

# Clinical skills competence of nursing students

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ABSTRACT

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Nursing skills competency is important knowledge throughout nursing carrier, it is part of basic practical skills that is vital to all nursing students. The purpose of this thesis was to create awareness to first year nursing students of Lahti University of applied sciences about the importance of practicing nursing skills early on in their studies through skills lab practice in a clinical setting. The aim was to enlighten the importance of practicing nursing hand skills repetitively. It was meant to give the students a perspective to master practical hand skills before their first clinical training for the exposure of nursing care.

This is a thesis project, the project was carried out with first year degree nursing students of Lahti University of Applied Sciences. Through a brief lecture students were explained what the project entailed, thereby, it allowed them to choose to enroll, 14 students enrolled and participated in the study. Data was collected through qualitative research method, unstructured interviewing and open ended questions were used for data analysis. The effect of continuous practice and possibilities of improvement were analyzed after practical clinical skills were done at the laboratory.

The result of the study showed that nursing students appreciate repetitive nursing skills practice, the continuous practice of hand skills demonstrated improvement of knowledge and boost of performance by the participants. The students valued the study and they hoped that more nursing skills competency will be practiced in future. Participants understood that practical nursing hand skills procedures done on patients is an important part of a nurse profession and the security of patients, thereby, variations in nursing competency in relation to learning outcomes should be taken seriously by registered nurse lecturers in planning the overall nursing curriculum by equally balancing theoretical and practical studies.

Keywords: Nursing students, clinical practice, clinical competence, project.

Lahden ammattikorkeakoulu  
Hoitotyön koulutus

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Hoitotyön opiskelijoiden kliininen  
osaaminen.

Hoitotyön opinnäytetyö

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TIIVISTELMÄ

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Hoitotyön ammatilliset taidot ovat tärkeitä taitoja, joita sairaanhoitaja tarvitsee koko työuran. Ne ovat osa käytännön perustaitoja, jotka ovat tärkeitä kaikille sairaanhoidon opiskelijoille. Opinnäytetyön tarkoitus oli lisätä Lahden ammattikorkeakoulun ensimmäisen vuosikurssin sairaanhoitajaopiskelijoiden tietoisuutta hoitotyön kliinisistä taidoista harjoittelun avulla. Tavoitteena oli kouluttaa kliinisiä taitoja opiskelijoille, tavoitteena oli valmistaa opiskelijoita ensimmäiseen harjoitteluun sekä valmistaa opiskelijat hoitotyön vaatimuksiin.

Tämä opinnäytetyö toteutui projektina. Ensimmäisen vuoden sairaanhoitajaopiskelijoille järjestettiin laboraatiotunti, jossa harjoiteltiin kliinisiä hoitotyön taitoja. Laboraatiotunnille osallistui 14 opiskelijaa, jotka jaettiin kolmeen eri pienryhmään. Harjoittelun jälkeen palautetta kerättiin avoimella kyselylomakkeella.

Tulokset osoittivat, että sairaanhoitajaopiskelijat arvostivat toistuvia kliinisten taitojen harjoituksia sekä kokivat, että kliinisten taitojen harjoittelu edistää heidän tietoa ja taitoa. Opiskelijat toivoivat, että hoitotyön kliinisiä taitoja harjoitellaan myös jatkossa. Opiskelijat ymmärsivät, että kliinisten taitojen oppiminen lisää heidän ammattitaitoa ja edistää myös potilasturvallisuutta, sillä tavalla, vaihtelut hoitotyön osaamista suhteessa oppimistuloksiin tulisi ottaa vakavasti sairaanhoitaja luennoitsijoiden suunnittelussa koko hoitotyön opetussuunnitelman yhtä tasapainotus teoreettisia ja käytännön opintoja.

Avainsanat: sairaanhoitajaopiskelijat, kliininen harjoittelu, kliininen osaaminen, projekti

## LIST OF ABBREVIATIONS

EU	European Union
RN	Registered nurse
UAS	University of Applied Sciences
AMK	Ammattikorkeakoulu
VALVIRA	Finland National Supervisory Authority for Welfare and Health
ICN	International Council of Nurses
O <sub>2</sub>	Oxygen
BP	Blood pressure
SPO <sub>2</sub>	Oxygen saturarion

# Table of Contents

1	INTRODUCTION	1
2	REGISTERED NURSE EDUCATION IN FINLAND	3
2.1	Clinical learning experience	3
2.2	Clinical competency	4
2.2.1	Basic care	5
2.2.2	Vital signs	6
2.2.3	Ergonomics	8
2.2.4	Pharmacotherapy	10
2.2.5	Elimination	11
3	PURPOSE, AIMS AND OUTCOME	13
3.1	Purpose	13
3.2	Aims	13
3.3	Outcome	13
4	METHODOLOGY	14
4.1	Project work	14
4.2	Questionnaire design	15
5	PROJECT IMPLEMENTATION	17
5.1	Participants	17
5.2	Project plan and implementation	18
5.3	Skills lab day	22
6	PROJECT ANALYSIS AND RESULTS	24
6.1	Data analysis	24
6.2	Results	25
7	CONCLUSION	27
7.1	Discussion	27
7.2	Risks	29
7.3	Ethical issues	30
7.4	Implication	31
	REFERENCES	32
	APPENDICES	

## 1 INTRODUCTION

Hand Skills is part of nursing's most essential foundation in nursing care (Nelmes 2011, 11). Research has proven that learning is achieved most effectively through practically working with your hands thereby gaining experience. Methods of teaching have advanced immensely in recent years, one significant improvement is the use of the modernized skills laboratory rooms that have state of the art machinery. This has made it possible for students practice as many times as they wish. It has resulted in perfection of hand skills generally increasing performance of clinical nursing skills among nursing students. (Godson, Wilson & Goodman 2007, 943.)

Nursing skills competence is the use of evidence based procedures is aimed at promoting patients health by use of applicable procedure(s). It is made up of various methods and procedures performed at skills laboratories, where skills are improved with each training. Critical thinking is important in performing most of the skills. (Standing 2007, 260.)

The effectiveness of skill laboratory is attained by fostering a good foundation throughout nursing school. Nursing students trained early in their studies ensures growth and experience over the studying period as one masters the technique and becomes confident erasing uncertainty and fear of making mistakes, thereby, boldly seeking to learn more skills while retaining those already learnt. (Raurell-Torredà, Olivet-Pujol, Romero-Collado, Malagon-Aguilera, Patiño-Masó & Baltasar-Bagué 2015, 36; Felton & Royal 2015, 41.)

Studies have shown that students are anxious and worried when practically attending to a patient, this is perceived to be lack of enough skills, lack of preparation and lack of enough knowledge. In nursing ethics, students are required to master basic procedures before practicing on patients (Numminen 2010; Aitamaa 2010, 472). In order to meet these challenges, skills laboratories were established for the purpose of increasing patients' safety and to foster proper foundation in the early

stages of nursing school thus building the skills and confidence required in the actual clinical setting (Ingebjørg, Dagfinn & Åshild 2009, 19).

This is a project thesis carried out at Lahti University of Applied Sciences with first year international nursing degree students. The purpose of the thesis is to emphasize the importance of mastering nursing skills competency early in nursing studies by practicing through skills laboratories. It is aimed at stressing the importance of repetitive skills practice to boost nursing skills performance.

## 2 REGISTERED NURSE EDUCATION IN FINLAND

Registered nurse education in Finland takes 3.5 years at polytechnics/universities of applied sciences, the name of the degree goes by the name 'Sairaanhoitaja AMK' (Kilpeläinen 2010). RN education curriculum is fully regulated by law, the nursing curriculum studies is determined on the basis of European Union; EU directive 2005/36/EC, European Commission, 2005, Ministry of Education, 2010 and Ministry of Education, 2011 (Lakanmaa, Suominen, Perttilä, Ritmala-Castrèn, Vahlberg & Leino-Kilpi 2014, 646; Kajander-Unkuria, Meretojaa, Katajistoc, Saarikoskia, Salminena, Suhonena & Leino-Kilpi 2014, 799). The base of the curriculum is directed to family health care nursing, geriatric nursing, development of health and entrepreneurship Lahti University of Applied Sciences (2015). According to the Ministry of education (2014) Finnish National Board of Education works with the Ministry of Education and Culture to develop educational aims, content and methods. To practice as a RN in Finland, the law (Health care professional Act 559/1994) requires professionals to apply for a license that will entitle them to practice the nursing profession (Valvira 2008).

To graduate as a registered nurse, students have to complete 210 credits. This covers; 115 credits for theoretical studies, 75 credits for clinical practice, 15 credits for thesis and 5 credits for elective studies, 1 credit correlates to 27 hours of completed clinical training by the student. (Lahti University of Applied Sciences 2015.) Nursing studies are conducted through intense theoretical studies and skills labs, prior to completion of nursing studies, students are expected to demonstrate their maturity with the overall intent of ensuring that they are competent (Finnish Nurses Association 2015; Kilpeläinen 2010,8).

### 2.1 Clinical learning experience

Clinical experiences is achieved when students gets the opportunity to learn and develop their skills (Hiino & Vehviläinen-Julkunen 2012, 134). Learning and practicing clinical skills helps students to develop confidence



allowing them to build independence and competent professional skills (Godson et al 2007, 942).

At Lahti University of Applied Sciences (2015) clinical training covers a total of 75 ECTS, learning is carried out in different nursing fields which lasts a minimum of 6 to 7 weeks. The training experience is divided into 6 sections of 10 ECTS each and the final section of 15 ECTS. The period prior to each training session is significant for students to be well prepared through their theoretical studies. Simulations are also mandatory and are carried before each training period with the aim of training the students' for real life situation. Each simulation is equivalent to 1 ECTS that is summed as part of the clinical training hours.

## 2.2 Clinical competency

Competency is the capacity to do something successfully and efficiently (Oxford dictionary 2015). Competency organization is an important aspect of high quality, safe and economical health care, it reflects everyday clinical practice and the difficult nature of professional practice (Defloor, Van, Verhaeghe, Gobert, Darras & Grypdonck 2006, 672).

Through numerous researches it has been found that quality nursing care offered and expectations from patients has shown that quality of services and care provided is directly related to education and competency skills taught and how it is applied to maximize patient's care and overall quality (Hiino et al 2012, 142). Experience is earned through real practicing whereby new graduates will be expected to put to use the theory and practical lessons they learned to ensure patients' well-being is paramount since there are special cases and challenges that require steadiness, courage, practice and experience from the nurses and other care givers. With the ever changing technology, one needs to be a step ahead in ensuring the skills learned are sharpened regularly to keep up with developing health environment. (Nieminen, Mannevaara & Fagerström 2011, 662.)

Researchers attribute the nursing competency to the chemistry between the nurse and patient, success could be achieved through own interpersonal skills, knowledge and ability to rise to the occasion day in day out by using learned practical and theoretical knowledge to enrich own experience as part of care values. Nurse mentors serve to enrich nursing students experience and expectation, skills learned from such situation forms an integral part and foundation to having a fulfilling career in nursing and health care fields. (Meretoja & Koponen 2012, 335.)

Lenburg (1999) describes eight core nursing competencies that the nursing student should acquire during their studying and working life. The first four competencies are assessment and intervention, communication, critical thinking and human caring and relationship competencies. The skills needed to reinforce these competencies are monitoring, therapeutic procedures, oral reporting, writing and computing skills. Decision making skills coupled with scientific and research process lead to critical thinking. Knowledge and practice of ethics together with skills such as patient advocacy are the key to ensuring that nurses are competent in their relationships and human caring. The other four nursing competencies as described by Lenburg (1999) include management, leadership, teaching and knowledge integration.

### 2.2.1 Basic care

Basic nursing care has been defined as the essential key of nursing care in regard to nursing problems (Adamsen & Tewes 2000, 120). Since Nightingale's time, basic nursing care has been the main principle of nursing care to all patients of all ages, race, culture, diagnosis and forms of treatment. Basic care is the main essential principle of nursing care concerning personal care, nutrition, pain and medication that is vital in meeting patients' quality care. (Nice guidelines 2007; Adamsen & Tewes 2000, 120.)

Lahti UAS takes basic nursing skills seriously. It is introduced to first year RN students during their first semester before they start their first clinical

practice at the hospital. Basic nursing care at Lahti UAS includes: safety; hand general hygiene, disinfection and wearing sterile and non sterile gloves. Elimination; female and male catheterization, nasogastric tube insertion and suctioning. Vital signs; pulse rate, temperature, respiration rate, oxygen saturation and blood pressure. Other skills include; bed making, oral care, feeding, bathing and ergonomics. (Lahden ammattikorkeakoulu, Reppu 2013.)

The learning process is always developed from the simplest point as it advances to more complex procedures. Basic care fundamentals in nursing is important as it prepares the learner to advance into more complex knowledge and skills. Understanding the basics of nursing is valuable in relation to the care of human life. (Mahanes, Quatrara & Show 2013, 258.)

### 2.2.2 Vital signs

Vital signs includes the measurements of body temperature, pulse, respiration, blood pressure and blood oxygen saturation, this measurements are vital to be learnt accurately by nursing students early on in their studies. The evaluations are significant indicators of how well the body functions. From the values, nurses will have a clear picture on how to handle a patient and communicate with other health care providers. Vital signs figures helps to explain the condition the patient is at for proper actions to be taken to save the patient's life. The main objectives of measuring and monitoring vital signs is to evaluate treatment and detect deteriorations to initiate the appropriate emergency response required early enough. (Kaveevivitchai, Chuengkriankrai, Luecha, Thanooruk, Panijpan, & Ruenwongsa 2009, 65-72.)

The outcome of vital signs is very crucial that nurses should understand the need to a proper follow up to determine how the changes behave and how the patient is responding. This should be followed with documentation to facilitate tracking of the individual's recovery process to avoid life threatening outcomes. The actions taken in response to the changes in

vital signs readings should also be clearly recorded. (Royal College of Nursing 2013; Elliott & Coventry 2012, 621-625.)

Nurses' awareness of the three different types of body temperatures is crucial for proper interpretation of acute illnesses. How the patient feels may differ from and how they feel to their surface temperature. These may also be contradicted by their core temperature, which is a measure of the average internal temperature of a human body. It varies according to different changes that takes place in ones body, and from part of the body from which it is measured. These sites are the axillary, oral, forehead and rectal. Equipment used in measuring temperature is considered to yield different figures, studies have shown significant variations between different equipments. (Kaveevivitchai et al 2009, 65 - 72.)

Pulse rate is the heart beat per minute, it is the rhythm and strength that contracts and expands through an artery, and it is felt when compressed slightly. Sites on the body on which this can be done are at the wrist, neck, behind the knee, near the ankle and on the inner side of the elbow. The site at which pulse was obtained should be documented indicating the name of the area: radial, carotid, popliteal, posterior tibial and brachial, and the number of heart beat per minute. Pulse rate is also assessed by listening directly to the heart using a stethoscope. This is called auscultation. It is not necessary to check for pulse for a full minute but for 15 seconds and then the number is multiplied by four to get the number of beats per minute. The normal range of pulse in adults is between 60 and 100 beats per minute. Nurses must remember that the full description of the character of the pulse obtained from physical assessment is crucial in giving accurate clues to the patient's condition. (Elliott & Coventry 2012, 621-625.)

Blood pressure (BP) is the measure of the force exerted by blood on the walls of the arteries during contraction and relaxation of the heart muscles. This is the reason why BP is expressed as a fraction, the upper number representing the force of blood during cardiac muscles contraction and is known as the systole. The lower denominator is the diastole and is the

force on the arteries as the heart muscles relax. Nurses have adopted the use of automated BP monitors due to the increase in their workload. Studies have shown that this has increased the chances of errors. That is why researchers of this work used manual blood pressure meter during the project, to reinforce this skill among nursing students. (Elliott & Coventry 2012, 621-625.)

It is recommended that nurses should count the number of breaths of a patient for a full minute in order to increase sensitivity and accuracy of the measurement. The character of the patient's breath is also described by taking note of the depth of the inspiration, the need to use accessory muscles during breathing and the symmetry of the rise and fall of the chest. These factors are crucial because the slightest change in respiration rate can help predict life threatening situations such as cardiac arrest. Despite these important facts, observation shows that nurses do not record respiratory rate in clinical settings. This may be due to absence of an automated method of measuring or the assumption that the oxygen saturation reflects on the patient's respiratory rate. (Royal College of Nursing 2013.)

Oxygen oximeter measures the oxygen saturation ( $SpO_2$ ) that gives an indication of tissue oxygenation. An oximeter is the equipment that is used for this purpose. It depends on sufficient flow of blood to the limbs. Therefore, the nurse should consider the patient's overall state of health in order to determine the reading obtained is reliable. The blood pressure and respiratory rate are the key parameters that affect tissue oxygenation. (Elliott & Coventry 2012, 621-625.)

### 2.2.3 Ergonomics

Bridger (2008) defines ergonomics as laws of work, a definition directly derived from its component Greek words *ergon*, meaning work and *nomos*, meaning laws. It is a practical science that has its core in the relationship between people and their working environment. Its purpose is

to increase compatibility, overcome limitations and reduce hazards between the work environment and the worker (Dental Abstract 2015).

The nursing profession exposes nurses to physical strain, most of the work is done in different positions; bending, lifting and standing while caring for patients. This in turn predisposes nurses to deteriorating long-term effects on their bones, joints and muscles. Ergonomics in nursing focus on studying these effects in nurses work environment with the aim of significantly reducing related risks. This prompts educating nurses on techniques that would minimize risks at their work place such as lifting, repositioning and transferring of patients. Ergonomical studies also guides nurses, health care managers and others in authority on the measures to be undertaken to create a safer and more effective work environment. Such measures include reorganizing and increasing staffing, keeping well organized supply closets, good working aid equipments and improving the general quality of the working facility. (Strategies for Nurse Managers 2007; Nelson & Baptiste 2004.)

Nelson & Baptiste (2004) raises concerns that training and educating nurses about lifting techniques have not been effective in preventing and reducing injuries to patients and nurses. He attributes this to the fact that most lifting techniques concentrate on lifting tasks. These kinds of lifting techniques are ineffective in nursing tasks such as bathing, dressing and undressing the patient, nurses have to spend time in a forwardly bent or twisted trunk. Patient handling tasks are further aggravated by the unpredictable nature of patients who may turn out to be aggressive, uncooperative or unable to participate in the nursing task.

The use of mechanical equipment to handle patients does not guarantee the elimination of the dangers involved in manual lifting. This is due to the fact that human effort is still applied in order to use mechanical devices. In the example of a lifting device, the patient must first be rolled in order to position the sling and the nurse must keep the device steady and push it. Mechanical equipment do, however, significantly decrease the amount of work related injuries, these justifies their purchase and use in hospital

units. Reduction of work related injuries in turn improve the standards of work life for the nurses' hence improved patient care and low staff turnover. (Hughes & Nelson 2009, 457-463.)

#### 2.2.4 Pharmacotherapy

Medication is mainly used as therapy in almost all cases of sickness, to care, improve and heal patient's health. RN spends most of their carrier administering medicine to patients, pharmacotherapy knowledge and skill of preparation and administration is essential and needs to be fostered early in nursing education to help erase mistakes that might cause serious problems while on internship. Early pharmacotherapy knowledge and practice tailors nursing students to work life competence where they can handle procedures of obtaining medical supplies, refilling and reviewing the medical cart. Theoretical knowledge about medications, interpretation skills of the prescriptions and the mathematical skills to interpret and minimize medication errors are equally critical. (Piispanen & Väkiparta 2012.)

The Lahti UAS medication passport is an online tool that is widely used by universities of applied sciences in Finland to guide and gauge nursing student's pharmacological knowledge and skills. Its use has standardized pharmacotherapy knowledge among nursing students in Finland. This was initiated in Turku UAS 2006 and adopted by most of other universities by 2010. (Piispanen & Väkiparta, 2012.)

The medication passport has a list of knowledge and skills that the nursing student is expected to acquire. These skills include theoretical knowledge, types of medical therapy and routes of drug administration. It also contains a checklist of medical calculations performed in the clinical setting and blood transfusion therapy knowledge and skills. It is accessed by the nurse mentor, tutor teacher and the nursing student. The student's role is to mark when they have observed and done the skill while the nurse mentor verifies. The teacher follows upon the student's pharmacological progress. The medication passport is used upon graduation period to verify that the

student has sufficient knowledge to graduate. (Lääkehoitopassi 2015; Piispanen & Väkiparta, 2012.)

Pharmacotherapy is initiated by the patient's need for medication and is steered forward by the doctor's analysis, decision and clear guidance of the medical interventions to be applied. The nurse then has the task of ensuring that the identity of the patient's coincide with the prescriptions to avoid medication mistakes. The nurse also has the role of educating the patient about administering the medication in cases where the patient has to continue with the medical treatment at home. It is important to note that most prescriptions in Finland are prescribed only by a doctor. (Sosiaali- ja terveysministeriö 2011.)

The nurse's role in pharmacotherapy raises ethical concerns, mistakes in understanding and administering the prescriptions could lead to harmful results to the patients. The nurse must therefore take responsibility in their advocacy role to the patient. They should do this by being honest about their skills in administering the medication. Patients should be given sufficient details regarding their medication to help them make informed decisions. In case of errors during medications, nurses should not attempt to conceal such mistakes but instead embrace their duty to report and document. (International Council of Nurses 2012.) Authors of the thesis project did not practice pharmacotherapy at the skills lab. It is mentioned in this thesis since it is a vital nursing skill for RN to understand early in nursing school.

#### 2.2.5 Elimination

Elimination of body waste products is a vital body function that most people become independent early on in their lives. The process is private and personal, but in case of physical or mental disability, this vital process will require assistance in carrying out according to the degree of dependency of a patient. In hospital setting, nurses play an important role in management of fecal and urine incontinence. (Pellatt 2007.)



Relating to the kind of problem the patient has concerning bowel and urine elimination, nurses and other care providers assist by giving care and advice on how the patient should care or be cared for. Several methods of managing body waste elimination can be used depending on the difficulties the patient has. Nurses takes into consideration patients diet, exercising, bowel and bladder muscle training, taking medication and undergoing surgery. The success for a patient to rehabilitate well will be refelected through the patient ability to manage elimination on their own. (Johns Hopkins medicine 2016.)

### 3 PURPOSE, AIMS AND OUTCOME

#### 3.1 Purpose

The purpose of this project is to create awareness among nursing degree students on the importance of practicing nursing skills through skills laboratory. This project is intended to emphasize the importance of repetitive skills practice to improve their nursing skills competency in a clinical setting.

#### 3.2 Aims

The aims of this project:

1. To educate the first year nursing students of Lahti UAS the importance of practicing nursing skills
2. To prepare nursing students for the first clinical training
3. To expose nursing students to the requirements of nursing care.

#### 3.3 Outcome

Nursing students became aware of the importance of practicing nursing hand skills repetitively as a tool of taking care of patients in a safe and ethical way. They benefit by participating in an extra skills lab and realize the important of applying the skills in an experimental and in real situations.

## 4 METHODOLOGY

This thesis project used various forms to arrive to the results of the project, under this chapter it has been explained how the project was executed. Methodology used looks into the hypothesis the authors identified, chose and analyzed information. Collected data was used to find answers to the research question and this lets the reader evaluate the study lethargy and reliability (University of Southern California 2016).

### 4.1 Project work

Project work methodology has been used for many years in teaching different subjects (Oxford University Press 2010). This project thesis is composed of two main aspects being the project itself and theoretical framework. A project is a preparation of a set of tasks that are closely associated to be undertaken within a specific time frame for a specific purpose (Canonico, Söderlund, De Nito & Mangia 2013, 223). Theoretical framework is the study done based on researched work demonstrating the relation with researchers work (Simon & Goes 2011). There are different types of theoretical framework, in this research work, phenomenography was used. It was developed by Martin (1986) and is a qualitative theoretical framework used by researchers to study how people experience a particular study. (Simon & Goes 2011; Ornek 2008, 11; Sjostrom, Dahlgren & Dahlgren 2002, 339.)

Project work mainly consists of three main stages being the initiation, implementation and closure. It is in the initiation stage of a project that a problem or an opportunity is identified and this will be the purpose of the project. Possible solutions are then explored and a final recommendation is agreed upon after studies are conducted to explore the practicality of the solutions to the identified problem or opportunity. At this point, the project is initiated by the organizers. The appointed project manager of the team then seeks approval from the concerned authorities, after which extensive planning is made in readiness for implementation. Planning entails outlining all the tasks and detailing every measurement that will be

taken to embark on it inclusive of the costs and management of possible risks. When the team has documented the plan, they begin to implement the project. (Dobson 2015; Watt 2014.) The implementation stage of a project is also known as the execution phase. This is when the actual work outlined in the plan is done. At this stage, it should be expected that it is necessary to make changes in the original plan is very likely to occur. Therefore, the original plan should be updated whenever reviews occur in addition to documenting all the work done to necessitate monitoring of the project's adherence to the plan. The project will be ready for completion once all the planned tasks have been completed. (Dobson 2015.)

#### 4.2 Questionnaire design

Completion of the tasks planned then steered the project into the closure phase whereby evaluations on the success and failures of the project was measured against the purpose and the final results released. This project work was evaluated by use of open ended questionnaires to bring out a more variety of answers. Open ended questions used allowed participants to respond according to their own opinions and feelings. The questionnaires were issued immediately after the completion of the skills tasks that allowed for immediate feedback. The researchers scrutinized the progress of the project to realize the success and failures, which were then documented and the valuable experience used for future studies. (Simon & Goes, 2011.)

The researchers of this project work used a self designed unstructured questionnaire made up of five open ended questions to collect feedback from the participants to form the basis of the evaluation stage. The questionnaire was designed crucially to ensure that the questions would give responses that depict clearly whether the aims of this project were achieved. The questions were designed to elicit many detailed open responses by encouraging flexibility in the thinking and reflecting process of the participants. The order of the questionnaire questions was

numbered not necessarily in order of importance, all responses to each question were equally important. (Wasik & Hindman 2013.)

Conclusions and recommendations to affect future research in the same field were also expected to be deducted from the range of feedback collected. Important decisions by Lahti UAS related to repetitive skills practice that would involve time usage and costs would also be supported from the data collected. Feedback was collected and analysed to determine the success of the project work. (Canonico et. al 2013, 225).

## 5 PROJECT IMPLEMENTATION

The planned project is put into action at this phase. The execution of planned activities/study from the start to the end is referred to as project implementation, project team planners practically implement the project to produce the objectives of the study. The resources and materials intended to be used are put into use to derive to the goal of the project. This phase has its own challenges due to performance and quality of work put by the project team. (Hyväri 2006, 31-32.)

### 5.1 Participants

The study was carried out with first year degree international nursing students of Lahti UAS academic year 2015-2018. Out of a class of 30 students 14 students enrolled and participated in the project. The criteria used for students to take part in the project was voluntary, researchers of the project had a 15 minute PowerPoint introduction lecture (Appendix 1) to the class/focus group, the lecture was meant to give a clear understanding of the project, thereby, students could choose whether to take part in the project or not. At the end of the lecture presentation students were given time to ask questions (Wasik & Hindman 2013).

Information in the lecture entailed a brief explanation of what nursing skills competency entailed and its importance in the nursing profession. Nursing students were informed about the purposes and aims of this project and the three skills that would be practised. These three skills were basic care, vital signs and elimination. Clear information was passed to the participants about the project that; it was voluntary, had no effect on their grades, they would sign a consent form prior to the skills lab day and that their feedback through questionnaire forms were greatly anticipated to enable the evaluation of the project work. Participants were also informed that the project work would be implemented on three different dates within the first semester, each participant needed to participate only once. The dates and the implementation rooms at the Social and Healthcare campus of Lahti UAS was communicated later when vacant laboratory room had

been approved by concerned lecturer. The scheduled dates and labrooms were indicated at students' 'lukkarikone' - school timetable. The contact details of the authors were also indicated in the lecture so that participants would be able to ask questions about the project whenever they arose. The lecture was posted in Reppu pages in the students' 'Clinical Competence in Good Nursing Care' course, for their review.

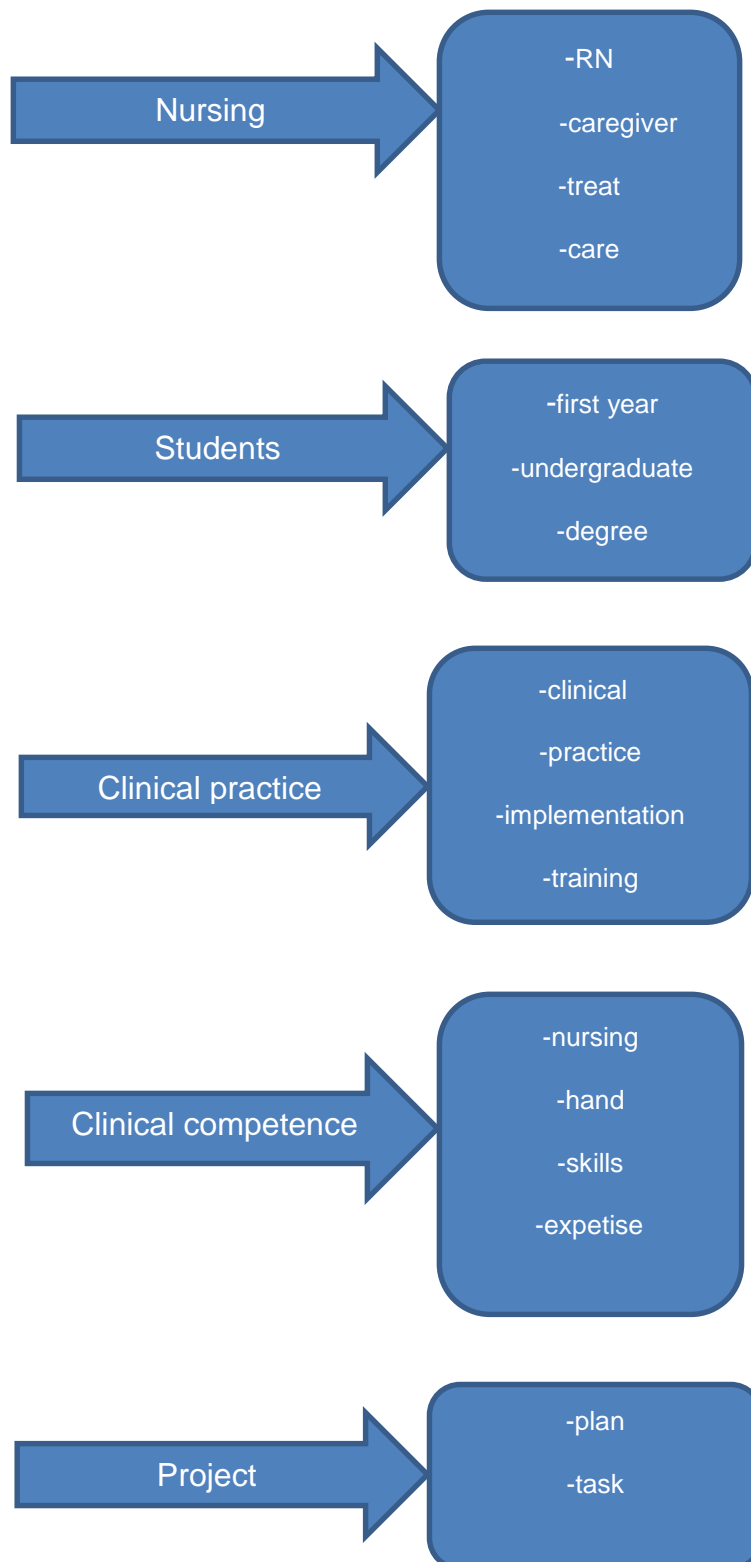
## 5.2 Project plan and implementation

Planning a project is a step by step procedure (Dobson 2015). Projects are successful when they are undertaken according to plan, it saves time, money and many problems. For the success of the project, proper approach by the project team in planning and managing leads to the success of the project. (Hyväri 2006, 32.)

The project was initiated in December 2014, a meeting between the supervising lecturer and the authors of the thesis was held during that time. In April 2015, the progress of the thesis proposal was presented to the supervisor and areas that needed changes, improvement or additional information were discussed. The recommendations were acted upon after which the seminar day for the presentation of the plan was approved by the supervisor for August, 2015.

Further research was carried out to broaden the theoretical background of this thesis project, data was retrieved from fifty seven scientific research papers not older than ten years, most of the articles are peer reviewed. This are; CINAHL, Pubmed, Sage journals, Elsevier data journals, EBSCO host and from books found at Lahti UAS library. Some data were collected online to support the study. Search keywords used were: nursing students, clinical practice, clinical competence and project. Figure 1 below shows the criteria used to arrive to related keywords that validates this thesis.

Figure 1: Criteria of keywords used:





The authors' prepared PowerPoint lecture presentation that was presented to the students/focus group in November 2015, the presentation has been broadly discussed in sub-chapter 5.1. Part of the lecture explained how students can enroll to participate in the skills lab project. The execution of this project was made possible by lecturers that teach clinical competence practicals by enrolling authors of the thesis project to participate as teachers under the course 'Clinical competence in good nursing care'. This course is offered to first year nursing degree students' academic year 2015-2018, at Lahti UAS. Through the course, authors and participants had a convenient platform to communicate to one another. The course was accessed online, from Lahti UAS Reppu pages. Powerpoint presentation, consent form and authors personal contacts were posted on the page for students to read through. From the course, witable (Table 1) was created for student to enroll themselves, the authors divided the table/skills lab into 3 groups where students would write down their names under one of the group they would like to participate, and this was to give participants a possibility to participate according to their own suitable time.

Table 1: Participants enrolment witable

	<b>01.12.2015</b> <b>at 12:00 – 15:00</b> Group B	<b>07.12.2015</b> <b>at 12:00 – 15:00</b> Group A	<b>10.12.2015</b> <b>at 12:00 – 15:00</b> Group C
<b>1</b>			
<b>2</b>			
<b>3</b>			
<b>4</b>			
<b>5</b>			
<b>6</b>			

Consent form (appendix 2) contained four closed questions, the first question sought confirmation from the students if they had read and understood the contents of the information lecture and that they had time to ask questions. The next two questions were aimed at clarifying that the prospective participants agreed to take part in the project and that they knew that their participation was voluntary. This implied that they could withdraw without giving any reason. The final question confirmed whether they agreed to be quoted anonymously in publications. The participant and researchers confirmed by signing the consent form. An open ended questionnaire (appendix 3) with 5 questions was then formulated and later approved by the supervisor. The use of open ended questions was to encourage participants to express themselves without limitation. At the end of the skills practice it was participant's general feelings and opinions were assessed in a more critical way from open-questionnaire and unstructured interviewing. In this project setting it was easy to randomly use unstructured interview questions while generally discussing the project success, importance and participants feelings.

Skills laboratory room was reserved through guidance of 'lukkarikone', a web page that shows Lahti UAS faculty of social and health care students' schedule. From 'lukkarikone' authors planned decisively for the perfect dates to run the project, considerations taken into account was that the student must have practiced the clinical skill with their own lecturer prior attending to the project and that there are available lab rooms for the chosen dates. Confirmation of vacant rooms was confirmed to the authors by the lecturer of the course. The chosen dates were marked down at 'lukkarikone' to make it easy for anyone interested to note.

In November-December 2015, the skills lab project was initiated, it was followed by analyzing, compiling and documenting of the data in January-February, 2016. The final presentation of this thesis project was planned to take place in April 2016 and the thesis published after undergoing a maturity test.

### 5.3 Skills lab day

The project was a 3 day clinical skills practice that was executed in December, 2015 at Lahti UAS faculty of social and healthcare skills laboratory classrooms. The dates were ; 1<sup>st</sup> December, 2015, 7<sup>th</sup> December, 2015 and 10<sup>th</sup> December, 2015. In all the 3 groups the project lasted for 3 hours, from 12:00 to 15:00. The last group took more than 3 hours because there were health care lecturers from different countries that had visited the faculty to learn how Lahti UAS runs the university in different aspects. They went round laboratory rooms where time was consumed answering to their questions. The first group 4 students enrolled and participated, 2<sup>nd</sup> group 4 enrolled but 3 participated and in the 3<sup>rd</sup> group 6 students enrolled, but 7 participated, the participant who was absent in the 2<sup>nd</sup> group participated in the 3<sup>rd</sup> group making a total of 7 participants. Total participants were 14. Before the start of the project at 12.00 author of the thesis project collected all the needed equipments from the faculty store.

The skills lab practicals began by the author generally explaining what was going to be practiced and in what order. All the equipments were placed on one working table, from the table participants collected what they needed to practice a particular skill. The session started by showing videos to some of the practicals. According to Shwu-Ru, Chia-Hao, Hsiu-Min & Ching-Yu (2012) videos shown for study purposes display a great chance of competency. Powepoint pictures with procedure was used to teach how to insert nasogastric tube (appendix 4). It was followed by explanation then practically practicing. The videos shown were all in Finnish language from the link '[www.sanompro.fi](http://www.sanompro.fi)', a recommended link by Lahti UAS faculty of social and health care. Participants worked in pairs during the skills lab, this gave each of the RN student the opportunity to practice their skills and receive nursing care in turns (International Council of Nurses 2012). Table 2 is a summery of skills performed, videos watched and equipments used during the clinical competence project.

Table 2: Clinical skills competence executed during the project

	Clinical competence	Skill practiced	Video watched(x)	Equipment/material used
1.	Basic care	Hand disinfection	X	Alcoholic based antiseptic
2.	Safety	Wearing sterile gloves	X	Sterile gloves
3.	Elimination	Female and male single use & indwelling catheterization	X	Anticeptic sterile gloves, sterile forceps, sterile gauze, urine drainage bag and tubing, 10ml syringe, xylocaine gel, Nacl 0.9%, disposable sterile drapes, tape, indwelling catheter, catheter support, scissors,tissues
		Nasogastirc tube insertion	Powerpoint (appendix4)	Clean gloves, kidney pan, glass water, straw, stethoscope, 60ml syringe, drainage bag, NG tube, xylocaine gel, ph strips, tape, scissors, tissues
		Suctioning (upper respiratory tract)	X	Clean gloves kidney pan mask santion catheter sterile water cup tissues disposable drapes
4.	Vital signs	Blood pressure meter (manual)	X	BP meter, cuff, stethoscope
		Oxygen therapy	–	SpO <sub>2</sub> Pulse oximeter nasal cannula, mask, O <sub>2</sub> therapy tank
		Pulse rate	–	Stethoscope
		Respiration rate	–	Stethoscope

## 6 PROJECT ANALYSIS AND RESULTS

The results gotten from the project was analysed, this was based on the group response of students who participated in the project. The responses were analysed though predictive analysis.

### 6.1 Data analysis

Data analysis is a process that uses various procedures to scrutinize the information collected during a research process. In this thesis project predictive analysis was used to draw up the possible opportunities and risks that are likely to occur in the future by use of current and past data. (Beal 2016.) Watt (2014) the aim of this investigation is to discover profitable knowledge that could be used to draw conclusions and form the basis for decision making.

The first step in analyzation of data obtained from participants in the project was organizing the data. This was done by first reading through all the questionnaires and getting a general idea of what kind of responses they had. This was followed by grouping the responses to each question. The next step involved finding and grouping ideas, feelings and perceptions in the responses. It involved scrutinizing the choice of words that responders used to express themselves. The frequently used words and ideas expressed were grouped into categories. The researchers also noted the responses that were unrelated to the questions and inspected them for the possibilities of new ideas, conclusions and challenges for future research work. The ideas and concepts from the responses to each of the questions were then categorized. These facilitated the formulation of themes deduced from the data.

A summary of the concepts and themes was the final step in the data analysis of this research. In this step the concepts and themes were weighed against the theoretical framework of this project to check if the findings are supported by the literature. The new ideas that emerged were

also summarized. (O'Connor, Fealy, Kelly, Guinness & Timmins 2009, 493-499).

## 6.2 Results

The evaluation of the research was conducted by the use of open-ended questionnaire that contained 5 questions, it allowed participants to describe their experiences ultimately. Unstructured interviews was as well used to assess clinical nursing competence in a more precise approach. According to (Wasik & Hindman 2013, 1) Open-ended questions evoke the need of an individual to explain and express themselves more. Unstructured interviews (Morse 2015) provides rich data that corresponds to the study ending up to be more resourceful.

The first question asked how the student had benefited from the skills lab practice. Most of the participants said that the extra practice gave them the confidence they needed. Others said that it helped them remember everything they had learned earlier in the course.

*"I have understood all the necessary procedures.....this will help me in my next clinical practice because I will be sure of what to do."*

When asked what they learnt best and why, some students said that it was catheterization because it was explained thoroughly and they had an opportunity to practice and ask questions. Others said vital signs was their best skill learned because they realized its importance. The rest of the students cited that the insertion of the nasogastric tube was their best skill because the authors made it seem easy and effortless. They said it was well explained well and that they all got a chance to practise, an opportunity that some did not have earlier in the course.

*"I understand catheterization process well. It was done thoroughly and I have repeated a couple of times. The teacher clearly explained the procedure well and was very practical."*

The third question sought to find out how the project has prepared the students for their clinical training. They responded that they have built confidence and courage that eased their anxiety. They felt ready to participate in their training because they now know the nature of the equipment, their memories have been boosted and they know what to do when and why it is done.

*"It has given me more courage and self confidence for my clinical training."*

Students keep improving their nursing skills by watching videos, looking at pictures and reading reliable books (Shwu-Ru 2012). They would keep practicing in school and in their clinical training. They believe that they would benefit from extra skill lab sessions and explanations of procedures from their teachers, tutors and students who are ahead of them in their studies.

*"More practice and extra skill labs and explanations from teachers, tutors and students ahead of me."*

They shared their personal opinions in the last question about what could be done to improve nursing skills to nursing students. They responded that this can be achieved by availing more videos and practice sessions. The tutorial session that this extra skills lab offered them was seen as a great way of improving the students' nursing skills. Participating in clinical training and visiting the healthcare centers and hospitals more often was also seen as an opportunity to achieve this. Other students also said that teachers should first explain the procedures thoroughly, then introduce the equipment.

*"I need more practice in the skill lab. The more I do/practice each activity, I will master them easily and will be easy to work in the real practice."*

*"As a new nursing student many things are new to me, having more chances to practice and listen to my fellow students helps us in our studies."*

## 7 CONCLUSION

Repetative practice of clinical competence by RN students is comparatively new at Lahti UAS, as such the authors of the thesis recommends a review on how students can have time on their own to practice nursing skills. The results of the study show that it is a viable tool that students will benefit by improving their clinical competence. The quality and professionalism of future nurses does not only depend on university nursing programs but also with competent nurses in clinical environment (Wilson 2012, 34). The results clearly showed great satisfaction from the participants on how the project was implemented and executed, majorly, participants were grateful for the skills practiced, they realized the importance of repetitive skills practice, are prepared for their first clinical training and are more confident to practice the skills on patients. From these results Lahti UAS can use this study to create a framework for 'extra skills practice' by students for students in a conducive and flexible environment. Challenges of not having enough considering time of senior students and new students, facilities and equipments may be experienced.

### 7.1 Discussion

The aim of this research project was to educate first year RN students of Lahti UAS about the importance of practicing nursing skills. It was anticipated that participating in the study would make them aware of nursing profession's requirements and thus prepare them for their first clinical training. The results obtained from the analysis of the feedback collected in the open-questionnaires and unstructured interview provided a basis for making important decisions about scheduling repetitive skills lab sessions at Lahti UAS. The extra skills lab proved to be beneficial to the new RN students in different ways. This is evidenced from the questionnaire responses, they appreciate the relevance of nursing skills competency and the importance of repetitive clinical skills practice. The opportunity to repeat their skills lab lesson relieved their anxiety and made



them more confident and prepared for their first clinical experience. Participants realized the importance of repetitive practice and updating of their knowledge and skills. All 14 participants assessed themselves that the skill laboratory practice was more useful in boosting their nursing skills in readiness for their clinical training and in future working life. Participants had a positive attitude, they felt that through this skills practice they had the support in developing their skills even more (Kajander-Unkuria et. al 2014; Kilpeläinen 2010).

Participants worked in pairs during the skills lab project this gave them the experience of working in teams and a clear understanding of the importance of empathy, knowledge, understanding and consent while caring for patients during their clinical training and later as professional RN nurses. The ultimate objective was achieved when the students transfer what they had learnt in skills laboratories into the real situations in care/clinical environment with confidence and professionalism. (International Council of Nurses 2012.)

As much as there are good ongoing clinical competence improvements at Lahti UAS (2016). Good excellence in nursing skills competence should be allowed according to students own time(s) by allowing students to practice their nursing skills and know how various equipments at the skills laboratory rooms are used, this will help them to develop their carrier gradually. Allowing them to have their own groups and practice at their own phase will ensure excellence in the capability of students' skills competence. Students' motor skills are important to develop early in nursing school for successful future clinical practice. (Shwu-Ru et.al. 2012).

RN students who participated in the extra skills lab expressed their appreciation for the opportunity to repeat the skills lab lesson. They were anxious about attending their first clinical training and felt pressured to be perfect. The authors took notice of the circumstances that aggravated these students' anxiety. These were factors such as being new student residents of Finland, learning of new knowledge and skills and being under

pressure to learn and understand Finnish language and culture. They were pleased that the researchers were also immigrants in Finland and had the same experiences in the initial stages of their studies. They appreciated that the researchers' Finnish language skills was enough to understand the skills videos from SanomaPro.fi. Participants were hopeful that they will keep learning and improving thier nursing skills during their laboratory trainings and clinical trainings.

## 7.2 Risks

The project was based on voluntary participation by first year 2015 RN students this brought about the risk of not getting enough participants or none at all, during the time our focus group had a busy schedule and many may have found it hard to create time to attend either days of the project, while others may not have been interested in participating. As a consequence, out of a class of 30 students a total of 14 students enrolled and participated on the different dates of extra skill lab. The variables of the study could not be certainly correct due to the study number of participants, the results doesn't tell if all first year RN students of Lahti UAS 2015 agree to the findings of the study. The wikipable that was used by participants to enroll was not used appropriately, some participants enrolled in one of the groups but decided to participate on the other, authors of the thesis project could not be 100% sure that the number of students who enrolled at the wikipable would show up, besides having posted our contacts to the students accessible links their was no communication of absentisim or change of skills group.

Shortage of some equipments; for example gas tanks, was experienced when another skills lab was ongoing in a different lab room, the project had to stall causeing delay. Directly participants had no risks involved since invasive procedures that were practised; nasogastric tube insertion, urine catheterization and upper respiratory tract suction were performed only on mannequins. Non-invasive procedures; hand hygiene and measuring of vital signs were safe for the participants to perform on each

other.

The risk of delay in finishing the thesis was experienced, the authors of the thesis initial plan was to finish the thesis in December 2015 but it was not possible since the implementation of the project relied on the nursing students' schedule. The project was only to be executed when the students had already practised the skills with their lectures. The researchers therefore had to wait until the nursing students' schedules had been made before going ahead and making a schedule for the extra skills lab days. Further delays were caused by difficulty to find time and laboratory classrooms that suited the students' timetable. Eventually, it was apparent to the authors that the project analysis and completion of the thesis would be postponed to spring, 2016.

### 7.3 Ethical issues

Through our supervising lecturer, Lahti UAS gave ethical approval for the study, and study permissions were obtained from lecturers' concerned before the PowerPoint lecture introduction was introduced to the focus group in November, 2015.

The prospective participants were introduced to this project work through an introductory lecture that disclosed the process of implementing the project, information on benefits and the possible risks that might be encountered were discussed. During this lecture the students were given the opportunity to seek clarification of any unclear areas concerning the study. They were informed that they would sign a consent form to affirm their voluntary participation. They were assured that their participation is voluntary and their anonymous evaluation collected in the questionnaires will be confidential and will have no influence in their grades or studies. After the introductory lecture participants were given a duration of 4 weeks before project implementation day to ask questions and consider if it is worth enrolling to the project. This period was crucial in ensuring that the prospective participants have had the chance to think, consider and have all their questions responded to and were therefore making an informed

and voluntary decision to participate. (Finnish Advisory Board on Research Integrity 2014; Resnik 2011.)

#### 7.4 Implication

This study has proven the importance and benefits of facilitating nursing students with the opportunity to repeat their skills lab lessons. This supports the proposal by the researchers of this work that extra skills lab lessons be made available to nursing students at Lahti UAS. This can be achieved by including the extra skills lab lessons in the course studies. The researchers of this work suggest that the skills lab rooms may be reserved in advance and witable prepared in Reppu pages for enrolling in the extra skills labs. These extra skills lab sessions would be available to all nursing students regardless of their year of study. Senior nursing students would enroll as tutors voluntarily to teach/practise. Participation in extra skills labs as students and as tutors could contribute to final grades after responsible lecturer evaluates the student's clinical competence. This will motivate nursing students to enrol, this will ensure better clinical skills competency in nursing career.

Future studies in this field will face the challenge of acquiring more volunteers. A large number of volunteering participants would be an indication of greater self-initiative and responsibility by the nursing students in honing and updating their nursing skills.

## REFERENCES

- Adamsen, L. & Tewes, M. 2000. Discrepancy between patients' perspectives, staff's documentation and reflections on basic nursing care. *Scandinavian journal of caring sciences* 2000 14 (2), 120-9.
- Aitamaa, E., Leino-Kilpi, H., Puukka, P. & Suhonen, R. 2010. Ethical problems in nursing management: The role of codes of ethics. *Nursing Ethics* 2010 17 (4), 469-482.
- Beal, V. 2016. Predictive analytics [referenced 10 March 2016]. Available in [http://www.webopedia.com/TERM/P/predictive\\_analytics.html](http://www.webopedia.com/TERM/P/predictive_analytics.html)
- Bridger R. S. 2008. Introduction to ergonomics: 3rd edition [referenced 10 May 2015]. Available in [https://books.google.fi/books?id=Jr4FIRQnVqQC&printsec=frontcover&dq=introduction+to+ergonomics+second+edition&hl=en&sa=X&redir\\_esc=y#v=onepage&q=introduction%20to%20ergonomics%20second%20edition&f=false](https://books.google.fi/books?id=Jr4FIRQnVqQC&printsec=frontcover&dq=introduction+to+ergonomics+second+edition&hl=en&sa=X&redir_esc=y#v=onepage&q=introduction%20to%20ergonomics%20second%20edition&f=false)
- Canonica, P., Söderlund, J., De Nito, E. & Mangia, G. 2013. Special issue on organizational mechanisms for effective knowledge creation in projects; Guest editorial. *Managing Projects in Business* 2013 6 (2), 223-235.
- Defloor, T., Van, H. A., Verhaeghe, S., Gobert, M., Darras, E. & Grypdonck, M. 2006. The clinical nursing competences and their complexity in Belgian general hospitals. *Journal of advanced nursing* Dec 2006 56 (6), 669-78.
- Dental Abstracts. 2015. January-February 2015 60 (1), 38-39 [referenced 8 April 2015]. Available in <http://www.sciencedirect.com.aineistot.lamk.fi/science/article/pii/S001184861400404X>
- Dobson, M. S. 2015. Understanding the Five Stages of the Project Life Cycle [referenced 8 March 2015]. Available in <http://playbook.amanet.org/5-stages-of-the-project-life-cycle/>

Elliott, M. & Coventry, A. 2012. Critical care: the eight vital signs of patient monitoring. *British journal of nursing* (Mark Allen Publishing) 2012 21 (10), 621-625.

Felton, A. & Royal, J. 2015. Skills for nursing practice: Development of clinical skills in pre-registration nurse education. *Nurse Education in Practice* Jan 2015, 15 (1), 38-43.

Finnish Advisory Board on Research Integrity. 2014. Ethical Principles [Referenced 8 January 2015]. Available in <http://www.tenk.fi/en/ethical-review-human-sciences/ethical-principles>

Finnish Nurses Association. 2015. Working as a nurse in Finland [referenced 7 July 2015]. Available in [http://www.nurses.fi/nursing\\_and\\_nurse\\_education\\_in\\_f/working-as-a-nurse-in-finland/](http://www.nurses.fi/nursing_and_nurse_education_in_f/working-as-a-nurse-in-finland/)

Godson, N., Wilson, A. & Goodman, M. 2007. Evaluating student nurse learning in the clinical skills laboratory. *British journal of nursing* (Mark Allen Publishing) 2007 16 (15), 942-945.

Hinno, S., Partanen, P. & Vehviläinen-Julkunen, K. 2012. The professional nursing practice environment and nurse-reported job outcomes in two European countries: a survey of nurses in Finland and the Netherlands. *Scandinavian journal of caring sciences* March 2012 26 (1), 133-43.

Hughes, R. E. & Nelson, N. A. 2009. Estimating investment worthiness of an ergonomic intervention for preventing low back pain from a firm's perspective. *Applied Ergonomics* 2009 40 (3), 457-463.

Hyväri, I. 2006. Success of projects in different organizational conditions. *Project Management Journal* Sep 2006 37 (4), 31-41.

Ingebjørg, S., Dagfinn, N. & Åshild, S. 2009. Students learning in a skills laboratory. *Nordic Journal of Nursing Research* 2009 29 (3), 18-22.

International Council of Nurses (ICN). 2012 [referenced 3 March 2015]. Available in <http://www.icn.ch/who-we-are/code-of-ethics-for-nurses/>

International Council of Nurses (ICN). 2012. The ICN Code of Ethics for Nurses [referenced 8 March 2016]. Available in [http://www.icn.ch/images/stories/documents/about/icncode\\_english.pdf](http://www.icn.ch/images/stories/documents/about/icncode_english.pdf)

John Hopkins medicine. 2016. Bladder and Bowel Dysfunction [referenced 26 April 2015]. Available in [http://www.hopkinsmedicine.org/healthlibrary/conditions/kidney\\_and\\_urinary\\_system\\_disorders/bladder\\_and\\_bowel\\_dysfunction\\_134,113/](http://www.hopkinsmedicine.org/healthlibrary/conditions/kidney_and_urinary_system_disorders/bladder_and_bowel_dysfunction_134,113/)

Kajander-Unkuri, S., Meretoja, R., Katajisto, J., Saarikoski, M., Salminen, L., Suhonen, R. & Leino-Kilpi, H. 2014. Self-assessed level of competence of graduating nursing students and factors related to it. *Nurse Education Today* May 2014 34 (5), 795-801.

Kaveevivitchai, C., Chuengkriankrai, B., Luecha, Y., Thanooruk, R., Panijpan, B. & Ruenwongsa, P. 2009. *Nurse Education Today* 2009 29 (1), 65-72.

Kilpeläinen, T. 2010. Foreign nurses' guide to Finnish working life. [Referenced 8 April 2015]. Available in [https://seure.fi/Global/Polku/Foreign\\_Nurses\\_Guide\\_to\\_Finnish\\_Working\\_Life.pdf](https://seure.fi/Global/Polku/Foreign_Nurses_Guide_to_Finnish_Working_Life.pdf)

Lahti University of Applied Sciences. 2016. Faculty of Social and Health Care, Degree Programme in English [referenced 3 March 2016]. Available in <http://www.lamk.fi/english/social-and-health-care/about/Sivut/default.aspx>

Lahti University of Applied Sciences. 2015. Faculty of Social and Health Care, Degree Programme in English [referenced 7 August 2015]. Available in <http://www.lamk.fi/english/social-and-health-care/studies/degree-programmes-in-english/Sivut/default.aspx>

Lahden ammattikorkeakoulu, Reppu. 2013. Basics of nursing and nursing science [referenced 26 April 2015]. Available on <http://reppu.lamk.fi/course/view.php?id=8722>

Lakanmaa, R., Suominen, T., Perttilä, J., Ritmala-Castrèn, M., Vahlberg, T. & Leino-Kilpi, H. 2014. Graduating nursing students' basic competence in intensive and critical care nursing. *Journal of clinical nursing* March 2014 23 (5-6), 645-53.

Lääkehoitopassi. 2015. Nurse's medication passport [referenced 20 April 2015]. Available in <https://www.laakehoitopassi.fi/tasks/browse>

Lenburg, C. 1999. Redesigning Expectations for Initial and Continuing Competence for Contemporary Nursing Practice. *Online Journal of Issues in Nursing* Sep 1999 4 (2).

Mahanes, D., Quatrara, B. D. & Shaw, K. D. 2013. APN-led nursing rounds: An emphasis on evidence-based nursing care. *Intensive & Critical Care Nursing* 2013 29 (5), 256-260.

Meretoja, R. & Koponen, L. 2012. A systematic model to compare nurses' optimal and actual competencies in the clinical setting. *Journal of advanced nursing* Feb 2012, 68 (2), 414-22

Morse, J. M. 2015. Critical Analysis of Strategies for Determining Rigor in Qualitative Inquiry [referenced 18 March 2016]. Available in <http://qhr.sagepub.com.aineistot.lamk.fi/content/25/9/1212>

Nelmes, P. 2011. Professional skills in nursing. *Nursing Management* Feb 2011 17 (9), 11.

Nelson, A. & Baptiste, A. 2004. Evidence-Based Practices for Safe Patient Handling and Movement. *Journal of Issues in Nursing* 2004 9 (3).

Nice guidelines. 2007. Acutely ill adults in hospital: recognising and responding to deterioration [referenced 4 June 2015]. Available in <https://www.nice.org.uk/guidance/cg50/chapter/Patient-centred-care>



- Nieminen, A., Mannevaara, B. & Fagerström, L. 2011. Advanced practice nurses' scope of practice: a qualitative study of advanced clinical competencies. *Scandinavian journal of caring sciences* Dec 2011 25 (4), 661-70.
- Numminen, O. 2010. Nursing Ethics Education in Finland from the Perspective of Codes of Ethics [referenced 4 July 2015]. Available in <https://www.doria.fi/bitstream/handle/10024/63587/AnnalesD912Numminen.pdf?sequence=1>
- O'Connor, T., Fealy, G. M., Kelly, M., Guinness, A. M. M. & Timmins, F. 2009. An evaluation of a collaborative approach to the assessment of competence among nursing students of three universities in Ireland. *Nurse Education Today* 2009 29 (5), 493 – 499.
- Ornek, F. 2008. An overview of a theoretical framework of phenomenography in qualitative education research: An example from physics education research. *Asia-Pacific Forum on Science Learning and Teaching* Dec 2008 9(2), 11.
- Oxford dictionary. 2015. Definition of competence in English [referenced 4 June 2015]. Available in [http://www.oxforddictionaries.com/us/definition/american\\_english/competence](http://www.oxforddictionaries.com/us/definition/american_english/competence)
- Oxford University Press. 2010. Introduction to project work – what is a project? [referenced 9 December 2015]. Available in <https://oupeltglobalblog.com/2010/11/26/introduction-to-project-work-what-is-a-project/>
- Pellatt, G. C. 2007. Clinical skills: bowel elimination and management of complications [Referenced 5 August 2015]. Available in <http://web.a.ebscohost.com.aineistot.lamk.fi/ehost/detail/detail?vid=3&sid=0c3249dd-3493-4f48-bacc-5389e0768994%40sessionmgr4004&hid=4206&bdata=JnNpdGU9ZWlhvc3QtbGl2ZQ%3d%3d#AN=2009552012&db=cin20>

Piispanen, K. & Väkiparta, L. 2013. Degree Programme Students' Perspectives on the Medication Passport in Facilitating Learning of Pharmacotherapy [referenced 4 August 2015]. Available in [http://www.theseus.fi/bitstream/handle/10024/54396/Piispanen\\_Katri\\_Vakiparta\\_Laura.pdf?sequence=1](http://www.theseus.fi/bitstream/handle/10024/54396/Piispanen_Katri_Vakiparta_Laura.pdf?sequence=1)

Raurell-Torredà, M., Olivet-Pujol, J., Romero-Collado, À., Malagon-Aguilera, M. C., Patiño-Masó, J. & Baltasar-Bagué, A. 2015. Case-based learning and simulation: useful tools to enhance nurses' education? Nonrandomized controlled trial. *Journal of nursing scholarship* Jan 2015, 47 (1), 34-42.

Resnik, D. B. 2011. What is Ethics in Research and Why is it Important? [referenced 8 March 2015]. Available in <http://www.niehs.nih.gov/research/resources/bioethics/whatis/>

Royal College of Nursing. 2013. Standards for assessing, measuring and monitoring vital signs in infants, children and young people [referenced 8 August 2015]. Available in [https://www.rcn.org.uk/\\_\\_data/assets/pdf\\_file/0004/114484/003196.pdf](https://www.rcn.org.uk/__data/assets/pdf_file/0004/114484/003196.pdf)

Shwu-Ru, L., Chia-Hao, C., Hsiu-Min, T., Ching-Yu, C. 2012. The effects of a deliberate practice program on nursing students' perception of clinical competence. *Nurse Education Today* 2012.

Simon, k., M. & Goes, J. 2011. What is Phenomenological Research? [referenced 8 August 2015]. Available in <http://dissertationrecipes.com/wp-content/uploads/2011/04/Phenomenological-Research.pdf>

Sjostrom, B., Dahlgren, LO. 2002. Applying phenomenography in nursing research. *Journal of advanced nursing* Nov 2002 40 (3), 339-345.

Sosiaali- ja terveystieteiden ministeriö. 2011. Sosiaali- ja terveystieteiden ministeriön asetus laadunhallinnasta ja potilasturvallisuuden täytäntöönpanosta laadittavasta suunnitelmasta [referenced 8 October 2015]. Available in <http://www.finlex.fi/fi/laki/alkup/2011/20110341>

Standing, M. 2007. Clinical decision-making skills on the developmental journey from student to Registered Nurse: a longitudinal inquiry. *Journal of advanced nursing* Nov 2007 60 (3), 257-69.

Stratetegies for Nurse Managers. 2007. *Ergonomics in Nursing: Imporance of a Safe and Healthy work Environment* [Referenced 8 August 2015]. Available in <http://www.hcpro.com/content/77607.pdf>

University of Southern California. 2016. *Research guides* [referenced 17 May 2016]. Available in <http://libguides.usc.edu/writingguide/methodology>

Valvira. 2008. *National supervisory authority for welfare and health* [referenced 17 July 2015]. Available in [http://www.valvira.fi/web/en/healthcare/professional\\_practice\\_rights](http://www.valvira.fi/web/en/healthcare/professional_practice_rights)

Wasik, A. P. & Hidman, H. A. 2013. *Realizing the Promise of Open-Ended Questions* [referenced 21 January 2016]. Available in <http://onlinelibrary.wiley.com/doi/10.1002/trtr.1218/abstract>

Watt, A. 2014. *Project Management* [referenced 8 March 2015]. Available in <http://opentextbc.ca/projectmanagement/>

Wilson, C. 2012. *Clinical competence of nursing students*. *Australian Nursing Journal* Feb 2012 19 (7), 34.

## APPENDICES

### Appendix 1: Powerpoint lecture presentation



## Introduction

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- Nursing hand skills is the use of evidence based methods in the aim of promoting patients' health by use of applicable skills and procedures such as taking vitals, basic care, catheterization and cannulation
- Nursing skills competency is the most essential foundation in nursing care.
- Learning is achieved most effectively through practical experience
- Lack of enough skills, preparation and knowledge is the main cause of anxiety among nursing students when practically attending to a patient.
- Skills practicing has increased the performance of clinical nursing skills among nursing students.

- 
- Nursing ethics requires that students master basic procedures before practicing on patients
  - Skills laboratories are non-clinical settings established for the purpose of practicing nursing skills.
  - They have increased patients' safety and fostered proper foundation in the early stages of nursing school by building the skills and confidence that nursing students require in the actual clinical setting .

- 
- In this project, we have researched theories of the nursing skills of basic care, vital signs and elimination.

## Nursing Skills Competency

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- Ensure patients gets high quality, safe and cost-effective health care
- Should be continuously reviewed to keep up with evidence based practices and changes in technology and the environment

- 
- Nursing skills to be practiced in this project work are:
  - Basic Care
  - Vital Signs
  - Elimination

## Purposes and Aims

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### Purposes:

- provide enlightenment to nursing students about the importance of nursing skills through skills laboratory.
- boost their confidence in performing nursing skills and technique.
- emphasize the importance of repetitive skills practise.

### Aims:

- to educate the first year nursing students of Lahti University of Applied Sciences about practicing nursing skills
- to prepare nursing students for the first clinical training
- to expose nursing students to the requirements of nursing care.

## Evaluation

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- In this project work, questionnaires with open ended questions will be used
- feedback collected in the questionnaires will be confidential and will have no influence in your grades or studies.
- The questionnaires will be answered and submitted immediately after participating the project

## Enrollment and Contact Information

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- Participation is voluntary and begins with signing of the consent form
- Enrollment is through the Reppu pages
- You may contact the implementers of this project to request further clarification or ask any question that concern you in participation.
- The contact details are:
- [zipporah.gakere@student.lamk.fi](mailto:zipporah.gakere@student.lamk.fi) & [lilian.kirwal@student.lamk.fi](mailto:lilian.kirwal@student.lamk.fi)



## Implementation timetable

Task	Implementation
Signing and submitting the consent form	9.11-16.11.2015
Enrollment in Reppu	9.11-5.12.2015
Projection Execution: Group A	14.12.2015 at 8.15 - 11.30am
Project execution: Group B	17.12.2015 at 8.15 - 11.30am
Project execution : Group C	17.12.2015 at 12.15 -15.30pm

- Each student will participate only once on the specific day they enrolled in Reppu.

## References

- Adamsen, L. & Tewes, M. 2000. Discrepancy between patients' perspectives, staff's documentation and reflections on basic nursing care [Referenced 28.8.2015]. Available <http://web.b.ebscohost.com/aineistot.lamk.fi/ehost/detail/detail?vid=13&sid=e5a1c33b-d5fc-4a78-9f32-67266b18613e%40sessionmgr110&hid=123&bdata=JnNpdGU9ZWlvc3QtbG12ZQ%3d%3d#AN=2000079955&db=cin20>
- Aitamaa E., Leino-Kilpi H., Puukka P. & Suhonen R. 2010. Ethical problems in nursing management: The role of codes of ethics [Referenced 4.7.2015]. Available <http://web.b.ebscohost.com/aineistot.lamk.fi/ehost/detail/detail?vid=9&sid=dca906f1-7ded-45d6-9b30-258e6a1dd3fe%40sessionmgr115&hid=115&bdata=JnNpdGU9ZWlvc3QtbG12ZQ%3d%3d#AN=2010716688&db=cin20>

- Business Dictionary. 2015 [Referenced 8.3.2015]. Available <http://www.businessdictionary.com/definition/project.html>
- Defloot, T., Van, H. A., Verhaeghe, S., Gobert, M., Darvas, E. & Grypdonck, M. 2006. The clinical nursing competences and their complexity in Belgian general hospitals [Referenced 29.8.2015]. Available <http://web.a.ebscohost.com/aineistot.lamk.fi/ehost/detail/detail?vid=9&sid=0c3249dd-3493-4f48-bacc-5389e0768994%40sessionmgr4004&hid=4206&bdata=JnNpdGU9ZWlvc3QtbG12ZQ%3d%3d#AN=2009350071&db=cin20>
- Finnish Advisory Board on Research Integrity. 2014. Ethical Principles [Referenced 8.1.2015]. Available <http://www.tenk.fi/en/ethical-research-human-sciences/ethical-principles>
- Finnish Nurses Association. 2015. Nursing and nurse education in Finland [Referenced 7.7.2015]. Available [http://www.nurses.fi/nursing\\_and\\_nurse\\_education\\_in\\_fi/](http://www.nurses.fi/nursing_and_nurse_education_in_fi/)
- Godson, N., Wilson, A. & Goodman, M. 2007. Evaluating student nurse learning in the clinical skills laboratory [referenced 26 April 2015]. Available on <http://web.b.ebscohost.com/aineistot.lamk.fi/ehost/pdfviewer/pdfviewer?vid=8&sid=0c303492-56b7-466b-9631-73e94d7575eb%40sessionmgr110&hid=109>
-

- 
- International Council of Nurses (ICN). 2012. The ICN Code of Ethics for Nurses [Referenced 8.3.2015]. Available [http://www.icn.ch/images/stories/documents/about/icncode\\_english.pdf](http://www.icn.ch/images/stories/documents/about/icncode_english.pdf)
  - Johns Hopkins Medicine. 2015. Tests and Procedures [Referenced 7.15.2015]. Available [http://www.hopkinsmedicine.org/healthlibrary/test\\_procedures/pulmonary/oximetry\\_92,p07754/](http://www.hopkinsmedicine.org/healthlibrary/test_procedures/pulmonary/oximetry_92,p07754/)
  - Kilpelläinen, T. 2010. Foreign Nurses Guide to Finnish Working Life 2010, 8-11 [Referenced 16.7.2015]. Available [https://seura.fi/Global/Polku/Foreign\\_Nurses\\_Guide\\_to\\_Finnish\\_Working\\_Life.pdf](https://seura.fi/Global/Polku/Foreign_Nurses_Guide_to_Finnish_Working_Life.pdf)
  - Lahti University of applied sciences. 2015. Bachelor's Degree Programme in Nursing, Registered Nurse [Referenced 7.8.2015]. Available <http://www.lamk.fi/english/future-students/bachelor-degree-programmes/Sivut/tuote.aspx?pid=2105>
  - Loughborough University. Questionnaire Design. Available <http://www.lboro.ac.uk/media/www/lboroacuk/content/library/downloads/advice sheets/questionnaire.pdf>

- 
- Meretoja, R. & Koponen, L. 2011. A systematic model to compare nurses' optimal and actual competencies in the clinical setting [Referenced 29.8.2015]. Available <http://web.a.ebscohost.com/aincristot.lamk.fi/ehost/pdfviewer/pdfviewer?vid=6&sid=913b1ad9-feca-449c-b309-b56dca110fbc%40sessionmgr4005&hid=4214>
  - Merriam-Webster Dictionary. 2015. [Referenced 8.3.2015]. Available <http://www.merriam-webster.com/dictionary/project>
  - Ministry of education. 2006. Education and science in Finland [Referenced 11.6.2015]. Available [http://www.minedu.fi/export/sites/default/OPM/Julkaisu/2006/liitteet/eng\\_opm13.pdf](http://www.minedu.fi/export/sites/default/OPM/Julkaisu/2006/liitteet/eng_opm13.pdf)
  - Nelmes, 2010. Professional skills in nursing- guide for the common foundation programme 2010, 30 [referenced 26 April 2015]. Available on <http://web.b.ebscohost.com/aincristot.lamk.fi/ehost/pdfviewer/pdfviewer?vid=4&sid=303b7e9bd1aa40be936b85b38541e0f4%40sessionmgr113&hid=109>



---

- Nelson, A. & Baggett, A. 2004. Evidence-Based Practices for Safe Patient Handling and Movement [Reviewed 25.8.2015]. Available <http://www.nursingworld.org/nursesandpatients/transportation/movingpatients.htm?articleContentId=90047&articleId=90047&articleContentId=90047>
- New York University. 2015. Types of Thesis [Reviewed 25.8.2015]. Available <http://guides.library.nyu.edu/theses/typesofthesis/typesofthesis.htm>
- Nuorteva, A., Malmgren, B. & Fagerlin, L. 2011. Advanced practice nurses' scope of practice: a qualitative study of advanced clinical competencies. [Reviewed 29.8.2015]. Available <http://web.a.ebscohost.com.ezproxy.library.nyu.edu/abstract?direct=true&db=amed&dbid=7133447&ppa=449&ppq=633&defol=4&fromopenpage=true&sk=6214>
- Nuorteva, O. 2010. Nursing Ethics Education in Finland from the Perspective of Codes of Ethics 2010, 35-53 [Reviewed 4.7.2015]. Available [https://www.doc.ic.ac.uk/~n/nuorteva/theses/2010/4\\_53377/Avantio2010Dissertation.pdf#page=1](https://www.doc.ic.ac.uk/~n/nuorteva/theses/2010/4_53377/Avantio2010Dissertation.pdf#page=1)
- Palani, A., Gosselin, D., Eick, J.G. & Carlson, N. 2010. From health organization-oriented standardization work process to a personhood-oriented care process in an Italian nursing home: effectiveness on bowel elimination model [Reviewed 5.8.2015]. Available <http://web.a.ebscohost.com.ezproxy.library.nyu.edu/abstract/detail/detail?direct=true&db=amed&dbid=7133447&ppa=449&ppq=633&defol=4&fromopenpage=true&sk=6214>
- Pellat, G. C. 2007. Clinical skills: bowel elimination and management of complications [Reviewed 5.8.2015]. Available <http://web.a.ebscohost.com.ezproxy.library.nyu.edu/abstract/detail/detail?direct=true&db=amed&dbid=7133447&ppa=449&ppq=633&defol=4&fromopenpage=true&sk=6214>



---

- Pegram, K. & Wilson, L. 2012. Egan's Progression System: Preparation for the National Progression Framework Learning of Practitioners [Reviewed 4.8.2015]. Available <http://www.nursingworld.org/nursesandpatients/transportation/movingpatients.htm?articleContentId=90047&articleId=90047&articleContentId=90047>
- Rasmussen, D. B. 2011. Theory-Based and Theory-Inspired [Reviewed 11.10.2015]. Available <http://www.library.nyu.edu/theses/typesofthesis/typesofthesis.htm>
- Royal College of Nursing. 2012. Standards for learning, teaching and supporting the registration of nurses, midwives and young people [Reviewed 11.10.2015]. Available <http://www.rcn.org/standards-for-learning-teaching-and-supporting-the-registration-of-nurses-midwives-and-young-people>
- Royal Free School Medical Centre. 2014. Patient Education: (Old) Egan's Progression System [Reviewed 11.10.2015]. Available <http://www.rcn.org/standards-for-learning-teaching-and-supporting-the-registration-of-nurses-midwives-and-young-people>
- Royal Free School Medical Centre. 2014. Patient Education: (Old) Egan's Progression System [Reviewed 11.10.2015]. Available <http://www.rcn.org/standards-for-learning-teaching-and-supporting-the-registration-of-nurses-midwives-and-young-people>
- Royal Free School Medical Centre. 2014. Patient Education: (Old) Egan's Progression System [Reviewed 11.10.2015]. Available <http://www.rcn.org/standards-for-learning-teaching-and-supporting-the-registration-of-nurses-midwives-and-young-people>
- The University of Kansas Medical Center. 2014. Clinical Learning Skills Laboratory [Reviewed 11.10.2015]. Available <http://www.library.nyu.edu/theses/typesofthesis/typesofthesis.htm>
- The University of Texas. 2014. Nursing Skills Lab [Reviewed 11.10.2015]. Available <http://www.library.nyu.edu/theses/typesofthesis/typesofthesis.htm>
- Thomas, J. 2014. Can hand learning and simulation really help in advanced nursing education? [Reviewed 21. April 2015]. Available <http://www.library.nyu.edu/theses/typesofthesis/typesofthesis.htm>
- Thomas, J. 2014. Can hand learning and simulation really help in advanced nursing education? [Reviewed 21. April 2015]. Available <http://www.library.nyu.edu/theses/typesofthesis/typesofthesis.htm>
- Thomas, J. & Oakden, J. 2007. Evaluating the use of clinical skills laboratories for nursing practice [Reviewed 21. April 2015]. Available <http://www.library.nyu.edu/theses/typesofthesis/typesofthesis.htm>

ANY  
QUESTIONS  
?



Thank  
You!

Appendix 2: Consent form

**LAHTI UNIVERSITY OF APPLIED SCIENCES (LAMK)**  
**SOCIAL AND HEALTH CARE FACULTY**  
**NURSING DEGREE THESIS PROJECT.**

TITTLE OF PROJECT: NURSING SKILLS: Nursing Skills Project with Nursing Degree Students at Lahti University of Applied Sciences

RESEACHERS: Lilian Kirwa ([lilian.kirwa1@student.lamk.fi](mailto:lilian.kirwa1@student.lamk.fi)).  
LAMK Nursing Student

Zipporah Gakere  
([zipporah.gakere@student.lamk.fi](mailto:zipporah.gakere@student.lamk.fi)).  
LAMK Nursing Student

Dear Prospective participant, please answer YES or NO to the following statements:

1. I confirm that I have read and understood the information lecture for the above project and have had the opportunity to ask questions.

Answer: \_\_\_\_\_

2. I understand my participation is voluntary and that I am free to withdraw at any time, without giving reason.

Answer: \_\_\_\_\_

3. I agree to take part in the above study.

Answer: \_\_\_\_\_

4. I agree to the use of anonymised quotes in publications.

Answer: \_\_\_\_\_

Name of Participant

Date

Signature

Name of Researcher

Date

Signature

Appendix 3: Questionnaire form



**Nursing skills lab questionnaire**

1. How have you benefited from this skills lab practice? \_\_\_\_\_

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2. What did you learn best and why? \_\_\_\_\_

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3. How has the skill lab practice prepared you for your first clinical training? \_\_\_\_\_

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4. What would help you to keep improving your nursing skills? \_\_\_\_\_

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5. In your own opinion what should be done to improve nursing students? \_\_\_\_\_

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#### Appendix 4: Insertion of nasogastric tube

Put the patient in a comfortable sitting position, prepare a paper cloth, a kidney pan and a glass of water



Measure the length of tube, from ear to nose, then continue from nose to stomach, make a mark on the tube.

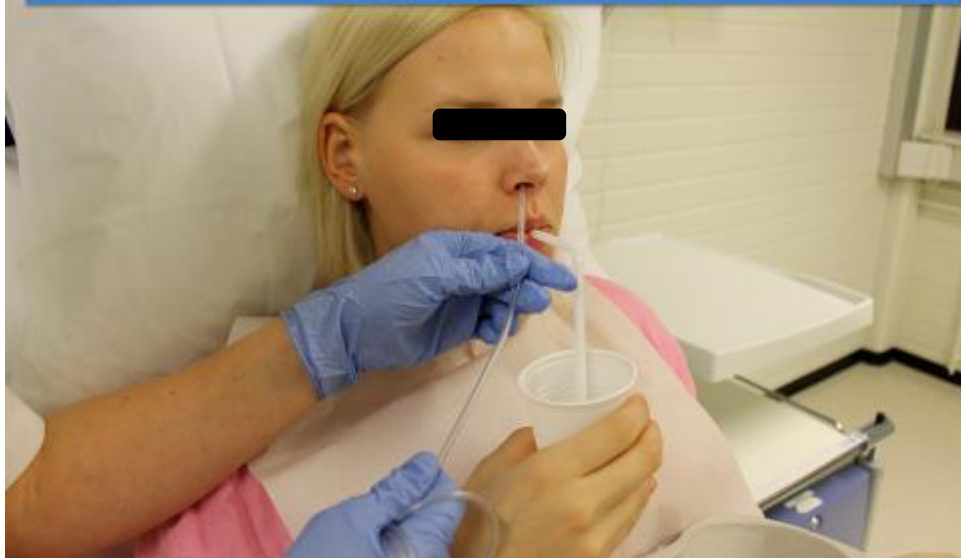




Moist the tube with water ,if need, you can use local anesthetic substance



Insert the tube gently till the mark place what you made before, also ask patient to take some water which helps the tube to go down by swallowing





Checking the tube whether in the stomach or not , by aspiration



Keep the tube stable by sticking the tube on the nose and the side of face .