hand towards the scalp) _____
 - Determine Hair Porosity (resistant, normal, overly porous) _____
- Hair Elasticity Test (stretch a few clean hair strands and release them) _____
 - Determine Hair Elasticity (%; high, medium, low; breakage) _____

Hair Analysis Score ____/20

Perform a relaxer service and semipermanent color service. (4 points each)

- Setup _____
- Product selection _____
- Wet chemical draping (2 towels) _____
- Scalp and perimeter prep (oil base) _____
- Sectioning (4 sections, minimal tension on hair and scalp) _____
- Base scalp (oil application) _____
- Application
(start at the most resistant area, center, apply to new-growth, ¼ inch from the scalp) _____
- Processing and inspection _____
- Rinsing (warm water until all is removed) _____
- Neutralizing shampoo (>/2 cycles until completely cleansed) _____
- Application (start at the most resistant area, center, apply ¼ inch from the scalp) _____
- Exothermic/Natural heat application (processing cap) _____
- Processing and inspection _____

Deep Conditioning _____
Drying (thermal protectant application, blow dry) _____

Relaxer and Semi-Permanent Color Service Score _____/60

Chemical Texture Services and Haircoloring and Lightening Services _____/100

Interim Progress Assessment (IPA) Results

Course:	Semester: _____
Competency:	Date: / /
Written Exam	_____/30 _____%
Results	PASS/FAIL
Practical Exam	_____/100 _____%
Results	PASS/FAIL

Record the results for each IPA using the form. Transfer results to the Comprehensive Curriculum and Competency-Based Instruction Model (CCC-BIM) and Knowledge and Skills Acquisition (KASA) for Apprentice Barber License form.

Appendix I

Final Summative Assessment (FSA): Advanced Students

Final Summative Assessment
Mock Written Exam

1. The basic function of the NCBBE is to _____?
 - a. inspect barbershops for compliance with appropriate sanitation practices
 - b. proctor and assess licensure examinations
 - c. protect the health, safety, and welfare of the public as it relates to barbering
 - d. inspect barber schools for compliance with the NCBBE's rules and regulations

2. How many members serve on the NCBBE?
 - a. 5
 - b. 10
 - c. 6
 - d. 7

3. NCBBE members are _____.
 - a. appointed by the NCBBE's executive director
 - b. elected by North Carolina residents
 - c. selected by the NCBBE when a member completes a term
 - d. appointed by the governor

4. North Carolina law mandates that the NCBBE consists of _____ licensed North Carolina registered barber(s).
 - a. 1
 - b. 2
 - c. 3
 - d. 4

5. What is the minimum square footage required for a barbershop in North Carolina?
 - a. 144
 - b. 168
 - c. 196
 - d. 121

6. North Carolina law mandates that the NCBBE consists of _____ North Carolina resident(s) to represent the public interest.
 - a. 1
 - b. 2
 - c. 3
 - d. 4

7. In no event will a temporary license be issued or renewed if the candidate has _____.
 - a. failed the apprentice licensure exam
 - b. failed the apprentice licensure exam twice
 - c. a misdemeanor
 - d. a felony

8. How long is a temporary permit to work valid?
 - a. 30 days
 - b. until the candidate passes the NCBBE apprentice exam
 - c. 60 days
 - d. until the next succeeding NCBBE apprentice exam

9. How many consecutive terms can NCBBE members serve?
- 1
 - 3
 - 2
 - 4
10. What individuals are permitted to directly or indirectly practice barbering in North Carolina?
- Healthcare providers (e.g. doctors, nurses, etc.)
 - Active and inactive/retired military and armed forces veterans
 - Licensed apprentice and registered barbers
 - All of the above
11. Cutting against the grain cuts the hair _____ than cutting with the grain.
- faster
 - slower
 - shorter
 - longer
12. A flat spot or discoloration on the skin is a _____.
- vesicle
 - cyst
 - nodule
 - macule
13. What causes a wheal?
- Cancer
 - Impetigo
 - Poison ivy
 - Mosquito bite
14. What body system controls the activity of sweat glands?
- Nervous
 - Lymphatic/immune
 - Endocrine
 - Circulatory
15. Which of the following is a form of seborrheic dermatitis?
- Eczema
 - Miliaria rubra
 - Dandruff
 - Ivy dermatitis
16. The skin responds to heat, cold, touch, pressure, pain, and movement through its _____ nerve endings.
- secretory
 - motor
 - sensory
 - autonomic
17. _____ tissue is a layer of fatty tissue found below the dermis.
- Elastic
 - Adipose
 - Connective
 - Fibrous
18. _____ are symptomatic of Grade II acne.
- Minor breakouts
 - Redness and inflammation
 - Cysts with comedones
 - Many closed comedones

19. A bulla is a(n) _____.
- a. small blister or sac containing clear fluid
 - b. abnormal mass varying in size, shape, and color
 - c. large blister containing a watery fluid
 - d. liver spot
20. What type of nerve fibers regulates the excretion of perspiration from the sweat glands?
- a. Secretory
 - b. Surface
 - c. Sensory
 - d. Motor
21. What type of skin cancer is characterized by black or dark brown patches that may appear uneven in texture, jagged, or raised?
- a. Basal cell melanoma
 - b. Basal cell carcinoma
 - c. Squamous cell carcinoma
 - d. Malignant melanoma
22. The American Cancer Society recommends using the ABCDE Cancer Checklist. What does the "B" stand for?
- a. Border
 - b. Brown
 - c. Blood
 - d. Basal
23. Disease-causing microorganisms carried in the body by blood or body fluids:
- a. Bloodborne pathogens
 - b. Allergens
 - c. Fungi
 - d. Bacteria
24. An open comedo is also known as a(n) _____.
- a. acne
 - b. whitehead
 - c. birthmark
 - d. blackhead
25. Skin care products are _____.
- a. intended to be absorbed beyond the top layer
 - b. not intended to be absorbed beyond the top layer
 - c. cure dryness
 - d. neither of the above
26. During the late 1800s, employer organizations of barbers were known as _____ barber groups.
- a. master
 - b. protective
 - c. senior
 - d. journeymen
27. According to Leviticus, _____ was told to command those who had recovered from leprosy to shave all their body hair as part of ritual cleansing.
- a. Leviticus
 - b. Moses
 - c. Alexander
 - d. Ezekiel

28. Disinfectants are designed to destroy all of the following *except* _____.
- | | |
|--------------|----------|
| a. spores | c. HIV |
| b. influenza | d. fungi |
29. Implements must be _____ before they are _____.
- | | |
|-------------------------|--|
| a. cleaned; disinfected | c. immersed into a wet disinfectant; cleaned |
| b. disinfected; cleaned | d. none of the above |
30. The Latin word means the cutting, clipping, or trimming of hair with shears or a razor.
- | | |
|------------|-------------|
| a. barba | c. tonsure |
| b. artisan | d. tonsoria |
31. Which of the following is an example of a long-term goal?
- Finishing reading a chapter by the end of the day.
 - Getting through an exam successfully.
 - Graduating from barbering school.
 - Becoming a barbershop owner in five years
32. A(n) _____ establishes the purpose and values by which an individual or institution lives and works.
- | | |
|-----------------|----------------------|
| a. organization | c. ethic |
| b. game plan | d. mission statement |
33. _____ combs are made are antistatic and stiff.
- | | |
|-----------|----------------|
| a. Metal | c. Graphite |
| b. Carbon | d. Hard rubber |
34. Which of the following occurs when the hair is combed away from its natural fall position?
- | | |
|---------------|------------------|
| a. Slithering | c. Overdirection |
| b. Texturing | d. Notching |
35. On-base roller placement sits directly on the base and produces what type of curl?
- | | |
|----------|----------------|
| a. Loose | c. Pin |
| b. Tight | d. Full volume |
36. The muscular system comprises what percentage of the body's weight?
- | | |
|---------------------|---------------|
| a. 15 to 20 percent | c. 25 percent |
| b. 40 to 50 percent | d. 80 percent |
37. Staphylococci cause which of the following?
- | | |
|------------|--------------------|
| a. Tetanus | c. Pneumonia |
| b. Boils | d. Blood poisoning |
38. A _____ is the connection between two or more bones of the skeleton.
- | | |
|-----------|-------------|
| a. joint | c. ligament |
| b. tendon | d. muscle |

39. What type of cut builds weight and volume along the perimeter of the hairstyle?
- Long-layered
 - Graduated
 - Blunt
 - Uniform-layered
40. When acids and alkalis are mixed together in equal proportions, they neutralize each other to form _____.
- salt and hydrogen
 - water and alcohol
 - sodium hydroxide and water
 - water and a salt
41. Lymph nodes filter the lymphatic vessels, which helps _____.
- body movement
 - produce both white and red blood cells
 - regulate the body's temperature
 - fight infection
42. In an oil-in-water (O/W) emulsion, droplets of oil are dispersed in water, where they are surrounded by _____.
- suspensions
 - solvents
 - surfactants
 - solutes
43. The seventh cranial nerve is also known as the _____ nerve.
- facial
 - accessory
 - trigeminal
 - trifacial
44. To palm the razor for hair combing, roll the razor into your hand with the blade facing _____ the comb.
- toward
 - in front of
 - away from
 - behind
45. After cutting and blending a full head bonded replacement system, the client should allow how long before shampooing?
- One week
 - 72 hours
 - Two weeks
 - 24 to 48 hours
46. For beard designs on curly textured facial hair, you will trim excess hair using what technique?
- Clipper-over-comb
 - Taper and blend
 - Outliner-over-comb
 - Shear-over-comb
47. What type of tension would you use on straight hair to create precise lines?
- No tension
 - Maximum
 - Minimum
 - Moderate
48. The orbicularis oculi muscle _____.
- can easily be damaged during makeup application
 - wrinkles the forehead vertically
 - enables you to close your eyes
 - draws the eyebrows down

49. _____ is a type of skin cancer that has a 90% survival rate with early diagnosis and treatment.
- Basal melanoma
 - Squamous cell carcinoma
 - Malignant melanoma
 - Basal cell carcinoma
50. Low-light laser therapy stimulates _____ in the hair follicles.
- cell regeneration
 - restoration
 - reconditioning
 - transplantation
51. One of the functions of the lymphatic/immune system is to _____.
- act as a defense against toxins and bacteria
 - pass on the genetic code
 - stimulate functional activity
 - supply oxygen and eliminate carbon dioxide
52. Round-shaped bacteria that appear alone or in groups:
- Flagella
 - Diplococci
 - Cocci
 - Bacilli
53. Recent research suggests that _____ disorder is part of an autoimmune disease?
- Chloasma
 - Tan
 - Vitiligo
 - Stain
54. Which of the following is an example of a single-process coloring?
- Fillers and tints.
 - Pre-softener and tint applications.
 - Lightener and toner applications.
 - Virgin tint applications.
55. _____ introduce water-soluble products into the skin during facials.
- Galvanic machines
 - Thermal styling tools
 - High-frequency machines
 - Come done extractors
56. Blood may carry dangerous _____, so you should never touch an open sore or a wound.
- pathogens
 - allergens
 - nonpathogens
 - nutrients
57. What nervous system in the body includes the brain?
- Peripheral nervous system
 - Autonomic nervous system
 - Somatic nervous system
 - Central nervous system
58. During a shave service, you should _____.
- refrain from stretching the client's skin
 - use gliding strokes with the point leading
 - keep your fingers wet
 - never shift your body position

59. _____ is an oral medication that is prescribed only for men to stimulate hair growth.
- Cover-up hair
 - Finasteride
 - Minoxidil
 - Rogaine
60. Therapeutic lamps that use ultraviolet light can treat _____.
- dandruff conditions
 - muscles
 - pain
 - nerves
61. What type of glands release hormonal secretions directly into the bloodstream?
- Oil
 - Exocrine
 - Endocrine
 - Duct
62. The number of hairs on a client's head can be estimated by their _____.
- length
 - color
 - style
 - texture
63. The high-frequency machine can benefit the client's skin by _____.
- decreasing cell metabolism
 - deoxygenating the skin
 - stimulating blood circulation
 - decreasing glandular activity
64. What shampooing method would you use for a client who is disabled or wheelchair-bound?
- European-style
 - Special needs
 - Inclined
 - Reclined
65. What is the most common elevation for a graduated cut?
- 0 degrees.
 - 90 degrees.
 - 45 degrees.
 - 180 degrees.
66. A client with brown hair has red highlights. Brown is the _____, and red is the _____.
- hue; tone
 - tone; primary color
 - tone; hue
 - hue; secondary color
67. What is the most common neutralizer in permanent waving?
- Hydrogen peroxide
 - Mercaptamine
 - Ammonium bisulfite
 - Ammonium sulfite
68. Which of the following is an indication of the strength of the side bonds in the hair?
- Porosity
 - Elasticity
 - Density
 - Texture
69. Hair that has a low porosity is considered _____.
- receptive
 - overly porous
 - resistant
 - overprocessed

70. During curl reformation, the hair is neutralized and it rehardens the bonds in the _____ into a new, wavy pattern.
- Medulla
 - Keratin
 - cortex
 - cuticle
71. Using the level system, 1 is _____ and 10 is _____.
- black; blond
 - blond; red
 - red; blond
 - blond; black
72. Rosacea is a chronic condition that appears primarily _____.
- on the scalp
 - on the cheeks and nose
 - on the back
 - below the waist
73. Razor shapers are also known as _____.
- blending shears
 - edgers
 - outliners
 - hair shapers
74. A normal adult heart beats about how many times per minute?
- 100 to 110
 - 60 to 80
 - 90 to 120
 - 40 to 50
75. On average, hair grows at the rate of about _____ inch per month.
- 1
 - $\frac{1}{2}$
 - $\frac{3}{4}$
 - $1\frac{1}{2}$
76. During what hair phase are new cells manufactured in the hair follicle?
- Telogen
 - Catagen
 - Resting
 - Anagen
77. Visible light makes up what percentage of natural sunlight?
- 5 percent
 - 95 percent
 - 25 percent
 - 35 percent
78. Motor nerves carry impulses from the brain to the _____.
- nose
 - muscles
 - brain
 - skin
79. When complementary colors are mixed, they _____.
- Create a secondary color
 - Create a tertiary color
 - neutralize each other
 - intensifies the color they produce
80. A scalp analysis includes checking for _____, _____, and _____.
- hypertrophies, abrasions, parasites
 - texture, porosity, elasticity
 - porosity, elasticity, and abrasions
 - hypertrophies, abrasions, porosity

81. Hair porosity is the ability of the hair to _____.
- a. return to its original length without breaking
 - b. have an odor
 - c. stretch
 - d. absorb moisture
82. _____ is an extremely alkaline product and may process hair too quickly where a blowout cannot be performed.
- a. Ammonium bisulfate
 - b. Sodium hydroxide
 - c. Formaldehyde
 - d. Hydrogen peroxide
83. What type of rod shape produces a tighter curl in the center and a larger curl on the sides of the hair?
- a. Concave
 - b. Circle
 - c. Straight
 - d. Bender
84. How long does the telogen phase last?
- a. 3 to 6 months
 - b. 10 years
 - c. 1 to 2 weeks
 - d. 3 to 5 years
85. An example of connective tissue would be _____.
- a. lymph
 - b. glands
 - c. neurons
 - d. the lining of the heart
86. What should a barber do if he or she recognizes that a client has a skin disease?
- a. Prescribe an over-the-counter remedy.
 - b. Refer the client to a physician.
 - c. Perform a medical diagnosis of the condition.
 - d. Provide medical treatment.
87. Which is a characteristic of ammonium thioglycolate relaxer?
- a. Contains lye
 - b. Low pH
 - c. Odorless
 - d. Compatible with soft-curl permanent waves
88. What type of hone cuts faster than the water hone?
- a. Combination
 - b. Natural
 - c. Synthetic
 - d. Belgium
89. Half off-base placement results from wrapping the hair at an angle of _____ to its base section.
- a. 90 degrees
 - b. 45 degrees
 - c. 180 degrees
 - d. 30 degrees
90. In hair design, the form occupies _____ space.
- a. disproportional
 - b. positive
 - c. negative
 - d. proportional

91. _____ developer is the standard volume used with many permanent color products.
- 10-Volume
 - 30-Volume
 - 20-Volume
 - 40-Volume
92. What artery supplies blood to the brain?
- Facial
 - External carotid
 - Submental
 - Internal carotid
93. What devices have surge protectors and must be installed properly to operate as intended?
- Cathodes
 - Ground fault interrupters
 - Grounded plugs
 - Anodes
94. Which shampoo is a good choice for color-treated and chemically treated hair?
- Neutralizing
 - Dry or powder
 - Sulfate-free
 - Balancing
95. The _____ bone joins all of the bones of the cranium together.
- zygomatic
 - frontal
 - ethmoid
 - sphenoid
96. A possible side effect of finasteride is _____.
- weight gain
 - weight loss
 - increasing the rate of hair loss
 - increase in sexual function
97. What is the widest section of the head?
- Reference point
 - Occipital bone
 - Apex
 - Parietal ridge
98. Never use a(n) _____ product on hair that has been previously relaxed with a thio product.
- Sulfite
 - ammonia
 - peroxide
 - hydroxide
99. What type of wrapping/rodding technique is the hair wound from the hair ends toward the scalp?
- Croquignole perm wrap.
 - Water wrap.
 - Bookend wrapping.
 - Spiral wrap.
100. _____ is known as a developer that produces a relatively mild lightening of the natural hair color.
- Sodium hydroxide
 - Ammonia thioglycolate
 - Hydrogen peroxide
 - Guanidine hydroxide

101. Which of the following is a disadvantage associated with a human hair solution?
- It possesses a high gloss.
 - It tends to mat and tangle easily.
 - It is difficult to blend the piece with the client's natural hair.
 - It reacts to climate changes.
102. Oily skin is characterized by _____.
- not enough sebum production
 - loosening of the elastic skin fibers
 - excess sebum production
 - depressions in the skin
103. Which of the following brings nutrients to the cells and carries away waste materials?
- Venules
 - Capillaries
 - Arterioles
 - Arteries
104. Slender, hairlike extensions used by bacilli and spirilla for locomotion:
- Flagella
 - Diplococci
 - Cocci
 - Bacilli
105. If you accidentally cut a client, what should you do first?
- Stop the service immediately.
 - Apply slight pressure to the area.
 - Wash your hands.
 - Calmly apologize.
106. A(n) _____ service partially straightens the hair with the intent that it will be picked out and cut.
- texturizing
 - keratin-based straightening treatment
 - chemical blowout
 - curl reformation
107. For clients with round faces, beards should be styled to make the face appear more _____.
- oblong
 - oval
 - pear-shaped
 - square
108. Which of the following medical devices uses electromagnetic radiation and a medium?
- Lasers
 - Therapeutic lamps
 - LEDs
 - Ultraviolet light
109. When using chemical relaxers, you should _____.
- use additional product to relax excessively damaged hair
 - use a hydroxide relaxer on thio-treated hair
 - apply relaxer cream to the least resistant area first
 - save any unused product that you mixed

110. What body system controls and coordinates the functions of all the other systems?
- Muscular
 - Circulatory
 - Nervous
 - Endocrine
111. Lighteners are not designed to _____.
- remove unwanted artificial haircoloring products from the hair
 - dissolve or remove the hair's natural color pigment
 - both a and b
 - neither a or b
112. What should be done prior to fitting any hair solution?
- Scalp reduction.
 - Contour analysis.
 - Reconditioning treatments.
 - Tapering and blending of the hair.
113. _____ require the use of an outside heat source to activate chemical reactions and processing.
- Endothermic waves
 - Acid-balanced waves
 - Exothermic waves
 - Ammonia-free waves
114. Avoid large blockings on thin hair growth in permanent waves as the strain may cause _____.
- hair that tangles easily
 - breakage
 - sponginess
 - limpness
115. Which of the following would be a benefit associated with alkaline perms?
- Strong curl patterns.
 - Slower, but more controllable processing time.
 - Softer curl patterns.
 - Gentler treatment for delicate hair types.
116. Thio-free waves have a pH range of _____ while low-pH waves have a pH range of 6.5 to 7.0.
- 7.0 to 9.6
 - 7.8 to 8.2
 - 9.0 to 9.6
 - 9.6 to 11.0
117. A client has brown hair with a red undertone. Red is considered the _____.
- natural hair color
 - primary color
 - secondary color
 - contributing color
118. Petroleum distillates are excellent for removing _____ from metals.
- oil
 - rust
 - spores
 - scratches
119. _____ are powerful disinfectants known as tuberculocidal.
- Quaternary ammonium compounds
 - Bleaches
 - Sodium hydroxides
 - Phenolic disinfectants

120. When honing a razor, the first position and stroke begins with _____.
- a. the razor on its back on the upper far left corner of the hone
 - b. the razor on its face on the upper far right corner of the hone
 - c. the razor on its face on the upper far left corner of the hone
 - d. the razor on its back on the upper far right corner of the hone

Final Summative Assessment
Mock Practical Exam

Professional Image Assessment

Preparedness (10 pts each)

Arrival Time ____ (*Late arrival will result in automatic failure*)

Check-In Time ____:____

Model/Mannequin Present ____ (*Absent model or mannequin will result in automatic failure*)

Forms Present and Completed ____

Forms of Identification ____

____/40

Appearance (10 pts each)

Personal Grooming and Hygiene ____

Dress Code

Trousers ____

Collar shirt ____

Casual shoes (*no sneakers allowed*) ____

Smock ____

Kit organization ____

____/60

Comments: _____

Recommendations: _____

Professional Image Score: ____/100

Decontamination and Sanitation Practices Assessment
(10 pts for each properly demonstrated)

Pre-Exam Station Setup ____

Wet and Dry Sanitation ____

Tools

Clippers ____

Implements

Shears ____

Razors ____

Combs ____

Equipment

Station ____

Chair ____

Headrest ____

Post-Exam Station Cleanup ____

Comments: _____

Recommendations: _____

Decontamination and Sanitation Practices Score: ____/100

Shaving Assessment

Pre-Shave Procedures (1 pt for each procedure demonstrated properly)

- Handwashing _____
- Draping _____
- Headrest Cover _____
- Linen and Wiping Pad Setup _____
- Chair Operation _____
- Steam/Tepid Towel Application _____
- Shaving Cream Application _____
- Towel Storage and Disposal _____
- Razor Decontamination/Sanitation _____
- Store Razor _____

_____/10

Shaving Demonstration

3 Shaving Movements/Strokes (1 point for each procedure properly demonstrated)

Require the student to state and demonstrate the following.

1. Freehand _____
2. Backhand _____
3. Reverse Freehand _____

If the student has a different response: _____

What is the 4th razor movement?

Reverse Backhand _____ If not, response: _____

Where is it used?

Behind the Right ear _____ If not, response: _____

Demonstrated Correctly: Y/N (circle one)

If not, what was student's demonstration? _____

14 Area Shave (1 point for each properly demonstrated)

Require the student to state and demonstrate each step of the shaving procedure.

- | | | |
|---------------------------|------------------|------------------|
| 1. Freehand _____ | 9 o'clock _____ | Razor Wipe _____ |
| 2. Backhand _____ | 9 o'clock _____ | Razor Wipe _____ |
| 3. Freehand _____ | 9 o'clock _____ | Razor Wipe _____ |
| 4. Freehand _____ | 9 o'clock _____ | Razor Wipe _____ |
| 5. Reverse Freehand _____ | 12 o'clock _____ | Razor Wipe _____ |

Re-lather: Y/N (Circle one)

Palm the Razor _____

- | | | |
|----------------------------|------------------|------------------|
| 6. Backhand _____ | 9 o'clock _____ | Razor Wipe _____ |
| 7. Backhand _____ | 12 o'clock _____ | Razor Wipe _____ |
| 8 Freehand _____ | 9 o'clock _____ | Razor Wipe _____ |
| 9. Backhand _____ | 12 o'clock _____ | Razor Wipe _____ |
| 10. Reverse Freehand _____ | 12 o'clock _____ | Razor Wipe _____ |
| 11. Freehand _____ | 9 o'clock _____ | Razor Wipe _____ |

12. Freehand ___ or Backhand ___ 9 o'clock ___ Razor Wipe ___
13. Reverse Freehand ___ 12 o'clock ___ Razor Wipe ___
14. Reverse Freehand ___ 12 o'clock ___ Razor Wipe ___

_____/50

Exposure Incident Demonstration (5 points for each properly demonstrated)

Blood spill Kit Check ___
Client Notification ___
Demonstration ___
Biohazard Disposal ___

_____/30

Post-Shave Procedures (1 point for each properly demonstrated)

Store Razor ___
Astringent Application ___
Moisturizer Application ___
Tepid Towel Application ___
Talcum/Powder Mitt ___
Talcum/Powder Application ___
Chair Operation ___
Towel Disposal ___
Decontamination/Sanitation ___
Handwashing ___

_____/10

Comments: _____

Recommendations: _____

Shaving Score: ____/100

Tapered Haircut Assessment

Model's Pre-Haircut Hair Measurements *(2 points for each)*

Crown: _____ inches (>/2 inches)
Temple: _____ inches (>/2 inches)
Occipital: _____ inches (>/ 2 inches)
Nape: _____ inches (>/1 inch)

_____/10

Taper/Blend Quality *(0 -20 points for each area)*

Scalp exposure and hard line-ups will result in an automatic fail

Crown: _____/20
Temple: _____/20
Occipital: _____/20
Nape: _____/20

_____/80

Model's Post-Haircut Hair Measurements *(2 points for each)*

Crown: _____ inches (>/2 inches)
Temple: _____ inches (>/2 inches)
Occipital: _____ inches (>/ 2 inches)
Nape: _____ inches (>/1 inch)

_____/10

Comments: _____

Recommendations: _____

Tapered Haircut Score ____/100

**Final Summative Assessment (FSA):
Mock NC Apprentice Barber License Exam Results**

Written Exam	_____/120 _____%
Results	PASS/FAIL
Practical Exam	
Professional Image	_____/100
Decontamination and Sanitation Practices	_____/100
Shaving	_____/100
Tapered Haircut	_____/100
	_____/400 _____%
Results	PASS/FAIL

Record the results for each FSA. Transfer the results to the Comprehensive Curriculum and Competency-Based Instruction Model (CCC-BIM) and Knowledge and Skills Acquisition (KASA) Form for Apprentice Barber License.

Appendix J

JIBCA Advanced Students' KASA Forms

Appendix J1

Student One's KASA Form

<p><i>Objective IV: Students will demonstrate proficient knowledge and skills of all competencies. This standard will encompass an intensive apprentice licensure examination preparation. Students will exhibit preparedness for the transition of being a student to becoming a professional barber. Student will achieve >80% proficiency for each competency to satisfy the criterion for Objective IV of this CCC-BIM.</i></p>	<p>IFA Score (%) Date: 11/14/2022</p> <p style="text-align: center;">WRITTEN</p> <p style="text-align: center;">75 / 120 = 63 %</p> <p style="text-align: center;">PRACTICAL</p> <p>Sanitation = 100/100 Shaving = 25/100 Haircut = 80/100</p> <p style="text-align: center; background-color: #90ee90;">255/300 = 85%</p>	<p>Theoretical Knowledge (check) Instructor will initial each competency once completed. The activity/task completed in during instruction can be documented.</p>	<p>IPA Score (%) Document % of proficiency on written IPA for each competency.</p>	<p>Practical Skills (check) Instructor will initial each competency once completed. The activity/task completed in during instruction can be documented.</p>	<p>IPA Score (%) Document % of proficiency on practical IPA for each competency.</p>
<p>Professional Barbering Topics</p>	<p>Consultation Notes:</p> <p>"Repetition helps me. Reviewing the information at the beginning and at the end of class would help me remember."</p>	<p>Student needs to:</p> <ol style="list-style-type: none"> 1) Arrive earlier for set-up (>30 mins prior); 2) Improve work ethic and seek to bring value to the business; 3) Improve cutting ability 			
<p style="text-align: center;">Employment Job Interviews Income Management Accounting and Taxes</p> <p style="text-align: right;">1st Attempt 2nd Attempt</p>	<p style="text-align: center;">21 / 30 29 / 30</p>	<p style="text-align: center; background-color: #ffff00;">Area needs review</p> <p style="text-align: center; background-color: #f08080;">70.00%</p> <p style="text-align: center; background-color: #90ee90;">97.00%</p>			<p style="text-align: center; background-color: #ffff00;">GOOD JOB!</p> <p style="text-align: center; background-color: #90ee90;">89%</p>
<p style="text-align: center;">Effective Product Sales and Retail Ethics Marketing and Establishing Clientele</p>	<p style="text-align: center;">24 / 30</p>	<p style="text-align: center; background-color: #90ee90;">80.00%</p>			<p style="text-align: center; background-color: #90ee90;">88%</p>
<p style="text-align: center;">Compensation (Services, Booth Rental, Commission, et cetera) Entrepreneurship and Management in Barbering Use of Technology in Barbering Business</p>	<p style="text-align: center;">24 / 30</p>	<p style="text-align: center; background-color: #90ee90;">80.00%</p>			<p style="text-align: center; background-color: #90ee90;">85%</p>

**This section of the KASA form reports Student One's IFA score and performance on competency IPAs in the Professional Barbering Topics course.*

Apprentice Examination Prep IV					
Intro to Barbering & Cosmetic Arts		"Review at the beginning and the end of class."	Area needs review		SUPERB
	1st Attempt	20 / 30	66.67%	Arrive >/30 mins for setup; Work on tapered haircutting	93%
2nd Attempt	29 / 30	96.67%			
General Barbering & Cosmetic Sciences I		"Songs and associations"	Area needs review		GOOD JOB!
	1st Attempt	18 / 30	60.00%	Disinfecting time; Debris removal; Blade wash; Drying surfaces	89%
2nd Attempt	29 / 30	97.00%			
Foundations of Haircutting, Styling & Shaving I		28 / 30	93.00%	o Review content from the previous class at the beginning of each class	94%
General Barbering & Cosmetic Sciences II		24 / 30	80.00%	o Brief review at the end of classes	87.50%
Anatomy & Physiology of Barbering & Cosmetics		28 / 30	93.00%	o Repetition	84%
Trichology & Dermatology of Barbering & Cosmetics		24 / 30	80.00%	o Mnemonics (e.g., Songs/lyrics, association)	96%
Advanced Haircutting, Styling, & Shaving		28 / 30	93.00%	o 1-on-1 learning opportunities (practical skills)	88%
Chemical Textured Services		30 / 30	100.00%	o More instructor demonstrations	87%
Haircoloring & Lightening		27 / 30	90.00%		85%
NCBBE Practical Examination (Sanitation/Disinfection, Haircut, Shave)		25 / 30	83.00%		88%
Test Taking Skills		"I need some 1-on-1 so you can show me."	Area wants review		
	1st Attempt	15 / 30	50.00%		95%
2nd Attempt			87.00%		

**This section of the KASA form reports Student One's IFA performance on competency IPAs in the Apprentice Prep IV course.*

Appendix J2

Student Two's KASA Form

<p><i>Objective IV: Students will demonstrate proficient knowledge and skills of all competencies. This standard will encompass an intensive apprentice licensure examination preparation. Students will exhibit preparedness for the transition of being a student to becoming a professional barber. Student will achieve >80% proficiency for each competency to satisfy the criterion for Objective IV of this CCC-BIM.</i></p>	<p>IFA Score (%) Date: 11 /14 /2022</p> <p>WRITTEN 95 /120 = 79 %</p> <p>PRACTICAL Sanitation = 100/100 Shaving = 71.5/100 Haircut = 56/100 227.5/300 = 75.8%</p>	<p>Theoretical Knowledge (check) Instructor will initial each competency once completed. The activity/task completed in during instruction can be documented.</p>	<p>IPA Score (%) Document % of proficiency on written IPA for each competency.</p>	<p>Practical Skills (check) Instructor will initial each competency once completed. The activity/task completed in during instruction can be documented.</p>	<p>IPA Score (%) Document % of proficiency on practical IPA for each competency.</p>														
<p>Professional Barbering Topics</p> <table border="1"> <tr> <td>Employment Job Interviews Income Management Accounting and Taxes</td> <td>1st Attempt 23 / 30</td> <td>2nd Attempt 30 / 30</td> <td>76.67%</td> <td>85%</td> </tr> <tr> <td>Effective Product Sales and Retail Ethics Marketing and Establishing Clientele</td> <td>26 / 30</td> <td></td> <td>87.00%</td> <td>99%</td> </tr> <tr> <td>Compensation (Services, Booth Rental, Commission, et cetera) Entrepreneurship and Management in Barbering Use of Technology in Barbering Business</td> <td>30 / 30</td> <td></td> <td>100.00%</td> <td>86%</td> </tr> </table>	Employment Job Interviews Income Management Accounting and Taxes	1st Attempt 23 / 30	2nd Attempt 30 / 30	76.67%	85%	Effective Product Sales and Retail Ethics Marketing and Establishing Clientele	26 / 30		87.00%	99%	Compensation (Services, Booth Rental, Commission, et cetera) Entrepreneurship and Management in Barbering Use of Technology in Barbering Business	30 / 30		100.00%	86%	<p>Consultation Notes: "I just need a review. I should be fine after that."</p>	<p>Area needs review</p>	<p>Student needs to: 1) Arrive earlier for set-up (>/30 mins prior) 2) Improve work ethic and seek to bring value to the business; 3) Improve cutting ability; 4) Become a more confident when cutting.</p>	
Employment Job Interviews Income Management Accounting and Taxes	1st Attempt 23 / 30	2nd Attempt 30 / 30	76.67%	85%															
Effective Product Sales and Retail Ethics Marketing and Establishing Clientele	26 / 30		87.00%	99%															
Compensation (Services, Booth Rental, Commission, et cetera) Entrepreneurship and Management in Barbering Use of Technology in Barbering Business	30 / 30		100.00%	86%															

**This section of the KASA form reports Student Two's IFA score and performance on competency IPAs in the Professional Barbering Topics course.*

Apprentice Examination Prep IV				
Intro to Barbering & Cosmetic Arts	25 / 30	83.33%	Pump Soap; Work on tapered haircutting	87%
General Barbering & Cosmetic Sciences I	"A brief review should be good for me."	Area needs review		GOOD JOB!
	1st Attempt 22 / 30	73.33%	Disinfecting time; Debris removal; Blade wash; Drying time.	91%
2nd Attempt		100.00%		
Foundations of Haircutting, Styling & Shaving I	29 / 30	97.00%		94%
General Barbering & Cosmetic Sciences II	24 / 30	80.00%		87.50%
Anatomy & Physiology of Barbering & Cosmetics	27 / 30	90.00%		100%
Trichology & Dermatology of Barbering & Cosmetics	29 / 30	97.00%		92%
Advanced Haircutting, Styling, & Shaving	29 / 30	97.00%		86%
Chemical Textured Services	30 / 30	100.00%		87%
Haircoloring & Lightening	30 / 30	100.00%		95%
NCBBE Practical Examination (Sanitation/Disinfection, Haircut, Shave)	24 / 30	80.00%		98%
Test Taking Skills	24 / 30	80.00%		98%

**This section of the KASA form reports Student One's IFA performance on competency IPAs in the Apprentice Prep IV course.*

Clinical Practicum IV				
Handwashing				50/50
Hygiene and Personal Grooming	Student exceeded mastery level on the first attempt!	EXCELLENT	30/30	OUTSTANDING!!!
Proper Ergonomics	27 / 30	90.00%	16/20 - Student needs to improve tool-use fluidity.	96%
Human Relations and Communication Skills	30 / 30	100.00%		100%
Cleaning and Disinfecting: Equipment, Tools, Implements, Clippers and Outliners/Trimmers	28 / 30	93.00%		96%
Honing and Stropping Razors				
Towel Wrapping				
Handling Clippers, Shears, Razors, and Combs				
14 Areas and Movements of a Shave				
Handling of Exposure Incidents	24 / 30	80.00%		94%
Draping (Wet and Dry)				
Hair Cutting and Styling				
Facials				
Shampoos	26 / 30	87.00%		100%
Chemical Texture Services				
Haircoloring & Lightening Services	30 / 30	100.00%		93%
		Mean Proficiency		Mean Proficiency
		91.02%		93.15%
Final Mock NCBBE Apprentice Barber Licensure Exam	Date: 2 /12/23	FSA Scores: Written: 119 /120 = 99%	Sanitation=100, Shave=100, Haircut=70	90%
Notes:				
Student has demonstrated superb proficiency, exceeding the minimum cumulative proficiency average of 80%.				
See cumulative proficiency average above. Student has demonstrated knowledge and skills that bode well for passing the NCBBE apprentice barber licensure exam.				
NC Apprentice Barber Licensure Exam (NC ABLE) Results:				
	Written Exam		Practical Exam	Satisfied requirements for
	State Law: 9		Haircutting Score: 70 (PASSED)	Apprentice Barber License
	Barber Practice: 96	Total: 105 (PASSED)	Sanitation Score: 100 (PASSED)	CONGRATULATIONS!!!

**This section of the KASA form reports Student One's IFA performance on competency IPAs in the Clinical Practicum IV course.*

Appendix K

Advanced Students' NC ABLE Score Reports

Appendix K1

Student One's NC ABLE Score Report



State of North Carolina
BOARD OF BARBER EXAMINERS
7001 Mail Service Center, Raleigh, North Carolina 27680
Phone (919) 814-0640 • Fax (919) 981-5068
barbers.nc.gov • barberboard@nc.gov

EXAM RESULTS FROM 2/13/2023
Apprentice Barber Application
Stephen L Smith

Written exam: Pass

State law score.....	6
Barber practice score.....	73
Total score.....	79

Note: to pass, you must receive a total score of 70.

Practical exam: Fail

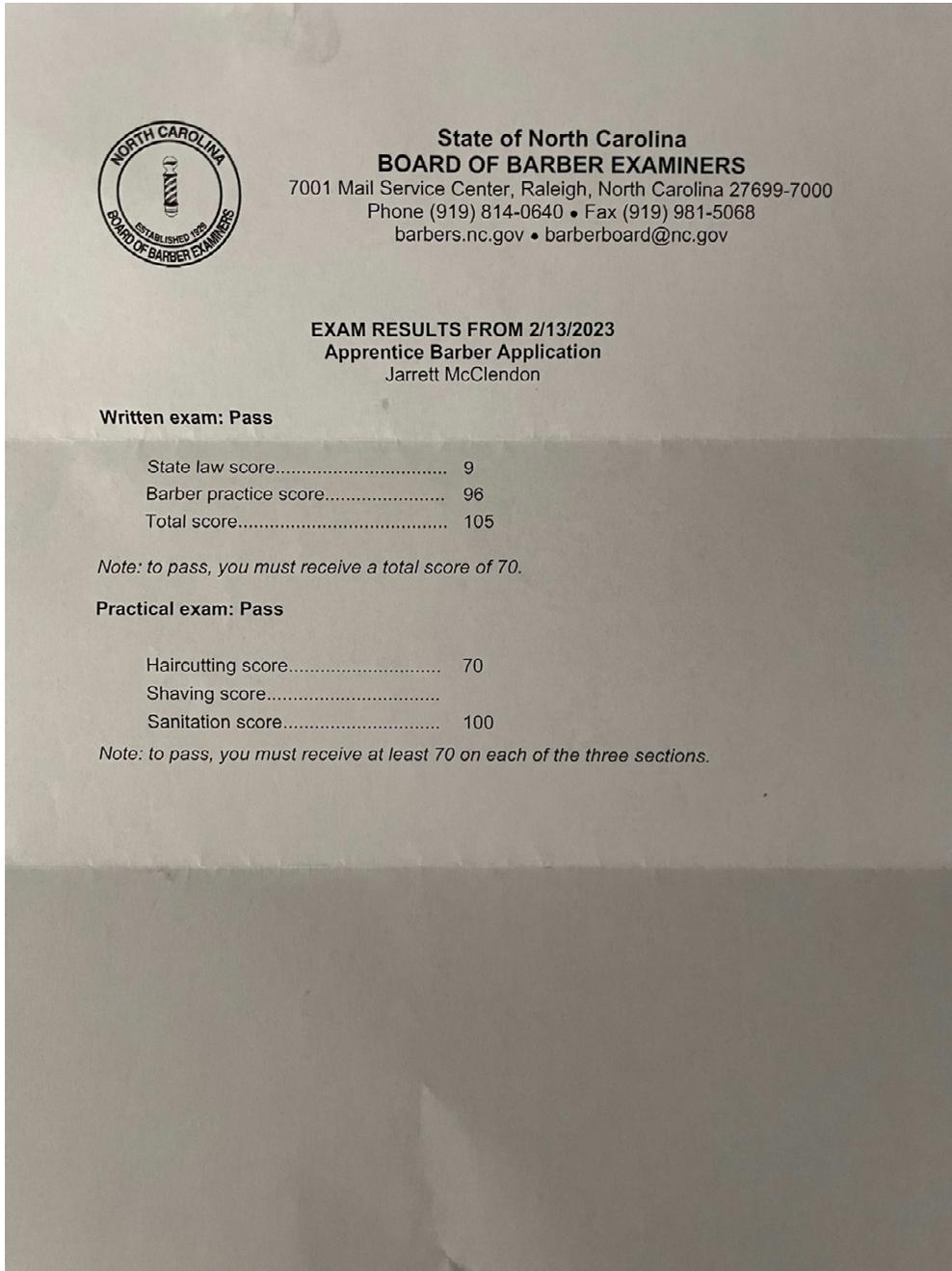
Haircutting score.....	50
Shaving score.....	
Sanitation score.....	100

Note: to pass, you must receive at least 70 on each of the three sections.

Note. Student One will retake the practical examination. The Haircutting Score of 50 did not meet the cut-off score of 70.

Appendix K1

Student Two's NC ABLÉ Score Report



Note. Passing NC ABLÉ score report.