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Experiences of work-integrated learning in nursing education

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ABSTRACT

Nursing education and the nursing profession have an artisanal character, which has dominated the profession for a long time. Work-integrated learning in nursing education means that theoretical studies are integrated with a clinical placement. The aim of the study was to describe how nursing students experience work-integrated learning in nursing education. The study has a qualitative descriptive design. Qualitative content analysis was used and the analysis focused on both the manifest and latent content of the material. The analysis resulted in the theme *Sustainable learning during education and for the future profession as a nurse*, revealing students' experiences of work-integrated learning during their education. The categories *Different methods*, *Collaboration* and *Bringing the parts together as a whole* constitute the integrated learning process during the education and depend on each other for increased understanding. When the students practice their theoretical knowledge in the clinical placement, work-integrated learning can facilitate them to bring the parts together as a whole, thus giving them an opportunity to enhance their learning process and develop professional skills.

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Education; nursing student; profession; skills; work-integrated learning

Introduction

During nursing education, students must acquire the necessary knowledge and abilities to be able to work as a nurse. The requirements include independence, the ability to identify and solve problems and the development of a critical approach in relation to the profession (SFS 1992:1434; 1993:100). One way to prepare nursing students for their upcoming profession is through work-integrated learning (WIL), which can be seen as an educational method and strategy, where theoretical knowledge is combined with a clinical placement. The focus of the present article is to describe how students experience WIL in the nursing education in Sweden.

Nursing as a practical profession

Nursing education and the nursing profession have an artisanal character, which has been dominant for a long time. The Swedish nursing education includes the following six core competencies: providing person-centred care, working together in teams, providing evidence-based care, gaining knowledge that leads to quality development, ensuring patient safety and processing and communicating information. To strengthen these competencies, clinical placement is an important element of the education, which can support students in their upcoming professional role as nurses (Swedish Nurses' Association, 2013). Kaihlanena, Lakanmaa, and Salminen (2013) state that the transition to becoming a registered nurse can be exciting, yet stressful and challenging for nursing students, but

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a supportive mentor during the education can help them in their transition. Walker et al. (2014) show that role models, acceptance, critical thinking ability, peer support and confidence contribute to the construction of a nursing identity among nursing students. Early in their career, nurses conceive practice development as the acquisition of skills and knowledge relevant to the immediate needs of their patients, which they learn by asking questions. The nurses express that they are learning in the moment. Developing confidence was integral to all aspects of practice development (Daws, McBrearty, and Bell 2020).

Learning during the education

Meaningful learning occurs when a link is made between new and existing knowledge, where a prerequisite is that the new knowledge results in a change in awareness and know-how (Taylor and Hamdy 2013). Students construct their own knowledge (Wang et al. 2013). One way to strengthen student learning is with support from clinical learning centres (CLC), which are available in several nursing educations. The CLC creates learning environments where theoretical and practical knowledge is integrated by means of reflection. Under the supervision of teachers, the students are offered the opportunity to learn and train in the practical skills required for the profession through simulation without the risk of harming patients (Elmqvist, Johansson, and Tiger Axelsson 2015; Lestander, Lehto, and Engström 2016). According to a study by Kaddoura et al. (2016), simulation training increases students' self-confidence while improving clinical competence. In their study Curl et al. (2016) show that students' technical ability and critical thinking are improved by simulation and reflection. According to Salminen et al. (2010), it is not justifiable for healthcare professionals to be unprepared for practical skills when training can take place in artificial learning environments, without the risk of harming any patient. Learning and training can enable the integration of theoretical knowledge and practical actions, the development of critical approaches, collaboration and provision of constructive criticism to fellow students. The CLC provides opportunities to reflect on and discuss the meeting with a patient based on nursing theories. In this way the students can reflect together on their performance based on science and proven evidence. According to Taylor and Hamdy (2013), context and group are crucial for learning, which can be related to Elmgren and Henriksson's (2013) description of sociocultural learning, i.e. when learning takes place within the group.

According to Ewertsson's (2017), there is a tension between what students learn at CLC and what they learn during their clinical placement. Ewertsson found that nurses did not always do what the students had learned during their education. It was also not common for nurses at the clinical placement to take a critical approach or discuss different elements of their work with the students. When teaching staff support students' learning experiences, positive learning relationships can develop that allow students to actively engage in their learning (Henderson et al., 2018). Calleja et al. (2016) identified strategies of importance for nursing student outcomes; being prepared for clinical learning, having ability to develop in clinical practice, sharing awareness in relation to understanding, insight and expectations but also the relationship between the student, supervisor and other personnel.

Nursing education in Sweden

The nursing education in Sweden includes 180 Higher Education Credits (HEC), a professional degree and a bachelor degree. To obtain a professional degree, the student must have the knowledge and ability required to qualify as a nurse. This means that the national goals pertaining to knowledge and understanding, skill and ability, as well as values and approach should be achieved. A bachelor's degree requires completion of an independent degree project of 15 HEC within the main subject, which is nursing (SFS1993:100).

Nursing is the main subject in nursing education, where the health and well-being of the individual are in focus. It is based on a humanistic view and characterised by a holistic, scientific and ethical approach. The education deepens nursing skills through a theoretical approach based on science and evidence-based knowledge. It also includes other areas of knowledge such as ethics, leadership, biomedicine, public health and pedagogy, which are integrated with the main subject. The education is carried out in collaboration with various regional and municipal healthcare providers (Swedish Nurses' Association, 2021).

Work-integrated learning as a pedagogical method and strategy in nursing education

There is no clear definition of WIL, which is used as an umbrella term for teaching methods and models that combine theoretical studies with practical work experiences in the form of, for example, clinical placement (Patrick et al. 2008). Björck and Johansson (2019) show that theory and practice complement each other and enrich learning. During nursing education, WIL is included to give the students an opportunity to learn from their experiences both in the educational context and in the care context via clinical placement. This enables students to study people's needs for caring and nursing, while at the same time acquiring a theoretical basis as a starting point for caring (Billett and Choy 2014; Billett, Cain, and Hai Le 2016; Martin and Hughes 2009). The study by Berndtsson et al. (2019) shows that WIL can make it easier for students to integrate theory and practice, develop skills and knowledge in practice and prepare them for working life. WIL can also support the sharing of work experience between different professions in healthcare. In addition, there is a commitment to one's own learning together with organisational and social support to related WIL. By developing a self-directed and collaborative role one gains the ability to engage in one's own learning and development (Andersson, Graneheim Hällgren, and Skyvell Nilsson 2022). According to Costley (2007), WIL can improve the students' ability to engage in abstract and critical thinking, to collaborate and make decisions, as well as strengthening their trust, leadership role and insight into the organisation, thus increasing their overall professional competence. Walker and Rossi (2021) report that nursing students need personal qualities such as enthusiasm to succeed, commitment to learning, self-motivation, confidence, effective communication skills and compassion. Rock (2012) suggests that a proactive personality may support the transfer of learning. WIL can be related to 'situated learning', which can be seen as a process of learning in working life. The starting point in 'situated learning' is that humans are seen as a social, creative and learning being. Human activities (work) and relationships are constructed and consciously created in and through work (Wenger 1998).

WIL is part of the nursing education by integrating theoretical studies with a clinical placement. Previous research describes, among other things, how WIL within the nursing programme is used to integrate theory and practice to develop praxis and strengthen student learning (Berndtsson et al., 2019; Billett and Choy 2014; Costley 2007; Dahlborg et al., 2014; Jonsson et al. 2014). There is a lack of clinical supervisors to guide students who need support for WIL (Carey, McKay, and Allen 2015). However, previous research does not clearly describe how students experience WIL in nursing education, which is the focus of this study.

Aim

To describe how nursing students experience work-integrated learning in nursing education.

Method

As the aim is to describe WIL during nursing education, the choice of a qualitative study with a descriptive design was considered appropriate. The purpose of qualitative studies is to describe and interpret people's subjective experiences of a phenomenon in order to see and understand the whole in a specific context (Polit and Beck 2021).

Selection and description of the participants

The inclusion criterion for participation was students in semesters five and six of nursing education. The students were informed orally about the purpose of the study by the authors SP and MK. Those interested in participating were also given written information. Written informed consent was obtained from all students before the interview and they were informed that the interview would be recorded using a Dictaphone. A total of 12 students (ten women and two men) participated in the study, seven students from the fifth semester and five from the sixth semester of nursing education. Their age ranged from 22 to 48 years with a mean age of 27 years.

Data collection

The study was performed at a smaller university located in a medium-sized city in Sweden during spring and autumn 2020. Approximately 13,000 students of diverse nationalities study at the university. The teaching context at the university and the nursing programme are based on a joint set of values that underline the equality of people, where democracy and diversity contribute to social well-being and sustainable societal development. The education at the university is based on student participation and the students can contribute to improving it. The leaders of the nursing programme have well-functioning cooperation with different care providers such as hospitals, primary care, community care but also other universities. Student learning can also take place at a Clinical Learning Centre (CLC) at the university. A CLC is a specially equipped centre with the opportunity for simulation, where students can train and teach communication, different care techniques and preparedness for action in different scenarios. A special coordinator organises the students' clinical placements.

Based on the purpose of the study, an interview guide was designed for support during the interviews (Polit and Beck 2021). The interviews were done by the author (LH) and began with the student being asked about her/his age and semester in nursing education. Then the main questions were posed: How do you view your own learning during the education? What does work-integrated learning mean to you? Can you give an example of an activity where you feel that learning and your clinical placement were integrated? Examples of follow-up questions used are 'Can you tell us more?' and 'Can you give examples?'. The interviews ended with an open question 'Is there anything you would like to add?' where students were given the opportunity to tell us more about the topic that they considered important.

The interviews with the students took place via digital connection due to pandemic situation. According to Trost (2010), it is important that interviews take place in locations where the participants feel safe and where there is limited risk of interruption. The individual interviews lasted from 10 to 55 minutes and were then transcribed verbatim.

Analysis

Qualitative content analysis based on Graneheim, Lindgren, and Lundman (2017) was used as an analytical method to describe WIL. The analysis focused both on the manifest and the latent content of the text. Manifest content concerns the visible, what is evident in the text, while the latent content implies an interpretation of the underlying message of the text.

Table 1. The various steps of the analysis process.

Meaning units	Condensation	Coding	Sub-category	Category	Theme
We have studied together and learn from each other	Students who studied together and taught each other	Learning from each other	Reasoning together	Collaboration	Sustainable learning during education and for the future profession

The interviews were transcribed verbatim by the author (LH). The material was then read in full several times by all authors to gain an overall impression of the content. When reading the material, the question 'What is said?' was asked in order to understand the students' experiences of WIL in nursing education. Meaning units were identified, namely words, sentences or paragraphs in the text that corresponded to the aim. The meaning units were condensed, marked and encoded. Sub-categories were identified, followed by categories and finally a theme describing the meaning of the statements. To confirm the interpretation of the students' statements, quotations are included in the presentation of the results, which allows the reader to assess the credibility. [Table 1](#) outlines the various steps of the analysis process.

Ethical considerations

The study was based on the ethical requirements of the Helsinki Declaration (2018) and the ethical research principles of humanities-social sciences research. These principles include the following four requirements: information, consent, confidentiality and usage (Swedish Research Council, 2017). Written and oral consent was obtained from the students before the interview and they were informed that participation was voluntary and that they could withdraw from the study at any time. The interview material was stored in a way that no unauthorised persons could access it. The data collected were only used in the present study.

Results

The analysis of the students' experiences of WIL during nursing education revealed the theme: Sustainable learning during education and for the future profession. The categories and sub-categories should be understood as an integrated learning process during the education and are dependent on each other for increased understanding. This integrated learning process includes collaboration and different methods for bringing the parts together as a whole for sustainable learning ([Table 2](#)).

Table 2. An overview of the result.

Theme	Category	Subcategory
Sustainable learning during education and for the future profession as a nurse	Different methods	-Using tools -Using one's senses -Reflecting
	Collaboration	-Reasoning together -Learning with and from each other
	Bringing parts together as a whole	-Integrating theory and practice

Category: different methods

Using tools

The results showed that during the clinical placement it was necessary to use different educational tools to learn. The portfolio method was employed as a learning support and strategy, especially in courses that contained much factual knowledge. Participants stated that it was helpful to document what happened, what was said, patients' reactions, supervisors' reactions, ethical problems and reflection on what could have been done differently. The documentation in the portfolio later constituted the basis for an examination related to the clinical placement.

The portfolio has helped me to see the development, you see that you are developing, have learned and see that you are constantly evolving (IP2).

... I have used it (the portfolio) for every clinical placement ... to answer questions about what I do as a nurse ... how the clinical placement period will be, there are slightly different questions depending on what course I am doing ... I think it's quite important to get mentally prepared for what's to come ... then I think it was interesting when I filled out the portfolio afterwards to see if my expectations or thoughts about things ... matched what I had gone through (IP8).

Participants described that the use of the portfolio method facilitated learning, especially during longer periods of the activity-based training. It emerged that during their clinical placement the participants had to learn and assimilate a great deal of knowledge every day. For this reason, it was good to document what 'you have learned and how to learn' (IP12). The portfolio method also supported participants in thinking and reflecting methodically and better understanding how they could use both practical and theoretical knowledge.

... I think that when I learned the theoretical part in the school, and came to the clinical placement, I had to reflect and put things down in written form, i.e., when you have written, for example, in the portfolio ... it (the knowledge) I remembered it in a different way and that is exactly what it means to reflect on things ... I think I underestimated the portfolio from the beginning ... what weight it has for one's development (IP8).

For others, the portfolio method had no major impact on their learning. Their learning strategy involved reflecting on the new knowledge themselves and in dialogue with others rather than documenting it.

The portfolio did not help me ... actually, I tried with this portfolio ... and I have done the tasks that were in the portfolio ... but I have not felt that it has helped me at all (IP4).

I have had difficulty seeing what it (portfolio) would give for my own learning, because I think it is easier to reflect for myself and with others (IP7).

The participants appreciated practical training as it was an important support to prepare for the clinical placement and for their future profession as a nurse. One strategy considered essential for learning was practical elements at the CLC, which they expected to have to perform during the clinical placement. It was valuable to first have a theoretical overview with lectures and then train in various elements such as blood pressure measurement, vein sampling or wound dressing hygiene routines at the CLC.

It was good that there are instructions that you should go through during skill training to be able to identify the patient's problems. You can then take these instructions with you to the clinical placement, identify the patient's health status, introduce yourself, use the planning that has been learned in school. I will bring these instructions with me after the training as well (IP12).

The participants described the importance of allocating time for further opportunities to practice practical skills. Sometimes the learning process during practical tasks could be perceived as stressful and that the participants only learned such skills for the examination.

Need a little more time to understand everything, because when the learning process becomes stressful it can more easily be forgotten ... that you learn just for the sake of the examination and not for the sake of learning ... (IP7).

Using one's senses

In order to absorb and understand the knowledge it was beneficial to use all one's senses such as seeing, listening, touching and feeling the atmosphere. The participants described reading, writing and orally explaining, as well as being able to practice various nursing and medical situations during the clinical placement, considered important for activating and raising awareness of the knowledge needed in the upcoming profession as a nurse.

... use as many senses as possible to better understand and learn/... /read the books, do the clinical placement to understand ... (IP8).

Participants also experienced using their senses to learn as part of the maturation process to develop into a nurse. When the participants started their education, they experienced that it was difficult to talk to the patients in a professional way. With theoretical and practical training during their education, they developed their ability to engage in dialogue with the patient in a professional way. They also became more independent in their becoming as a nurse and at the end of the education experienced that they could take more responsibility for the patients. They learned not only for the profession, but also developed as human beings with an awareness of what is happening around them.

It is possible to learn ... How to cope with the task depends on one's maturity to understand what it is (IP9).

From not daring to talk to the patients at the beginning of the education to being completely responsible for them at the end of the education ... that is a huge development (IP2).

Reflecting

According to the participants, it was important to take responsibility for one's own learning to gain a deeper understanding. This was done by, for example, reading the course literature after a lecture. It could also involve reading other literature in addition to the course literature to reflect and broaden their knowledge perspective to create understanding.

If you discover something new that you can't understand, you should seek the answer (IP11).

Another way to take responsibility for the learning was to dare to ask one's supervisor questions before performing a care session during the clinical placement, thus providing an opportunity to deepen their understanding and reduce the patient's suffering.

I've got better at taking care of myself during the clinical placement, if there's something I don't understand, I'll ask. For example, as soon as there was the slightest difficulty in taking blood samples from a patient, I asked myself, why do it, I will have to try two or three times before this works if it works at all. The patient may experience discomfort, which I have caused (IP9).

Another activity that strengthened the reflection and development of knowledge was writing nursing plans related to the course literature during clinical placement. This activity allowed practical knowledge to be integrated with theoretical knowledge, which stimulated the learning process.

Writing from literature gives a lot, you get a good idea of what you're doing ... understanding, it feels very good ... integrating and thinking theory and practice (IP11).

The participants mentioned that not having another job at the same time as their studies facilitated learning, as it gave them more time to focus on their studies.

... I haven't worked or anything during my education, so I've been able to focus on my studies (IP5).

Category: collaboration

Reasoning together

During the clinical placement it was beneficial to be able to discuss different patient cases together in a seminar and then practice writing nursing plans, thus integrating the theoretical knowledge with the nursing process. This approach supported the students in their learning process, enabling them to use the clinical placement to see how patients relate to the planned nursing measures, which made the care appear more person-centred.

Theoretical patient cases are first discussed. Then the students must try to identify potential nursing plans and be able to plan how they should be designed, implemented and evaluated (IP9).

Being allowed to orally present and discuss examinations in small groups, such as in seminars with teachers and other students, was considered a good learning opportunity that deepened knowledge. It provided different perspectives and nuances when the teacher and other students shared their knowledge by problematising and reasoning about an existing nursing plan and together being able to improve it.

It is rewarding to have another student to talk to ... to discuss and reason about real patient cases at seminars (IP2).

Having the opportunity to reason together with both a supervisor and the clinical assistant professor during the clinical placement gave the participants an insight into how everything is connected, namely how the practical care work is based on theoretical knowledge.

By reasoning together, you gain an insight into how everything is connected (IP4).

Learning with and from each other

According to the participants, working together with other students was valuable, as they could share their thoughts and get tips along the way. It was also positive to interpret and carry out tasks or instructions and practice different care elements together with other students at the CLC.

Being a group of students who studied together provided the opportunity to learn with and from each other (IP12).

Learning together and from each other was also about learning during clinical placement. Supervisors and students shared theoretical knowledge and practical skills with each other.

During the clinical placement I brought up things that we did at the university and that my supervisor had not thought of. There [during the clinical placement] I as a student could learn from the supervisor at the same time as she learned from me (IP1).

Category: bringing the parts together as a whole

Integrating theory and practice

The students considered it an advantage to have clinical placement within different care contexts, such as hospital and home care, as it made it easier to integrate the knowledge necessary for their future profession as a nurse. In order to feel confident as a nurse it was important to be able to combine all parts of the knowledge at the end of the education. This applied to everything the students learned, both theoretically and practically, during the education. Supervisors, different care situations as well as fellow students could be helpful for the students' integration of knowledge. It could even concern identifying and discussing different cases during the clinical placement, together with other students and teachers, in order to create an overall picture of patients' needs and resources.

... tie everything together with the help of colleagues to learn together (IP5).

It was also considered easier to integrate factual knowledge such as medical knowledge, physical symptoms, and signs of illness, as well as practical skills. Knowledge concerning things that were not obvious in nursing and that involved the so-called 'soft values', such as care and treatment, was found more difficult to integrate.

... I could use all the knowledge that is pure fact ... I have a little difficulty with ... those courses are a bit fuzzy to me ... when talking about for example, the soul ... one has learned how to think and so on but to do it later is a bit difficult at the beginning ... (IP5).

It took longer to integrate knowledge that, among other things, was about ethics, professional approach and leadership as a nurse. On the one hand, it could be that during the clinical placement the students met patients who had a disease about which they felt insecure. On the other hand, they could see the person, regardless of diagnosis, as they had knowledge of treatment and how to interact with the patient.

... although I did not know much about psychosis when I was in that ward ... I still knew how to interact with a human being, how to perhaps see a human being regardless of diagnosis ... how to respond ... (IP6).

Another advantage was being able to begin with the basics and gradually add both theoretical and practical knowledge to create a deeper understanding and gain an overall picture of the situation.

I want to be very confident on a theoretical level about what I am doing and then when I understand, I want to clarify the theoretical knowledge ... We learn along the way and grow as we feel confident (IP9).

It was considered positive to be able to problematise an existing nursing plan as a theoretical task on campus and then improve and develop it practically during the clinical placement, thus bringing everything together as a whole in a patient-centred manner.

You have the opportunity to use the knowledge that you have learned in school during practice/ ... /then try to discuss it at seminars in school after the clinical placement (IP3).

After the clinical placement, the nursing plan was discussed theoretically again, based on the course literature. In this way, students can bring the parts together as a whole by integrating the knowledge into their profession as a nurse.

Discussion

The aim of this study was to describe how nursing students experience work-integrated learning in nursing education. The study shows that the students use different learning methods such as pedagogical tools, their senses and reflection to achieve understanding, which is in line with the findings of Berndtsson et al. (2019), who showed that there are different methods of teaching that make it easier for students to use theoretical knowledge during their clinical placement, e.g. the stimulation of critical thinking, reflection for problem-solving and feedback to motivate students to understand what they need to improve in order to develop knowledge. To succeed at WIL, Walker and Rossi (2021) recommend students to be aware of personal qualities, e.g. enthusiasm to succeed, commitment to learning, self-motivation, confidence, effective communication skills and compassion. Rock (2012) suggests that to successfully transfer learning, students must maintain their motivation from pre-training through post-training. These different methods are in line with Costley's (2007) description of WIL.

This study found that collaboration between the University and those responsible for the care activities is a prerequisite for integrating theoretical and practical knowledge. Walker et al. (2014) demonstrated that good role models during the clinical placement support student learning and help them bring the parts together to understand nurses' role. According to Martin and Hughes (2009), there must be collaboration between the student, the workplace and the education with

a shared responsibility to promote students' achievement of relevant professional skills. This understanding can also be related to the study by Andersson, Graneheim Hällgren, and Skyvell Nilsson (2022) about newly graduated nurses' experiences of WIL. As WIL can be related to 'situated learning', it is important to collaborate with others in and through work (Wenger 1998). Reasoning together provides an opportunity to learn with and from each other. Walker et al. (2014) also found that peer support is important for developing a nursing identity.

This study also found that it was easier for the students to bring the parts together as a whole when they had the opportunity to integrate theory and practice during the education. When students can practice their theoretical knowledge in the clinical placement, WIL can facilitate the learning process. This is in line with the study by Curl et al. (2016) demonstrating that technical ability and critical thinking can be improved by simulation and reflection, which increase understanding and support nursing students to prepare for the clinical placement and their future profession as a nurse. WIL enables students to develop skills for knowledge-in-practice and prepares them for working life and personal development (Berndtsson et al., 2019; Jackson 2015; Zegwaard 2014). It also gives them a deeper understanding of their profession. In the pilot study on understanding the patient perspective, Feo et al. (2018) showed that students can practice with each other to gain an insight into what care can feel like for the patient.

The three categories identified can be seen as strategies used by the students in an integrated learning process for WIL and thus giving them an opportunity to develop professional skills: I) The students become acquainted with the nursing profession and used different methods such as tools, their senses and reflection for increased understanding, which occurs individually, II) The students collaborate and reason with other students, teachers and supervisors in order to learn with and from each other, and III) The students integrate theory and practice to bring all parts together as a whole for their profession as a nurse. These three strategies in this integrated learning process can go back and forth or in a circle and enable the students to bring the parts together as a whole for sustainable learning during the education and for their future profession as a nurse Figure 1. Although recent research studies have identified one or two of these strategies (e.g. Berndtsson et al., 2019; Curl et al. 2016; Feo et al. 2018; Jackson 2015; Zegwaard 2014), no study has identified all three, and moreover not as an integrated learning process for WIL.

WIL as an integrated learning process

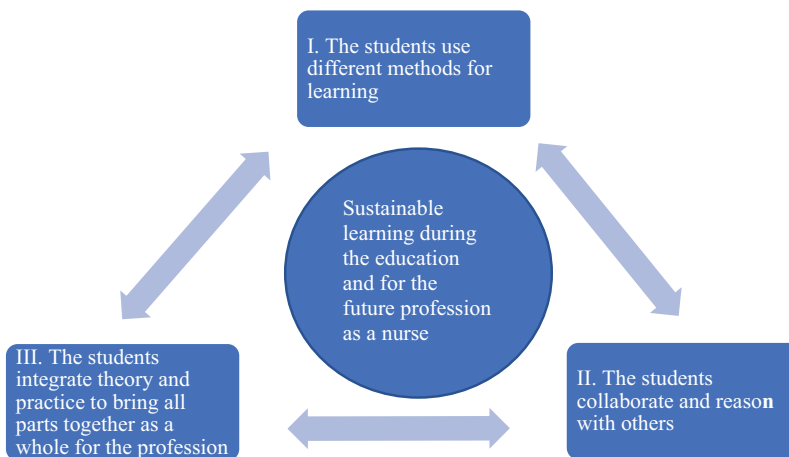


Figure 1. A description of the three categories identified as strategies in an integrated learning process for WIL.

The outcomes of this the present study can contribute to making nursing students and teachers aware of the strategies, such as an integrated learning process, needed to succeed at WIL. We recommend the implementation of the strategies during education to encourage students to reflect on their own learning process and to facilitate their understanding of how to integrate theory and practice in order to bring all the parts together as a whole for their future professional life as a nurse. In this way, as an integrated learning process WIL may support sustainable learning during the education and for the future profession as a nurse.

Conclusion

This qualitative study aimed to describe how nursing students experience WIL in nursing education. In the content analysis based on Graneheim, Lindgren, and Lundman (2017) the theme *Sustainable learning during education and for the future profession as a nurse* and three categories *Different methods*, *Collaboration* and *Bringing the parts together as a whole* emerged. The result illustrates nursing students' experiences of WIL, which can be described as an integrated learning process and includes the categories that can be defined as strategies. The study reveals that nursing students use different learning methods, as well as collaborating and reasoning with others and the strategies are recommended to facilitate students' understanding of how to integrate theory and practice to bring all the parts together as a whole for their future professional life as a nurse. Nursing students must become aware of the strategies to motivate them to be active and take responsibility for their learning during the education, in order to ensure the success of WIL.

Limitations

One limitation is that this study is based on only a small number of interviews. Nevertheless, the result can contribute to a deeper understanding of nursing students' experiences of WIL during their education and for their future profession as a nurse. The study can also contribute to broadening the discussion about WIL and nursing students' learning process during their education, with for example, supervisors at clinical placements and at the university.

To obtain more nuanced experiences of WIL, several interviews from students in specialist nurse programmes should have been included. It would also have been advantageous to follow nursing students' WIL process over time.

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Disclosure statement

No potential conflict of interest was reported by the author(s).

Data availability statement

The data that support the findings of this study are available on request to the corresponding author, [MK]. The data are not publicly available due to the fact as they contain information that could compromise the privacy of the research participants.

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