Analysis of the Japanese National Nursing Examination completed for the first time by Vietnamese Economic Partnership Agreement Nurse candidates
—A true/false comparison with Japanese examinees—

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Objective: This study compared the results of the National Nursing Examination (NNE) between Vietnamese Economic Partnership Agreement (EPA) nursing candidates and Japanese nursing examinees. It clarified the trends and reasons for incorrect answers to help frame suggestions for future support and ways to enhance teaching and learning of nursing candidates.

Method: Seven Vietnamese candidates agreed to participate in the study. The researchers analyzed their results from the 104th NNE. A questionnaire asked for reasons for incorrect answers, and responses were discussed further during interviews.

Results: More than half of the Vietnamese candidates gave incorrect responses to the following questions on which 70% of Japanese examinees answered correctly: 8 compulsory questions, 28 general questions, and 13 situational questions. For compulsory questions, two candidates obtained scores of 82% answers correct. More than half of the respondents reported that they had not learned about 'Health support and the social security system', 'Pediatric nursing' and 'Integration and practice of nursing' in either Vietnam or Japan.

Discussion: We need to understand the current situation and cultural differences in nursing and medical care in Vietnam before providing support to Vietnamese candidate nurses. The reasons for incorrect answers in the NNE were identified as originating from the different curricula in Vietnam and Japan, as well as lectures, tutor methods, and practice. Compulsory questions require an understanding of relevant vocabulary to increase the score of general and situational questions. Results also suggest that if the candidate obtains an N3 level of Japanese proficiency, it will be easier to learn and pass the NNE.

Key Words: National Nursing Examination; Economic Partnership Agreement; Vietnamese Nurse candidates; Japanese examinees.

Ⅰ. Introduction

Through the Economic Partnership Agreement (EPA) in Japan, nurse candidates were accepted from Indonesia in 2008 and then from the Philippines in 2009 (Ministry of Health, Labor and Welfare [MHLW], 2020). To maintain the quality of nursing in Japan and to safeguard patients, nurses complete the National Nurses Examination (NNE) in Japanese. Because Japanese is a difficult language to acquire, the MHLW (2015a) extended the examination time for candidates and allows English disease names and phonetic notes for Kanji. The pass rate of Indonesian and Filipino candidates is around 10% whereas the Japanese average pass rate is about 90% (MHLW, 2015b).

Since 2014, Japan has accepted candidates from Vietnam with an agreed prerequisite of acquiring N3−

level Japanese Language Proficiency (JLP), that is, communication used in everyday settings (MHLW, 2015c). Kawaguchi (2010) stressed that limited language ability, combined with differences between nursing education and curriculum, compound learning challenges to pass the NNE. Previous studies have addressed the EPA from various angles (Fukutake, Nanba, Shimamura, Oota, 2011: Kinkawa, Hapsari, Ueda, Matsuo, 2013; Morioka, Kitaoka, Kawamura, Nagata, Kawamura, 2016; Yamamoto, Higuchi, 2015; Yamada, 2012), targeting Indonesian and Filipino candidates. Because the Vietnamese intake is new, research on these candidates is limited. Still fewer studies have explored the results of the Vietnamese candidates on the NNE.

This study compared the results of the NNE between EPA Vietnamese nursing candidates and Japanese nursing examinees. It elucidated the trends and reasons for incorrect answers to help frame suggestions for future supporting orientation, and the method of learning course content.

Ⅱ．Method

1．Research subjects

Seven of 21 Vietnamese nursing candidates who arrived in Japan in June 2014 and took the 104th NNE, after being employed for six months, agreed to participate in this study.

2．Data collection

From August to October 2014, the researchers mailed research requests to the Vietnamese candidates, and the facility where EPA Vietnamese candidates had been accepted, to request research cooperation. The contents were thoroughly explained to the EPA candidates who confirmed that they understood the requirements of their participation.

The 104th NNE was conducted on the 22nd of February 2015. The seven candidates who consented to research cooperation answered questions about their true/false correctness in the NNE, and the reasons for answering incorrectly. Responses were received

by mail for that part of the study. The survey was conducted to clarify reasons for wrong answers, investigating whether errors were due to problems in understanding Japanese or an issue with the learning process. All seven participants answered the questions about true/false correctness, and five gave reasons for being incorrect. Reasons for the wrong answer were selected from the following options: ① I have not learned in universities or hospitals in Vietnam or Japan, ② I have learned in Vietnam or Japan, but I forgot it, ③ I could not understand the Japanese, ④ Other. The period of data collection was between June and July in 2015.

Between July and October 2015, 6 to 8 months after taking the NNE, five of the seven candidates were interviewed in Japanese for between 30 minutes and an hour where the focus was on the reasons for wrong answers.

3．Data analysis

The MHLW National Nursing Practice Questionnaire (MHLW, 2014) classified the results of the 104th NNE. Criteria for the NNE are categorized into 12 components: 'Compulsory', 'Structure and function of human body', 'Formation of disease and promotion of recovery', 'Health support and the social security system', 'Fundamental nursing', 'Adult nursing', 'Gerontological nursing', 'Pediatric nursing', 'Maternity nursing', 'Mental health nursing', 'Community nursing', and 'Nursing consolidation and practice'. These are further subdivided into three components. Calculation of the correct answer rate for Japanese examinees was based on 'Ra Supa Kakomon taisaku for the 104th NNE Practice Paper' (Tecom Editing Committee, 2015) and 'DetaDeta mon 100 ～ 104 Shiken Mondai Kangoshi Kokkashikenn Koh Seikairitsu Kako Mondaishu Tokyo Academy Henn' (Tokyo Academy Editing Committee, 2015).

Compulsory questions are the foundation of the NNE (MHLW, 2012). General questions require extensive knowledge of each nursing specialty covering anatomy, physiology and disease. In situational questions, the assessment includes reading

comprehension and the ability to assess and judge (MHLW, 2012). In the 104th NNE one of the situational questions was an inappropriate question that was excluded from scoring, resulting in 239 questions comprising 50 compulsory questions, 130 general questions, and 59 situational questions. To pass the NNE, examinees must attain 80.0% in compulsory questions and 64.1% in general and situational questions. If these conditions are satisfied, the acceptance criteria are met (MHLW, 2015a).

Half the candidates did not answer 95 questions correctly. Of those 95 questions, 49 were answered correctly by more than 70% of the Japanese examinees. Researchers analyzed those 49 questions in terms of content, and the results of the Japanese examinees and Vietnamese candidates were compared.

4. Ethical considerations

This study received approval from the Research Ethics Review Board of NPO Foreign Nurse/Care Worker Education Support Organization (No. 201401). Participants received clarification that cooperation was voluntary, that they could withdraw at any time, and that all data collected would be held in confidence.

Ⅲ. Results

1. Results of the Vietnamese EPA candidates

Table 1 shows scores for compulsory questions, general questions, and situational questions of the 104th NNE by seven Vietnamese candidates, and their correct answer rate.

2. Comparison of the correct answer rate between Vietnamese candidates and Japanese examinees, and reasons why questions were incorrectly answered

The content of the NNE compulsory, general and situational questions were summarized and are indicated here in square brackets.

For compulsory questions, no Vietnamese candidates were correct in [Occupational diseases due to vibration]. Accuracy rate was 28.6% for questions related to [Explanation of the working order of nursing methods], [In-home nursing], and [dyspnea]. In contrast, 100% of candidates were correct in [Concentration of sodium chloride in physiological saline], which was significantly higher than the Japanese rate of correct responses (59.6%).

Table1. The Score of the 104th National Nursing Examination by the 7 EPA Vietnamese candidates

candidate	compulsory 50 questions 1question 1 point	general 130 questions 1question 1 point	situation 59 questions 1question 2 points	general & situation 248 points full
V-1	34 68.0%	67 51.5%	76 64.4%	143 57.7%
V-2	41 82.0%	66 50.8%	56 47.5%	122 49.2%
V-3	37 74.0%	67 51.5%	62 52.5%	129 52.0%
V-4	37 74.0%	77 59.2%	78 66.1%	155 62.5%
V-5	41 82.0%	73 56.2%	80 67.8%	153 61.7%
V-6	34 68.0%	52 40.0%	58 49.2%	110 44.4%
V-7	34 64.0%	54 41.5%	66 55.9%	120 48.4%
Average	37.0 74.0%	65.0 50.0%	68.0 57.6%	133.0 53.7%

For general questions, Vietnamese candidates had 0 correct answers in [Sterile management for infection prevention], [Adult compressive cardiac massage], and [Nutrition guidance in prenatal education], and 14.3% in [Japanese Constitution], [Side effects of psychotropic medicine], and [Nursing activity timing post-disaster]. In 'Formation of disease and promotion of recovery', more than half the candidates were incorrect, and similarly more than 70% of Japanese examinees did not answer this question correctly. In [The components of elongated reflexes], 22.5% of Japanese were correct compared to 71.4% of Vietnamese candidates. Also, for [Cerebellar function], 28.1% of Japanese were correct compared to 71.4% of Vietnamese candidates.

Situational questions concerned [Observation on the first day of puerperium in the postpartum period], and [Prevention of deterioration of the pressure crease in the twelfth thoracic cord injury patient]. Candidates' correct answer rate was 14.3%. The second-lowest score (28.6%) was for [Assessment of postoperative complications of rectal cancer], [Ophthalmic nursing], [Exercise guidance for patients with osteoporosis], [Observation of symptoms of acute bronchiolitis dehydration], [Observation of depression indicators on the day of hospitalization], [Explanation of non-invasive positive pressure ventilation in child muscular dystrophy], and [The purpose of the nurse's visit to emergency accommodation after a landslide]. In contrast, 61.8% was achieved by Japanese examinees in [Providing information on social resources relating to acute lymphocytic leukemia] as compared to 85.7% for Vietnamese candidates. For [Probable symptoms of menopausal disorder] Japanese examinees scored 59.6% compared to 85.7% for Vietnamese candidates.

3. Reasons why Vietnamese candidates were incorrect in the 104th NNE

Table 2-1 shows scores for compulsory questions: ②'I forgot,' was the most frequent response at 41.7%; ① 'I have not learned' was the next most frequent answer (29.2%).

Table 2-2 shows scores for general questions. ① 'I have not learned' obtained 48.3% of the responses; ② 'I forgot' was indicated by 38.2%. Seven (of 11) candidates answered 'I have not learned' for 'Health support and social security system'; 2 out of 3 for 'Pediatric nursing', and 9 out of 10 for 'Nursing consolidation and practice' (Table 2-2). Table 2-3 summarizes situational questions where candidates responded: ①'I have not learned' (28.9%); ②'I forgot' (26.7%); ③'I could not understand the Japanese' (24.4%).

For 'Pediatric nursing studies', and 'Nursing consolidation and practice', no candidates answered 'I have not learned'.

4. Japanese words that candidates could not understand

In the 104th NNE, more than half of the Vietnamese candidates were incorrect, and answered that they 'could not understand the Japanese' (see Table 3).

Table 2-1. Incorrect answers to questions and reasons incorrect 〔compulsory questions〕

questions	Reasons for Incorrect Answers					
	①	②	③	④	Unclear	Total
Occupational diseases due to vibration	2	3	0	0	0	5
Relationship of parent and adolescence child	1	0	1	1	0	3
Explanation of the working order of nursing methods	2	2	0	1	0	5
In-home nursing	0	3	0	0	0	3
High urgency arrhythmia	2	1	0	0	0	3
Dyspnea	0	0	0	3	0	3
Cyanosis	0	2	0	0	0	2
The Requirement of high illuminance	1	0	1	0	0	2
	7	10	1	6	0	24
	29.2%	41.7%	4.2%	25.0%	0.0%	100.0%

① I have not learned in universities or hospitals in Vietnam or Japan　② I have learned in Vietnam or Japan, but I forgot it
③ I could not understand Japanese　　④ other

Table 2-2. Incorrect answers to questions and reasons incorrect〔general questions〕

Area	Questions	Reasons for being incorrect					
		①	②	③	④	Unclear	Total
Structure and function of human body	Cell organelles involved in protein synthesis Oculomotor nerve Angiography Bladder structure	6	7	0	1	0	14
Health support and the social security system	Public assistance act Influence of environmental factors on health Japanese Constitution	7	2	1	1	0	11
Fundamental nursing	Sterile management for infection prevention Adult compressive cardiac massage Tasks for nurses Skin structure and function Law stipulating staffing standards of nurses	4	7	0	1	0	12
Adult nursing	Hormones related to regulation of urine volume Mydriatic drug	2	2	0	1	0	5
Gerontological nursing	Evaluation of elder abuse Comprehensive functional evaluation of the elderly	3	3	0	1	0	7
Pediatric nursing	Challenges and measures for pediatric medical care	2	0	1	0	0	3
Maternity nursing	Prenatal diagnosis Changes associated with the menstrual cycle Nutrition guidance in prenatal education]	5	7	0	1	0	13
Mental health nursing	Neurotransmitter Group psychotherapy Side effects of psychotropic medicine	2	4	1	1	0	8
Community nursing	Pain management for home nursing patients Assistance for elderly living alone	3	1	1	1	0	6
Nursing consolidation and practice	Obligations of medical institutions under medical law. Nursing activity timing post-disaster Consideration for elderly people living in evacuation centers	9	1	0	0	0	10
		43 48.3%	34 38.2%	4 4.5%	8 9.0%	0 0.0%	89 100.0%

① I have not learned in universities or hospitals in Vietnam or Japan　② I have learned in Vietnam or Japan, but I forgot it
③ I could not understand Japanese　④ other

Table2-3. Incorrect answers to questions and reasons incorrect〔situational questions〕

area	questions	Reasons for being incorrect					
		①	②	③	④	Unknown	Total
Adult nursing	Predictive pathology for chronic kidney disease Assessment of postoperative complications of rectal cancer	3	1	2	0	0	6
Gerontological nursing	Assessment of alzheimer's disease Opthalmic nursing (Exercise guidance for patients with oseoporosis)	3	1	1	1	1	7
Pediatric nursing	Preoperative strabismus nursing Observation of symptoms of acute bronchiolitis dehydration	0	0	2	1	0	3
Maternity nursing	Observation on the first day of puerperium at the postpartum period Suspected uterine subinvolution of puerperium at the postpartum period	3	3	0	1	0	7
Mental Health nursing	Observation of depression indicators on the day of hospitalization	3	1	0	1	0	5
Community nursing	Explanation of non-invasive positive pressure ventilation in child muscular dystrophy Infection control in child muscular dystrophy Prevention of deterioration of the pressure crease in the twelfth thoracic cord injury patient	1	5	5	2	0	13
Nursing consolidation and practice	The purpose of the nurse's visit of emergency accommodation after a landslide	0	1	1	2	0	4
		13 28.9%	12 26.7%	11 24.4%	8 17.8%	1 2.2%	45 100.0%

① I have not learned in universities or hospitals in Vietnam or Japan　　② I have learned in Vietnam or Japan, but I forgot it
③ I could not understand Japanese　　④ other

Table 3. Japanese words that EPA Vietnamese candidates could not understand

Home nursing related	Long-term care insurance act, In-home nursing, Short stay
Disaster related	Relief goods
Chemical agent	Folic acid, Arsenic, Photochemical oxidants, Ozone hole.
Katakana description	Ileus, Tardive dyskinesia, Push up Reclining, (Improvement of) Respite care, (Improvement of) Doctor's car
Others	Pulmonary blood flow, dehiscence (Ruptured wound closure), Suture of epistomy, Subinvolution When equipment indicates surplus sir supply Check circuit, Vibration, Interference, Illuminance

For these same items that were problematic for the Vietnamese candidates, 49 of the Japanese examinees answered more than 70% correctly.

During interviews, candidates indicated that they did not understand Katakana such as 'sexuality', 'brushing', and 'Venturi mask'. They also demonstrated inadequate abilities to conduct conversations about daily life and the workplace.

5. Questions in which all Vietnamese candidates were incorrect

Here, there is a comparison of questions where all Vietnamese candidates were incorrect, but Japanese examinees gave correct answers. Table 4 shows there were two compulsory questions, six general questions, and one situational question.

Table4. Correct rate of Japanese participants

	questions	Correct rate of Japanese participants
compulsory	Patient mediaction levels monitoring	46.1%
	Occupational diseases due to vibration	97.5%
general	Multiple sclerosis	22.5%
	Sterile management for infection prevention	83.1%
	Disorders of post total laryngectomy and tracheotomy	53.9%
	Revised DDST	31.5%
	Nutrition guidance for pregnant women, Folic acid	80.9%
	Defensive function	62.9%
situational	Nursing of cardiogenic cerebral infarction	50.6%

Ⅳ. Discussion

1. Comparing the accuracy rates for compulsory questions, general questions, and situational questions between Vietnamese candidates and Japanese examinees

The NNE was the first examination candidates took after entering Japan. At the time, none were familiar with Japanese life or culture. Four of the seven candidates attained correct answer rates within or near to the pass criteria. The reason for answering incorrectly was that nearly half of the candidates forgot what they had learned. Iwata (2014) analyzed the grammar and vocabulary used in the past seven NNEs and clarified that the vocabulary used in compulsory questions appears again in 60% of general questions and 57% of situational questions. Therefore, compulsory questions cover not only specialized content, but also provide a basis for understanding relevant vocabulary, and raising the score of general and situational questions.

In general questions, low correct answer results were connected to inadequate learning in 'Formation of disease and promotion of recovery' for Vietnamese candidates and Japanese examinees. In addition, because the correct answer rate of Vietnamese candidates was about three times higher in 'Structure and function of human body' that cannot be explained simply because the learning is insufficient. Details will be described in the next section on differences in nursing education between Vietnam and Japan.

Although the correct answer rate for situational questions was higher than the correct answer rate for general questions, many of the candidates indicated: 'I didn't understand Japanese'. The situational questions involve long sentences where it is not easy to understand all the words. Therefore, candidates judged the situation in the question based on their experiences as nurses in Vietnam.

In future, it is expected that the number of situational questions for the NNE will increase, which will require the ability to assess and judge a clinical situation. To pass the exam, it will be important to fully understand the Japanese language and the situation in clinical practice in Japan.

2. The difference between nursing education in Vietnam and Japan and the requirements of the NNE questions

Regarding 'Health support and the social security system', and 'Nursing consolidation and practice', more than half of the respondents said they had not learned about these in either Vietnam or Japan. As Vietnam is a socialist nation, there are differences in social norms and mindsets. Vietnamese EPA candidates entering Japan must understand terms from Japanese law such as the Public Assistance Act, the Japanese Constitution, Medical Law, and many more. This learning process will inevitably be a long and arduous

undertaking, but is important because the terms are included in the NNE.

In regards to [Life factors and the influence on health], there are variances in disease prevalence among countries (World Health Organization, 2016). Different conditions influence the health care approach. Conditions in Japan make 'Disaster nursing' and 'Home nursing' priority health subjects. Vietnam's situation excludes these subjects from the curriculum (Shiraishi, 2015), hindering candidates from learning the associated technical terms, likely leading to incorrect answers in the NNE.

In Vietnam, doctors are heavily involved in nursing education and clinical practice. Doctors guide the practical training, mainly focusing on the understanding of diseases and acquisition of techniques such as administration of injections and treatments (Asanaga, Okamoto, Omote, 2014). During the interviews with the Vietnamese EPA candidates, the impression received was that the role of the nurse in Vietnam is mainly as an assistant to doctors. However, in such working circumstances, it is possible to intensively learn about [Sterile management for infection prevention], [Dyspnea], and [Cyanosis] but all Vietnamese EPA candidates were incorrect in these subject areas.

There is an assumption that within the Vietnamese nursing education curriculum, nutritional guidance for pregnant women and information about folic acid should be learned. However, none of the Vietnamese EPA candidates were correct in subjects such as 'Maternity and gynecology nursing' (Kobayashi, Okanishi, 2016), 'Maternity and gynecology nursing', (Shiraishi, 2015) and 'Gynecology, motherhood, and family nursing' (Asanaga, Okamoto, Omote, 2014). These differences in the curriculum may also relate to differences in the content of lectures, tutorials, and clinical practice. By 2007, almost all nursing schools in Vietnam had been promoted to the junior college level, and the Nursing Association was focusing on nursing research and striving to develop its own specialty in nursing. However, the quality of nursing was not sufficiently assured because of a deficient nursing

system linked to a chronic lack of nurses and the relatively strong medical orientation (Hiruma, Amano, 2015; Kobayashi, Okanishi, 2016).

We need to understand the current situation and cultural differences in nursing, medical care and culture in Vietnam to provide relevant support for Vietnamese EPA candidates.

3. Training in Japan and study content

After the intake of candidates, questions arose regarding whether training and learning in Japan had helped develop candidates' knowledge and skills. Hirano et al. (2015) translated the 103rd NNE into Vietnamese and conducted a simulation test with candidates before their arrival in June 2014 to include in this research. Comparing the results between the simulation test and the 104th NNE used in this study revealed stark differences. The average correct answer rates of the simulated test compared to the actual test were, respectively: Compulsory questions - 56.4% correct (simulation) and 74.0% (NNE); for general questions - 25.8% correct (simulation) and 50.0% (NNE); and for the situational questions - 49.7% correct (simulation) and 57.6% (NNE), showing an improving accuracy rate. These results suggest that if a candidate obtains an N3 level of Japanese proficiency, it will be easier to learn to pass the NNE. Saito (2010) and Okuda (2011a) state, however, that Level 2 of the JLPT is the appropriate level for completing the NNE. Iwata (2014) noted that even the JLPT Level 1 only covers 65% of the noun vocabulary required in the NNE. For the purpose of the NNE, and because the required noun vocabulary learning for the JLPT was not acquired through study, the JLPT is inadequate. For this reason, the proposal is to introduce gradual higher learning corresponding to the requirements of the NNE.

The learning support method differs in each facility. In many facilities, Japanese nurses provide training support to Vietnamese candidates (Kugahara, 2018). Vietnamese candidates need to study both Japanese and nursing to understand the NNE; specialized language knowledge will support their communication

and nursing abilities. It is essential therefore that both language and nursing educators cooperate to teach expert and specialized knowledge to candidates.

4. Communication skills and technical terms not understood

The technical terms that the candidates could not understand included Kanji which Japanese people can easily recognize. Available information shows that Community nursing is not an occupation in Vietnam and receives no mention in their nursing curriculum. Therefore, the candidates could not understand the content related to 'In-home nursing'. This, however, does not explain the lack of understanding of the terms 'short stay', 'ileus', or 'tardive dyskinesia'. For foreigners, there is a problem that foreign words cannot be recognized as having the same meaning because Katakana notation is not associated with the original language (Okuda, 2011b). For that reason, chemical substances such as folic acid and arsenic were understood if written in English. As a concessionary measure, the MHLW will allow the written English version of internationally certified names of diseases instead of Katakana.

V. Research limitations and future research

This research is limited and does not reflect all possible trends because only seven candidates, just one-third of all Vietnamese nursing candidates, participated.

Most institutions consider the purpose of acceptance of EPA candidates to be international exchange (Japan International Corporation of Welfare Services [JICWEL], 2017), and there are variations in the learning support for candidates at each facility (Nagae, Iwase, Furusawa, Tsubonouchi, Shimai, Andou, 2018). Therefore, there are no external content inclusion activities to facilitate cooperation of support content at the receiving facilities. We need to understand the reasons for facilities not being able to provide external content support and to introduce successful examples that showcase this practice.

The reasons for incorrect answers in the NNE were attributed to the two different curricula (Vietnamese and Japanese), which also differ by way of lectures, tutors, and practice. It is necessary to investigate the educational situation in Vietnam as a subject of future research. Further investigation must include cooperation between Japanese nurses and Japanese teachers at each facility to encourage the EPA candidates to pass the NNE.

VI. Conclusion

1. For the compulsory questions, two of the seven candidates were within the passing range with a correct answer rate of 82.0%, and two were close to the passing range with a correct answer rate of 74.0%.

2. The average correct answer rate of 57.6% for the situational questions is higher than the average correct answer rate of 50.0% for the general questions. Therefore the Vietnamese candidates could judge by assessing the situation. However, their lack of understanding of Japanese in the situational questions means they need to develop associations and obtain nursing experience to acquire the necessary technical terms.

3. More than half of the candidates answered that they had never learned about 'Health support and the social security system' and 'Nursing consolidation and practice'. Social conditions are different in Vietnam and Japan, and it is difficult for candidates to understand the law, medical system and culture of Japan. They need more time to learn about and experience these aspects.

4. Subjects such as 'Disaster nursing' and 'Home nursing' are not included in Vietnamese nursing education, resulting in incorrect answers in the NNE. However, even when subjects were included in the Vietnamese curriculum, all candidates answered incorrectly. There is a need for further investigation of content and education methods in Vietnam.

5. Cooperation between Japanese nurses and Japanese

teachers is required to understand the NNE, as both nursing and communication require specialized knowledge. Vietnamese EPA candidates need to study both Japanese and nursing.

6. A further complication is that some Katakana words do not always coincide with the original sounds, which confuses foreigners.

7. It is necessary to increase reliability with a greater number of candidates in future studies, however at present there is only a small pool of available EPA Vietnamese candidates.

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