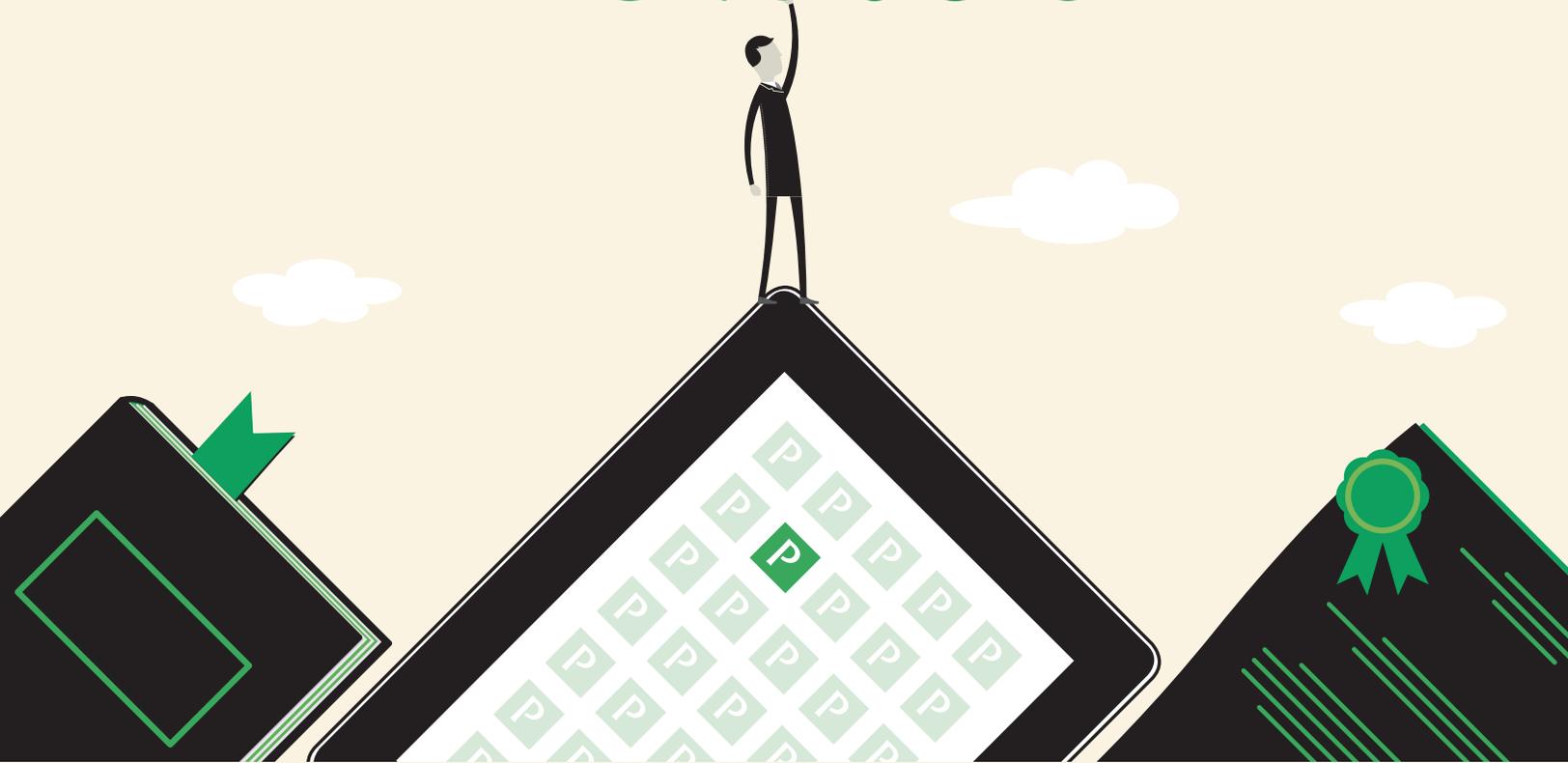


The *value* of



CERTIFICATION

Introduction

Education, validation and recognition - just a few characteristics of a quality professional certification that distinguishes individuals who have demonstrated particular knowledge or skills required for a specific role or profession. This paper discusses the benefits of voluntary certifications and the value derived from earning credentials, employing certified individuals, creating certification programs and relying on those demonstrated competencies. The information herein was gathered from certification program owners, published articles and Pearson VUE research.

The origins of certification and testing

Dating back to 2200 B.C. when the Chinese emperor examined his officials every third year to determine their fitness for office, individuals and organizations have sought to validate competency.

Competency assessment continued through medieval Europe where, through guilds, skilled craftsmen passed on their knowledge to apprentices. For consumers, working with a member of the guild provided confidence in workmanship. For tradesmen, membership was an honor, replete with increased prestige and financial benefits.

Certification in the 21st Century

Today's certification programs resemble guilds in several areas, but extend their benefits to groups beyond workers and consumers. Professional certifications today are one of the best and most effective mechanisms to assess the knowledge, skills and experience needed to perform a specific role. Certifications can have a direct effect on hiring decisions, customer satisfaction, sales opportunities, salaries and regulation of ethical practices.

A multitude of industries confer professional certifications covering hundreds of disciplines. Trade and professional associations in health care, finance, education and others have developed training and experience criteria as well as assessments from which to determine eligibility and acceptance.

For-profit organizations including those working in information technology (IT) or high-tech product manufacturing, maintain and promote their own certifications to demonstrate expertise in both hardware and software applications. In some professions, certification is mandatory and regulated by the state. These licensure credentials are required to practice medicine or law, or to work as a pilot, nurse or in real estate.

In each case, professional certification assures stakeholders, including the public, that the person holding the certification is competent and professional.

Of course, not all certifications are mandatory. Increasingly, voluntary certifications are being developed and adopted by employers and professionals across a broad mix of industries. Medicine, academia, IT and a host of other industries have developed voluntary certifications that benefit multiple stakeholders.



“Even if it’s not a requirement, I can’t imagine going through training and not taking the last step to get certified. The credibility that comes with certification is important to me.”

Liz O’Brien
PTCB certification candidate

Professional certifications serve many

Certification is an ‘everyone wins’ enterprise, playing a part in helping individuals, organizations, industry and the public meet their financial, employment, ethical and regulatory goals.

Value to certificants

Professional credentials vary in terms of purpose, educational requirements, rigor and industry, and those who earn certification typically cite multiple benefits. At the top of the list are relevance and staying current, personal accomplishment, career advancement and marketability, and increased earnings.

While some employers fear that certification can lead to a call for promotion, a 2013 survey by Pearson VUE and Firebrand found that is not the case. Rather than seeking promotion or alternative employment, the study of more than 1,300 respondents who had recently trained and received an IT certification found 75% did so to improve their reputation among peers, improve confidence and to work on more complex tasks.

Relevance

Staying current is critical in nearly every profession that certifies competence and is important to those professionals who undertake the effort to train and test. Two-thirds of respondents in the Pearson VUE-Firebrand survey cite the main purpose of training was to update their knowledge. Up-to-date skills gained in training, continuing education and recertification benefit not only certificants, but also employers and the public alike.

Confidence and personal accomplishment

Although an exact relationship between certification and job performance is difficult to measure, surveys show that earning a credential increases certificants’ confidence in critical thinking and professional abilities. The American Board of Nursing Specialties’ *Value of Certification Survey* found a high level of agreement on how certification impacts certificants’ perceptions about themselves. In considering several value statements, for example, nurses responded that they ‘agree’ or ‘strongly agree’ that certification:

Enhances professional credibility	95.4%
Enhances feeling of personal accomplishment	98.0%
Enhances personal confidence in clinical abilities	88.2%

That same survey found that nurse managers responded positively to job effectiveness value statements in ‘agreeing’ or ‘strongly agreeing’ that certification:

Validates specialized knowledge	97.9%
Indicates attainment of a practice standard	94.4%
Provides evidence of accountability	87.4%

The perceived value from professionals carries across industries. For example, according to the Global Knowledge and Tech Republic *2012 IT Skills and Salary Report*, employees do view certification as a worthwhile career investment. Two-thirds of respondents who certified within the previous five years reported they felt efforts to obtain a certification were worth the additional commitment. The report also noted that more than half of the respondents said employers support and recognize the value certifications provide.

Marketability

In an increasingly competitive global employment landscape, certification allows individuals to differentiate themselves from others. For hiring managers in any field, certification affirms that an applicant is driven to achieve, shows commitment to their profession and, most importantly, possesses validated knowledge and skills. The resume that denotes professional certification is more likely to be placed in the ‘interview pile.’ For example, a 2010 survey conducted by the HR Certification Institute cited 96% of employers feel that an HR certified candidate applying for a job would have an advantage over a non-HR certified candidate.

Regarding advancement within an organization, certification helps managers identify employees with the latest skills, knowledge and drive to move into leadership positions. This is especially true in industries that face rapid and dramatic changes such as medicine or technology.

“One of the reasons we’re seeing growth in our certification program is the marketability and portability that certifications offer. It’s a real competitive advantage.”

Erik Ullanderson
Director, Global Certifications
VMware



Salary

For many of the same reasons that certification improves an individual's marketability, it can improve earning potential. Many studies show that those who receive a credential earn a higher salary than those who do not.

Oracle University, for example, compared the average salary of individuals who hold Oracle certifications vs. those who do not and found measurable differences. Globally, Oracle Certified Professionals earn 13.7% more than their non-certified colleagues. The percentages below show the salary enhancement regionally.

Region	Higher average earnings with Oracle certification
APAC	9.2%
EMEA	6.1%
Japan	18.6%
Latin America	10.9%
North America	7.5%

The survey also reports that individuals holding additional certifications earn additional salary. For example, the average global salary of certificants with a single Oracle certification is \$47,285. That figure increases 85% for those with five certifications, who earn an average salary of \$87,638.

Academic credit

Colleges and universities also place high value on professional credentials by allowing vetted certifications to be converted to academic credit toward a degree. Organizations like the American Council on Education's College Credit Recommendation Service make course equivalency recommendations to help higher education institutions facilitate credit award decisions. Today, certifications sponsored by corporations, professional and volunteer associations, schools, training suppliers, labor unions and government agencies are converted to academic credit in hundreds of college degree programs globally.

“85% of supervisors responded their (Microsoft) Office certified workers are more productive and require less supervision.”

Microsoft Office Specialist: Improving the Workplace

Value to employers

All things being equal, employers would prefer to hire a certified candidate over one that is not certified.

A 2011 CompTIA research study aimed at gaining insight into how IT hiring managers evaluate job candidates and the role of certifications in the hiring process, found credentials, such as IT certifications, are factors in decision-making.

“From the employer's perspective, top benefits of IT certification are validation of an individual's ability to understand new or complex technologies, higher productivity and more insightful problem solving,” says Tim Herbert, vice president, Research, CompTIA. The survey found that 86% of hiring managers indicated IT certifications are a high or medium priority during the candidate evaluation process.

This preference for certification is largely based on improved effectiveness, as noted in the Global Knowledge 2012 *IT Skills and Salary Report*, which states that more than half of IT managers surveyed reported their staff was ‘more effective’ or ‘significantly more effective’ on the job after attaining certification.

Certification is also valuable for a company's reputation. Employees who have earned certification, either as a part of specialized training or work experience, have demonstrated a level of competence that can affect perception among customers. Walgreens, America's largest pharmacy chain with more than 8,000 stores, considers certification so important, the company offers employees paid training and national pharmacy technician certification.

Dr. Mete Çek, President of the European Board of Urology concurs. “Professionals holding the title Fellow of the European Board of Urology (FEBU) are highly valued as they have proven themselves to meet the relevant European standards. Not only do they acquire an added qualification – a great asset to their CV and portfolio – but the FEBU diploma is a mark of excellence; demonstrating competence in the safe practice of urology. Successful completion of the written and oral examinations instills confidence in future employers in more than 30 countries that are members of the European Union of Medical Specialists (UEMS).”

In addition to anecdotal evidence, many businesses have hard data that certification impacts the bottom line. A research study conducted by the International Data Corporation entitled *Benefits and Productivity Gains Realized Through IT Certification*, cites several examples of how certification benefits corporations in the IT sector.

- Certified professionals handle 40% more support calls per person, per day, than uncertified staff.
- Companies that advocated certification reported 49% less downtime than those that did not.
- The costs of certification were repaid in fewer than nine months by the savings from increased effectiveness in the majority of companies surveyed.

While employers are more likely to seek-out professional training, the Pearson VUE-Firebrand survey found that they are less likely to fund the exam used to award the credential. This suggests that some employers have yet to fully embrace the value of certification.

“Competency, skill, commitment—Oncology Certified Nurses® offer continuous exceptional care. Patients and families can see certified nurses' names on a plaque that we display in the Cancer Center.”

Nan Quade, RN, OCN
Manager Medical Oncology & Infusion
Park Nicollet Frauenshuh
Cancer Center
Minneapolis, Minnesota, USA

Value to credentialing programs

Both for- and non-profit organizations develop voluntary certification programs to achieve multiple goals. In addition to advancing or maintaining an organization's reputation as an industry leader, credential owners aim to establish themselves as the industry's preferred and trusted authority in the eyes of certificants, employers and the public.

Successful certification programs can form the basis of industry standards that reflect the highest quality and excellence. Although a single entity, like a company or association, does not develop and document standards (that is undertaken by independent standards developers such as the International Organization for Standardization (ISO) or the British Standards Institution (BSI)), the ultimate recognition of any credential is for the competencies that are measured to become standardized as 'best practice.'

An example of a best practice certification is the PRINCE2 certification for project and program management professionals which has been developed through a panel of 150 public and private sector organizations. It was recently described in a 2011 report as a standard for project and program professionals.

In practice, Marc Laroche, Director, Project Delivery Office, has ascertained through PRINCE2, "Our people perform better in their project roles and make our projects more successful."

Credential owners are also finding success marketing their certifications to a broader base of professionals. For example, Eric Linn, senior talent and learning manager at Lloyd's, says, "The Lloyd's and London Market Introductory Test (LLMIT) is an extremely useful qualification for anyone working in the complex world of specialist insurance. It helps both insurance professionals and representatives of professional services firms such as lawyers and accountants, to gain the right level of understanding of the London insurance market which enables them to interact with confidence and authority with other industry professionals. Its success therefore is measured in how it helps professionals establish their own credentials for doing business."

Certificants, employers and the public can build and maintain tremendous brand loyalty to the association or organization that owns a respected credential.

Revenue

From a financial perspective, credentials provide a revenue stream that can significantly add to a certification owner's bottom line. For programs that offer a suite of credentials with a proven return on investment, the achievement of one certification will likely lead an individual to pursue others from the same provider. In addition to repeat business, the best certifications garner excellent exposure; either by word of mouth or in more formal mediums such as trade publications.

In addition to proceeds generated from the certification process (i.e., application and examination fees), organizations can benefit financially by offering in-house training courses or by licensing course work to third-party training providers. Programs may also create and market study guides, instructor manuals, practice tests and other preparation materials which generate additional revenue.

Recertification is another financial opportunity for program sponsors. The need to track ongoing competence requires most programs to develop criteria that will generate additional revenue. In addition to the recertification itself, programs may market refresher courses, continuing education and other training materials.

In different ways, IT certifications have a more direct impact on revenue. HP for example, places a high value on educating and certifying its internal sales force on the products it sells. For example, printer sales representatives are required to earn one or more printer certifications; the HP laptop sales team is certified in the hardware and software capabilities of those devices. This gives HP greater confidence that its sales teams are equipped with the latest knowledge about that product. Equally important, certifications play a role in the direct sale of software to users, as being certified in a particular product (i.e., design or networking software) typically translates to the subsequent purchase of updated product releases.

Non-revenue benefits to certification owners

Although revenue neutral, a program's database can be extremely valuable. Data regarding training and education, work experience and level of expertise can be used by a program owner to set strategic direction, create new offerings and reach out to certificants to market different or more advanced credentials.

One of the most important, but often unmeasured, benefits of a certification is the relationship built between certificant and program sponsor. A respected certification draws professionals with whom the credential-owner is proud to be affiliated.





Value to the public

Certification can help guide consumers to locate the most qualified service providers available. In life- or system-critical professions (i.e., health care, finance, education), certifications provide assurance of quality, safety and ethical conduct. In medicine, for example, patients may have greater confidence in physicians who are 'board certified' knowing they have completed advanced training and passed the series of exams deemed satisfactory by a medical specialty board.

Whether a Certified Public Accountant, a teacher with an advanced certification or a hospital administrator certified in data privacy ... the fact is, certification translates to confidence and trust, and is valued by consumers worldwide.

In a national survey conducted on behalf of The National Board of Certification and Recertification for Nurse Anesthetists (NBCRNA) and the Citizen Advocacy Center, 91% of U.S. adults think it is very important/important that a health care professional who is going to treat them has passed an examination on their profession's specific knowledge.

Another testament to the public's value of certification: According to the 2012 *Evaluation of preparation for the IAM Advanced Driving Test* report, 90% of drivers who had taken an Advanced Driving Test said that there had been a lasting effect on "greater awareness of other road users."

Code of conduct

According to the Institute on Credentialing Excellence (ICE), "A code of ethics, sometimes referred to as a code of professional conduct, is a critical feature of a certification program both for the promotion of the safety of the public and the integrity of the program's credential." The code of ethics articulates how certified professionals shall conduct themselves in exemplifying the highest ethical standards and professionalism. Additionally, the policy documents a legally defensible process for due process and disciplinary action in case of complaints or proof of violation.

Merrill Lynch, the world's second largest broker, in 2012 began requiring trainee brokers to complete the six-course Certified Financial Planner (CFP) study curriculum and pays incentives to adviser teams that include a CFP holder.

Brokerage firms debate value of Certified Financial Planner title
Reuters.com, June 3, 2013

Characteristics of a valued certification

The strength of a professional certification is based on a fundamental trust that a person who receives a credential (the certificant) has proven he or she possesses the required experience, knowledge or skills of a particular profession or practice. This credibility is paramount in order for the credential to maintain value for individual stakeholders, the profession and the public.

ICE describes five characteristics of valued certifications:

Built on demonstrated market need. There must be perceived value in distinguishing those who have proven competency and those who have not.

Objectivity. Qualified and independent subject matter experts, third-party endorsement and autonomy in governing the certification program are essential in developing and maintaining a valid and legally defensible credential.

Rigor. A certification that requires little effort or knowledge or one that everyone can earn is typically of lower value than one that demands great effort, experience, knowledge and skill. A rigorous regimen of training and assessment is essential to a successful certification program, which by its nature is often perceived as a competitive advantage.

Emphasis on ethics. Ethical conduct covers a broad range of topics, from protecting the certification exam from cheaters to ensuring the ethical practice of the profession.

Recertification. Because all industries and organizations grow and change, professionals that serve them must do the same.

Accreditation by an independent body is also recommended to affirm that the credentialing body is capable of carrying out certification. The term 'accredited' also gives stakeholders, including certificants and the public confidence that the certifier has been independently validated and that the program operates according to international standards.

Developing a reputable voluntary certification program requires expertise in several areas. Whether the program sponsor is a private or public entity, in-depth knowledge of the industry and particular job tasks, training and eligibility requirements, assessments and maintenance are a few aspects that must be included in the program development plan.

“American National Standards Institute (ANSI) accreditation is one of a number of efforts under way to make sure the value of Cisco certification remains high and reflects and validates real-world skills that are relevant to the marketplace.”

Jeanne Beliveau-Dunn
Vice President and General Manager
Cisco Systems

The assessment

Proof that an individual possesses the skill or knowledge required to earn a certification is typically determined by a test or examination (exam). Some exams are created to distinguish candidates who demonstrate the required knowledge, skills and abilities from candidates who do not. Others place test-takers along a continuum so that valid comparisons can be made. Regardless of whether the goal of the examination is to make a pass/fail decision or to provide a ranking of test-takers, the examination must be valid, reliable and fair.

Validity

The Standards for Educational and Psychological Testing describe validity as “the most fundamental consideration in developing and evaluating tests.” Simply put, validity is concerned with answering the following two questions:

1. Does the test measure what it is supposed to measure?
2. Are the interpretations drawn from the test scores appropriate and justifiable?

A valid test reduces the guesswork or misjudgments about an individual's true competence.

Reliability

Reliability refers to the consistency of the measure and the degree to which a test is free of random error; defined as anything which causes a test-taker to respond based on something other than knowledge of the correct response. Test-takers' performance can be affected by many factors, such as anxiety or how they are feeling on the day of the test. While these factors are outside of their control, test sponsors have a duty to standardize the factors contributing to irrelevant test score variances that are within their control, such as the testing environment and the test itself.

Fairness

In addition to being valid and reliable, an exam must be fair. Without fairness, basic comparisons between test-taker scores cannot be judged. Decisions about setting pass/fail scores, for example, directly influence who will be granted certification and who will not. Fairness includes concepts such as the absence of question or test-taker bias, fair treatment with regard to scoring and equal opportunity to learn the material being tested.

An examination that is used to grant or deny certification must be developed with these requirements in mind as the exam is being developed. It is both inefficient and difficult to go back and address these requirements after an exam has been created.

Format

Certification examinations can be delivered in several formats including paper and pencil, computer, oral or live practical assessment. Advantages of a paper-based test might be portability, especially where Internet access is unavailable, and familiarity with the format. The downside of using paper includes the effort to manually score the test, legibility of handwritten responses and security. Conversely, computer-based delivery is highly secure, reducing the possibility of proxy testing (having a fraudulent test-taker take the exam), cheating or memorizing answers. Computer-based testing (CBT) also offers immediate scoring and in many areas, greater convenience and accessibility. It also offers more sophisticated ways to test such as combining video, images and audio. As technology advances, new modes of computer-based delivery, including Internet-based and observational testing using tablet devices, are further pushing the boundaries of assessment of knowledge and competence.

About Pearson VUE

Pearson VUE is a business of Pearson, the world's leading learning company. Helping to improve people's lives through professional certification and academic testing is Pearson VUE's mission. Clients worldwide count on us to help them validate valuable knowledge and skills required for technology, regulatory and professional careers and to confirm academic learning. In addition to credential management and test development expertise, Pearson VUE delivers millions of exams reliably and securely through its global network of more than 5,100 test centers and via secure Internet-based testing technology.

mindhub™

mindhub brings together a variety of learning resources for individuals who are pursuing professional credentials, continuing education or are considering a career change. It works with leading publishers, practice exam providers and other content experts to provide the highest quality materials to certification candidates. mindhub complements Pearson VUE's core business of providing computer-based testing by giving its clients a means to strengthen their relationship with stakeholders. Unlike traditional online bookstores, mindhub takes advantage of the natural synergies between training and testing through Pearson VUE with targeted offers and cross-promotions. Visit mindhub.com to find practice exams, courseware and other exam preparation and continuing education materials.

To learn how Pearson VUE can support and grow your certification program, contact a Pearson VUE representative.

“Certification is proof of learning. As part of the world's largest learning company, validating competence through professional certification is a core Pearson VUE value.”

Bob Whelan
President & Chief Executive Officer
Pearson VUE



References

Oracle University

http://education.oracle.com/pls/web_prod-plq-dad/db_pages.getpage?page_id=305#

HR Certification Institute

http://staging.hrci.org/uploadedFiles/Content/Home/Calendar_Events/Value%20of%20Certification%20Presentation_HRCI.pdf

American Board of Specialty Nursing

http://www.nursingcertification.org/pdf/executive_summary.pdf

Global Knowledge & Tech Republic

2012 IT Skills and Salary Report

CompTIA

comptia.org/news/11-02-07/IT_Certifications_Grow_in_Importance_in_Hiring_Process_but_Employers_Challenged_by_Evaluation_Validation_Issues_CompTIA_Study_Finds.aspx

International Data Corporation

Benefits and Productivity Gains Realized Through IT Certification

Prince2

<http://www.prince-officialsite.com>

National Board of Certification and Recertification for Nurse Anesthetists

nbcrna.com/about-us/announcements/Pages/Press-Release-Public-Survey-on-Healthcare-Providers.aspx

Institute on Credentialing Excellence

A Look at the Value of Professional Certification

Institute of Advanced Motorists

iam.org.uk/images/stories/policy-research/evaluation-of-preparation-for-the-advanced-driving-test-summary-report-issue-1.pdf

Microsoft

Microsoft Office Specialist: Improving the Workplace

Pearson VUE sales offices

Americas

Global Headquarters
Minneapolis, MN
800 837 8969
pvamericassales@pearson.com
www.pearsonvue.com

Philadelphia, PA
610 617 9300
pvamericassales@pearson.com
www.pearsonvue.com

Chicago, IL
800 837 8969
pvamericassales@pearson.com
www.pearsonvue.com

Asia Pacific

Noida, India
+91 120 4001600
pvindiasales@pearson.com
www.pearsonvue.com

Beijing, China
+86 10 5849 2600
pvchinasales@pearson.com
www.pearsonvue.com.cn

Tokyo, Japan
+81 3 6891 0500
pvjpsales@pearson.com
www.pearsonvue.com/japan

Europe, Middle East & Africa

Manchester, United Kingdom
+44 0 161 855 7000
vuemarketing@pearson.com
www.pearsonvue.co.uk

London, United Kingdom
+44 0 161 855 7000
vuemarketing@pearson.com
www.pearsonvue.co.uk

Dubai, United Arab Emirates
+971 44 535300
vuemarketing@pearson.com
www.pearsonvue.ae