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Employability of Nursing Care Graduates

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Starting points: In Slovenia, the higher education institution for nursing started exploring employability opportunities in nursing care in connection with the achievement of competencies from students' and employers' point of view. This article highlights the importance of monitoring nursing graduates' employability. Its aim is to examine the employability of nursing care graduates based on the self-evaluation of competences obtained during the last study year and to establish a link between the self-evaluation of competences and students' academic performance.

Methodology: A questionnaire was distributed to full and part time nursing care students attending the last study year at five different healthcare/health sciences faculties in Slovenia and to employers (healthcare institutions) where the majority of nursing care graduates finds employment. We examined the level of competence achieved by nursing students and the level of competences required by employers. The sample included a total of 485 students. 194 surveys were returned, which represent a 40 percent response. We used Kolmogorov-Smirnov test for each individual joined competence. Further, we compared employability skills of students and employers with Mann-Whitney and Wilcoxon rank-sum test. For correlation between two variables we used Spearman correlation analysis.

Results: The Mann-Whitney and Wilcoxon Rank test show that employers generally assess competences with a higher average grade in comparison to students and these differences are statistically significant. By applying the Spearman correlation analysis, we established that a statistically significant weak correlation may be observed between the "average grade" and "competences" variables.

Discussion and conclusion: Our findings show that a continuous monitoring of general and subject-specific competences gained by students, along with a periodic verification of competences demanded by employers, is necessary. It is very important to monitor the requirements of the labour market in terms of ongoing communication with employers who can best estimate special knowledge needs.

Keywords: *employability, nursing care graduates, competences, labour market*

1 Introduction

In the past, the employability of nursing care professionals in Slovenia was considered high and the labour market in nursing also showed a relatively high demand. Nowadays, there are several reasons for concern, as the labour market in the field of nursing in Slovenia is slowly filling up. Statistical data of the Employment Service of Slovenia (2013) show that there were 821 job offered in nursing care in 2011 (after 2012 the Employment Service of Slovenia gathered no more data about job offers by the law). Today's data show an increased unemployment in nursing. In

August 2014, there were 171 registered unemployed graduated students in the field nursing care (European Federation of Nurses associations Workforce Committe, 2014).

This shows there are relatively few employment opportunities in the field of nursing and healthcare in Slovenia, although the demand in practice is evident. Our purpose is to find out, what the higher institutions can do to increase the employability of nursing care graduates. Higher education institutions can look into monitoring the employability of nursing care graduates from two perspectives, i.e. higher education institutions may offer enrolment places to candidates on the basis of demand and interests or follow

the situation on the labour market in the field of nursing care and offer enrolment places on the basis of this factor.

Marjetič and Lesjak (2013) claim that higher education institutions have recently not had to deal with the labour market, as all graduates were able to enter into fairly good employment. Therefore, there was no need to monitor the manner in which graduates were entering the labour market. Nowadays, however, we are dealing with the issue of monitoring graduates' employability and establishing mechanisms that would help them in the transition from education to employment. There is also a lack of unified mechanisms for verifying the effectiveness and validity of study programmes, with the exception of those used for checking the general and subject-specific competences gained during the study.

This raises a question of what happens to a graduate who is waiting for a job for more than six months after graduation. What is the aim of competences and skills achieved when graduates finish their study, since they are not able to apply them in practice due to unemployment? Pavlin (2012) also states that Europe has been waiting for an analysis of empirical research among higher education graduates that would cover the topic of career success, employability and the evaluation of higher education for decades.

1.1 Employability and employment of nursing care graduates

Minten and Forsyth (2014) defined employability as "capability to move self-sufficiently within the labour market to realise potential through sustainable employment". Harvey (2001) quotes employment as the share of graduates who are employed full time in a specific time frame or as the number of graduates taking part in regular contract employment. Naturally, one should consider that more capable students find employment faster. The term employability can be explained as a transition to the work sphere. Yorke (2006) defines employability as a unit of achievements, skills, competences, understanding and personal characteristics that enable graduates to get employment so they are successful in their chosen occupation.

He also explains that employability is a graduate's skill to work in a work environment. Mason, Williams and Cranmer (2009) claim that the term employability refers to the so-called "work willingness" which means that a graduate possesses skills, knowledge and understanding that will contribute to organisations' goals in a creative manner. In the field of nursing care graduates' employability there is a need for adjusting norms and standards, and evaluating the quality of education. Qualification of graduates as an answer to the industry demands becomes a major aim for higher education institutions (Eurico, Silva and Valle, 2015). This may consequently lead to setting the necessary relations between key competences in the field of health-

care.

In Slovenia, there has been no mechanism that would systematically establish the needs for certain competences in the labour market yet. Furthermore, a measurement tool for measuring/monitoring graduates' employability has also not been developed yet. Estimates are available from the Employment Service of Slovenia, which is gathering data on employers' needs on the basis of occupation and not competences.

The assessment of competences obtained at the end of one's studies (Mogonea, 2015) and the assessment of competences required by employers could be one of the possibilities for measuring graduates' employability (Singh, Thambusamy and Ramly, 2014). Based on these findings, the following hypothesis was formulated:

RH1: On average nursing care students evaluate the level of achieved competencies higher than employers.

In their research, Kim, Lee, Eudey and Wong Dea (2014) find that the level of students' perceived competences was positively correlated with the level of their interaction with the preceptor in clinical settings which lead to reconcile the role between nursing students and employers. Fan, Wang, Chao, Jane and Hsu (2015) state that nursing students must acquire competences in a clinical environment to close the gap between education and practice, and that nursing education should be based on competences-based learning. This leads us to hypothesis two:

RH2: Level of required competences from the employers' side is on average higher with employers on secondary and tertiary level, as with employers on primary level of health care.

In order to enable the transition of nursing care graduates to the labour market, it is important that the education system and the labour market (clinical environment) are constantly adjusted and closely coordinated. This means that educational institutions should be in constant contact with employers who offer jobs to graduates and should know which competences are needed for certain work positions. On the other hand, employers should thoroughly define skills and competences required at certain positions. Higher education institutions are actually becoming economic institutions and get involved into competitive market relations (Pavleka, 2014). The level of nursing care graduate's employment is therefore important factor of their success. One of the main indicators of nursing care graduate's success is their average grade. Unfortunately, the relationship between traditional measures of academic success, such as average grade and postgraduation job performance is not well established (Codier and Odell, 2014). Based on these findings, the hypothesis three was formulated:

RH3: Nursing care students who evaluate their level of achieving competencies higher, will have a higher average grade.

1.2 Competences needed for graduates' transition to the labour market

It is important to establish which competences are needed for a successful entry into the labour market and better employability, and how these competences are related to a job profile (Allen and van der Velden, 2009).

In nursing, there are key competences, which define the proper field of nurses' work and are defined and categorised differently around the world. Competences may be combined into different categories (see Table 1).

European Federation of Nurses Associations (EFN) (2015) presents a document in which EFN prepared a guideline for the implementation of Article 31 of the Mutual Recognition of Professional Qualifications Directive 2005/36/EC, amended by Directive 2013/55/EU. This EFN Competency Framework is a guideline for the implementation of the changes in the directive into the national nursing curricula. This document is establishing a pathway that connects the competences with the related list of topics for the nurse education and potential learning outcomes (European Federation of Nurses Associations, 2015). We can predict that this is one of the first steps to unify professional competences on the European Union level.

The Nursing Council of Hong Kong (2012) defines key competences as result of education. Nurses who graduate from a bachelor's nursing care study programme, gain competences before entering the labour market and are therefore capable to provide safe, effective and ethical care to the public. Ravindra and Sheelam (2013) also state that individuals' capability or competence should be matched with organisational job requirements. Important job requirements in health care are leader's competences (Kvas et al., 2014). The European Federation of Nurses Associations Workforce Committee (EFN) (2014) and the Nurses and Midwives Association of Slovenia (2014) presented a document in which the EFN prepared the basis for defining key competences for new profiles of nurses. The matrix of key competences is not fully developed as it is expected that individual European Union countries will introduce their own competences and skills that were not planned by the EFN. It is therefore possible to predict that this is one of the first steps to unify professional competences at the European Union level.

Allen and van der Velden (2009) also state that the level of required competences may vary due to the demand in the labour market. In the field of nursing, one may also talk about differences between the healthcare level and required competences. Our study combines competences and eight employability skills, which were classified by Robinson (2000), European Commission (2011), Nurse of the Future Competency Committee (2010), Lee-Hsieh, Kao, Kuo and Tseng (2003), Hsu and Hsieh (2013) and Liptak (2010). These include performing professional nursing, innovativeness, team work, life-long learning,

technological knowledge, work organisation, productivity and communication.

The purpose of this paper is to investigate the employability of nursing care graduates in connection with achieved and required competences. The aim of the research was to identify which competences are obtained by nursing care graduates during their study and what was their self-evaluation in the last study year, to investigate which competences are expected by employers and to establish the connection between competence self-evaluation and study efficiency.

2 Methods

2.1 Instrumentation

We prepared two surveys. A survey on competence evaluation, intended for nursing care students with 3 thematic sets (competencies evaluation with 49 competencies; factor affecting the employability with 10 factors; career development – the use of Schein career anchors) and demographic data: sex, age, study form and average grade was used. We also prepared a survey on expected competences and employability of nursing care graduates' intended for employers who employ nursing care graduates with 2 thematic sets (competencies evaluation with 49 competencies; factor affecting the employability with 10 factors and 6 items about publishing job vacancies) and demographic data: type of institution, region where the institute is located, and number of job vacancies publishing per year.

Both surveys were prepared based on analysis of the literature that describes competences in nursing care (Železnik et. al, 2008; TUNING, 2012; European Federation of Nurses associations Workforce Committee, 2014; Official Journal of the EU, 2013; Official Journal of the EU, 2006/394). To establish characteristics of variables we combined and classified 49 competencies from the survey, according to substantive area. We combined competencies to the so called 8 employability skills, also classified by Robinson (2000), European Commission (2011),

Nurse of the Future Competency Committee (2010), Lee-Hsieh, Kao, Kuo, & Tseng (2003), Hsu & Hsieh (2013), Liptak (2010), Official Journal of the EU (2013). We named them: performing professional nursing, innovativeness, team work, life-long learning, technology knowledge, work organization, productivity, and communication. For variable "performing professional nursing" we combined 7 competencies in connection with performing nursing care as well as to plan, organise and implement nursing care.

For variable "innovativeness" we combined 10 competencies in connection with competencies for independent decision making, performing nursing care based on evidence based practice and competencies for using crit-

Table 1: Categorisation of key competencies depending on different descriptions

Country/Association/ Author	Number of categories	Key competences categories	Reference
Directive 2005/36/EC amended by Directive 2013/55/EU European Union	8	<ul style="list-style-type: none"> • Use of theoretical and clinical knowledge in order to improve professional practice • Teamwork and Collaboration • Health promotion and empowerment of individuals, families and groups towards healthy lifestyles and self-care • Ability to act in emergency and crisis situations • Competence to independently advise, instruct and support individuals needing care • Competence to independently ensure the quality of nursing care and assess it; • Professional communication • Competence to analyse the quality of care in order to improve their own professional practice as general care nurses. 	Official Journal of the EU (2013)
European Federation of Nurses (EFN) European Union	6+4 subgroups	<ul style="list-style-type: none"> • Culture, ethics and values • Health promotion and prevention, guidance and teaching • Decision-making • Communication and teamwork • Research, development and leadership • Nursing Care • Assessment and diagnosis • Care planning • Nursing intervention • Evaluation and quality assessment 	European Federation of Nurses Associations (2015)
TUNING project / European Union	6	<ul style="list-style-type: none"> • Professional values and the role of a nurse • Nursing practice and clinical decisions • Nursing skills, interventions / activities to provide optimum nursing care • Knowledge and cognitive competencies • Communication and interpersonal skills (including the use of communication technology) • Leadership, management and teamwork competencies 	TUNING (2012)
The Nursing & Midwifery Council (NMC) / England, Wales, Scotland and Northern Ireland	4	<ul style="list-style-type: none"> • Professional values • Communication and interpersonal skills • Nursing practice and decision making • Leadership, management and team working 	The Nursing and Midwifery Council (NMC) (2010)

Table 1: Categorisation of key competencies depending on different descriptions (continued)

Massachusetts department of Higher Education / USA	7	<ul style="list-style-type: none"> • Patient-Centred Care • Leadership • Communication • Professionalism • Systems-Based Practice • Teamwork and Collaboration • Informatics and Technology • Safety • Quality Improvement • Evidence-Based Practice (EBP) 	Nurse of the Future Competency Committee (2010)
Canadian Nurses Association / Canada	4	<ul style="list-style-type: none"> • Professional role, authority and responsibility • Patient evaluation and diagnostics • Management in the frame of a therapeutic programme; • Health promotion, illness and injury prevention 	Canadian Nurses Association (2010)
Robinson / USA	3	<ul style="list-style-type: none"> • Basic Academic Skills • Higher – Order Thinking Skills • Personal Qualities 	Robinson (2000)
Nursing Council of Hong Kong	5	<ul style="list-style-type: none"> • Professional, legal and ethical nursing care • Promotion of health and health care education • Management and guidance • Research and personal effectiveness • Professional development 	Nursing Council of Hong Kong (2012)
Shafie Asmaak and Surina / Malaysia	9	<ul style="list-style-type: none"> • Personal Attributes • Team Work • Self-Management • Technology • Learning • Initiative and enterprise • Communication • Problem Solving • Team Work 	Shafie Asmaak and Surina (2010)
Hsu and Hsieh / Taiwan	6	<ul style="list-style-type: none"> • Ethical practice and accountability • General clinical nursing skills • Lifelong learning • Clinical biomedical science • Caring • Critical thinking and reasoning. 	Hsu & Hsieh (2013)

ical and reflective thinking. For variable “team work” we combined 6 competencies in connection with ability forming constructive and effective professional relationships in team. For variable “life-long learning” we combined 6 competencies in connection with ability to active participate and cooperate with educational procedures and assuming personal responsibility for professional education.

For fifth variable “technology knowledge” we combined 4 competencies in connection with ability for work with a computer and with medical equipment. For variable “work organization” we computed 5 competencies in connection with ability to organize the work and supervise nursing care activities. For variable “productivity” we combined 5 competencies in connection with ability to perform nursing care activities and assuming responsibility for decision making within practice. For variable “communication” we combined 6 competencies in connection with using professional assertive, therapeutic communication and ability constructive conflict resolution.

Student’s assessment of competencies and employer’s assessment of expected competences were measured on 5-point Lickert scale in which 1 means lowest range and 5 highest range of competencies attainability.

The reliability of both questionnaires was checked with the Cronbach’s alpha test. Cronbach’s alpha amounted to 0.923 in the survey filled in by students and to 0.963 in the survey intended for employers.

2.2 Sample

The research was carried out in spring 2014 at five faculties for nursing in Slovenia. The sample included third year students of full and part time bachelor’s study programme of nursing care. Faculty deans were asked for permission to carry out the research.

At the two of five faculties the survey was sent in paper format. At the three faculties the survey was carried out online. Different approach for collecting the data was chosen because of the organisational site of institutions in connection with forwarding the survey to the students.

On Faculties on which the survey was carried out online the email with survey link was sent to the Students Affairs Office and then was forwarded to students email addresses. We used simple random sampling. The sample included a total population of 485 students. 194 surveys were returned, which represent a 40 percent response. The survey for employers who employ nursing care graduates was sent by e-mail to several health care institutions in Slovenia.

An e-mail with a link to the survey was sent only to the assistant directors for health care in each institution with the request for participation in the survey. Included were 23 general hospitals, 2 clinical centres, 55 community health centres and 43 elderly and social care institutions, a total of 143 institutions. According to the data of Association of Health Care Institutions and Association of Social and Welfare Institutions, in Slovenia is 193 health care, social and welfare institutions. From sample we excluded 50 institutions because of poor contact data. The sample

Table 2: Average values of gaining joined competences – students’ and employers’ grade

<i>Employability skills</i>	<i>Actual competences – students (N=194)</i>				<i>Required competences – employers (N=47)</i>				Z	P
	<i>Min.</i>	<i>Max</i>	<i>M</i>	<i>SD</i>	<i>Min.</i>	<i>Max</i>	<i>M</i>	<i>SD</i>		
Communication	2,50	5	3,68	0,57	2,33	5	3,91	0,752	-4,945	<0.001
Productivity	2,00	5	3,51	0,60	2	5	3,8	0,83	-6,369	<0.001
Technology knowledge	1,00	5	3,36	0,82	2,6	6	4,83	0,90	-7,655	<0.001
Work organization	2,00	5	3,62	0,61	2,75	5	4,06	0,666	-6,266	<0.001
Life-long learning	1,67	5	3,38	0,73	1,67	5	3,67	0,842	-7,013	<0.001
Team work	1,33	5	3,31	0,70	1,83	5	3,76	0,865	-7,666	<0.001
Innovativeness	2,10	5	3,62	0,58	1,8	5	3,66	0,841	-5,369	<0.001
Performing professional nursing	1,14	5	3,60	0,60	2,14	5	3,82	0,839	-6,893	<0.001
Total			3,5				3,94			

represent 74,1 percent of total population. 47 surveys were completed, which represent a 32,9 percent response.

3 Results

The estimates of students' self-assessment of achieved competences were compared to the estimates of competences required by employers. A Kolmogorov–Smirnov test was performed for each individual joined competence (employability skills), which shows that not all variables distributed normally. On the basis of the test, the estimates of employability skills as seen by students and employers were compared to each other with a nonparametric test in order to find differences in the arithmetic mean (Mann-Whitney and Wilcoxon rank-sum test). It was established that the actual individual competence achievement is rated better by employers, since the average values were higher in 38 out of a total of 49 competences. Results (Table 2) show that employers rated all 8 employability skills better than students ($p < 0.05$).

In order to establish the link between the “self-evaluation of actual competence achievement” and the “average study grade” variables, a test of exploratory analysis was carried out with the aim of verifying the presumption regarding normal distribution and homogeneity. We then performed the Kolmogorov–Smirnov test, which proves that the “average grade” and “individual competence” vari-

ables do not divide in a normal manner (all competences amounted to $p < 0.05$). Therefore, Spearman's correlation test was used for further testing. It was found that there is a statistically significant weak correlation ($r = 0.22$; $p = 0.002$) between the above two variables.

In the research, we also checked the level of required competences according to the healthcare institution level. Group 1 included primary level healthcare institutions, while group 2 included secondary and tertiary level healthcare institutions. Institutions operating at secondary and tertiary levels were combined, because only one tertiary level healthcare institution participated in the survey. Considering the number of units in a sample ($N=47$), the Shapiro-Wilk test, which shows that the distribution of variables is not normal ($p < 0.05$), was used. Table 3 shows average grade values for “required joined competences”, which show that secondary and tertiary level institutions rated the required competences with a higher average grade.

The “knowledge of technology” competence represents an exception. By using the Mann-Whitney test for determining differences between the required competences according to the level of healthcare following a two-sided testing, we could not prove any significant differences.

Table 3: Values of average ranks for the employability skills regarding the type of institution variable

Employability skills	Level of healthcare	N	M	t
Performing professional nursing	Secondary and tertiary level	27	26.70	721.00
	Primary level	20	20.35	407.00
Innovativeness	Secondary and tertiary level	27	26.57	717.50
	Primary level	20	20.53	410.50
Team work	Secondary and tertiary level	27	26.96	728.00
	Primary level	20	20.00	400.00
Life-long learning	Secondary and tertiary level	27	24.78	669.00
	Primary level	20	22.95	459.00
Technological knowledge	Secondary and tertiary level	27	23.67	639.00
	Primary level	20	24.45	489.00
Work organisation	Secondary and tertiary level	27	23.56	636.00
	Primary level	20	24.60	492.00
Productivity	Secondary and tertiary level	27	25.54	689.50
	Primary level	20	21.93	438.50
Communication	Secondary and tertiary level	27	25.33	684.00
	Primary level	20	22.20	444.00

4 Discussion

The research established that employers generally rated actual and required competences higher than nursing care students. We expected that the self-evaluation of achieved competences would be rated higher by students than by employers. This would prove that students are more self-confident and have suitable knowledge and skills when entering the labour market. They are also prepared for new work tasks and eager to improve their acquired knowledge. The fact that employers rated graduates' acquired competences with very high grades is rather interesting. One could assume that graduates meet employers' demands when they graduate. One could also claim that their employment skills are highly developed. Therefore, the RH1 hypothesis was not confirmed.

This also raises the question of how to improve students' self-confidence and which specific knowledge within individual competences was rated as weak by students. Our research established that students rate their competences in the field of team work, technological knowledge and technologies, as well as life-long learning with the lowest grade. On the other hand, employers attributed the lowest grade to competences that were classified into the employment skills group, i.e. innovativeness and life-long learning.

De Souza (2012) finds that nursing care students grade the acquisition of individual competences very highly, especially in the field of performing professional nursing, while they consider themselves less competent in the field of research in nursing care and life-long learning. The author also states that nursing care study programmes need additional contents in areas where competence levels are deemed low. According to the National Association of Employers and Colleges (2009), employers believe that an important skill deficiency occurs in the development of effective communication skills and technological knowledge.

Van Schoot and Streumer (2003) also state that students and nursing care graduates nowadays meet a greater diversity and complexity of conditions in nursing care and care at institutions. An update and expansion of course syllabi is of key importance for improving the transfer of theory into practice. There is a lack of research into the manner in which study programmes and the acquisition of individual competences affect students' and graduates' employment.

West and colleagues (2014) describe the importance of introducing additional programmes, the so-called programmes for renewing knowledge and skills after graduation that ease nursing care graduates' transition to the labour market and give them a chance to refresh and further develop their skills and competences, thus helping them find or retain employment. Pavlin (2012) states that the main goal of higher education is to prepare graduates for entering the labour market, which can be achieved by de-

veloping competences in the higher education system.

The research also showed a difference in the estimates of required competences among employers. Employers at the primary healthcare level demand a lower level of acquired competences. Graduates must achieve the highest level of required competences for the secondary and tertiary healthcare levels.

Employers at the primary level rated the "Technological knowledge" employment skill higher. These findings enabled us to reject the RH2 hypothesis. Defloor et al. (2006) also find that a higher level of cognitive and psychomotor competences is required in special fields of nurse activities. It is very important for graduates and employees to have a chance to acquire new competences in specific areas of their work, along with renewing those competences they already gained. It is also very important for employers to get to know students while they are performing clinical practice. On the other hand, Liptak (2010) explains that most competences and skills that employers require and are found lacking in new employees are not job-specific, but the kinds of skills required in most occupations.

The research also shows that students with a higher average study grade evaluate the level of achieving individual competences better. Findings prove that students, who are successful in their studies, and part-time students are more self-confident and better prepared for the transition from study to independent work in a clinical environment. Lee-Hsieh, Kao, Kuo and Tseng (2003) also find that part-time students mark the level of competence acquisition right after finishing their studies higher, while the self-evaluation of individual competence compounds (communication, professional growth, clinical competences and competences in the field of leadership) is statistically significant and rated better by full-time students after a 3 months introduction into independent work.

Those findings are an important basis for further research in the sense of following graduates' employability and marking the level of achieving individual competences after they become employed. On the other hand, Pavlin (2012) finds that high average grades do not affect graduates' good career opportunities in Slovenia. Therefore, Missen, McKenna and Beauchamp (2014) stress that graduates are a "vulnerable population" after finishing their studies. These require the introduction of the so-called supporting educational programmes that help graduates with the transition to the labour market. Such programmes should be intended for graduates' specialisation, thus enabling an easier acceptance of the work role, and as improvement of knowledge and skills required in clinical practice.

5 Conclusion

It is very important to monitor the requirements of the labour market in terms of ongoing communication with employers who can best evaluate the special knowledge needs, i.e. individual general, social and special competences or advanced knowledge in the context of life-long learning. We also suggest the introduction of a permanent and continuous general and specific competences achievement monitoring by students and periodic assessments of competences, knowledge and skills required by employers.

In addition, we recommend further research in the field of employability and career aspiration of nursing care graduates. Further research could be based on a longitudinal study to monitor the achievement of competences at the point of graduation and in the first year after graduation (at six-month intervals). Such data would serve to continuously follow nursing care graduates' employability and as a basis for defining the missing key knowledge and competences.

These could be introduced at higher education institutions by offering supporting professional courses for renewing one's competences in the field of nursing care. In doing so, we would strengthen links between graduates after they finish their studies, while continuously following their transition to the labour market, thus helping them to improve individual competences and knowledge in specific professional fields.

It is important to note that such competence renewal educational courses would be intended for individuals who are already employed in the field of nursing care and would want to acquire the so-called "complex-progressive" knowledge or renew and upgrade the already acquired knowledge and competences. Higher education institutions could use those educational programmes as a marketing activity and for gaining projects in the field of life-long learning, as well as for the purposes of career orientation. Our proposal for practical improvement could be supported by Pavlin's findings (2012), which clearly show that the recognisability of study programmes is a very important factor for employing higher education graduates.

It is important to follow employment and employability. Employment data are an important segment allowing a continuous following of graduates on the labour market. Such data show whether graduates are employed, how long did it take them to find a job after graduation and in which field they found employment. A higher education institution could monitor the employment and unemployment by obtaining data from graduates or regional Employment Services of Slovenia. Such data should be acquired in intervals, i.e. one year and five years after graduation.

A higher education institution should set up a mechanism for monitoring employment and unemployment within the supported information system and career centres at higher education institutions or universities.

Literature

- Allen, J., & van der Velden, R. (Ed.). (2009). *Competencies and Early Labour Market Careers of Higher Education Graduates*. Retrieved from http://www.decowe.org/static/uploaded/htmlarea/finalreportshegesco/Competencies_and_Early_Labour_Market_Careers_of_HE_Graduates.pdf
- Canadian Nurses Association. (2010). *Core Competencies Framework*. Retrieved from https://www.cna-aiic.ca/~media/cna/files/en/competency_framework_2010_e.pdf
- Codier, E., & Odell, E. (2014). Measured emotional intelligence ability and grade point average in nursing students, *Nurse Education Today*, 34(4), 608–612, <http://dx.doi.org/10.1016/j.nedt.2013.06.007>
- Defloor, T., Van Hecke, A., Verhaeghe, S., Gobert, M., Daras, E., & Grypdonck, M. (2006). The clinical nursing competences and their complexity in Belgian general hospitals. *Journal of Advanced Nursing*, 56(6), 669–78, <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2648.2007.04245.x/pdf>
- de Souza, S. N., Deggau H., & Miyadahira, A. M. K. (2012). Development of competences in the nursing course: perception of graduate students *Ciencia, Cuidado e Saude*, 11, 243–250, <http://dx.doi.org/10.4025/cienc-cuidsaude.v10i5.17082>
- Eurico, S. T., Silva, J. A. M., & Valle P. O. (2015). A model of graduates' satisfaction and loyalty in tourism higher education: The role of employability, *Journal of Hospitality, Leisure, Sport & Tourism Education*, 30–42, <http://dx.doi.org/10.1016/j.jhlste.2014.07.002>
- European Commission. (2011). *Transferability of Skills across Economic Sectors: Role and Importance for Employment at European Level*. Retrieved from <http://ec.europa.eu/social/BlobServlet?docId=7124&langId=en>
- European Federation of Nurses associations Workforce Committee. (2014). *EFN Matrix on the 4 Categories of the Nursing Care Continuum*. Retrieved from <http://www.zbornica-zveza.si/sl/definicija-efn-stirih-poklicnih-kategorij-v-zdravstveni-negi-na-ravni-eu>
- European Federation of Nurses Associations. (April 2015). *EFN Competency Framework. EFN Guideline to implement Article 31 into national nurses' education programmes*. Retrieved from <http://www.efnweb.be/wp-content/uploads/EFN-Competency-Framework-19-05-2015.pdf>
- Fan, J.-Y., Wang, Y. H., Chao, L. F., Jane, S.-W., & Hsu, L.-L. (2015). Performance evaluation of nursing students following competency - based education. *Nurse Education Today*, 35(1), 97–103, <http://dx.doi.org/10.1016/j.nedt.2014.07.002>
- Harvey, L. (2001). Defining and measuring employability. *Quality in Higher Education*, 7(2), 97–110, <http://dx.doi.org/10.1016/j.qhe.2001.06.002>

- doi.org/10.1080/13538320120059990
- Hsu, L.-L., & Hsieh, S.-I. (2013). Development and psychometric evaluation of the competency inventory for nursing. Retrieved from: <http://www.sciencedirect.com/science/article/pii/S0260691712001827#>
- Kim, K. H., Lee, A. Y., Eudey, L., & Wong Dea, M. (2014). Improving Clinical Competence and Confidence of Senior Nursing Students through Clinical Preceptorship. *International Journal of Nursing*, (1)2, 183-209, <http://dx.doi.org/10.15640/ijn.v1n2a14>
- Kvas, A., Seljak J., & Stare J. (2014). Training Needs Assessment for Leaders in Nursing Based on Comparison of Competency Models. *Organizacija*, 47(1), 66-75, <http://dx.doi.org/10.2478/orga-2014-0006>
- Lee-Hsieh, J., Kao, C., Kuo, C., & Tseng, H.-F. (2003). Clinical Nursing Competences of RN-to-BSN Students in a Nursing Concept-Based Curriculum in Taiwan. *Journal of Nursing Education*, 42 (12), 536-45
- Liptak, J. J. (2010). Employability Skills Inventory. Retrieved from: <https://www.careerkids.com/uploads/CKDownloads/EmployabilitySkillsInv.pdf>
- Marjetič, E., & Lesjak, D. (2013). Trg dela in visokošolski razpis za vpis - Analiza trga dela v povezavi z visokoškolskimi vpisnimi mesti ter številom študentov in diplomantov [Labour Market and Undergraduate Tender for Subscription –Labour Market Analysis in Connection between Under graduate Tender for Subscription and Number of Students and Graduates]. RS Ministrstvo za izobraževanje, znanost, kulturo in šport. Retrieved from: http://www.mizs.gov.si/fileadmin/mizs.gov.si/pageuploads/Visoko_solstvo/Statistika_in_analize/Analiza_trga_dela_jan2013.pdf
- Mason, G., Williams, G., & Cranmer, S. (2009). Employability skills initiatives in higher education: what effects do they have on graduate labour market outcomes? *Education Economics*, 17(1), 1-30, <http://dx.doi.org/10.1080/09645290802028315>
- Minten, S., & Forsyth, J. (2014). The careers of sports graduates: Implications for employability strategies in higher education sports courses: *Journal of Hospitality, Leisure, Sport & Tourism Education*, 15, 94–102, <http://dx.doi.org/10.1016/j.jhlste.2014.06.004>
- Missen, K., McKenna, L., & Beauchamp, A. (2014). Satisfaction of newly graduated nurses enrolled in transition-to practice. *Journal of Advanced Nursing*, 70(11), 2419-33, <http://dx.doi.org/10.1111/jan.12464>
- Mogonea, F. (2015). Portfolio-Tool for (self) Evaluation of Students-Future Teachers, *Procedia - Social and Behavioral Sciences*, 180, 860 – 864, <http://dx.doi.org/10.1016/j.sbspro.2015.02.227>
- National Association of Employers and Colleges (2009). 2009 Experiential Education Survey. Retrieved from: http://www.immagic.com/eLibrary/ARCHIVES/GENERAL/NACE_US/N090318E.pdf
- Nurse of the Future Competency Committee. (2010). Building the Framework for the future of nursing education and practice. Retrieved from <http://www.mass.edu/nahi/documents/NursingCoreCompetencies.pdf>
- Yorke, M. (2006). Employability in higher education: what it is - what it is not. Retrieved from https://www.heacademy.ac.uk/sites/default/files/id116_employability_in_higher_education_336.pdf
- Pavelka, J. (2014). Trends Emerging on the Czech Higher-Education Market and their Influence on the Employability of Graduates in Practice since 1989, *Procedia - Social and Behavioral Sciences*, 139, 87 – 92, <http://dx.doi.org/10.1016/j.sbspro.2014.08.031>
- Pavlin, S. (2012). Slovensko visokošolstvo s perspektive zaposljivosti diplomantov [Slovenian Higher Education from Graduate Employability Perspective]. University of Ljubljana, Faculty of social Sciences. Retrieved from: <http://knjigarna.fdv.si/s/u/pdf/439.pdf>
- Plazar, N., & Babnik, K. (2011). Zaposljivost diplomantov UP Visoke šole za zdravstvo, pridobljene kompetence ter dejavniki in učinki zavzetosti studentov v času študija : vmesno poročilo [Employability of Graduates from University of Primorska, Faculty of Health Science, Acquired Competences, Factors and Effects of Students Engagement in Time of Study: Interim Report]. Izola: Visoka šola za zdravstvo v Izoli.
- Ravindra, J., & Sheelam, J. (2013). Conceptualization, Measure Development and Empirical Assessment of Career Oriented Attitudes and Employability of Technology Graduates. Retrieved from The Journal of Business Perspective: <http://vis.sagepub.com.ezproxy.lib.ukm.si/content/17/2/143.full.pdf+html>
- Robinson, J. P. (2000). What Are Employability Skills? Retrieved from <http://www.fremont.k12.ca.us/cms/lib04/ca01000848/centricity/domain/189/employability-skills.pdf>
- Shafie Asmaak, L., & Surina, N. (2010). Employability Awareness among Malaysian Undergraduates. *International Journal of Business and Management*, 5 (8). Retrieved from: <http://www.ccsenet.org/journal/index.php/ijbm/article/viewFile/6917/5487>
- Singh, P., Thambusamy, R. X., & Ramly, M. A. (2014). Fit or Unfit? Perspectives of Employers and University Instructors of Graduates' Generic Skills. *Procedia - Social and Behavioral Science*, 123, 315 – 324, <http://dx.doi.org/10.1016/j.sbspro.2014.01.1429>
- The Nursing and Midwifery Council (NMC). (2010). Standards for competence for registered nurses. Retrieved from <http://www.nmc.org.uk/globalassets/sitedocuments/standards/standards-for-competence.pdf>
- The Nursing Council of Hong Kong. (2012). Core competences for registered Nurses (General). Retrieved from <http://www.mass.edu/currentinit/documents/Nursing-CoreCompetencies.pdf>
- TUNING. (2012). TUNING project - TUNING Educational Structures in Europe. Retrieved from: <http://tun->

- ing.unideusto.org/tuningeu/
 Official Journal of the EU. (2006/394). Priporočilo evropskega parlamenta in sveta z dne 18. decembra 2006 o ključnih kompetencah za vseživljenjsko učenje [EU Parliament and Council Recommendation from December 18th 2006 About Key Competences for Lifelong Learning]. Retrieved from http://eur-lex.europa.eu/legal-content/SL/TXT/?uri=uriserv:OJ.L_.2006.394.01.0010.01.SLV
- Official Journal of the EU. (2013). Direktiva 2013/55/EU Evropskega parlamenta in sveta [Directiva 2013/55/EU of European Parliament and Council]. Retrieved from <http://www.fzv.uni-mb.si/page/images/stories/File/NAKVIS/Direktiva%202013-55-EU%20%2820.11.2013%29.pdf>
- van Schoot, E., Streumer, J. N. (2003). The impact of the curriculum on the employability of nursing and health-care graduates. *International Journal of Human Resources Development and Management*, 3(4), 296-307, <http://dx.doi.org/10.1504/IJHRDM.2003.003406>
- West, N., Berman, A., Karshmer, J., Priori, S., Van, P., Wallace, J. (2014). Preparing New Nurse Graduates for Practice in Multiple Settings: A Community-Based Academic-Practice Partnership Model. *Journal of Continuing Education in Nursing*, 45(6), 252-256, <http://dx.doi.org/10.3928/00220124-20140417-03>
- Zavod Republike Slovenije za zaposlovanje, Območna služba Maribor (2013). Posredovanje podatkov o ponudbi in povpraševanju po strokovni izobrazbi s področja zdravstva [Data Transmission about Higher Education Supply and Demand on the Health Field]. Private communication, University of Maribor, Faculty of Health Sciences
- Zavod Republike Slovenije za zaposlovanje. (2014). Strokovna izhodišča za leto 2015 [Professional Starting Point for Year 2015]. Retrieved from http://www.ess.gov.si/files/6551/strokovna_izhodišca_za_leto_2015.pdf
- Zbornica zdravstvene in babiške nege Slovenije - Zveza društev medicinskih sester, babic in zdravstvenih tehnikov Slovenije. (2014). Definicija EFN štirih poklicnih kategorij v zdravstveni negi na ravni EU [Definition of Four Occupation Categories in Health Care on EU Level]. Retrieved from <http://www.zbornica-zveza.si/sl/definicija-efn-stirih-poklicnih-kategorij-v-zdravstveni-negi-na-ravni-eu>
- Zbornica zdravstvene in babiške nege Slovenije - Zveza društev medicinskih sester, babic in zdravstvenih tehnikov Slovenije. (2014). Izjava Zbornice-Zveze za javnost glede pobud o uvajanju novih izobraževalnih programov s področja zdravstvene nege [Statement from Nurses and Midwives Association of Slovenia Regarding Initiatives of New Educational Programs Introduction in The Health Care Field]. Retrieved from: <http://www.zbornica-zveza.si/sl/izjava-zbornice-zveze-za-javnost-glede-pobud-o-uvajanju-novih-izobrazevalnih-programov-s-podrocja>
- Železnik, D., Brložnik, M., Hajdarjević Buček, I., Dolinšek, M., Filej, B., Istenič, B., & Verebič, M. (2008). Poklicne aktivnosti in kompetence v zdravstveni in babiški negi [Profession activities and competences in Nurses and Midwives Care]. Ljubljana: Zbornica zdravstvene in babiške nege Slovenije - Zveza društev medicinskih sester, babic in zdravstvenih tehnikov Slovenije.
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