

CERTIFICATION AND LICENSURE: BENEFIT OR LIABILITY?

BY LON KILGORE

Lon Kilgore reviews recent legislation affecting personal trainers and discusses what it might mean for CrossFit trainers and affiliate owners.



In 2014, Washington, D.C., passed legislation giving the D.C. Board of Physical Therapy regulatory authority over fitness professionals, who also had to register with the mayor’s office in order to practice.

Omnibus Health Regulation Amendment Act of 2013 established DC Code 3-1209.08 with an effective date of March 26, 2014.

In Florida in 2009, a proposed law regarding personal-trainer preparation would have placed regulation of personal-training and fitness professions under the auspices of the Board of Athletic Trainers, which was specifically created to regulate the allied health-care profession “athletic trainer,” not fitness professionals. The bill, SB 984, was unsuccessful and was revised, modified and resubmitted as SB 1616 in March 2013 to remove the oversight by the Board of Athletic Trainers through the creation of the state Board of Personal Training.

Although SB 1616 died in committee, the concept of statutory regulation of personal trainers has persisted in some form in the Florida legislature for over five years. More than half a dozen other states have considered statutory regulation of personal trainers in the past decade under the guise of protection of the public, so it’s important to examine what such regulation proposes and how it might affect our businesses.

Anatomy of Bad Legislation

The D.C. law is very simple. It registers personal trainers in order that their services can be taxed according to code (4). An individual must register if he or she meets the following definition:

“The term ‘personal fitness trainer’ means a person who develops and implements an individualized approach to exercise, including personal training and instruction in physical fitness and conditioning for an individual and a person who performs similar physical fitness training regardless of the designation used.”

SB 1616’s definition of the regulated professional is also quite broad in scope:

“‘Personal trainer’ means a person who evaluates a client’s health and physical fitness; develops a personal exercise plan or program, or core-induced activity, for the client; and demonstrates, with or without equipment, exercises designed to improve cardiovascular condition, muscular strength, flexibility, or weight loss” (6).



If licensure legislation passes, many currently held certificates will not allow trainers to practice legally.

These definitions certainly bring to light a set of interesting questions that have direct effects on every CrossFit affiliate, its trainers, its coaches and the exercising public. In fact, the generic wording could easily apply to and affect phys.-ed. teachers, professional sport coaches, volunteer coaches, nurses, physical therapists, and any person who helps another through programming and delivering exercise advice and instruction—unless they are specifically exempted from the regulation for some reason.

Foremost among the questions: “Would I have to have a university education to meet state requirements?”

The short answer in the proposed legislation is no. The regulatory framework, as written, creates a minimum age and requires

only a standard first-aid/CPR/AED certification and the holding of an exercise-related certification. A university education is not required and is likely overkill for the basic duties of a personal trainer working with a healthy clientele. Fortunately, numerous organizations offer certification tests that potentially satisfy these requirements.

An interesting follow-up question: “If no education is required, how would someone pass a certification or then a licensure test?”

There are a variety of answers. It should be apparent that a valid test of one’s ability to be a fitness professional, someone who teaches exercise and programs exercise for the general population, would be an assessment of relevant fact-based knowledge

and an assessment of the candidate’s practical ability in teaching and programming.

Curiously, the answer to this question from every major professional credentialing and certifying body—save one—is to read a book at a minimum, maybe watch some videos, possibly do some pen-and-paper exercises, and then take a computerized or pen-and-paper test. The test can be proctored at a computerized facility or taken at home depending on the organization. When looking in detail at credentialing in the fitness professions, it is a telling indictment that a glut of organizations provide such without any evidence the candidate has actually interacted with another person in the learning process or can deliver training and programming to a live person.

When the quality and completeness of preparation to deliver fitness training to the general population is examined, only one major fitness organization requires (A) face-to-face instruction, (B) a supervised period of work-based or internship-based practice, and (C) an in-person assessment of practical abilities. That organization is CrossFit, with its newly restructured credential and certification system (3).

Table 1 compares the activities and requirements of the major credentialing and certifying bodies.

	ACE-CPT	ACE-GFI	ACSM-CPT	ACSM-HFS (Clinical specialist)	AFAA-CPT	Cooper Institute-CPT	AFPA-CPT	CrossFit L1	CrossFit L2	CCFT/CrossFit L3	CrossFit L4	IFPA-CPFT	ISSA-CPT	NASM-CPT	NCSF-NCPT	NETA-CPT	NEPT-CPFT	NCSA-CSCS (Professional sport strength coach)	NCSA-CPT
Costs for Credentialing																			
Cost of education	\$-	\$-	\$-	\$35,972	\$499	\$-	\$395	\$1,000	\$1,000	\$-	\$-	\$-	\$599	\$-	\$-	\$-	\$-	\$35,972	\$-
Cost of books	\$130	\$90	\$121	\$5,500	\$89	\$35	\$-	\$-	\$-	\$-	\$-	\$50	\$-	\$59	\$79	\$88	\$89	\$5,500	\$166
Cost of testing	\$400	\$250	\$279	\$279	\$-	\$289	\$-	\$-	\$-	\$650	\$500	\$349	\$-	\$599	\$249	\$449	\$329	\$445	\$420
Cost of test prep materials	\$269	\$159	\$423	\$275	\$-	\$39	\$-	\$-	\$-	\$-	\$-	\$600	\$-	\$191	\$252	\$198	\$151	\$539	\$280
Total cost	\$799	\$499	\$823	\$42,026	\$588	\$363	\$395	\$1,000	\$1,000	\$650	\$500	\$999	\$599	\$849	\$580	\$735	\$569	\$42,456	\$866
Average of cost carried as borrowed debt	\$-	\$-	\$-	\$29,400	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$29,400	\$-
Credentialing Facts																			
Study duration in years	<1	<1	<1	4+	<1	<1	<1	<1	1	>1	>1	<1	<1	<1	<1	<1	<1	4+	<1
University degree required	No	No	No	Yes	No	No	No	No	No	No”	No	No	No	No	No	No	No	Yes	No
Exercise-related degree required	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
High school or GED required	No	No	Yes	Yes	Yes	No	Yes	No	No	No	No	No	No	No	Yes	No	Yes	Yes	Yes
Face-to-face & practical instruction required	No	No	No	No	No	No	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No
In-person practical testing required	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No
Externally accredited	Yes	Yes	Yes	Yes	Yes^	Yes	Yes’	Yes	No	Pending	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Content proposed relevance to training %	100	100	100	30	100	100	100	100	100	100	100	100	100	100	100	100	100	0-30	100
Required practice hours at worksite	0	0	0	0-500	0	0	0	130*	750	>750	0	0	0	0	0	0	0	0-500	0
Requires CEUs to maintain certification	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
’ Accredited by Vital Research																			
^Accredited by ICE, NCCA parent organization																			
*Based on 5 hours per week for recommended 26 weeks																			
”University degree holders with 1,500 hours of practical experience may take the certification test																			
NOTE: Cost of testing included in AFAA educational fee																			
NOTE: All face-to-face, online, and text educational materials included with CrossFit educational or testing fees																			
NOTE: Another NCCA accredited program is often listed as fitness related, NATA-BOC, but this is a clinical certification and practice																			

TABLE 1

Words Can Hurt

A fairly significant issue that emerges from the wording of SB 984 and SB 1616 is that the candidate for licensure “has obtained the required certification from a program that is accredited by the National Commission for Certifying Agencies (NCCA) or the Distance Education and Training Council (DETC) and that is recognized and approved by the board.”

There are potential problems here. The most apparent is that by restricting the recognition of professional certification to the 13 fitness organizations accredited by the NCCA and the six degree-granting and four post-secondary training programs accredited by the DETC, all other externally accredited certifying organizations and their certificate holders would be in violation of the law by practicing.

The newest version of the Florida bill places failure to comply as a “misdemeanor of the first degree,” punishable by up to a year imprisonment, up to US\$1,000 in fines and potential loss of future eligibility for licensure. Passage of such a law would require currently practicing CrossFit trainers and coaches to abandon their existing credential or require them to pay for and complete a different and additional NCCA-accredited credential, such as ACSM-CPT, NSCA-CPT, ACE-CPT, etc. And this process would have to occur before the candidate could take the newly mandated state licensure test.

In short, if the proposed law passes, the cost of being a personal trainer in Florida will increase by doubling the number of formal tests to be paid for by many existing professionals, and it would triple the number of formal tests for others who hold credentials not recognized by the NCCA/DETC. For CrossFit trainers, it could specifically add the requirement to obtain a second accredited credential.

It is imperative to understand here that accrediting organizations do not make judgments on the quality of the content tested. There are no fitness professionals within the NCCA making judgments about how good or bad a test is. The NCCA is simply there to ensure that the assessment and credentialing system meets a set of guidelines the NCCA created and applies to all professions it accredits.

There is nothing magical about the NCCA, formed in 1989. In fact, the American National Standards Institute (ANSI) that accredits CrossFit’s Level 1 Certificate Course has been operating since 1918 and created the International Standard for Organizations framework. As with the NCCA, ANSI staff are not exercise experts; they are experts in ensuring organizations can carry out their business fairly, equitably and according to a set of general standards.



In the proposed Florida bill, trainers who practice without a license could face fines and jail time.



Tai Randall/CrossFit Journal



Dave Re/CrossFit Journal

CrossFit certification involves practical instruction and evaluation (far left), as well as written or computer-based testing. Most other agencies focus only on the latter.

Another small problem—or a large one, depending on perspective—is that it will become a criminal offense to operate a personal-training business without a specific license, to employ unlicensed personal trainers, to fail to list license numbers on media or advertising, or to train clients while the trainer is ill or injured (mentally or physically). Most of the wording in the Florida bill is relatively nebulous, but interpretations in court could place the trainer in precarious situations.

An easily overlooked and insidious problem with the original bill was not all personal trainers would require certification, in what appeared to be a specifically designed codicil to incrementally move the profession under the auspices of another clinical profession (note the earlier reference to the boards of Physical Therapy and Athletic Trainers).

SB 984 included such a clause: “468.769 Exemptions.—Sections 468.7501-468.769 do not prevent or restrict: (1) The professional practice of a licensee of the department who is acting within the scope of that practice” (5). This would likely mean that a National Athletic Trainers’ Association Board of Certification (NATA-BOC) athletic trainer, physical therapist, nurse, physician, or any another person not trained, certified, or licensed as a personal trainer could act as a personal trainer if he or she is working for or within a duly licensed clinical

premise (physician’s practice, hospital, physical therapist’s practice, chiropractor’s practice, or a high-school or collegiate athletic-training practice).

The problem of uncertified individuals working as trainers—the problem the proposed law was intended to solve—would be allowed to continue within the legislation. Untrained personnel, under that proposed bill, could act as personal trainers but only under medical or allied-health-professional supervision? A clear bias is present: Degreed clinical professionals should be managing fitness training and personal trainers even if they have neither experience nor training in delivering fitness.

Who Advocates for You and Your Practice?

Who are the people and groups that are lobbying for professional regulation and licensure? A number of organizations say they are representing your and the profession’s needs in seeking regulation and licensure. It has long been a goal of academic exercise organizations to influence the government at the national, state or local level to regulate the exercise industry through some type of legislation that restricts who may or may not deliver training with or without compensation.

American College of Sports Medicine (ACSM)—In the ACSM’s Science Outcomes Advocacy Resources (SOAR) Statement outlining organization goals, this was included in the advocacy section: “Increase media advocacy and policy influence.” But nowhere in the four statements does “fitness” appear. (1). What does the ACSM actually advocate? Legislation that requires any person acting as a personal trainer (loosely defined) to possess a bachelor’s degree in “exercise science, kinesiology, exercise physiology, physical education, or a related health-and-fitness field,” plus a certification gained through testing by an external organization that is further certified by another body to offer the certification (2)?

National Strength and Conditioning Association (NSCA)—The NSCA, like the ACSM, has long been interested in licensure, publishing articles on such as early as 1994. Further, the NSCA and ACSM retain the same legal expert on certification and licensure (7).

Accrediting organizations also can be found working with academic organizations to lobby for professional regulation and licensure.

National Commission for Certifying Agencies—Named prominently in SB 984 and several other similar propositions around

the country, this organization aids its customers, such as the ACSM and NSCA, in their lobbying efforts.

National Board of Fitness Examiners—This organization has lobbied in several attempts to position itself to be named as the examination provider for state and national licensure. It aids client-certifying bodies, some listed in Table 1 above, in their lobbying efforts.

Interestingly, the published ACSM position that a bachelor’s degree is required to be an effective personal trainer is not reflected in its personal-training certification test. The biased belief that university degrees are the gold standard for personal trainers—a belief shared by the NSCA—is often trotted out and paraded in front of the media and politicians in an attempt to prove superiority over certifications that do not require degrees. When both organizations certify personal trainers without requiring university degrees, this perception of superiority is unearned. This perception is especially ludicrous given the NSCA’s degree requirement for its Certified Strength and Conditioning Specialist credential, its flagship certification for strength-and-conditioning professionals, not personal trainers. The degree requirement can be satisfied with any bachelor’s degree—in English, theater, anthropology, math, history or any other major.

A curious circumstance is likely to arise in the future. Both organizations are happy to take the money of non-degreed individuals and award them the title of certified personal trainer, but what happens to those same individuals when lobbying efforts are successful and licensure requires a university education in addition to certification? Will the individual's certifications stand and allow him or her to practice? Or will the trainer have to go to university and, upon degree completion, retake the same certifying test that was previously passed, followed then by a state licensure test? What happens to the non-university-based certifying organizations? Will being forced to require a university degree shut them down or will they simply tack on a prerequisite of a degree and still deliver the same certification test as previous?

A fairly significant consideration here is this: Does the ACSM or the NSCA really represent the majority of fitness professionals? Do these organizations actually represent you and your system of certification? Do they affect your daily professional work? A large portion of fitness professionals will likely answer no (See Table 2).

So how did we end up worrying about legislative proposals driven by a minority?

Organizational Impact on Fitness Professionals		
Organization	Active Credential Holders	Percent of professional body
CrossFit	100,000	21.2
ISSA*	90,000	19.1
AFPA	79,000	16.7
NETA*	65,000	13.8
ACE	53,000	11.2
AFAA	25,000	5.3
NSCA	11,000	2.3
ACSM*	10,000	2.1
NCSF	9,000	1.9
TOTAL	442,000	
*Assumption that 40 percent of ACSM credential holders are in non-B.S.-requiring certificates; assumption that 50 percent of 180,000 ISSA and 130,000 NETA credential holders since 1988 and 1977, respectively, are still active.		
NOTE: All organizations listed are externally accredited. Only accredited organizations with publicly available data are included.		
Impact is defined as percent of total professional body presented with specific organizational learning materials or standards.		

TABLE 2

Cui Bono?

One of the easiest ways to sort through the present quagmire is to ask the above question in English: Who benefits?

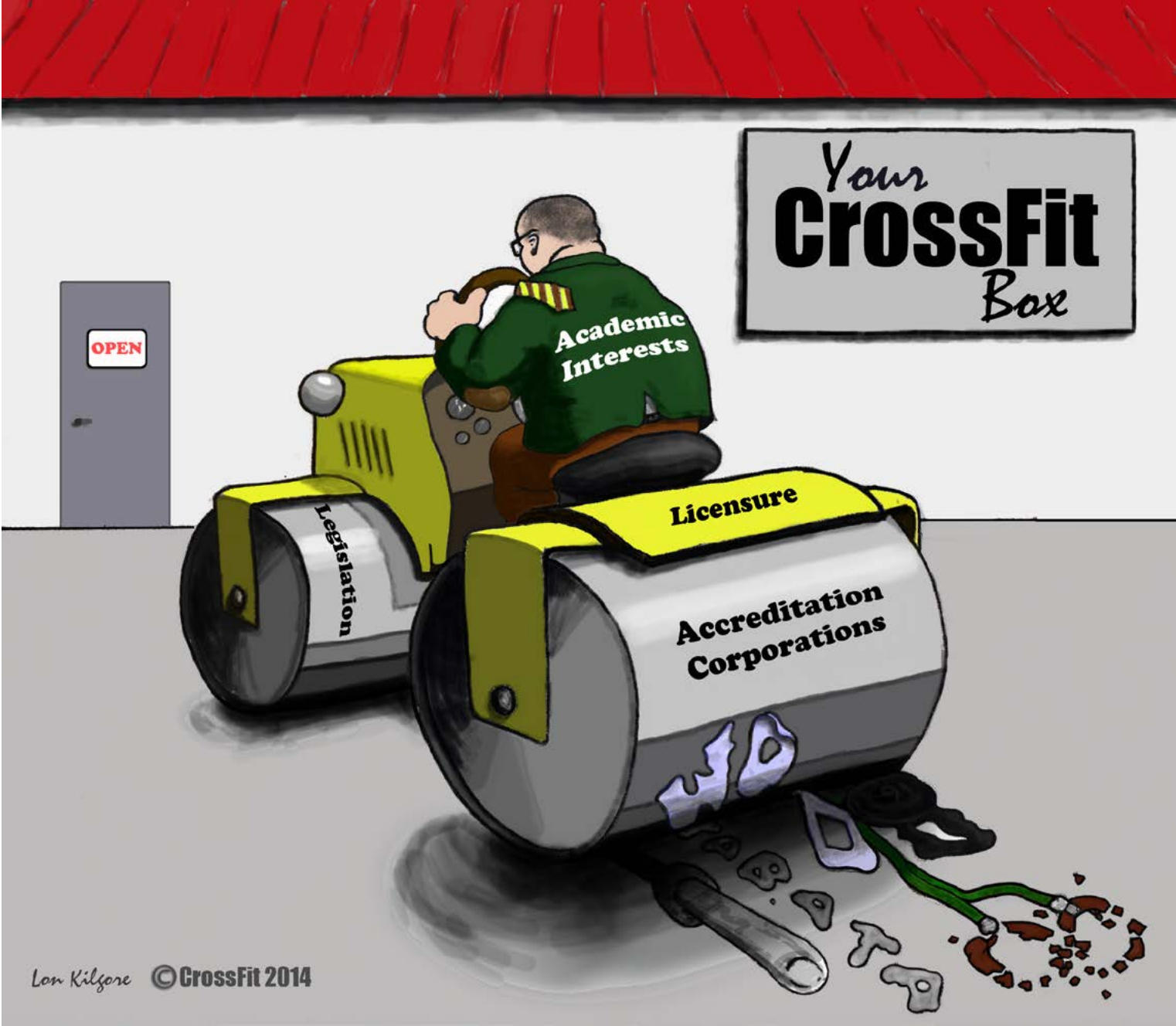
Let's start at square one. The ACSM and NSCA propose university education is required to be a competent professional in some publications, but they also, through certification requirements, intimate that a university degree is beyond the educational needs for personal trainers. Why the non sequitur?

Look at Table 2 and note the number of currently certified professionals who do not have a credential requiring a university degree. It's approximately 442,000 individuals. While a university degree is not required for the credential, many of those trainers will have a degree—about 30 percent of them. So, if we consider only the 70 percent of fitness professionals who do not have a university education (9), there are approximately 309,000 credentialed trainers without formal university degrees.

If a lobby group succeeded in motivating sponsored legislation requiring a degree as a prerequisite for licensure and legal fitness practice, what would the resulting higher-education market look like? Most officials and members within the ACSM and NSCA are university based, and 300,000 to 400,000 or more new students for the 2,870 four-year colleges and universities in the United States would be a significant source of income. For universities that have been slowly starved of state and federal funding over the past 20 years, the new blood would be a huge benefit.

University programs in exercise-related subjects already enroll 7 percent of the sum total of American students, and the huge influx of students following legislation mandating university education would be a windfall for universities everywhere. Similarly, certifying bodies with links to academia would also expect a financial boon.

There is a tremendously large “however” here. The average cost of a four-year degree is presently \$35,972. That's a large financial cost to the prospective professional, and one that will largely be funded by loans. The average university student graduates with \$29,400 of student-loan debt, which equates to about \$330 per month out of pocket for 10 years before any other expenses are considered. The U.S. Department of Labor Statistics lists an average income for fitness trainers as \$31,720 (2012) just by virtue of being a certified fitness professional, with or without a degree. This is an extra \$4,201 per year over the median compensation for the average American of \$27,519 (2012). The cost of a university education (loans) forfeits approximately \$4,000 per year of this income for 10 years. In



this instance, a licensure-required university education would create a de facto debtor profession.

Is a university education worth it if it nets less than \$20 per month in additional salary, an amount at least 10 times less than annual certification and licensure fees? (Note: This does not consider the other intrinsic values of university education or its significance in preparing a person to deliver exercise to diseased populations in a clinical setting.) If a professional or academic organization and a political body specifically author and legislate a law that enforces indebtedness as a professional pre-condition, is the best interest of the professional at the heart of the matter? It appears obvious that regulation and licensure do little to benefit the individual professional.

Does it benefit the consumer? In the D.C. law, only individual fitness instruction is targeted. If you are an instructor for any group-exercise activity, the law allows unrestricted practice with or without certification and registration. It's easy to see where globo gyms might be tempted to begin to cut back on personal training services in favor of group instruction to avoid legal hassle. It's also easy to see a bit of irony here as personal attention to a single individual makes personal training a generally safer and more effective means of fitness delivery than group spinning, dance-type aerobic exercise, etc.

As we see in the originally proposed Florida bill, there will still be ways untrained, uncertified and unlicensed persons can practice under the umbrella of another profession's scope of practice.

A mild consumer effect would also be observed, in that certification would be required of independent trainers, thus removing all individuals in independent practice who have not passed a test. Unfortunately, the choice of certified individuals would become myopic, controlled by just a few organizations. Competition-driven improvement in the preparation of personal trainers would be a thing of the past. One-size-fits-all training would likely become the rule of the day.

Who Benefits?

It should be obvious that if a certifying body, for profit or not for profit, can get itself written directly or indirectly into a regulation-and-licensure bill, it will be good for the bottom line. Doing so is a way to eliminate competition and drive customers to the door. Any certifying organization—and, by extension, its certificate holders—unlucky enough not to be specifically or generally included in the wording of a law will find itself in dire financial straits.

It's worrying that three certifying organizations are written into seats on the state board in Florida's most recent bill attempt: "Five members of the board must be personal trainers who are certified by the Aerobics and

Fitness Association of America, the National Academy of Sports Medicine, the American Council on Exercise, or their successor organizations."

This places a great deal of influence in the hands of these organizations because the board will "(1) Establish education and training standards for initial licensure and renewal of licenses. (2) Approve educational programs for initial licensure. (3) Establish a code of ethics and standards of practice and care for personal trainers" (6).

These five members, the majority of the board, are also charged to "Administer and certify continuing education credits, and establish and collect fees for administering and certifying such credits" (6).

It should be obvious how this might play out in terms of licensure content and content of the required continuing-education units.

Similarly, any accrediting organizations named in any regulatory or licensure law, as the NCCA and DETC are in SB 1616, will financially benefit. If a certifying organization wants to be viable, it will have to file the forms and pay the fees required to the accrediting agency named in the law—NCCA and DETC in Florida if the bill passes. It almost seems like a piecemeal pyramid scheme (Figure 1).

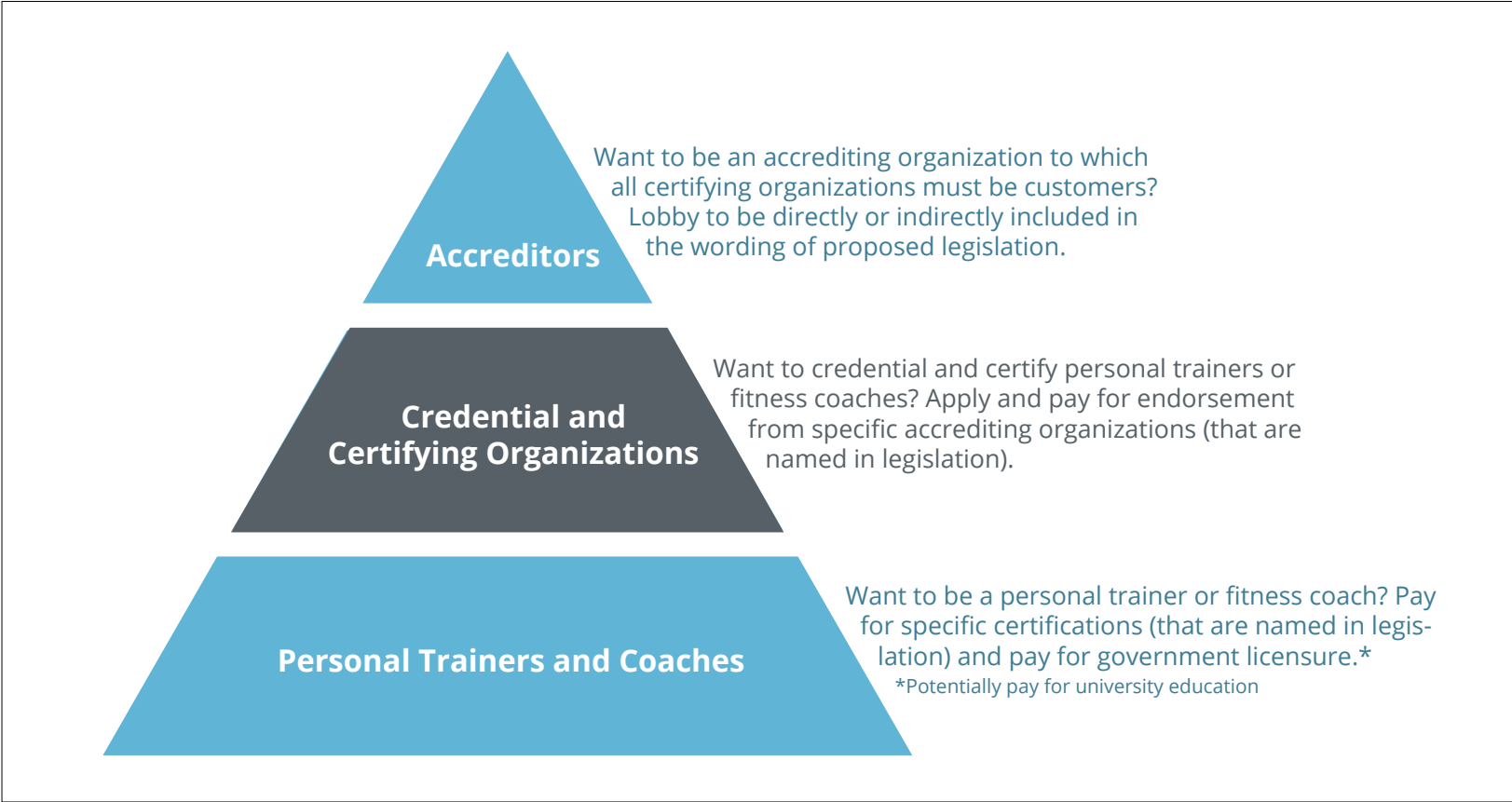


FIGURE 1

CROSSFIT: A HIGHER STANDARD

In the California Senate in 2009, Sen. Ron Calderon (D) proposed Senate Bill (SB) 374 on the regulation of personal trainers, and it was reintroduced as SB 1043 in 2010. Each time, it was strongly opposed and defeated. These proposals motivated CrossFit to seek accreditation for its training programs, as it had become strikingly apparent that organizations such as the National Strength and Conditioning Association (NSCA) and American College of Sports Medicine (ACSM) were lobbying for legislation to protect their interests as regulators of fitness-industry standards. This lobbying was happening specifically as CrossFit's popularity was exploding.

On Dec. 15, 2010, CrossFit's Level 1 Certificate Course received accredited status from the American National Standards Institute (ANSI). As of this writing, we are awaiting final review of our Certified CrossFit Trainer (CCFT) credential as an accredited certification. Achieving these standards makes CrossFit certificates and certifications equal to or more legitimate than any others in the fitness industry.

What makes CrossFit's certification unique is that it requires literary competency in conjunction with hands-on practical experience. This is a revolutionary diversion from the status quo of personal-trainer qualifications requiring only book learning, being of age (e.g., 18), holding a CPR card and passing a written exam. While some organizations tout this process as the standard of excellence, the reality is individuals can be deemed "qualified" to work in the profession without ever having received movement instruction of any kind. The lack of any instruction on movement mechanics is at best absurd and at worst dangerous when qualifying individuals to offer these same services to others.

CrossFit's break from the status quo reinstalls legitimacy in the industry and sets a new standard for quality fitness education and certification. We are not looking to the NSCA or ASCM to set standards and have instead chosen to lead by example. We've gone beyond current standards to create new expectations for fitness professionals.

CrossFit; ANSI; The International Health, Racquet and Sportsclub Association (IHRSA); and others will continue to oppose and petition against all or parts of legislative proposals similar to SB 1043. CrossFit will continue to lobby for, educate and provide resources to the community, and it will always fight to ensure CrossFit trainers are recognized as setting the new professional standards in fitness training.

Nicole Carroll
Director of Certification
CrossFit Inc.



Dave Re/CrossFit Journal

CrossFit trainers are encouraged to be vigilant and to advocate against any proposed legislation that will negatively affect their livelihoods.

What You Need to Do

Is there really an imminent danger of having poorly conceived and clearly biased legislation that affects you and me passed? For three decades, every attempt at regulating the personal fitness industry has failed, until the D.C. law was passed. The Florida bill was strongly under consideration, having been proposed in 2009 and 2014, but ultimately failed. There are no guarantees that such a persistent legislation type will not reappear, and perhaps in your home state.

Although the D.C. law targets the fitness professions as a taxation device and does little to regulate operations, we cannot ignore proposed legislation and hope that someone will do the right and informed thing. There is money and influence in play. For example, within SB 1616's inclusion of the DETC as an appropriate route of certification is the fact that DETC accredits only secondary-level (high school), post-secondary-level (college and university) and military education organizations approved by the state board of education. So the existing Florida bill would have established a foothold for the evolution of future personal-trainer qualifications to include a college or university degree.

Over 70 percent of all colleges and universities in the U.S. plan on expanding their distance-education (online) programs to increase revenues (8). We must ask if there is a connection here.

The other side of the coin is this: If the DETC only deals with secondary and post-secondary educational organizations, all other certification-offering organizations must go through the NCCA. Would this make it a legislated accreditation monopoly in Florida?

We must pay attention to the political environment in our city and state. Periodically, we need to review the various professional organizations' websites to see if they're trying to move legislation forward in our home states. Google can also be a valuable tool, but other, more direct online tools, such as [Legiscan.com](#), can specifically equip you to search through proposed legislation around the country. Further, [The Russells blog](#) does an excellent job of providing affiliates and the rest of the world with information about issues relevant to CrossFit affiliates and the CrossFit brand.

A very bright note here is that the CrossFit community is surprisingly politically astute and active. It's a good bet that if a bill is proposed in your state, someone will post the information on the [CrossFit Discussion Board](#). If a proposed bill will negatively affect you or your customers, do not be afraid of communicating with the network of affiliates in your area and their communities. There is power in our numbers, and that power can alter the course of poor legislative direction. ■

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Lon Kilgore graduated from Lincoln University with a B.Sc. in biology and M.Sc. in kinesiology from Kansas State University, and he earned a Ph.D. from the Department of Anatomy and Physiology at Kansas State University's College of Veterinary Medicine. He has competed in weightlifting to the national level since 1972 and coached his first athletes from a garage gym to national-championship event medals in 1974. He has also competed in powerlifting, the first CrossFit Total event, wrestling and rowing. He has worked in the trenches, as a coach or scientific consultant, with athletes from rank novices to professionals and the Olympic elite, and as a collegiate strength coach. He was co-developer of the Basic Barbell Training and Exercise Science specialty seminars for CrossFit (mid-2000s). He was a certifying instructor for USA Weightlifting for more than a decade and a frequent lecturer at events at the U.S. Olympic Training Center. He is a decorated military veteran (sergeant, U.S. Army). His illustration, authorship and co-authorship efforts include the best-selling books "Starting Strength" (first and second editions) and "Practical Programming for Strength Training" (first and second editions), recent releases "Anatomy Without a Scalpel" and "FIT," magazine columns, textbook chapters, and numerous research-journal publications. His professional goal is to provide the best quality, most practical, most accessible and highly affordable educational experiences to fitness professionals through his university work and through his [Anatomy-WOD](#) and [PhysiologyWOD](#) courses. His students have gone on to become highly notable figures in weightlifting, powerlifting, cycling, fitness and academia.