



CAMERON MURRELLS
NERISSA BERGSTRÖM

DIGITAL VOCABULARY

**CHILD AND ADOLESCENT
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<p>Abstract</p> <p>Communication is a vital skill in nursing. A nurse needs to understand their patient and be able to talk to their patient in a language they both understand in order to meet the patient's needs. English-speaking nursing students face an additional challenge during their internships in Finland, as they need to communicate in a language that is not native to them.</p> <p>English-speaking nursing students need good quality learning material in Finnish that focuses on nursing vocabulary. The digital vocabulary on child and adolescent nursing is the result of two nursing student's project thesis that aims to help them learn vocabulary related to their child and adolescent nursing internships. The vocabulary can also help other people studying or needing to communicate about children's or youths' healthcare needs in either Finnish or English.</p> <p>The production of the digital vocabulary on child and adolescent nursing required background research on the properties of a good vocabulary, project planning, forming selection criteria to define the content of the vocabulary, choosing the words of the vocabulary using the pre-defined criteria, translating the words included, editing the product based on feedback and forming the presentation of the vocabulary.</p> <p>The result was a list of words in Finnish and in English that a student can easily reference and study nursing words on child and adolescents from. The digital vocabulary on child and adolescent nursing will be a helpful tool for English-speaking nursing students in Finland in for years to come.</p>		
Keywords Digital, vocabulary, dictionary, communication, child, adolescent, nursing		

1 INTRODUCTION

There is an increased need for Finnish-language learning tools for students. In 2018, about 20 000 international students were recorded to be training at Finnish higher education institutions all over the country, within over 400 different study programs (Study in Finland). Satakunta University of Applied Sciences (referred from here on as SAMK), is located in Western Finland and has more than 300 international students. The majority of its courses are taught in Finnish, but there are several English-language degrees. The university is the perfect setting for our thesis, as a Finnish vocabulary for English-speaking students can be utilized as a teaching tool for students both of Finnish and foreign origin studying at SAMK. (SAMK [A].)

The digital vocabulary on child and adolescent nursing is a Finnish-to-English vocabulary containing words that are helpful to nursing students when preparing for their Child and Adolescent nursing placement. It is developed for SAMK and will primarily be used as learning material for foreign background students in the English-taught degree program on Bachelor of Nursing. The students use Finnish during their clinical practises in Finland. (SAMK [B].)

The aim of the digital vocabulary of child and adolescent nursing is to help nursing students to learn Finnish vocabulary that they can utilize during their child and adolescent nursing internship. Learning Finnish is mandatory for English-speaking nurses in order to progress through their studies and internships and Valvira (a national agency under the ministry of social affairs and health) requires that healthcare professionals must have sufficient oral and written language proficiency to allow them to carry out their responsibilities (Valvira 2021). Learning Finnish also helps nursing students of foreign background assimilate themselves into the Finnish society and help them find employment after graduation (YLE News 2021). It can be difficult to find a

job in Finland if you do not know one of Finland's native languages, Finnish or Swedish (InfoFinland.fi 2023).

The vocabulary will provide the learner with practical words that are focused on areas related to children and adolescent nursing (Kourkouta and Papathanasiou 2014). This is needed since most of the patients and co-workers encountered during nursing internships in Finland speak Finnish as their native language. The words learned with the help of the vocabulary can help nursing students to achieve mutual understanding with their patients and help them to communicate, which is an integral part of nursing. (Shamsi et al. 2020.)

The digital vocabulary on child and adolescent nursing can be used as a learning tool by Finnish-speaking nursing students or nurses as well. They need to know vocabulary in English when encountering English-speaking patients, relatives of the patient or co-workers either in Finland or abroad. The digital vocabulary on child and adolescent nursing could be used, for example, as a translation tool or a learning tool for situations where an English-speaking child receives nursing care in Finland. There are many families in Finland that cannot communicate in Finnish and/or prefer to receive healthcare in English instead. (Statistics Finland 2021.)

The digital vocabulary of child and adolescent nursing has been made to be concise but succinct, easy to understand and reliable. The theoretical background elaborates and researches the key concepts behind developing a digital vocabulary of child and adolescent nursing and how a vocabulary like it can enhance communication and language learning. The section on implementation depicts the project plan, methodology used and the implementation of the project plan that is used to produce a usable vocabulary for nursing students and others that might benefit from it.

Previous research on the topic of usefulness of word lists such as the digital vocabulary on child and adolescent nursing suggests that students can benefit from premade vocabulary lists (Lei and Reynolds 2022). Previous publications of Finnish-to-English vocabularies for nursing students include other bachelor thesis publications (Ahmed et al. 2020, Pokhareel et al. 2021, Spatura 2019) as well as commercial and educational

material published both online and offline, mainly in the form of leaflets and information booklets (FinnishPod101.com, Hoidokki 2005, Uusi kielemme). These vocabularies either focus on other sections of healthcare, are not comprehensive enough, available enough or are not free for nursing students in SAMK, the subscriber of the thesis, to use. Therefore before the production of the digital vocabulary on child and adolescent nursing SAMK had no Finnish-to-English vocabulary focused on words related child and adolescent nursing to give to nursing students.

Future recommendations on research topics include developing new vocabulary lists focusing on other areas of nursing work as well as testing the effectiveness of the digital vocabulary of child and adolescent nursing in a real-world setting by providing it to students and measuring its effect on their language learning.

2 THEORETICAL BACKGROUND

The key concepts of this thesis are “digital”, “vocabulary”, “dictionary”, “communication” and “child and adolescent nursing.”

2.1 Digital vocabulary

A dictionary is a reference work that arranges terms in a methodical way and defines each one. A multilingual dictionary gives the meaning of the words in multiple languages. Every dictionary is compiled with a particular set of users in mind and aims to provide useful explanations of linguistics for their users. Specialized dictionaries exist to serve a specific purpose, and of these the bilingual group are the most serviceable and frequently used. The dictionaries of technical terms in many fields often have the purpose of standardizing the terminology of their fields. (Read et al.)

Both dictionaries and vocabularies are lists of words, usually alphabetically arranged, that are then defined or explained (Merriam-Webster). Often the words “dictionary”

and “vocabulary” are used interchangeably when referencing a list of words defining their meaning. Rather than compiling all available words, a focused vocabulary explains all the words used when communicating about a certain topic or in a certain language. The acquisition of a large vocabulary has a beneficial effect on one's language proficiency and vocabulary knowledge foundational for language learning. (Word Dive 2013.)

High-quality instructional material should suit their users' circumstances. Glewwe, Kremer and Moulin (2009) found that giving textbooks to Kenyan children helped to raise the test scores of only those children that were already performing well. Some children found these textbooks too difficult and didn't benefit from the learning materials given. Therefore it is important to consider the level of understanding and skill of those using the learning material when developing it. The difficulty of the content, visual design and availability in an easy-to-access format should all match the learner's needs in order to answer the need of the student. (Hwa 2020.)

The visual design and layout, including colours and pictures, has been shown to have an impact on learning outcomes. Carefully considered text illustrations enhance the learner's performance, helping them focus, comprehend the subject and self-motivate while studying from learning materials. (Carney and Levin 2002.) Organizational visual elements, which show the relationships between different parts presented in text are very useful in dictionaries and wordlists. A common visual element in dictionaries is levelling the translations of presented words next to each other in a way where the student can easily comprehend that the word is the same word in different languages. Use of colour and easily readable font helps the student find the information they're looking for without effort, which they can then devote to learning instead. (Sentz 2020.) Font characteristics play a role in retention or recall of information because font design is significant to one's familiarity or unfamiliarity (Delgado 2021). Font size is important, as there may be a link between font size and memory. Regardless of the font's style, large font sizes may indicate greater recall (Price et al. 2016).

The features of a good dictionary include meaning, usage, grammar, spelling, and pronunciation. Other good useful information a dictionary might tell the reader is how

common the word is, if it is used formally or informally or if the word is used in a specialist subject. (EAP Foundation 2018.) A good word list, dictionary or vocabulary serves as effective instruction that brings a student's attention on to how to use word knowledge effectively (McKeown 2019).

The advances in technology in recent decades provide unprecedented affordances and chances for learning second language vocabulary (Ma 2017). Publishing a vocabulary in a digital form can strengthen or enhance a student's learning experience. In a digital form a vocabulary can be easily shared, retrieved at any time, and accessed from anywhere, which enables distance learning. With online distance learning there is the freedom to learn when, where and how the learner wants. Digital learning places the student at the heart of the learning and it is the training that adapts to the learner and not the other way round. (IPAG Business School 2021.)

There are numerous practical advantages in using digital learning tools, particularly when used in an online-learning environment. When a student is learning independently, there is no tutor present. The learning material online must therefore perform the functions that a teacher would normally provide and act as a guide to self-learning. High-quality learning material that a student uses to study independently should be self-motivating, so that they arouse curiosity and encourage the student to learn. The material should be self-explanatory and self-contained, so that no external support is required in order to comprehend the material. (Chakma 2022.)

There are cases where a paper word list can still be preferable to a digital one. For example, a nursing student might want to carry the vocabulary on child and adolescent nursing during their internship in a clinic or a hospital in a paper form, which is cheaper and more portable than an electronic device. In these cases a benefit of a digital vocabulary is that it can be turned into a physical form by simply printing it, which provides adaptability and ease of access to the student (Lei and Reynolds 2022.) Good quality textbooks are often expensive while free material online has highly variable quality. Therefore, there is a need for more high quality learning material available for free online (Hwa 2020).

A study conducted by Mohamad et al. in 2017 found that e-dictionaries or digital vocabularies can provide some benefits to enhance vocabulary learning. E-dictionaries enable learners to access material regardless of time and place and have visual impacts which can contain interactivity and often compared to a printed dictionary, provide clearer vocabulary teaching. However, the findings also mentioned some difficulties learners faced using digital vocabularies, such as inadequate definitions, the absence of definitions and examples, and the lack of credibility of some bilingual e-dictionary developers. (Mohamad et al. 2017.)

2.2 Communication

The exchange of information, ideas, and emotions between individuals through speech or other means is referred to as communication. In nursing, communication happens both ways between the patient and the nurse. The patient expresses their wants, fears, and symptoms to the nurse, who then gives the patient the appropriate healthcare advice and care. There are many different kinds of communication, but speaking and writing are essential when exchanging and documenting healthcare information. Nurses rely on effective communication with co-worker's and patients alike. All interventions, treatments, therapies, education, and health advocacy require effective communication. (Kourkouta and Papathanasiou 2014.) Without adequate communication the quality of education and health is reduced. Communication is so important to nurses that it is often taught that "If it's not documented, it's not done" (Russell 2019).

When we combine the topics of communication, nursing and education, the quality is defined by how easy it is to communicate a dialogue between students, nurses, and teachers. The biggest part of nursing education are clinical practices. These offer practical knowledge and firsthand experience of the field of study which is often the first time students can practice physical interventions under supervision. This understanding of key features in the field of nursing is affected through language. Students studying within a foreign country who do not speak the native language can struggle more, as communication is more challenging to them (Kourkouta and Papathanasiou 2014).

Communication is the key to the quality of education that someone can receive. The easier it is to communicate between student and teacher the safer and more knowledgeable the practice is. The development of this issue is to improve communication between all parties involved, therefore increasing the quality of education and nurses. (Gerrish and Lathlean 2015, 15.)

According to the research about the implication of language barriers for health care done by Shamsi et al., difficulty in healthcare stems from the miscommunication between the client/patients and their medical service professional. This can lead to dissatisfaction reducing the quality of healthcare and mistrust of the system (Shamsi et al. 2020). A study conducted by Kauffmann et al. (2020) shows that there are multiple communicative challenges that emerge in the care patients with different language to that of their health care provider. Furthermore, the results manifested that digital communication aids must be easily accessible and user friendly.

English-speaking students need to learn and communicate in Finnish during their nursing clinical practices (SAMK [B]). Although there are instances where the student's advisors might allow them to make use of English language, most of the time, they must use the Finnish language, especially when communicating with their clients or patients. It is the right of the patient to receive care in their native language as much as possible, as stated in the Finland's law regarding the status and rights of a patient (Finlex 1993).

2.3 Child and adolescent nursing

Child and adolescent nursing is a specialization field involved in the healthcare and nursing of children everywhere in the age range of newborns to those in their teenage years (National Health Service). It is an important area of nursing because children's healthcare varies according to their stage of growth and development and at all stages the care is different from the care of adults (Smith 2019).

An important characteristic of working with children is the care and support needed by the wider family of the child, such as the parents and carers, in addition to the care of the child themselves. Supporting the whole family is an important part of nurse's job when working with children. Families play an especially vital part in communication with the patient when they're a child of such a young age that they are not able to communicate their needs or symptoms themselves with words like an adult could. Children also have rights considering their family and their healthcare, and these rights mean including their family and culture needs when staying at hospitals and receiving treatment. The family and the child must be able to spend as much time together as possible, preferably in their own home, must receive all the information necessary and be part of their child's healthcare decisions and delivery wherever possible. (Terveyskylä.fi 2018.)

Nursing of a child is not like taking care of a small adult, as children have very specific needs. Their bodies are not only smaller but not as fully developed, meaning that drugs need different dosage and can sometimes have different responses or adverse effects in children when compared to adults. Many methods of medical care have been studied in adult populations, so extra care needs to be taken when delivered to children instead. (Stephenson 2005.) A nurse working with children and adolescents needs to understand the development of a child in all stages of development and consider how illnesses and health conditions affect children differently based on their individual age and level of development, both physical and mental. (National Health Service.)

Definitions of children and childhood are much more complex than the common practice of defining children in terms of their age and stage of biological and psychological growth. If the definition is established according to age, The Convention on the Rights of the Child defines children according to age as any person under the age of 18 unless majority is reached earlier under the child's relevant law. (The UN refugee agency 2001, 6). In Finnish law, the description of the child is similar as it is in the Convention of the Rights of the Child and primary responsibility of the child's welfare and upbringing rests on the parents or legal guardians of the child (Lastensuojelu.info).

Finland has high-quality health services specifically aimed for children and a nurse can specialize in their healthcare. Children receive healthcare catered to them starting from pregnancy and infancy in child health clinics all the way through school healthcare and specialized children's wards in hospitals dedicated to different sectors of children's healthcare (InfoFinland.fi 2022). Child and adolescent specialized nurses work in different hospitals and clinics typically monitoring the child's development and health, delivering medicine and vaccines and providing information about healthy nutrition and growth (National Health Service). To give children the best treatment possible, child and adolescent nurses frequently collaborate with other medical professionals as part of a multidisciplinary team. They play an important part in providing care and support throughout children's treatment, be it within a hospital or through a clinic (Smith 2019.)

3 PROJECT PLAN AND IMPLEMENTATION.

3.1 Purpose and objectives

The purpose of the thesis is to produce learning material in Finnish and English, in the form of digital vocabulary in child and adolescent nursing primarily to, but not limited to, nursing students studying at SAMK. The objective of the digital vocabulary of child and adolescent nursing is to help nursing students and other learners to enrich their vocabulary related to child and adolescent nursing and improve their communication skills.

3.2 Target groups

The primary target group of this thesis is the nursing students studying at SAMK who communicate either in English or in Finnish. A secondary target group are people of all backgrounds who need to communicate about children's healthcare in Finnish or in English. People that could stand to benefit from the dictionary include teachers,

medical professionals and patients needing to communicate about children's healthcare anywhere in Finland or abroad. There are many situations where the digital vocabulary of child and adolescent nursing might be used; an example is a situation where an average Finnish citizen might use it if their child is receiving healthcare in another country or from an English-speaking healthcare provider. The number of foreign background people in Finland is growing and these situations will become increasingly common in healthcare environments (Statistics Finland 2021.)

3.3 Project method

The project thesis of developing the digital vocabulary on child and adolescent nursing was planned using a Waterfall model. The Waterfall model is a classic project management model that consists of successive phases (Hughey 2009). In the model steps happen in sequence, and if the model is followed as planned, the project cannot go back to an earlier stage of development (hence "waterfall": like running water, the project must proceed forward) (Petersen et al. 2009). Defining clear tasks and stages of the project with a model such as the Waterfall model makes it easy to understand what to do next in order to progress and visualize the whole process even when the project is in its early stages. (Wells and Kloppenborg 2019.)

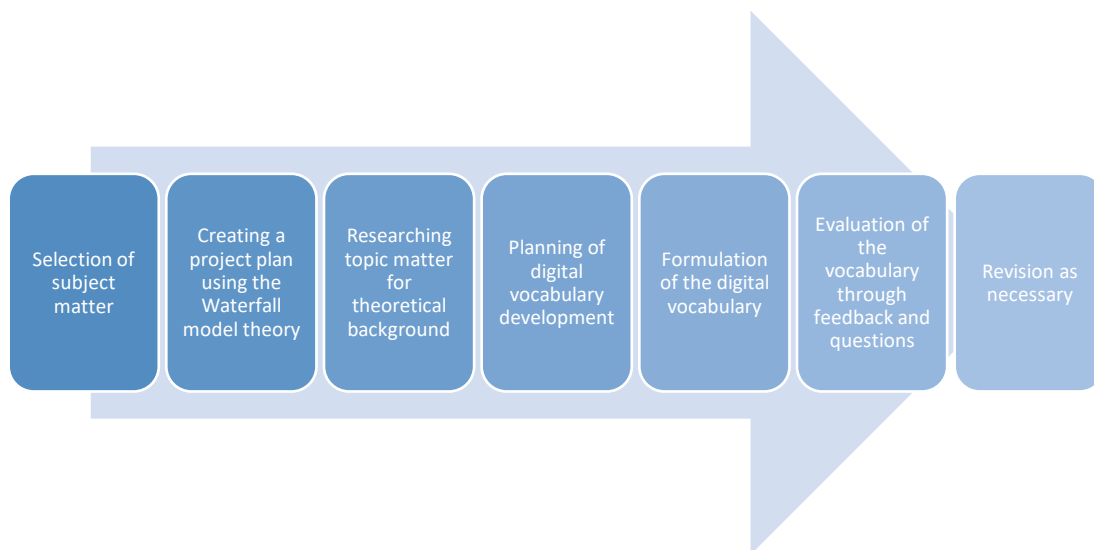
The original Waterfall method included the following steps: requirements, determination, design, implementation, verification and maintenance. The Waterfall has been modified and adapted according to the needs of different projects since. It was also modified to fit the needs of this thesis project, but the steps followed the same idea and visual representation of the original Waterfall model. (Hughey 2009.)

The project arose from the need of the thesis' subscriber for online learning material in the form of a vocabulary with words related to child and adolescent nursing. The idea of the project was defined more through rough discussion about what the final product would look like between the thesis' authors. In the early stage of the project a project plan was developed, for which the Waterfall model of the project was developed. The stages of the model remained the same throughout the project and were

followed consequentially, although the visual presentation and wording of the different steps was modified and refined as the project progressed.

The Waterfall model developed for the digital vocabulary project, displayed in figure 1, allowed the thesis to be mapped out into distinct, sequential phases that will have their own start and finish according to the task. The model created included the following steps; selection of the subject matter, creating a project plan utilizing the Waterfall method, researching the theoretical background of the subject matter, planning the actual creation and development of the vocabulary, carrying out the formulation of the vocabulary, evaluating and gathering feedback of the final product and revision as necessary. Using a linear method of project management, such as the Waterfall method, enables clear definition of each phase of the project. (Hughey 2009, Petersen et al. 2009, Wells and Kloppenborg 2019.)

Figure 1 Project plan for the digital vocabulary on child and adolescent nursing using the Waterfall model



3.4 Resources and risks of the project

Resources are the people, money and other resources that are used to complete the project. They describe what you invest in the project. It is important to define and be aware of the resources a project will consume, as deficiency of a needed resource can bring a project to a halt. (Wells and Kloppenborg 2019.) The vocabulary on child and

adolescent nursing is a digital product, so the project of developing it doesn't require physical resources besides computer access. No studies that cost money to view or share are used for this project, and as such a finance plan isn't necessary. The main resource of the project is the time investment from the authors.

Risks are events that may happen and may therefore affect the project. Usually this impact is negative, and therefore it is important to try and predict the risks of a project in order to minimize their impact. (Wells and Kloppenborg 2019.) If a risk realizes itself and a problem occurs in a project, it is important to act and rectify it. Once a problem in a project has been identified, it can be discussed and a solution can be found. It is important to gather feedback from others in order to develop project plans in an effective and ongoing matter (Melton 2008). As the main resource of the project behind developing the digital vocabulary on child and adolescent nursing was the author's time, the main risk is lacking enough time to work on the project. Other risks include lack of communication between the authors and a lack of motivation affecting the quality or the schedule of the work.

3.5 Selecting the words included in the vocabulary

A comprehensive dictionary's aim is to document every word that can be found in a language, whereas smaller dictionaries aimed at particular demographics try to select words that are likely to be looked up by the selected target group (Read et al.). The vocabulary of child and adolescent nursing is a small, specialized list of words meant to be fast and easy to learn and reference as needed. The aim of selecting the words included is to gather as many useful words related to the subject as possible while keeping the list as concise as possible.

The words to be included in this thesis' vocabulary are largely gathered from previously written dictionaries and vocabularies about either nursing or childcare. Some words are gathered from a Ministry of Social Affairs and Health pamphlet distributed in a Finnish maternity clinic (THL 2020), some from an extensive but uncredited vocabulary received from a maternity clinic in Finland (Neuvola vocabulary), some from excellent online vocabularies (Ylinen, Nationwide Childrens',

Speak Languages [A], Speak Languages [B], Speak Languages [C]) some from previously written theses touching on a similar subject matter (Ahmed et al. 2020, Pokharel et al. 2021, Spatura 2019). Some words that the authors thought of didn't appear in any source materials but are included as they fit the selection criteria.

Setting inclusions and exclusions parameters is a common practice when designing a project (Patino and Ferreira 2018). Selection criteria created to determine if a considered word should be included or excluded from the digital vocabulary on child and adolescent nursing is displayed in figure 2. Creating a selection criteria ensures objective quality and consistency in the final product and prevents the introduction of bias in the product (The Graduate Institute 2022). Merely picking words without consideration or selection criteria could result in poor quality vocabulary, where the words are just nursing words that the authors happen to know by chance and that is not comprehensive or useful enough. The criteria were developed through discussion and consideration between the authors and did not come from an outside source.

Figure 2 Selection criteria for words in the vocabulary

Is the word important and useful enough in normal nursing situations to be included?		Is the word related to children and adolescents nursing, their anatomy, environment, or treatment?		Is the word simple enough and not too difficult to be understood by nurses and patients?		Is the word too likely to be included in other, general nursing dictionaries?	
Yes	No	Yes	No	Yes	No	Yes	No
Include	Do not include	Include	Do not include	Include	Do not include	Include	Do not include

For the digital vocabulary on child and adolescent nursing to meet the properties of a good dictionary, all the words selected to the vocabulary should be specialized in the subject of child and adolescent nursing as to not overlap with other vocabularies produced for the subscriber, be appropriate for usage in the workplace and be common enough to be practical during nursing internships (EAP Foundation 2018). It is

important to consider which words to teach, as this helps the student to utilize word knowledge effectively (McKeown 2019). The selection criteria questions are defined keeping these factors in mind, while also leaving the final product succinct yet comprehensive.

3.6 Translating the words of the dictionary and gathering feedback

One word can mean many different things depending on the situation and the context it is used in (Koltai 2018). The translator often must use their own judgement and consider the contexts they have collected for the word in question to provide the most accurate translation (Read et al.). It is important that the digital vocabulary on child and adolescent nursing provides clear translations suited to a nursing environment, so that it can be used to reliably convey important healthcare information.

To keep the vocabulary as reliable as possible but free of bias and personal nuance, all the translations are acquired through translation services. Selected words were run through two separate translation websites, Google Translate (Google Translate) and Sanakirja.org (Sanakirja.org). Although Sanakirja.org is based on Wiktionary translations that can be edited people on the internet, it is very popular among Finnish users and gives multiple suggestions and examples for translations, as opposed to the more widely known Google Translate. In addition quality control is provided by native English and Finnish speakers who know both languages and are working as qualified healthcare professionals in Finland that the authors know personally. They read through the product and considering the inclusion and exclusion criteria, provided feedback and corrections where needed.

There is not one method for best defining all words. The person who writes or compiles a dictionary must use “artistry” in conveying a sense accurately and succinctly (Read et al.). This is provided to the digital child and adolescent vocabulary through the process of selecting the website translation that was deemed the most accurate, after which the nuance and quality control was carried out by native Finnish and English speakers, some of whom are healthcare professionals or students in healthcare. As a result of quality control and gathering feedback, some translations were modified to

better fit the context of usage in a nursing environment. Some words were omitted altogether from the vocabulary, as no accurate enough translation existed in both languages. Examples of modifications done as a result of quality control done by a native Finnish speaker is the change “height/length” from “korkeus” into “pituus,” where the latter is more appropriate when used to measure people and the modification of “conception” from “käsitys” into “hedelmöitys”, where the first one has meaning related to the conception of ideas rather than the conception of a fetus.

3.7 The layout and presentation of the dictionary

Nursing students using the digital vocabulary of child and adolescent nursing might bring the vocabulary with them to their nursing internships. Therefore it's important that they can quickly search for the words they hear or need to use. The visual representation of the digital vocabulary on child and adolescent nursing is simple, easy to read with information that is fast to process. A readily made template and stock images from Microsoft Word are used in the digital vocabulary of child and adolescent nursing, edited to fit the thesis' purpose and to use a gender-neutral color palette. The template and images are free of copyright and require no source to be listed, making them ethical choices for presentation. (Microsoft.)

There are several theses published previously that present vocabularies (Ahmed et al. 2020, Pokharel et al. 2021, Spatura 2019). The visual representation of the vocabulary of child and adolescent nursing is distinct and not plagiarized from these, while maintaining a similar look with organisational visual elements that ensure easy comprehension of the wordlists for the student (Sentz 2020).

A good dictionary has many different explanations for a word, including meaning, usage, grammar, spelling, how common the word is and pronunciation (EAP Foundation 2018). In the vocabulary of child and adolescent nursing only the categories of the words and the Finnish-English translations themselves are shown, forgoing for example pronunciation and etymology. This was to keep the vocabulary uncluttered and usable quickly on the field while working. It is essential that the word list can be easily memorized and referenced.

4 EVALUATION

4.1 Ethics

Ethical principles in research include honesty, objectivity, carefulness, openness, confidentiality and avoiding plagiarism (Regoniel 2020). In order to advance the goals of information, truth, and the avoidance of errors, it is crucial to uphold ethical standards in research (Resnik 2021). The thesis does not deal with patient data or other confidential material. The work did not cause any harm to our source materials, as their work has been credited throughout. The project thesis or the digital vocabulary on child and adolescent nursing doesn't harm our subscriber or our target group (nursing students), as the thesis's translations are verified to be accurate.

The digital vocabulary on child and adolescent nursing can be utilized by students in real world settings when providing healthcare services. The responsibility of providing accurate translations made quality control of the vocabulary an important ethical key point. Feedback from a native Finnish speaker working in the healthcare sector was carefully considered, which resulted in a vocabulary with correct meaning, grammar and spelling, as required from a good quality dictionary (EAP Foundation 2018). It would be unsafe to provide inaccurate translations to nursing students, as this could lead to misunderstandings and mistakes in treatment, which can have very serious consequences in nursing work (Regoniel 2020). Inaccurate translations would also undermine the thesis goal of lessening the language barrier, which is important when providing quality healthcare (Shamsi et al. 2020). In order to be open and prevent mistakes, a disclaimer proclaiming the vocabulary to be a product of a student-made bachelor thesis was added to end of the vocabulary.

The ethical principles of honesty, carefulness and openness are presented through the reporting of used methods and research in the text of this thesis. Objectivity and the avoidance of plagiarism are ensured by citing our sources meticulously. Sources were chosen based on their reliability and include many published articles, scientific studies, textbooks, online learning material or government information websites. Information

with potential commercial interests, outdated information or dubious background were avoided. Careful documentation of the project through all of its stages makes the result easily verifiable. This shows that even though many theses exist with a similar subject, this thesis' methods are unique and not plagiarized. (Regoniel 2020.)

Part of the project was gathering feedback from fellow students and healthcare professionals about the child and adolescent vocabulary. They were asked about how presentable they think the digital dictionary is and if they had comments about the translations and words included. There was no formal way to gather this information, rather the feedback was quickly utilized and the vocabulary was modified accordingly. This made the feedback difficult to document into the theory of the thesis but enabled fast progress with writing. It would had been better to gather the feedback in written form, as this would had displayed more objectivity.

4.2 Evaluation of the project plan and process

The project followed the plan developed with the Waterfall model displayed in the thesis. The model turned out to be an important project management tool, as having the full plan in mind was helpful and helped us to focus our work on step of the project that was relevant at the time. The most important steps to keep in mind were the early selection of the subject matter and narrowing down the scope of the dictionary. It was important to finish these steps of the project before proceeding forward with formulation of the vocabulary in order to streamline the process and ensure efficiency. It was also important to do background theory early on in the project in order to guarantee a broad enough knowledge base.

Evaluation of the final product and revision as necessary were also important in order to ensure the quality of the final product. In addition to the quality control provided by Finnish-speaking medical professionals, revision was also carried out based on feedback from the thesis' subscriber. Changes made to fit the needs of the subscriber were mainly providing more theoretical background and revision of some categories in the vocabulary of child and adolescent nursing.

The project process went generally well, even though the process took a long amount of time. Although the process and product required many revisions, these were done so that the readers to have more convenience in using the product.

4.3 Personal growth

The main risk identified in the project plan of the thesis was the lack of the author's time, as this was also the main resource required. Even though the risk was identified, lack of time and partly the lack of motivation impacted the quality and the schedule of the project. With more time and resources invested into the project, the theoretical background of the project could had been presented more clearly and the work could had been published according to the planned schedule. Motivation can be a significant risk when authoring a thesis. A large project took a long time to work through, and it was important for the authors to work together to cheer each other on and maintain motivation throughout the project by checking on each other regularly. (Wells and Kloppenborg 2019.)

Although the project was challenging to conduct, the authors' time was refunded in valuable project management skills, Finnish vocabulary knowledge, communication skills and overall professional growth. Experience awarded during this process will be valuable in nursing careers following graduation, as teamwork is the key in the field of nursing.

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Lasten ja Nuorten sairaanhoito -sanasto

Suomi- Englanti

Child and adolescent nursing vocabulary

Finnish – English

Sairaanhoito	Nursing
Suomi	English
Erite	Secretion
Häiriö	Disorder
Happisaturaatio	Oxygen Saturation
Hemoglobiini	Hemoglobin
Hengitys	Breathing
Hengitystie	Airway
Hengitystiheys	Respiratory Rate
Hoito	Treatment
Kommunikaatio	Communication
Lääkitys	Medication
Lämpömittari	Thermometer
Lämpötila	Temperature
Nesteytys	Hydration
Pään ympärysmitta	Head circumference
Paino	Weight
Pituus	Height/length
Ravitsemus	Nutrition
Rokotus	Vaccination
Terapia	Therapy
Vammaisuus	Disability
Verenpaine	Blood pressure
Verensokeri	Blood sugar

Sairaala	Hospital
Suomi	English
Kätilö	Midwife
Lastenosasto	Paediatric ward
Lastenlääkäri	Paediatrician
Osasto	Ward
Resepti	Prescription

Synnytyslääkäri	Obstetrician
Synnytysosasto	Obstetrics
Teho-osasto	Intensive care unit
Ultraääni	Ultrasound
Vastasyntyneiden osasto	Neonatal ward

Sairaudet ja oireet	Diseases and symptoms
Suomi	English
Ahdistus	Anxiety
Aivokalvontulehdus	Meningitis
Akne	Acne
Allergia	Allergy
Anemia	Anemia
Anoreksia	Anorexia
Arkuus	Tenderness
Fobia	Phobia
Hinkuyskä	Pertussis/Whooping cough
Huimaus	Dizziness
Ihottuma	Rash/Eczema
Jäykkäkouristus	Tetanus
Kramppi/Supistus	Cramp
Keltaisuus	Jaundice
Kipu	Pain
Kohonnut verenpaine	Hypertension
Kuume	Fever
Lavantauti	Typhoid
Lima	Mucus
Masennus	Depression
Matala verenpaine	Hypotension
Oksentaa	Regurgitating/throwing up
Polio	Polio
Punoitus	Redness
Ripuli	Diarrhea
Sivuääni	Murmur
Syanoosi	Cyanosis
Syömishäiriö	Eating disorder
Tuberkuloosi	Tuberculosis
Tuhkarokko	Measles
Tulehdus	Infection/Inflammation
Turvotus	Oedema/Swelling

Väsymys	Fatigue/Tiredness
Verenvuoto	Bleeding
Vesirokko	Chicken pox
Vihurirokko	Rubella

Raskaus ja synnytys

Pregnancy and delivery

Suomi	English
Aamupahoinvointi	Morning sickness
Alatiesynnytys	Vaginal delivery
Avustettu synnytys	Assisted delivery
Bilirubiini	Bilirubin
Ehkäisy	Contraception
Ennenaikainen	Premature
Epiduraali	Epidural
Hedelmöitys	Conception
Istukka	Placenta
Jälkeiset	Afterbirth
Jälkiehkäisy	Emergency contraception
Jälkivuoto	Lochia
Keisarinleikkaus	C-section
Keskenmeno	Miscarriage
Kohdunulkoinen raskaus	Ectopic pregnancy
Kohtu	Uterus
Kolmannes	Trimester
Laajentuminen	Dilation
Lapsivesi	Amniotic fluid
Synnytyksen laskettu aika	Estimated date of birth
Maidoneritys	Lactation
Neuvola	Maternity clinic
Oksitosiini	Oxytocin
Perätilasynnytys	Breech birth
Pidätyskyvyttömyys	Incontinence
Raskaus	Pregnancy
Raskausaika	Gestation period
Raskauskouristus	Eclampsia
Raskausmyrkytys	Pre-eclampsia
Raskaustesti	Pregnancy test
Sikiö	Fetus
Supistus	Contraction
Synnynnäinen	Congenital

Synnytyksen jälkeinen	Postnatal
Synnytyksen käynnistys	Induction
Synnytys	Birth
Täysiaikainen	Full Term
Ternimaito	Colostrum
Yliaikainen raskaus	Post term pregnancy

Vauva	Baby
Suomi	English
Apgar-pisteet	Apgar score
Aukile	Fontanelle
Babinskin refleksi	Babinski reflex
Hampaiden puhkeaminen	Teething
Hienomotoriikka	Fine motor skills
Imeä	Suckling
Imemisrefleksi	Sucking reflex
Imetys	Breastfeeding
Itkeminen	Crying
Karkeamotoriikka	Gross motor skills
Kehitys	Development
Kenguruhoito	Kangaroo care
Keskoskaappi	Incubator
Kiintyä	Bonding
Koliikki	Colic
Mororefleksi	Moro reflex
Napanuora	Umbilical cord
Pään ympärysmitta	Head circumference
Palmar-refleksi	Palmar reflex
Plantaarinen refleksi	Plantar reflex
Pulloruokinta	Bottle feeding
Röyhtäily	Burping
Ruokinta	Feeding
Synnytystä edeltävä hoito	Antenatal care
Tutti	Pacifier
Vaippa	Diaper
Vastasyntyneen refleksit	Neonatal reflexes
Vauva	Infant

Lapsi ja nuori	Child and youth
Suomi	English

Alkoholi	Alcohol
Hormoni	Hormone
Huume	Drug
Identiteetti	Identity
Itsetunto	Self-esteem
Kondomi	Condom
Koulutus	Education
Kuukautiset	Menstruation
Kuulotesti	Hearing test
Lastenrattat	Stroller
Lastentarha	Nursery
Leikkiä	Playing
Lukihäiriö	Dyslexia
Menarke	Menarche
Mielenterveys	Mental health
Murrosikä	Puberty
Nielurisa	Tonsil
Oppimishäiriö	Learning disorder
Ruoka	Food
Sukupuolielimet	Genitals
Tamppooni	Tampon
Teini-ikäinen	Adolescent
Terveysside	Sanitary pad
Vanhempi	Parent

This digital vocabulary was created by two nursing students as a bachelor's thesis project. The purpose was to create a product that would be used by nursing students as an educational resource when first entering their placement relating to child and adolescent nursing. The vocabulary may also be used as a communication tool, a teaching aid and by anyone trying to practice their language skills.

Tämä digitaalisen sanasto on kahden sairaanhoitajaopiskelijan opinnäytetyön tulos. Tarkoituksena oli luoda aineisto, jota sairaanhoitajaopiskelijat voivat käyttää oppimismateriaalina heidän aloittaessaan työharjoittelunsa lasten ja nuorten sairaanhoidon parissa. Sanastoa voidaan käyttää myös kommunikatiovälineenä, opetusvälineenä ja harjoitteluapuna kenelle tahansa, joka haluaa parantaa kielitaitoaan.