

# Evaluating the Accelerated BSN Program at the University of Washington and Its Potential for Implementation in China

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**Abstract:** Nurses are the largest group in the health care system. The current care shortage remains a global challenge in the healthcare system. The accelerated second-degree nursing (ABS N) program was first proposed by the University of St. Louis in 1971 and then vigorously developed in the United States. Its purpose is to train more nursing talents to solve the medical needs of the poor in the United States. In the past few decades, this project has been carried out by many countries around the world to solve their domestic nursing problems. As a strategy to address severe care shortages, ABS N is continuing to increase rapidly. China as the world's second most populous country, coupled with aging year by year, the demand for nursing talents, and the ABS N project just gave China effective inspiration. Therefore, this article introduces the basic design of the bachelor's degree in nursing at the University of Washington, summarizes the characteristics of the training model, and draws on experience from the basic situation, training objectives, courses and evaluation methods. It is urgent to provide guidance and reference for the acceleration of nursing education in China.

**Keywords:** USA, education, nursing, BA, ABS N

## Introduction

Accelerated baccalaureate second-degree nursing (ABS N) is the accelerated nursing program to attract new, once unexposed nursing professionals, namely training professionals with a bachelor's degree or a higher degree other than nursing.<sup>1</sup> The United Nations population trend forecast shows that the global aging is becoming rapidly deepening, with China, Europe and the United States being the most significant, and the shortage of nursing personnel is becoming increasingly serious.<sup>2</sup> The ABS N program can effectively create a shortcut for students with a bachelor's degree in other fields to become nurses. Therefore, it may be a good choice for China to carry out the ABS N program to increase nursing talents. According to the National Career Study, more than 50% of registered nurses in the US now are aged 50 and older and will have more than 1 million nurses to retire by 2030, a process that challenges the health care industry.<sup>3</sup> Moreover, with the sound regional healthcare system, the increased specialization in the medical sector, and the shorter length of hospital stay, these factors will also continue to aggravate the shortage of nursing professionals.<sup>4</sup> Thus, the first accelerated nursing program was proposed at St. Louis University in 1971, with ABS N as one of the strategies to address the problem. In 2016, Taiwan launched the ABS N project in four universities, and then the University of Tokyo also launched the ABS N project in 2017.<sup>5</sup> Their nurse training has achieved good results. As reported abroad, the situation of ABS N students is more diverse in terms of age, gender, race and ethnicity, as compared to traditional entry-level nursing students, and life experiences.<sup>6</sup> Studies have also shown that students in accelerated nursing programs have greater scientific research skills, higher academic achievement, employment rates, and higher professional values than traditional Bachelor of Nursing Science (BSN) programs, but Chinese institutions have not yet conducted their training programs.<sup>7-10</sup> And China's nursing curriculum adopts linear thinking mode, and the knowledge structure of the course is

generally basic knowledge, professional knowledge and professional direction. The curriculum system is basically in a closed state, and cross-disciplinary learning is generally not encouraged in the undergraduate education stage. Therefore, in terms of the cross-professional model of ABSN, there is no institution in China. Although many hospitals across the country carry out standardized training for nurses, there is a lack of unified and comprehensive quantitative evaluation and supervision system. Even in the same regular training base, due to the lack of quantitative assessment indicators, the assessment results of different departments are subjective.<sup>11</sup> The ABSN model, compared with the standardized training model for nurses in China, is more advanced and authoritative. It is not only used in clinical nursing practice, but also can improve nurses satisfaction with the hospital, so that nurses are more assured to provide safe services for patients. Therefore, this paper intends to use the educational experience of the school of Nursing, University of Washington, analyze the advantages of its training, and combine with the current situation of higher nursing education in China, to provide reference for further promoting the training of nursing talents in China.

Members of the research group used the Internet information survey to visit the official website of the University of Washington.<sup>12</sup> To extract the basic information, planning objectives, admission requirements, curriculum setting and evaluation methods of the accelerated bachelor of Nursing program of the hospital one by one.

## **Accelerated Bachelor of Nursing Education at the University of Washington, USA**

### **Accelerating Bachelor of Nursing**

The University of Washington School of Nursing offers rapid professional programs for students who have received a bachelor's degree and pursue nursing as a second career. Its Bachelor of Science in accelerated Nursing (ABSN) course allows participants to receive a four-quarter BSN course — of approximately half the two-year traditional (six-quarter) BSN course.<sup>13</sup> The project course will adopt a combination of practice and theory. The theoretical course part includes interdisciplinary education, such as medical ethics, public health, psychology, etc. In practice part, the participants will be under the supervision of clinical teachers in the university of Washington at the school of nursing simulation center, basic nursing skills training, the simulation center including health system innovation and research center, nursing biological behavior laboratory, nursing education research center and nursing informatics and intelligent health laboratory, its technology mainly includes AR, VR, MR and digital simulation equipment, and has high fidelity simulation doll, standardized patients, simulation clinic and video equipment. The prominent feature of the center is the adoption of an interprofessional cooperation model, which works with other health professional colleges and institutions, such as medical schools, schools of pharmacy, stomatology, public health, and local medical institutions and community organizations, to provide a more diversified and realistic simulation experience. The research of Koukorikos K et al<sup>14</sup> shows that simulation helps to address any limitations related to the clinical setting (including availability of patients, security issues etc), promote teamwork and solidarity among students, and implementation of a protocol for the attainment of a skill. Second, the University of Washington School of Nursing has 700 community and general hospitals (including Seattle Children's Hospital and number 1 University of Washington Medical Center) that provide participants with more than 1000 hours of patient care practice experience. In addition, the ABSN degree program provides diverse, personalized elective content to meet individual interests and career development needs, and for the program, graduates can also find jobs in different places such as hospitals, community health institutions, nursing schools, etc.

Based on the nature of the concept of nursing, the University of Washington School of Nursing aims to meet the healthcare needs of Washington and communities around the world through education, research and service, and the ABSN program covers a wide range of nursing humanities, nursing research, nursing management, and nursing decision-making areas.<sup>15</sup>

### **Accelerated Bachelor of Nursing Degree Program**

The Bachelor of Accelerated Nursing includes a full-time program of four quarters (fall to summer), and provides targeted course design for participants, and the foundation of the science and humanities courses plays an important role in the ABSN program. Its A BSN program includes: ① 's academic courses focused on developing student critical

thinking, care and treatment, and healthcare resources. ② Support students in giving classroom lectures with experienced practice nurses and researchers. ③ Clinical simulation exercises in the nursing laboratory. ④ Care for patients under the on-site supervision of teachers. Details are provided in Table 1.

The school's current focus is on the future of global population health and healthy aging. The Bachelor of Nursing Coordinating Committee (Bachelor of Science in Nursing Coordinating Committee, BSNCC) at the School of Nursing at the University of Washington is divided into three parts, including: (1) student progress evaluation (2) phased evaluation (3) summative evaluation. Details are given in Table 2.

## **The Enlightenment of the Educational Experience of the University of Washington School of Nursing to China**

### **tClear Educational Goals, Innovative Educational Ideas**

With the economic globalization and the transformation of China's social change, social ideology has been impacted and challenged by multiple ideologies such as liberalism, money worship and belief crisis. The values and nursing behaviors of nursing staff have also been affected to a certain extent. There are many problems, such as weak professional thinking, serious loss of personnel, distorted values and so on. Medicine is not only looking forward to saving lives, but also looking forward to the health and happiness of the mind. These are undoubtedly inseparable from the quality of nursing talents, and the quality of talents comes from the positioning of educational goals. At present, China's higher nursing education is more from the social standard, less attention to individual nurses, especially the improvement of the comprehensive quality of individual nurses and their career development; furthermore, with the increasing trend of population aging and the prominence of community medical care, the positioning of educational goals has been misplaced. Therefore, China's higher nursing education should clarify the educational objectives and innovate the educational concept. On the one hand, based on professional sentiment and ability, improve the comprehensive quality of nurses, rich cultural heritage; on the other hand, it is necessary to cultivate nursing talents in multiple directions according to the scientific orientation of degree level.

### **Give Full Play to the Student Source Advantage of ABSN in China**

The ABSN project is an accelerated BSN project and a pre-licensed project designed for individuals with a bachelor's degree outside the nursing field who now wish to pursue a nursing degree.<sup>16</sup> The optimization strategy of top college students is committed to selecting their own excellent students. The University of Washington accelerates the cultivation of nursing bachelor's degree to maintain the concept of diversity, fairness and inclusive education, and widely introduces and accepts excellent teachers, employees and students from different races, countries and regions to meet the nursing needs of different people.<sup>17</sup> Therefore, by understanding the application conditions for the accelerated Bachelor of Nursing at the University of Washington, Chinese universities can develop enrollment criteria for the accelerated Bachelor of Nursing, such as requiring students to have high academic performance, relevant practical experience, or other relevant qualifications. Colleges and universities in China can make full use of the advantages of students with different backgrounds, guide students with different professional backgrounds to combine original knowledge and skills with nursing theory and practice, innovate and solve clinical problems, improve the quality and efficiency of nursing services, and build a first-class nursing and multidisciplinary interdisciplinary cluster.<sup>18</sup> At present, China has carried out training methods such as double degrees, which provides opportunities for interdisciplinary talent training. In this way, many nursing disciplines in colleges and universities cooperate with other disciplines to train compound nursing talents.<sup>19</sup> It aims to cultivate more nursing talents with interdisciplinary knowledge structure, thinking and methods, so as to better solve today's complex and changeable health problems.

### **To Develop Nursing Project Certification and Promote the Effective Connection of Degree Level Education**

On the one hand, nursing project certification is conducive to improving the quality of teaching, and more importantly, it ensures that nurses have more knowledge, skills, attitudes and behaviors to provide safer and higher quality health

**Table 1** ABSN-2023-Spring and Autumn-Curriculum-Grid (Course Table)

Annum	Spring	Summer	Autumn	Winter
Spring-Curriculum	NCLIN 301 (6): Health assessment and basic nursing skills practice NCLIN 409 (4): Practice: To achieve population health through community health care collaboration NURS 303 (4): Foundation of professional nursing practice NURS 304 (5): Foundation of pharmacotherapy and pathophysiology NURS 420 (3): Community and public health nursing science	NCLIN 407 (5): Internship: nursing of adult patients NCLIN 418 (3): Practice: psychosocial care NMETH 403 (1): Brief introduction to nursing research NURS 401 (6): Disease basic care practice I NURS 417 (4): psychosocial care for health and disease	NCLIN 403 (4): Internship: Pediatric nursing NCLIN 416 (2): Practice: parenting family care NCLIN 475 (0): The foundation of Interprofessional practice (IPE). <sup>*</sup> NMETH 403 (1): Brief introduction to nursing research NURS 405 (6): Basic disease care practice II NURS 412 (3): Health care systems and policies NURS 415 (3): Nursing care of reproductive families NURS 431 (2): Health of children	NCLIN 411 (7): Internship: transition to clinical practice NCLIN 475 (1): The foundation of Interprofessional practice (IPE). <sup>*</sup> NMETH 403 (1): Brief introduction to nursing research NMETH 450 (3): Informatics, patient safety and quality improvement NURS 419 (5): Transition to professional practice
Autumn-Curriculum	NCLIN 403 (4): Internship: Pediatric nursing NCLIN 416 (2): Practice: parenting family care NCLIN 475 (1): The foundation of Interprofessional practice (IPE). <sup>*</sup> NURS 405 (6): Basic disease care practice II NURS 412 (3): Health care systems and policies NURS 415 (3): Nursing care of reproductive families NURS 431 (2): Health of children NMETH 403 (1): Brief introduction to nursing research	NCLIN 411 (7): Internship: transition to clinical practice NURS 419 (5): Transition to professional practice NMETH 403 (1): Brief introduction to nursing research NMETH 450 (3): Informatics, patient safety, and quality improvement safety	NCLIN 301 (6): Health assessment and basic nursing skills practice NCLIN 409 (4): Practice courses: achieve population health through community health care collaboration NCLIN 475 (0): The foundation of Interprofessional practice (IPE). <sup>*</sup> NURS 303 (4): Foundation of professional nursing practice NURS 304 (5): The basis of pharmacotherapy and pathophysiology NURS 420 (3): Community and public health nursing science	NCLIN 407 (5): Internship: nursing of adult patients NCLIN 418 (3): Practice: psychosocial care NCLIN 475 (0): The foundation of Interprofessional practice (IPE). <sup>*</sup> NURS 401 (6): Disease basic care practice I NURS 417 (4): psychosocial care for health and disease NMETH 403 (1): Brief introduction to nursing research

**Note:** <sup>\*</sup>Students will participate in IPE modules in autumn and winter of their ABSN program with a final grade awarded in winter quarter.

**Table 2** Evaluation Form

Evaluation stage	To evaluate the content				
Stage evaluation	Course results	Weekly teacher meeting: Wired Teaching	Quarterly clinical assessments: interim and final assessments	Basic behavioral records completed each quarter in the clinical course	BSNCC discusses students quarterly
Process evaluation	A weekly faculty meeting is held.	The BSNCC monthly meeting	The BSNCC reports are from all grade meetings and student representatives	The BSNCC annual meeting, reviewing other course issues	Curriculum evaluation by students and peer teachers.
Summarized evaluation	All curriculum reform materials	Terminal clinical evaluation in practice courses	The NCLEX primary pass rate	Project evaluation tool for measuring specific outcomes related to the BSN. include: 1. The BSN project closure survey 2. The BSN alumni evaluation survey.	

services.<sup>20</sup> At present, there are few nursing education certification programs in China.<sup>21</sup> The certification power is mainly controlled by the state administrative department, and the effectiveness of local and university and general non-governmental organizations is insufficient. Higher nursing education in China urgently needs to add diversified and international project certification to ensure the organic connection of education at all levels of degree, and to solve the problems of shortage, fault and low comprehensive quality of nursing human resources in China. Many of the international nursing program certification education is related to the professional master. According to the survey, the nursing staff who choose the professional master in China generally come from hospitals or related medical institutions, mainly for the promotion of professional titles or post promotion. With the continuous improvement of medical needs and the transformation of service direction in the new century, the demand for professional masters is increasing. The reasons are as follows: (1) the shortage of high-end nursing human resources in China; (2) The management service mechanism is not perfect; (3) The comprehensive quality of nursing staff is not high. Therefore, on the one hand, this kind of compound talents can make up for the shortage of talents; on the other hand, it can alleviate the embarrassing situation that the comprehensive quality of nursing staff is not high and the management service mechanism is not perfect.

## Integrate External and Internal Multi-Evaluation Subject Architecture

The curriculum and teaching evaluation of the School of Nursing at the University of Washington advocates full participation, and establishes a multi-evaluation subject structure that combines internal and external evaluation, including external professional certification bodies, graduates and employers, school teaching support departments, faculty leaders, curriculum managers, teachers, students and other different interest groups, and improves various systems to ensure that the evaluation subject exercises evaluation rights. For example, employers will receive a questionnaire survey from the college every year to evaluate the performance of graduates; school professional evaluators provide relevant training and consultation for college teachers, assist teachers in developing evaluation tools, and obtain, analyze and utilize evaluation data; there are student representatives from different grades in the coordination committee of each degree project of the college. Students can apply to the committee as student representatives by mail whenever they are interested. Student representatives are responsible for collecting and reflecting students' opinions and suggestions on curriculum and teaching to the committee. Evaluation is a kind of value judgment activity whether the object can meet the needs of the subject. The diversification of the evaluation subject is an important way to reflect the pluralistic values of evaluation. In the traditional nursing curriculum and teaching evaluation, there is a common phenomenon that the evaluation subject is single, mainly in the school or even in the college. Some key groups fail to appear in the evaluation system, such as graduates, employers, professional groups, etc.<sup>22</sup> It is also the key to the sustainable and healthy development of the college to absorb more evaluation subjects to participate in the evaluation of undergraduate courses and teaching, and to put forward the expectations and requirements for the training of nursing talents from different angles.

## Strengthen the Organic Combination of Theory and Practice

The research shows that virtual simulation technology expands and practices the comprehensive thinking of nursing students, and shortens the transformation process from theory to practice, from students to nurses, from classroom to clinical practice. More and more nursing educators are using virtual simulation technology for theoretical education and clinical training. Virtual simulation projects in the field of nursing education<sup>23,24</sup> and some studies. We evaluated the simulation of virtual simulation systems (students' sense of substitution, virtual projects, and complexity)<sup>25,26</sup> and found that it not only has a positive impact on learning outcomes, but also has an impact on students' interest, intention to use, and independent learning. Therefore, in order to develop the higher accelerated nursing bachelor's course in China, we should first improve the construction of interactive high-fidelity simulation experiment center, and introduce advanced equipment and facilities to support nursing virtual simulation teaching, including high-fidelity simulation, multimedia system, video playback system, clinical scene layout, etc. Secondly, the course should be inclined to practice. At present, China's nursing undergraduate education is generally the first two years of public courses, basic medical and nursing basic courses, the third year of nursing professional courses, the fourth year of clinical graduation practice. The theory and practice are separated for a long time and the degree of integration is not high. Clinical practice at the University of Washington College of Nursing begins at the beginning of freshman year and can be selected at any time during the four years of undergraduate study according to the teaching plan and the total class hours must not be less than 2700 hours.

Drawing on its experience, China's higher nursing education curriculum can be inclined to clinical practice, promote the organic combination of theory and practice, and apply what they have learned.

## Research Limitations

There are still limitations in this study: (1. Compact course and high pressure: the course of accelerated nursing bachelor's degree is very compact and the learning pressure is high, which puts forward high requirements for students time management and adaptability. This may make it difficult for unadapted students to complete the course and affect the learning effect. It is suggested that according to the situation of schools in different regions, whether the curriculum system structure can be reconstructed to improve the problem of compact curriculum. (2. High cost: The implementation of the project may involve high costs, especially the Introduction of advanced simulation technology and equipment. China's higher nursing education system needs to solve the problem of funding sources and cost control in the implementation process. (3. Localized adaptation: Although the ABSN project at the University of Washington has many advantages, how to adapt to the needs of Chinese society under the specific cultural and educational system in China still needs further research and exploration.

These limitations reflect some of the practical challenges faced by the full introduction and implementation of ABSN projects in China's higher nursing education system, which need to be explored in depth and gradually resolved.

## Summary

To sum up, under the background of multicultural, it is worth learning and learning from the concept of open inclusive education idea, clear education goal, established based on the student development and social demand as the oriented multi-level, systematic, multidimensional acceleration of nursing bachelor's degree education mode. However, the existing problems such as compact curriculum, curriculum pressure, high cost and scholarship opportunities still need to be thought about and solved. Therefore, China's higher nursing education should conform to the development trend of the times, correctly treat the practical difficulties encountered in the process of development, be good at analyzing and summarizing problems, critically absorb the experience of other countries, apply what they have learned, and seek a localization path suitable for the development of higher nursing education in China.

## Data Sharing Statement

Data will be made available on request.

## Ethics Approval and Consent to Participate

This study is a review study and no additional ethical approval is required.

## Author Contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

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