### **Edith Cowan University**

## **Research Online**

Research outputs 2014 to 2021

2016

# Closing the gap in nursing education: Comparing nursing registration systems in Australia and China

Carol Wang Edith Cowan University

Follow this and additional works at: https://ro.ecu.edu.au/ecuworkspost2013



Part of the Nursing Administration Commons

10.1016/j.cnre.2016.03.001 Wang, C. C. (2016). Closing the gap in nursing education: Comparing nursing registration systems in Australia and China. Chinese nursing research, 3(1), 1-6. https://doi.org/10.1016/ j.cnre.2016.03.001

This Journal Article is posted at Research Online. https://ro.ecu.edu.au/ecuworkspost2013/1986

HOSTED BY

Contents lists available at ScienceDirect

## Chinese Nursing Research





#### **Expert discussion**

# Closing the gap in nursing education: Comparing nursing registration systems in Australia and China

#### Carol Chunfeng Wang

School of Nursing and Midwifery, Edith Cowan University, Perth, Australia

#### ARTICLE INFO

Article history:
Received 25 October 2015
Received in revised from
25 October 2015
Accepted 13 December 2015
Available online 21 March 2016

Keywords: Nursing registration China Australia Nursing education Comparative

#### ABSTRACT

**Aim:** To provide a better understanding of how the nursing registration process in China compares to that of Australia and to identify common features and potential barriers that may affect or facilitate the development of China's ever-demanding need for healthcare and nursing education.

**Background:** Chinese nursing graduates are increasingly being used to augment the shortage of nurses in other countries, including Australia. However, China is desperately in need of strategies to cope with its current challenges in healthcare and nursing education. There is little discussion concerning the differences in nursing registration systems between countries, such as China and Australia. It is unknown how the differences and potential similarities of nursing registration systems in these two countries contribute to or impede nurses' training in China; or the potential for these Australia trained Chinese nursing returnees to cope with the challenges China is facing.

**Evaluation:** Using Bereday's four steps comparison method, this paper will describe, explain, compare, and contrast the nursing registration systems of Australia and China.

**Key issues:** Differences were found in the qualification requirements for: (1) initial registration, (2) levels of registration, (3) continuing professional development, (4) requirements of the registration renewal process, and (5) whether each country has a national nursing registration system. These factors may affect nursing education and healthcare development in China.

**Conclusions:** Although differences in the nursing registration process between Australia and China were identified, the insights gained from this study support the development of strategies to help with China's ever-demanding need for nursing education and healthcare development, thereby alleviating its nursing shortage.

**Implications for nursing management:** The implications of globalization of nursing education, research, and clinical practice, coupled with the nursing shortage on a global scale, have demanded increasing attention on the development of a high standard for nursing education that supports a safe and effective nursing workforce. This paper argues that there is value in nursing authorities, educators, and legislators working together in a network of collaborative engagement to support nursing education, thereby alleviating the nursing shortage on a global scale.

© 2016 Shanxi Medical Periodical Press. Production and hosting by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

#### 1. Introduction

The growing phenomenon of globalization and transcultural nursing, <sup>1–3</sup> linked with the predicted nursing shortage, poses challenges for health care provision on a global scale. <sup>4,5</sup> Nursing shortages have been associated with increased patient mortality, <sup>6</sup> workplace injury, staff turnover, and higher levels of stress. <sup>7</sup> In

Australia, there will be an estimated shortage of approximately 1,09,000 nurses by 2025. International recruitment of foreign nurses is viewed as one strategy to address this problem. Currently, overseas-born nurses constitute one-third of the nursing workforce in Australia, and this percentage is expected to increase<sup>8</sup> as a result of the national workforce policy. 9,10

China is an increasingly important source of nursing export to Australia to help alleviate the projected shortage. <sup>9,11</sup> In addition to the import of trained nurses, a significant number of international students are also being enrolled in nursing programs at Australian universities. <sup>1</sup> China is noted to be the country of origin for the single

E-mail address: c.wang@ecu.edu.au.

Peer review under responsibility of Shanxi Medical Periodical Press.

largest group of international students in many Australian educational institutions. <sup>12</sup> According to the data of Australian Department of Education on international student enrolments, <sup>13</sup> Chinese students were the largest single group of international students as a whole and, similarly, comprised the largest number of international students studying nursing in Australia.

However, China, similar to Australia and other countries, is also experiencing nursing shortages. There are increasing demands on China's health market for more and more qualified nurses because of the aging population with increasing needs for care; however, the capacity of the Chinese education system to train and certify high quality nurses in China is extremely lacking. 14,15 Many Chinese nurses lack professional competence as a result of limitations in nursing schools. These limitations include unqualified teaching faculties and outdated teaching approaches and materials. 14,16-18 For example, nursing practice focuses on disease treatment rather than disease prevention and health rehabilitation; the nursing curriculum uses a biomedical model instead of a nursing-oriented model, and it lacks the use of an evidence-based approach, standardized curriculum, and adequately resourced research opportunities; because of the lack of employer-funded professional development for nursing staff, the heavy workload, and outdated public perceptions of nursing roles, few people are interested in studying nursing, and nursing retention rates are generally low.<sup>19–2</sup>

All of these factors limit the development of nursing in China. Wang et al<sup>14</sup> estimated that there was a shortfall of 3,46,000 nurses in China in 2012 and noted that there was an "extreme shortage of well-educated nurses and those with advanced professional titles". 14 Globalization has implications for nursing education, research and clinical practice.<sup>2</sup> Coupled with the global nursing shortage, the development of nursing education to support a safe and effective nursing workforce has drawn increasing attention. 14,16,17,19,23–25 Chinese nursing graduates are increasingly being used to augment the shortage of nurses in other countries including Australia; however, China is desperately in need of strategies to cope with challenges it is currently facing in healthcare and nursing education. Although many issues have been identified in the literature regarding barriers to facilitating nursing and nursing education in China, 14,16-18 there is little discussion concerning the differences in nursing registration systems between countries such as China and Australia. It is unknown how the differences and potential similarities of nursing registration systems in the two countries contribute to or impede nurse training in China or what the potential is for these Australian-trained Chinese nurse returnees to cope with the challenges China is facing. This paper aims to provide a better understanding of how the nursing registration process in China compares to that of Australia and to identify common features and potential barriers that may affect or facilitate the development of China's ever-demanding healthcare and nursing education.

#### 2. Evaluation

The Bereday's four steps comparison method <sup>26–28</sup> is used in this paper to compare these two countries' nursing registration systems through document review. The comparative method has been adopted as the core method in the field of comparative education and educational research, <sup>29,30</sup> and "comparative perspectives are seen as most likely to render the essential common language required for academic discourse in an intercultural context". <sup>31</sup> In his book, *Comparative Analysis in Education*, Bereday<sup>27</sup> set out a four-step method for a comparative study: (I) Description, (II) Interpretation, (III) Juxtaposition, and (IV) Comparison. Bereday's

explanation of the four steps was perfectly illustrated by Lor<sup>32</sup> in Fig. 1.

Existing data from the two countries' nursing registration systems were described individually in the first step (Description); then, the data were further interpreted and evaluated in the second step (Interpretation). Data from each country were compared to establish similarities and differences in the third step (Juxtaposition), and a simultaneous analysis was conducted based on the comparison in the fourth step (Comparison).<sup>33</sup>

#### 2.1. Description

#### 2.1.1. Australian nursing registration system

The National Registration and Accreditation Scheme<sup>34</sup> for health care practitioners was established by Australia's state and territory governments and commenced on July 1, 2010. It is governed by the Health Practitioner Regulation National Law.<sup>35</sup> The NRAS aims to protect the public by ensuring that only suitably trained and qualified practitioners are registered to practice health care in Australia. The Australian Nursing & Midwifery Accreditation Council<sup>36</sup> is responsible for protecting the health and safety of the Australian community by ensuring a high national standard of nursing and midwifery education through certification of educational programs in nursing and midwifery. Nurses and midwives who complete the education programs accredited by the ANMAC are qualified to register with the Nursing and Midwifery Board of Australia<sup>37</sup> and are bound by the professional code of conduct to practice safe competent health care across the domains of nursing practice. The NMBA is responsible for the registration and regulation of nurses and midwives under the national law. In other words, to work as an enrolled or registered nurse in Australia, a person must have completed an ANMAC approved diploma or degree course in nursing and register with the NMBA via the Australian Health Practitioner Regulation Agency.

According to the AHPRA,<sup>38</sup> there are currently three levels of nursing registration in Australia: (1) Enrolled Nurse (EN): An EN requires 12–18 months of full-time or equivalent part-time study for a Diploma of Enrolled Nursing in Australia. An EN provides care to patients across a range of clinical settings under the supervision of a registered nurse. An EN can progress to a registered nurse by way of successful completion of an ANMAC recognized program of study at an accredited university. However, an EN is usually given recognition of prior learning and experience, which shortens the period of study prior to registration. (2) Registered Nurse (RN): An RN requires 3 to 3.5 years full-time or part-time equivalent study for a Bachelor of Science (Nursing) or Bachelor of Nursing in Australia. The responsibilities of an RN include but are not limited to, depending on the scope of practice within the healthcare facility:

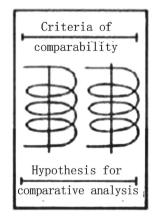
- providing direct patient care
- coordinating care delivery
- promoting health and wellness
- managing staff
- undertaking research or providing education

There are numerous career advancement options such as a capacity to specialize and scope to work in advanced practice roles. (3) Nurse Practitioner (NP): An NP is an experienced and knowledgeable registered nurse who has completed a relevant master's degree. An NP has been endorsed to function independently and/or work collaboratively in an advanced and extended clinical role and practice in a designated nurse practice area. The NP role includes assessment and management of patients using nursing knowledge and skills that may include, but are not limited to, direct referral of

#### I.DESCRIPTION II. INTERPRETATION Evaluation of Library Data Library Data Only Historical Country Α Political Α Economic Social Historical Country В Political B Economic Social

# III. JUXTAPOSITION Establishing Simi

Establishing Similarities and Differences



#### IV. COMPARISON

Simultaneous Comparison

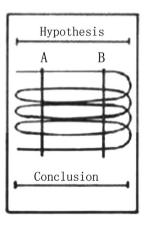


Fig. 1. Breday's four steps comparison method.

patients to other health care professionals, prescribing medications and ordering diagnostic investigations.

To support the renewal and continuation of NMBA registration, nurses are required to meet Continuing Professional Development (CPD) standards. This standard details the minimum requirements required for the RN and EN for registration and reregistration. Nurses are required to participate in at least 20 h of continuing nursing professional development per year. The CPD must be directly relevant to the nurse's context of practice. Under the national law, an NP must complete an additional 10 h per year in education related to their endorsement. The RN, EN and NP are required to maintain documentation of CPD demonstrating evidence of completion of the minimal hours of CPD per year. The Nursing and Midwifery Board of Australia (NMBA) emails a reminder to all registered nurses to renew their registration by May 31 of each year.

#### 2.1.2. Chinese nursing registration system

In China, to become a registered nurse, the applicant must have full capacity for civil conduct; that is, he/she must be recognized as an adult of sound mind under the General Principles of the Civil Law of the People's Republic of China.<sup>39</sup> The applicant is also required to have completed the relevant vocational education,

which includes the completion of 8 months of clinical placement in hospitals, met the health standards of the National Health Department, and have passed the National Nurse Licensure Examination (NNLE).<sup>40</sup> In contrast to Australia, there is only a single level of registration, which is that of an RN.

The Ministry of Health is responsible for the implementation and execution of the NNLE. The measures for the NNLE, adopted by the Ministry of Health and the Ministry of Human Resources and Social Security (No. 74), came into effect on July 1, 2010.<sup>41</sup> This is a nationwide uniform examination held once every year. The specific date of the examination is published at least three months prior to the due date.

Prior to 1992, nursing education in China comprised three levels: Diploma; Advanced Diploma; and Baccalaureate. The Diploma is offered by schools of health with graduates drawn from junior high schools. The Diploma consists of a three-year nursing program designed to teach technical skills. The Advanced Diploma is offered by colleges and universities with graduates drawn from high schools and schools of health. The Advanced Diploma consists of a three-year associate nursing degree program offering general training alongside nursing theory and skills. The Baccalaureate is offered by universities with graduates drawn from high schools and Diploma programs. The Baccalaureate consists of a five-year

Bachelor of Nursing program providing a broad nursing foundation with associated sciences. This program equips students to work at an advanced level of nursing in higher ranking hospitals or in management positions. 21,42

In the period of 2005–2010, there was a five-fold increase in the number of students enrolled in the Master of Nursing programs in China. The Master of Nursing programs aim to prepare experts in either clinical practice that emphasizes advanced clinical practice or in research that focuses on research training.<sup>20</sup>

Doctoral nursing programs in China are a relatively recent phenomenon. However, in the 5 years since the first Doctoral program was instituted in 2003, the number of programs has grown to 22.<sup>43</sup> The Doctoral nursing programs aim to train nurses in education, research, and management.

These five levels, despite their differing education and experience, are permitted to sit the NNLE. If they pass the examination, they are then eligible to apply to be a registered nurse. 16,41

Chinese nurses are required to renew their registration with their local Nursing Registration Board 30 days prior to the expiration of their current registration every 5 years. Again, in contrast to Australia, there is no requirement for CPD or examination in the registration renewal process at the national level.<sup>41</sup>

In China, because of the lack of a national registration, a nurse cannot move easily from one city to another. A registered nurse who wishes to work in another state or city is required to apply for their nursing registration to be transferred to that state or city before they can practice in that geographical area.

#### 2.2. Interpretation

#### 2.2.1. The process of an international Chinese nursing student becoming an Australian registered nurse

On completion of a Bachelor of Science (Nursing) or Bachelor of Nursing in Australia, the Chinese nursing graduate is required to meet the English Language Skills Registration Standard. This requires the graduate to provide evidence of completion of 5 years of full-time or equivalent education at either tertiary and secondary, tertiary and vocational, or combined tertiary, secondary and vocational education levels. This education must have been both taught and assessed in English, in a country listed in the registration standard. The approved countries are: Australia, Canada, New Zealand, Republic of Ireland, South Africa, the United Kingdom, and the United States of America. There are two other options. The first involves the successful completion of the International English Language Testing System (IELTS) examination (academic) with a minimum score of 7 in each of the four components of listening, reading, writing and speaking. The second is an Occupational English Test (OET) with an overall pass with a grade of A or B only in each of the four components of listening, reading, writing and speaking. It is also possible to perform other English language tests, but they must be approved by the registration board.<sup>3</sup>

Similarities and differences of the nursing registration systems of Australia and China.

Item	Australia	China
Nursing registration level	EN; RN; NP	RN
Qualification requirement	Diploma of nursing (EN)	Diploma of Nursing
	Bachelor of Nursing (RN)	Advanced Diploma of Nursing
	Master of Nursing (NP)	Bachelor of Nursing
Clinical placement required for initial registration	Yes	Yes
Exam	No	NNLE exam
CPD	At least 20 h CPD per year	No
National registration	Yes	No
Renew registration	Annually	Every 5 years
Registration body	AHPRA	Local Nursing Registration Board

#### 2.2.2. The process for a Chinese registered nurse to become an Australian registered nurse

For a nurse who has been educated or trained overseas to register in Australia, their nursing qualifications are assessed against the current standards required for registration by an Australian nursing graduate. Hence, the educational level of the Chinese qualification must, at a minimum, be equivalent to a Bachelor's degree and align with the Australian Qualification Framework (AQF) Level 7. If these qualifications do not meet the National Board's accreditation requirements, the applicant will be referred to a nursing conversion program that is approved by the board or to a Bachelor of Science (Nursing) or Bachelor of Nursing program in an Australian university. On successful completion of the required accreditation standards nursing course, the Chinese nurse is able to reapply for registration. Regardless of the educational pathway, Chinese nurses, similar to nurses from other non-English speaking countries, are required to demonstrate a proficiency in English language skills to a level that meets the Australian requirements. These tests include the International English Language Testing System (IELTS) examination (academic) with a minimum score of 7 in each of the four components of listening, reading, writing and speaking, or the Occupational English Test (OET) with an overall pass and a minimum grade of A or B in each of the four components of listening, reading, writing and speaking, or similar English language tests approved by the registration board. 34,36,44

#### 2.2.3. Advanced nursing programs in China

Similar to other countries' increasing focus on advanced nursing practice and training, China's goal is to develop its own specialized and advanced nursing programs. However, the development of these programs is still in its infancy. Because there is a tendency for the interpretation of the definition and role of advanced nursing practice to be generated in China at a local, rather than a national level, there is no singular definition of what constitutes advanced nursing practice. This lack of unity has led to confusion and heated discussion within nursing education.<sup>20</sup> Additionally, in China, clinical focused nursing programs of both Masters and Doctoral levels exist at universities only, but no advanced clinical practice is available for students.<sup>20</sup>

#### 2.3. Juxtaposition

Table 1 is intended to summarize the similarities and differences between the nursing registration systems of Australia and China:

#### 2.4. Comparison

The Australian registration system is protected by law and guided by legislation. The Australian registration system has different levels of nursing registration, each with its own requirements for registration, different responsibilities in practice,

and different levels of training and focus. The levels of registration and practice provide for recognized different needs and focuses of patient care. In China, nursing as a profession is a relatively late starter. In the past, nursing education in China generally consisted of a diploma qualification with a single level of nursing registration.

However, in recent years, tertiary nursing education in China has grown rapidly. Nursing qualifications have progressed from a single diploma level to an advanced diploma, degree and master levels. According to the China Ministry of Health (2012), 30% of nurses in China attained tertiary level qualifications (Bachelor's degree or above) by 2012. These different levels of nursing education now provide an opportunity for introducing different levels of nursing registration in China. The current single level of registration does not distinguish effectively between the differing levels of practitioners' competence and responsibility.<sup>19</sup> The single level of registration may prevent the progression to higher standards of nursing care in China.<sup>20,21</sup> It does not have the ability to support the utilization of different skills in different settings and may fail to inspire nurses to continue their studies, develop their expertise and stay in the nursing profession.<sup>19</sup>

In Australia, all nurses must meet the minimum requirements of the CPD standards to maintain their registration. The RN, EN and NP are required to maintain a written record of CPD demonstrating evidence of completion of the minimal hours of CPD per year. The aim is to protect the public by ensuring continued evidence-based nursing practice. In China, there is no clear requirement of CPD for the renewal of nursing registration. 41

The national level of nursing registration in Australia allows nurses to practice nursing in different states and territories. It also supports a national standard of care for all Australian citizens regardless of their location. However, in China, nurses are only able to practice nursing in the specific province or city in which they are licensed, and they are required to undergo a complicated transfer process to register in another province or city.

#### 3. Discussion

Legislation in China has the potential to support different levels of nursing registration according to the level of education and competency achieved by the individual.<sup>20</sup> The regulation of standards of national nursing registration, the introduction of a CPD requirement as a necessity in establishing an equitable nursing registration renewal process, and the establishment of nursing specialty roles such as NP and the RN as a Clinical Nurse Specialist (CNS) with the demonstration of competent clinical practice in a specialty area must be supported by advanced education and then protected by appropriate legislation. Adopting this model of nursing registration could have great significance not only for the nursing profession, nursing education, and nursing research in China, but it could also support a tiered system of health care with a focus on health care needs for the individual. It would also provide nurses with the needed recognition of their skills, expertise, and the benefits they bring to health care in China.

#### 4. Conclusions

This paper used Bereday's four steps comparison method to compare the two nursing registration systems in China and Australia with the aim of offering insight into the development of strategies that can support China's ever-demanding need for nursing education and healthcare development, thereby alleviating its nursing shortage.

#### 5. Implications for nursing management

The implications of globalization of nursing education, research, and clinical practice, coupled with the nursing shortage on a global scale, have demanded increasing attention be paid to nursing. Consequently, there is an urgent need for the provision of a high standard for nursing education that supports a safe and effective nursing workforce. This paper argues that there is value in nursing authorities, educators, and legislators working together in a network of collaborative engagement to support nursing, thereby alleviating the nursing shortage on a global scale.

#### **Conflicts of interest**

All contributing authors declare no conflicts of interest.

#### References

- Wang CC, Andre K, Greenwood KM. Chinese students studying at Australian universities with specific reference to nursing students: a narrative literature review. Nurse Educ Today. 2015;35:609

  –619.
- Meleis A, Douglas M, Davidson PM, Daly J. Globalisation as we enter the 21st century: reflections and directions for nursing education, science, research and clinical practice. *Contemp Nurse*. 2003;15:162–174.
- 3. Wang CC, Geale SK. The power of story: narrative inquiry as a methodology in nursing research. *Int J Nurs Sci.* 2015;2:195–198.
- Health Workforce Australia. Health Workforce 2025-Doctors, Nurses and Midwives. Volume 2. 2012. Adelaide, Australia http://120.52.72.47/www.hwa.gov. au/c3pr90ntcsf0/sites/default/files/HW2025Volume2\_FINAL-20120424\_0.pdf, 2014.11.15.
- Twigg DE, Duffield C, Evans G. The critical role of nurses to the successful implementation of the national safety and quality health service standards. Aust Health Rev. 2013;37:541–546.
- **6.** Shipman D, Hooten J. Without enough nurse educators there will be a continual decline in RNs and the quality of nursing care: contending with the faculty shortage. *Nurse Educ Today*. 2008;28:521–523.
- Yun H, Jie S, Anli J. Nursing shortage in China: state, causes, and strategy. Nurs Outlook. 2010;58:122–128.
- 8. Negin J, Rozea A, Cloyd B, Martiniuk ALC. Foreign-born health workers in Australia: an analysis of census data. *Hum Resour Health*. 2013;11:69.
- Fang ZZ. Potential of China in global nurse migration. Health Serv Res. 2007;42: 1419–1428.
- Xu Y, Zhang J. One size doesn't fit all: ethics of international nurse recruitment from the conceptual framework of stakeholder interests. *Nurs Ethics*. 2005;12: 571–581.
- Zhou Y. The experience of China-educated nurses working in Australia: a symbolic interactionist perspective. PLoS One. 2014;9:e108143.
- Mott-Smith JA, Lixia Jin, Martin Cortazzi. Researching Chinese learners: skills, perceptions and intercultural adaptations. Appl Linguist. 2011;32:581–584.
- Australian Education International. International Student Enrolments Data; 2012. http://www.austrade.gov.au/Australian/Education/Education-Data/2012, 2013.12.29.
- 14. Wang Y, Wei S, Li Y, Deng S, Luo Q, Li Y. Challenges and a response strategy for the development of nursing in China: a descriptive and quantitative analysis. *I Evid Based Med.* 2013;6:21—33.
- Wang CC, Greenwood KM. Chinese nursing students' culture-related learning styles and behaviours: a discussion paper. Int J Nurs Sci. 2015;2:253–258.
- You LM, Ke YY, Zheng J, Wan LH. The development and issues of nursing education in China: a national data analysis. Nurse Educ Today. 2015;35:310

  –314.
- 17. Wong FK. Challenges for nurse managers in China. *J Nurs Manag.* 2010;18: 526–530.
- 18. Ohr SO, Parker V, Jeong S, Joyce T. Migration of nurses in Australia: where and why? *Aust J Prim Health*. 2010;16:17–24.
- Wong F, Zhao Y. Nursing education in China: past, present and future. J Nurs Manag. 2012;20:38–44.
- 20. Zou H, Li Z, Arthur D. Graduate nursing education in China. *Nurs Outlook*. 2012;60:116–120
- 21. Eddins EE, Hu J, Liu H. Baccalaureate nursing education in China: issues and challenges. *Nurs Educ Perspect*. 2011;32:30–33.
- Sun J, Xu Y, Xu Z, Zhang J. Baccalaureate nursing education curricula in the People's Republic of China: status, issues and reforms. Nurs Health Sci. 2001;3: 225–235.
- 23. Zhu J, Rodgers S, Melia KM. The impact of safety and quality of health care on Chinese nursing career decision-making. *J Nurs Manag.* 2014;22:423–432.
- Gao LL, Chan SW, Cheng BS. The past, present and future of nursing education in the People's Republic of China: a discussion paper. J Adv Nurs. 2012;68:1429–1438.
- 25. Li Z. Problems and challenges in graduate education of nursing in China. *J Nurs Adm.* 2006;6:12–15.

- 26. Bereday GZF. Reflections on comparative methodology in education, 1964–1966. *Comp Educ.* 1966;3:169–287.
- 27. Bereday GZF. Comparative analysis in education. *Pros Quar Rev Educ.* 1977;7: 472–487.
- 28. Bereday GZF. Sir Michael Sadler's "study of foreign systems of education". *Comp Educ Rev.* 1964;3:307—314.
- 29. Easthope G. A History of Social Research Methods. London: Longman; 1974.
- Husén T, Postlethwaite TN. The International Encyclopedia of Education. Pergamon: Oxford; 1994.
- 31. Miyakawa H, Casco RAI. A comparative study on the curriculum for technology teachers in Japan and Paraguay. *Int J Curr Dev Prac*. 2007;9:1–14.
- 32. Lor PJ. International and Comparative Librarianship Chapter 5: Method, Procedures, Techniques, Instruments (Draft Version 2011-04-21). De Gruyter Saur; 2011
- 33. Krzys R, Litton G. World Librarianship: A Comparative Study. New York: Marcel Dekker; 1983.
- 34. National Registration and Accreditation Scheme (NRAS). http://www.health.gov.au/internet/main/publishing.nsf/Content/work-nras; 2010, 2014.11.15.
- Health Practitioner Regulation National Law Queensland; 2010. https://www.legislation.qld.gov.au/LEGISLTN/CURRENT/H/HealthPracRNatLaw.pdf, 2014.11.20.

- Australian Nursing & Midwifery Accreditation Council (ANMAC). http://www.anmac.org.au/; 2015, 2014.11.15.
- **37.** Nursing and Midwifery Board of Australia (NMBA). http://www.nursingmidwiferyboard.gov.au/; 2015, 2014.11.15.
- 38. Australian Health Practitioner Regulation Agency (AHPRA). https://www.ahpra.gov.au/; 2015, 2014.11.15.
- 39. Jones WC. Some questions regarding the significance of the general provisions of civil law of the People's Republic of China. *Harv Int'l LJ*. 1987;28:309.
- Chinese Ministry of Health. Administrative Measures for the Registration of Practicing Nurses. 2008.5.6. http://www.nhfpc.gov.cn/yzygj/s3592/200805/ 47a98d941bf148fa908bedcfcc7f01fe.shtml. 2015.2.25.
- 41. Chinese Ministry of Health. The Measures for the Nurse Practicing Qualification Examination. 2010.5.20. http://www.nhfpc.gov.cn/zhuzhan/zcjd/201304/500ae1951c5c455c92f2fb748c03b832.shtml. 2015.2.25.
- **42.** Chan S, Wong F. Development of basic nursing education in China and Hong Kong, *J Adv Nurs*. 1999;29:1300–1307.
- **43.** Feng L, Jie H. Thinking on training of master degree postgraduate in clinical nursing profession. *Chin Nurs Res.* 2010;3:56 (in Chinese).
- 44. Nursing and Midwifery Board of Australia. Framework for the Assessment of Internationally Qualified Nurses and Midwives for Registration in: Australia NaMBo. NMBA; 2013.