

Skill Evaluations Safeguarding IT Professional Talents

Information technology is widely applied in all walks of life. Nearly all highly industrialized countries are actively promoting appraisals and certificate tests of IT expertise. Taiwan is a society where examinations are leading teaching. In the ever-changing global economy, information and communication technology (ICT) is a significant indicator that exerts impact on a country's progress and competitiveness. In earlier days, there were not many IT-savvy operators in Taiwan. In other words, there was no way to distinguish between those who could and those who could not operate computers.

With IT getting more and more involved in everyone's life, appraisals and certificate tests of IT professionals are held in many highly developed countries. Since 1987, the Ministry of Education and the Ministry of Economic Affairs have commissioned the Institute for Information Industry to conduct Professional Competency Appraisals in Taiwan for ten years. On the one hand, Industrial Development Bureau of MOEA is in charge of all sorts of Specialized Tests for Information Technology Expert, while on the other hand, Microsoft, Cisco, Oracle, Red Hart and other internationally noted software and internet companies are progressively enforcing every kind of professional certification test.

In 1988, Li Kuo-ting, Minister without Portfolio of the Executive Yuan and a man of vision, encouraged Shih Chen-jung, then Chairman of Taipei Computer Association, to push forward the policy of quality control among information personnel. Board of Science and Technology of the Executive Yuan also joined hands with General Chamber of Commerce of the Republic of China, the Institute for Information Industry, Taipei Computer Association and other organizations to set up Computer Skills Foundation (CSF). Their goal was to combine the trilogy of training, examining and practicing as one to promote nationwide application of information technology.

When CSF was established, workers from all walks of life as well as students were encouraged to take the Chinese Computer Key-in Test. To them, a Chinese Key-in Certificate would prove to be of great help to either their chances of being employed or academic application. Apart from Key-in tests, CSF also hosted competitions to challenge as many people as possible. It was in this way that Taiwan overcame the bottleneck of Chinese keying in, which is regarded as more difficult than its English counterpart.

When it comes to manipulating and making use of Chinese computers, what counts most is something other than Chinese key-in. Information knowledge and application capabilities are equally vital basic skills. Based on the penetration of information education, CSF also presents “General Basic Information Competency Test” that offers grading criteria for people with different information requirements. It is also called “General e-Test.”

In joint efforts, CSF and the Institute for Information Industry (III) provide certificates to meet different requirements, including ITE (Information Technology Expert for Specialized Test), TQC (Techficiency Quotient Certification), EEC (E-Enterprise Planner Certification) and CWT (Chinese Writing Test). In addition to Key-in Tests of different languages like Chinese, English, and Japanese, other tests are offered to certify different information capabilities, such as those in computer operating system, word processing, electronic spreadsheet, presentation software, webpage design, computer-aided drafting (CAD), database management and programming.

For 28 years, CSF has labored relentlessly in propagating the system of IT certification. In fact, it is the biggest certification authority with the best-recognized credibility in Taiwan. Hou Ching-hsiung, Chairman of CSF, has invited a combination of officials, scholars and entrepreneurs, 550 altogether, to organize “Skill Specification Committee” and “Certification Promotion Committee.” The two committees are responsible for planning test contents, balancing theory and practice, and contacting other Asian countries for inter-certification. For years it has

launched cooperative education for 500 colleges and vocational schools in Taiwan and commissioned authority to 150 other training centers. Its service net has reached every corner in Taiwan. Its computerized certificates are so well-recognized that the number of people taking tests has already exceeded 5 million.

With the dawning of the Mandarin era, Chinese has virtually become the world's most popular language. Worldwide, there are over 2300 universities and 15000 schools teaching Chinese in 100 countries. Whether at school or at the workplace, the competition edge is no longer confined to Taiwan. For top talents to stand out in the world, Chinese will be the crucial capability.

In 2005 CSF established Chinese Test Center, launching Chinese Writing Test (CWT) for different levels of basic, elementary, intermediate, and high intermediate. In 2012 there were tests for advanced and superior levels. In 2016 a group of Malaysian Mandarin teachers came to Taiwan for CWT. Apparently CWT has turned internationalized.

IT progression and entrepreneurial variation have exerted great impact on each other. The IT that was so popular 20 years ago is experiencing dramatic changes 20 years later. For the Mandarinized computer to evolve into computerized Mandarin, what plays as the most important contributor is, other than technology development, the propagation of education. In this respect, Taiwan is playing the leading role. Behind it, III and CSF are keys to the performance of Intelligent Taiwan.

12 資訊專業人才 技能檢定把關

資訊技術普遍應用於生活與各行各業中，高度工業化的國家都積極推動資訊人才的專業能力**鑑定與認證**，台灣社會流行以考試領導教學，在瞬息萬變的全球經濟中，資訊及通訊技術(ICT)是影響國家發展進程與競爭力的重要指標。台灣早期沒有大量熟悉資訊科技操作人員，亦即懂得和電腦溝通的

隨著資訊技術普遍應用於生活與各行各業中，高度工業化的國家都積極推動資訊人才的專業能力鑑定與認證，我國 1987 年起教育部與經濟部委託資策會辦理專業人員能力鑑定 10 年，經濟部工業局主導推動「資訊軟體人員能力鑑定」，辦理各類資訊專業人才鑑定考試，微軟、思科、甲骨文、Red Hat 國際知名軟體與網路公司積極推行各專業認證考試。

1988 年行政院政務委員李國鼎高瞻遠矚，鼓勵台北市電腦公會理事長施振榮推動資訊人才品管，行政院科技顧問組、全國商業總會、資訊工業策進會(III)及台北市電腦公會等發起中華民國電腦技能基金會，以「訓考用合一」推動全民資訊應用。

電腦技能基金會剛成立時，從「中文電腦輸入檢定」著手，讓社會上各階層與學生參加中文輸入檢定，證明有中文輸入能力，中文輸入證書無論對升學或就業都重要。除了中文電腦檢定，電腦技能基金會還辦比賽，刺激全民挑戰，台灣就這樣克服中文輸入比英文輸入困難的瓶頸。

操控、應用中文電腦，不只會中文輸入法，資訊知識與應用能力亦為最重要的基本技能。電腦技能基金會依據資訊教育普及程度，規劃適合不同層級資訊需求能力分級標準，稱「全民基本資訊能力評量」，簡稱「全民 e 檢」。

電腦技能基金會和資策會等合作，針對資訊專業、設計、企業人才技能、企業電子化、全民中文能力檢定。從中文、英文、日文輸入檢定，電腦作業系統、文書處理、電子試算表、簡報軟體、網頁設計、電腦輔助製圖、資料庫管理、程式設計。

電腦技能基金會深耕認證領域 28 年，為全國最大、最具公信力的認證機構。董事長侯清雄延攬 550 位產官學界專家成立「技能規範委員會」及「認證推動委員」規劃試題內容，平衡理論與實務，與亞洲各國家互相採認，國內 500 所大專校院及高中職建教合作、150 家授權訓練中心，服務網絡廣佈全國。CSF 推動電腦化認證廣受肯定，參測人數逐年成長，早突破 500 萬人次。

華語時代來臨，中文已成為全球最熱門的語言，近 100 個國家、2300 餘所大學和 15000 所學校教中文，不論在學校或職場，競爭已不再侷限於台灣，世界各地頂尖人才，想要脫穎而出，中文為關鍵能力。

電腦技能基金會 2005 年成立**中文能力測驗中心**，開發與推廣「**全民中文檢定**」，舉辦基礎、初等、中等、中高等測驗，2012 年推出全民中文檢定**高等、優等**測驗。馬來西亞華校教師 2016 年率團參與全民中檢認證，讓**中文檢定證照國際化**。

資訊技術的演進與產業的變化，急遽互相影響，20 年前熱門的資訊技能，在 20 年後有相當的調整與變化，從**電腦中文化**到**中文電腦化**，除了技術研發，更重要是教育推廣，台灣扮演**領頭羊**，從資策會到電腦技能基金會應該算是智慧台灣的**關鍵**。