For the Biofeedback Certification International Alliance (BCIA), assessment is the culmination of a learning process that begins with didactic training that is guided by Blueprints of Knowledge and Core Reading Lists. The references in the BCIA Core Reading Lists help applicants master the learning objectives of the Blueprint and are the source of the exam questions. BCIA certification exams test entry-level knowledge that is relevant to the current practice of biofeedback. Applicants can now take exams in both paper/pencil and online formats. BCIA encourages applicants to use the Blueprints as roadmaps to guide their study, to read the Core references, and to take advantage of their mentors’ experience. The quality of the applicants, the excellence of didactic programs, and the careful construction of the exams have resulted in pass rates that exceed 70%. BCIA believes that the applicant’s journey, not passing the certification exam, is the best metric for measuring success. BCIA has achieved its mission in the time before the professionals arrive at their testing site.

I didn’t fail the test; I just found 100 ways to do it wrong.
—Benjamin Franklin

Exams Should Test Mastery of Biofeedback Fundamentals

Written exams are a necessary part of our professional lives. While most of us don’t enjoy taking them, we do like to challenge ourselves and expand our knowledge. We don’t fear learning new material; we fear the unknown. What will the exam be like? Did I study the right material?

According to the Institute for Credentialing Excellence (ICE), formerly the National Organization for Competency Assurance (NOCA), “certification of specialized skill-sets affirms a knowledge and experience base for practitioners in a particular field, their employers, and the public at large. Certification represents a declaration of a particular individual’s professional competence” (National Board for Certification of Orthopedic Technologists, 2010).

Most certifying agencies set standards of education and training to demonstrate entry-level competency. Most share the challenge of evaluating whether applicants have mastered a body of knowledge required for entry-level competence. BCIA, like many other certifying agencies, has found it challenging to build and maintain meaningful, current, and psychometrically sound assessment instruments. BCIA’s exam task forces have taken this work very seriously.

BCIA believes that tests should be fair, reflect essential knowledge, and allow test takers to demonstrate their mastery. We believe that our tests should have passing scores that clearly differentiate candidates with advanced knowledge from those who cannot demonstrate mastery of the fundamentals. We would like to demystify how we build our exams.

Exam 101

Each of our certification programs starts with a Blueprint of Knowledge that identifies the fundamental science, history, and concepts underlying each modality, independent of specific theories, vendors, or brands of equipment. This information is the basis of the didactic training required for certification. We divide each blueprint into content areas called rubrics and then assign a specific number of hours to each rubric to help training programs structure their workshops. An 8-hour rubric contributes more items to our exams than a 2-hour rubric. BCIA exams are built using 100 multiple-choice questions with only one right
answer. Professional educators review our questions for clarity and accuracy. We source each exam item to the references in our Core Reading Lists, and we accept only questions that applicants should be able to correctly answer after reading their Core references.

BCIA now offers our exams in both paper/pencil and online formats. Candidates may choose any of our regularly scheduled exam sites, or they may locate a nearby university or public library proctor to monitor the security of their testing.

How to Select an Exam Proctor

Start by deciding whether to take an online or written exam. Online testing costs only $50, and you will receive immediate feedback when you submit your answers. If you choose this option, make sure that the proctor understands that you must use one of their computers; not your own. We encourage you to see where you will be sitting to ensure that it is a quiet, low-traffic area that will allow you to concentrate. While some applicants may feel anxious about taking an online exam, BCIA uses one of the most intuitive and secure online testing platforms on the international market.

You may feel more comfortable completing your exam “old school” by using a standard no. 2 pencil and a Scantron bubble sheet. Our written test option may allow you to take the exam in a quieter and less distracting area within the testing site. However, the special exam fee is $100 due to our higher costs, and there is a delay between completing your exam and learning your score since your materials must be mailed back and manually scored.

Once you have chosen your exam format, how should you select a site to proctor your exam?

First, determine whether a site provides proctoring services for your community. Many applicants use municipal or university libraries. Second, find out when they are able to proctor your exam and whether they charge fees that would be your responsibility to pay. Third, find out whether they have a computer you can use with internet access if you intend to take your exam online.

After you have reached an agreement with a test proctoring site, you can submit the Special Exam Form to BCIA along with your fee, and soon staff will follow up to ensure that your proctor understands the full scope of this role. If there are no further issues, you’ll soon hear from BCIA that the exam is on schedule. Be sure to provide our staff with at least 10 days of lead time to make your arrangements. Regardless of the testing format you select, we provide you with a full 3 hours to reduce time pressure. Most applicants complete our exams in less than 2 hours.

We have successfully offered our online exams in English in several other countries such as Germany, the Netherlands, Mexico, and New Zealand. It appears that 2012 will see many more new certificants outside of the United States because we have made testing locally available.

Certification sounds so simple when presented like this, doesn’t it? So what are you waiting for? File your application and set a study schedule!

The Challenge of Building Quality Certification Programs

Many certifications are specific to a profession, such as truck drivers, nurses, or accountants. BCIA, in contrast, certifies professionals with backgrounds as different as neurology, counseling, and physical therapy. Our applicants’ experience levels also vary. While many individuals sit for their exam after years of experience, others have just entered the field and started to use the modality. Some professionals treat a wide range of clinical disorders, and others focus on related problems like pain or urinary incontinence. We value our applicants’ diverse backgrounds, experience, and clinical specialization, and we have developed exams that assess the common knowledge base that competent professionals should share.

We encourage feedback and listen carefully to our applicants and didactic training providers. Sometimes applicants are frustrated by questions that are specific to disorders they do not treat or that cover learning objectives that were never covered by their didactic training. Conversely, they may be distressed by the lack of exam questions over material that they intensively studied. Our answer to these reactions is yes, yes, and yes.

Our certifications cover our Blueprints, and you are expected to master each of their learning objectives. Our Blueprints provide a comprehensive review of the entry-level knowledge of biofeedback, neurofeedback, or pelvic muscle dysfunction biofeedback to provide you with a foundation for learning to treat new populations and use new protocols as your practice grows. It is important to learn material that you don’t immediately need to future-proof your education.

Instructors never have sufficient time to cover every learning objective, whether in a 5-day workshop or in a semester-long university course. Your instructor’s goal should be to help you learn the fundamentals and to show you how to learn the details through independent study. BCIA has simplified this task by providing detailed Blueprints and Core Reading Lists that teach its content, and by promoting your collaboration with mentors who can
help you integrate the disparate pieces into a coherent knowledge map.

Since there are more learning objectives than exam questions, we representatively sample the content of each rubric in proportion to its weight. For example, we may ask twice as many questions about a 4-hour rubric than a 2-hour rubric. Experienced exam builders ensure that each test has high content validity, and rigorous psychometric assessment confirms the discriminant validity of each test item. As with university courses, we want our applicants to focus on their learning and not on whether their exams covered all the concepts that they studied.

**Preparing for the Exam**
The BCIA website contains valuable resources to help you prepare for our exams. You will find links to our Blueprints of Knowledge, Core Reading Lists, didactic educators, and mentors. Our Blueprints are roadmaps of the content you will need to master. Our Core Reading Lists are made up of affordable, entry-level references that cover their Blueprints and serve as the basis for our exam questions. BCIA doesn’t publish its own textbook because excellent resources are already available. We want our certificants to be exposed to multiple scientific viewpoints.

BCIA doesn’t teach its own didactic courses for the same reason it doesn’t publish a textbook. We want to encourage a “marketplace of ideas” in which didactic instructors teach our Blueprint in university courses and vendor workshops from their unique perspectives. We believe that our field is stronger when applicants can learn from instructors with diverse teaching styles, materials, and emphases.

Never underestimate the power of a good mentor! Mentors help guide applicants’ personal self-regulation training and development of clinical skills. They help their mentees transform theory into practice. Good mentors are invaluable because they can reinforce didactic training and share their wealth of clinical knowledge. Since BCIA-certified mentors have passed our exam, they are ideal exam coaches.

**Passing the Exam**
More than 70% of our candidates pass our exam on their first attempt, compared with rates as low as 50% at many larger professional certification organizations. We find low pass rates to be unacceptable. Certification should guide and motivate applicants to acquire entry-level knowledge and develop competent clinical skills, not demoralize these professionals. What is the value to the field of a certification program that passes only five professionals a year? Our applicants are well-educated practitioners. In most cases, they have invested their own money in equipment, study materials, didactic training, mentoring, and certification fees. Since state law rarely requires them to gain our credential, they are motivated by their integrity and professionalism.

BCIA has found that we can maintain rigorous standards and achieve high pass rates. Our applicants pass our exams for three reasons. First, they are highly motivated elite professionals. Second, our applicants are taught and mentored by dedicated and experienced didactic educators who teach university and vendor courses. Third, we have designed our program for success. We provide detailed Blueprints of Knowledge that are directly linked to our Core Reading Lists. All exam items are based on these references and deal with scientific findings instead of opinions. We supply applicants with a directory of excellent university and vendor-based didactic programs and a list of gifted mentors when they are ready for consultation. Finally, we continuously monitor the psychometric performance of exam items to ensure their validity.

Does a high pass rate mean that our applicants know the answers to all of our exam questions? Of course not! The exam identifies the topics they mastered as well as the areas that may require more reading and study. Certificants can use this feedback to guide their future continuing education.

**The Future**
BCIA’s exams performed very well during 2011, both in North America and internationally. This fall, 100% of our new certificants in the Netherlands passed our Neurofeedback exam with scores that were higher than average! Keep in mind that English is their second language.

Despite the success of our exams, we have already started to reevaluate our Biofeedback, Neurofeedback, and Pelvic Muscle Dysfunction Biofeedback Blueprints, Core Reading Lists, and exam questions for the second time in 5 years. We invite you to submit multiple-choice exam items using our Core Reading Lists’ sources. For each exam item you submit, you will earn one-half hour of continuing education toward recertification, up to a maximum 20 hours. Yes, you heard it correctly. We’re offering free continuing education!

**It’s the Journey**
BCIA has a unique perspective on assessment. When most applicants think about certification, they mainly focus on the endpoint of passing our exam. Our Board believes that their journey, which involves independent study, didactic training, practice, and mentoring, is far more important. When professionals arrive at their testing site, BCIA has achieved its mission. We have taught them that competent
practice is based on published research, that training should be skill-driven instead of equipment-driven, and that professionals should be guided by science instead of dogma.

A recent certificant shared this insight: “The best thing about the BCIA exam experience is that in the process, I went deeper into the material than I ever have; in this sense, it was a very rich and professionally growth-enhancing exercise.”

We respect the courage and passion for learning that motivates our applicants to pursue our demanding certifications and share their excitement as they become “More than qualified—BCIA certified!”

References

Correspondence: Fred Shaffer, PhD, BCB, BCIA, McClain 229, Truman State University, 100 E. Normal, Kirksville, MO 63501-1820, email: fshaffer@truman.edu.