HOSTED BY

Contents lists available at ScienceDirect

# International Journal of Nursing Sciences

journal homepage: http://www.elsevier.com/journals/international-journal-ofnursing-sciences/2352-0132



# Original Article

# Aspiring for competence in a multifaceted everyday life: A qualitative study of adult students' experiences of a blended learning master programme in Norway



Bodil Gjestvang\*, Sevald Høye, Berit Arnesveen Bronken

Inland Norway University of Applied Sciences, Faculty of Health and Social Sciences, Elverum, Norway

#### ARTICLE INFO

Article history: Received 13 July 2020 Received in revised form 11 September 2020 Accepted 4 November 2020 Available online 11 November 2020

Kevwords: Adult students Blended learning Nurses Nursing education Online education Sociocultural learning

#### ABSTRACT

Aim: To gain knowledge of how adult students experienced the first year of a blended learning master programme to better understand their learning process.

Methods: A qualitative, exploratory, descriptive study based on data from two focus group interviews with students attending a blended learning Master programme. Qualitative content analysis based on Graneheim and Lundman's procedures was applied.

Findings: Our analyses revealed one main theme: aspiring for competence in a multifaceted everyday life and four main categories: acquiring professional competence, struggling to manage diverse forms of communication, demanding task juggling and confused student role.

Conclusions: The participants experienced that the programme enabled them to acquire professional competence relevant to practice. Despite the challenges, the programme is recommended for prospective students who live in both urban and rural areas, who are working and also responsible for children and

© 2020 The authors. Published by Elsevier B.V. on behalf of the Chinese Nursing Association. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

### What is known?

- Several studies report efficiently learning outcomes and positive experiences for students attending a blended learning model.
- Blended learning models promote flexibility and autonomy.
- Use of technology may be challenging for adult students as a tool for communication and research

### What is new?

- Adult students' experiences of learning in a blended Master programme in Norway.
- Online supervision groups seem to promote the learning process.

Peer review under responsibility of Chinese Nursing Association.

E-mail address: bodil.gjestvang@inn.no (B. Gjestvang).

# 1. Introduction

Adult students in higher education programmes frequently face conflicting demands [1] and often struggle to balance work, family and other obligations while attending university. Traditional education programmes are rarely designed to take account of adult learners' special needs and life situations [2,3]. Barriers may revolve around travel time, and distance to the campus and rigid course or programme design that conflicts with work and family obligations [4]. Colleges and universities are called to offer non-traditional programmes with more scheduling flexibility [5].

This study is based on a sociocultural understanding of learning. which emphasizes that learning is both an individual and a social process where interaction between people is essential [6]. Vygotsky stated that cognitive and social development are related to each other and that one learns through conversation, activities and social interaction. His theory states that one learns and develops when one's potential for learning is activated [6]. Activities that lead to learning and development are characterized as social, mediated, situated and negotiated [7].

Understanding individual student's growth as result of an interaction is a very complex endeavour [7], but it is possible to

<sup>\*</sup> Corresponding author. Inland Norway University of Applied Sciences, Faculty of Health and Social Sciences, Postboks 400, NO-2418 Elverum, Norway.

analyze aspects of a student's experiences of attending a learning programme to better understand the learning process.

There is extensive variability in the structure of educational courses and programmes [8–10]. Despite their popularity and the additional flexibility they may offer to adult learners, fully online courses and programmes often result in lower retention [11]. Attending face-to-face classes can provide adult learners with valuable relationships with their fellow students as well as their teachers [12]. Striking a balance between fully online and fully face-to-face learning is a major goal of a blended learning design [13]. Blended learning courses may be defined as: "learning events that combine aspects of online and face-to-face instruction" [14].

A literature review by Nortvig and co-workers [15] included 44 peer reviewed articles, primarily consisting of thematically focused case studies. This review shows that students in blended learning programmes in higher education achieve slightly better results than students who follow traditional classroom instructional programmes. The reasons for this are the elements of technology integration in blended learning courses and its facilitation of student interaction. Students value the social interaction involved in collaborative preparation online, but also the practical application of the online learning activities such as engaging in case studies, group discussions and debates, which increase human interaction and peer support thus motivating learners in the learning process [16].

Zhang and Zhu [17] conducted a systematic review, which included studies using a variety of study designs; qualitative and quantitative studies, case studies, and mixed-methods designs. The findings showed that blended learning effectively supports the rich variety of face-to-face and online components that provide students with a higher level of autonomy to organize their learning, better access to learning resources and greater flexibility to plan and manage their studies.

A systematic review [18] of 30 articles, describes self-regulation and the use of learning technology as the key challenges that students face in blended learning. Due to the flexibility and autonomy offered by blended learning, students devote a relatively small portion of their time to learning tasks. Students were also unable to obtain appropriate technological help online and unfamiliar communication channels can impede cooperation [19].

A meta-analysis of the impact of blended learning on students' performance in higher education [20], showed that students in hard disciplines performed significantly better by using blended learning than students in soft disciplines. The authors stated that hard disciplines such as algebra, human anatomy and general health depend on established facts and demonstrable theories, while soft disciplines, for example introductoty psychology and nursing, accept diversity in terms of conceptualization and research methodology. They concluded that instructors in soft disciplines should facilitate constructive but critical online discourses to provide high quality learning.

Some other challenges in blended learning programmes may be invisible student roles in the local area [21] and digital problems that can destroy student motivation [22,23].

There are some ambiguities in the conceptual definition when it comes to the adult student. One way to describe this group is by age. The entire group of adults who study, from the age of 18 onwards, have been defined as adult students [4]. Another term applied is mature students for people aged 25 and over [4]. Khiat [24] disagrees that age is a sufficient criterion and believes that the characteristics of the adult student should be central to the definition, for example that an adult student is typically a person juggling different roles as a student, worker, spouse and/or parent. The researchers in the present study agree with this understanding. Non-traditional student is another term used [25] to distinguish

between those juggling different roles and those enrolling in full time, traditional courses. Knowles [26] was not concerned with how to categorize adult students, but focused on the special pedagogy, the andragogy, which should be applied in adult pedagogy. This theory is centered on the idea that the teacher does not posses all the knowledge and that students should be encouraged to participate by utilising their own experiences. The present authors also agree with the principles of andragogy, but do not specifically focus on this approach. In the present article, the term 'adult student' is utilized.

### 1.1. Background

A few years ago, a small number of students applied for and attended the traditional Master programme at the University in this study. Many of the students lived in rural areas of Norway and were not granted leave by their employers to continue their education. As a result, a blended learning programme was developed. The learning outcomes of the original educational programme were maintained in terms of knowledge, skills and general competence. However, the structure, organization and methods were customized into a blended learning programme with a combination of synchronous online teaching and face-to-face meetings. The programme generates 60 credits in the European Credit Transfer and Accu-mulation System (ECTS). This blended learning programme led to a significant increase in applicants to the programme.

In the following, a brief description of the education programme and its design is presented.

The total programme lasted for four semesters (two years) and consisted of two 2-day face-to-face meetings each semester. In addition, an hour long synchronous online lecture was arranged every week by means of Skype. The online lectures were streamed and made available for asynchronous use. In addition, four obligatory, synchronous online group supervision meetings were arranged each semester as video conferences.

The literature reviews revealed few studies about adult students' perspectives and experiences of a blended learning master programme situated in a Scandinavian context.

### 1.2. Aim of study

The aim of this study was to investigate how adult students experienced a blended learning master programme in order to better understand the learning process.

### 2. Methods

## 2.1. Design

The study had a qualitative exploratory descriptive design.

# 2.2. Participants and recruitment

All 31 students who had completed the first year of the master programme were invited to participate in the study. The students were contacted and informed about the study via e-mail. Nine students accepted the invitation and gave their written consent to participate. The participants were all women aged 28–53 years, with a mean age of 44 years. Eight were registered nurses and one social worker. Nearly all of them worked fulltime, they worked in dementia care (five), home care (three) and mental health care (one). Their work experience ranged from three to thirty-four years.

### 2.3. Data collection

We chose focus group interviews for data collection in order to access the students' experiences of participating in a blended learning programme. The advantage of focus group interviews is the dynamic interaction between the group members that enables them to explore and clarify their views, which would be more difficult to achieve in individual interviews. A focus group discussion is particularly useful for exploring people's knowledge and experiences to examine how they think [27]. Two focus group interviews were conducted, with four students in one group and five students in the other group. Both groups were interviewed once. The interview took place in a classroom at the end of the first day of a face-to-face gathering at the beginning of the students' second year of the programme (August 2018). The two focus group interviews lasted 90 min and 120 min respectively.

A semistructured interview guide was developed by the first and the last author. The discussion was organized around five themes conserning experiences related to the participants' learning process and study context such as the organization and the mix of pedagogical methods employed in the blended learning model (i.e. faceto-face gatherings, supervision groups, web lectures and study tasks). A moderator (last author) and a co-moderator (first author) led the interviews. The moderator strived to establish a trustful atmosphere by highlighting the students' right to confidentiality. The moderator also emphasized the importance of sharing their true opinions as openly and honestly as possible and that there were no right or wrong answers. The moderator followed the group interaction and brought new issues into the discussion by asking for examples and descriptions. All students were included in the discussion and had their say. The students willingly shared both good and problematic experiences, although some were more active than others. The moderator gave short summaries during the interview to verify the interpretation of the discussion. The comoderator wrote notes, asked supplementary questions to avoid misunderstandings and ensured that the themes were covered thoroughly before finishing the interviews. Finally, the participants were asked if they had anything else they wanted to add beyond what had already been talked about.

The interviews were audio taped and transcribed verbatim by the first author.

### 2.4. Data analysis

The transcripts from the two focus group interviews were analyzed using qualitative content analysis based on Graneheim and Lundman's procedure [28,29]. Qualitative content analysis provides an opportunity to expand the understanding of both the manifest and the latent content of the text and enables the researchers to approach the students' experiences in different ways.

First, the entire text was read several times by all authors to identify what the data were about [28,29]. Then the statements were divided into meaning units. These units were condensed, coded and further compared for differences and similarities through an interpretation process consisting of reflections and discussions in the research team. The researchers agreed upon four categories, each of which was based on two sub-categories. The final step was the identification of a theme to link all the underlying meanings in the categories together [28].

An example from data analysis is presented in Table 1.

### 2.5. Ethical considerations

The project followed ethical standards in line with the Helsinki Declaration of 1964/75 and the Law on privacy, with written

informed consent, anonymization, voluntariness and the participants were assured that they could withdraw at any time without consequences [30]. The project was submitted to the Norwegian Center for Research Data (NSD) but was not considered to require approval from The Regional Committee for Medical and Health Research Ethics.

### 3. Findings

In the following the results of the analytical process are presented. One overall theme was revealed: Aspiring for competence in a multifaceted everyday life. Four main categories and eight subcategories emerged: 1) Acquiring professional competence (Developing an academic stance pertinent to clinical practice, Practicing critical reflections in supervision meetings); 2) Struggling to manage diverse forms of communication (Facing technical and digital demands; Lacking confidence about academic writing in relation to fellow students); 3) Demanding task juggling (Navigating between different tasks; Searching for predicatability and control) and 4) Confused student role (The challenge of positioning oneself as a student while employed, Conflicting expectations pertaining to academic assignments in one's leisure time).

### 3.1. Acquiring professional competence

The participants perceived their studies as relevant, both due to their interest in the subject and their motivation for self-development. The online sessions and the supervision meetings were experienced as related to their professional position and the learning objectives of the programme.

### 3.1.1. Developing an academic attitude pertinent to clinical practice

The participants were satisfied with the educational programme. They emphasized that both online teaching and supervision meetings were informative, relevant and contributed to them managing and improving the quality of their current work. They became more self-confident as illustrated by the following quotation:

"I think what I am doing is very important ... I can bring with me what I have learned for the job, and I can guide others. There are also things I can reflect on with my colleagues." (P9)

The participants appreciated that the programme was closely linked to practice, which made it easier to understand. When incidents occurred that should have been handled in other ways they also dared to point them out to colleagues to a greater extent.

### 3.1.2. Practicing critical reflections in supervision meetings

The participants experienced that the supervision meetings were important and useful in several ways; here they could discuss things together and found it safe to talk in the group, partly because there were not many students and they could see each other and partly because everyone listened with attention and curiosity. They expressed great interest in hearing what came up spontaneously when fellow students described how they solved challenging tasks in practice and how subjects and topics could be linked to situations. They experienced being included in the group when supervisors addressed each student by name. If someone had not said anything for a while, she was asked if she had thoughts, comments and reflections on the topic, or if she just wanted to listen. The participants appreciated this approach. One participant said:

"... you get the opportunity to participate in a professional discussion. It is fun to discuss subjects, and very interesting to hear

**Table 1**An example of the qualitative content analysis: meaning units, condensed meaning units, codes, sub-categories, categories and theme.

Meaning units	Condensed meaning units	Codes	Sub-categories	Category	Theme
I think it fits very well that I get to combine work with being a mother at home can devote time to reading at home, and at the same time take care of the children	0 3 1	and studies	between	Demanding task juggling	Aspiring for competence in a multifaceted life
I have to plan a little, because I may have some days off one week and have a full working week the next and then it is ok to get the task assignments well in advance. I think it is a bit to much at times — and the time between the assignments is too short	assignments in advance	studies	Searching for predictability and control		

how others deal with situations both in nursing homes and in the home service." (P4)

In addition to discussing challenging situations from professional life, study assignments were a theme in the supervision groups. The participants emphasized the importance of preparing for the discussion of study assignments in order to obtain good academic knowledge. They would have liked the duration of the supervision to vary depending on how involved the group members were.

### 3.2. Struggling to manage diverse forms of communication

The participants experienced several communication challenges regarding their technical skills, the digital system and the fact that they missed a more vibrant student environment. Despite these challenges, the online offerings allowed them to study.

### 3.2.1. Facing technical and digital demands

The participants were particularly concerned about the technical challenges of digital communication and interruptions during online meetings. They reported connection problems and that some students had no sound or picture, especially at the beginning of the programme. The participants found this very frustrating and became angry when they could not go online. They needed better information from the university regarding technical equipment such as headsets, type of PC, microphone and speakers. At times they experienced being suddenly cut off without being able to log in again and had to call "support". One participant put it as follows:

"We received too little information. I dare say that there could have been information on what kind of headset you need to have, and that it does not work with both a microphone and a speaker at the same time." (P8)

# 3.2.2. Lacking confidence about one's academic writing in relation to fellow students

Several of the learning activities had to be solved via the web, which challenged the communication between the students. They did not know each other very well, making them insecure about their own and fellow students' academic competence. The geographical distance between them also meant that traditional spontaneous and dynamic discussions were lacking and needed to be compensated for with alternative ways of collaborating. Cowriting documents like google docs, facebook groups and skype meetings provided opportunities for contact with fellow students, but there was still a distance between them.

During the online meetings, the agreed way to communicate was to write a message using the chat function when they had something on their mind. The participants did not like this form of

communication as they found the need to both follow the lecture and read what the other wrote distracting. Situations could arise where two or three students commented on each other's utterances, while the other students remained silent. There were also comments that some students wrote quickly. Those who wrote more slowly were unable to finish writing their post before the topic changed. Some participants thought that they were doing badly and that fellow students might think the posts they considered writing were stupid. One participant stated:

"I have not dared to write something that everyone can read and will stay there forever. I don't think I have done it at all. And I do not understand the technique either, so I have withdrawn from writing." (P2)

### 3.3. Demanding task juggling

The combination of studies, work and family life led to many demanding tasks, thus everyday life required structure, self-discipline, careful prioritzation and planning.

## 3.3.1. Navigating between different tasks

The participants found that the programme could be adapted to family and working life. Although it was possible to complete the programme, even with young children and a full-time job, having so much to do was challenging. The online activities were the reason they managed to study at all. For example, they could work at night before online meetings, and despite being tired could still follow what was taking place in the programme, or they could connect and join the online meeting during an autumn holiday in the cabin with family. A participant put it this way:

"I think it fits very well that I get to combine work with being a mother at home ... I can devote time to reading at home, and at the same time take care of the children." (P2)

Being an adult student is only one of the many activities in which the participants are involved and in general they are happy that there is a programme that enables them to continue their education.

# 3.3.2. Searching for predictability and control

The participants were concerned that both their studies and their own everyday life had to be well organized in order to manage all their tasks.

To do this, they had to carefully prioritize the practical home tasks, their tasks at work and those connected to their studies. They had to plan time for reading, time for working on the educational assignments as well as allocating time for both online meetings and supervision meetings. It was also important to plan other tasks,

such as which days they should take off from work, a definite time to collect the children, be available when the children came home from school, plan dinner and other domestic chores. One participant stated:

"I have to plan a little, because I may have some days off one week and have a full working week the next and then it is okay to get the task assignments well in advance. I think it is a bit too much at times - and the time between the assignments is too short. "(P8)

It was important to gain an overview of the specific assignments so that they could be adapted to everyday life.

They appreciated that the online meetings were streamed, as it allowed them to fit in the meetings with both their professional and private life.

Finding tranquility and sitting down and reading by themselves could be challenging. All tasks had to be well structured in order to allow space and time for study.

### 3.4. Confused student role

Giving greater priority to the student role could be challenging. Even if they wanted more contact with fellow students it could be impossible due to everyday demands. Such factors make the student role confusing.

# 3.4.1. The challenge of positioning oneself as a student when at work

Loyalty to the workplace made it difficult for the participants to find their role and identity as a student when at work. Most of them were allowed 1 h off work per week to participate in the programme, but were concerned about their colleagues having to face an increased workload. The participants rarely took time off work despite being in a demanding study situation. This is illuminated by the following quotation:

"I was allowed to leave the job for the hour in which the online meeting took place, but when there were some interruptions due to questions, it was easy to drop out of the programme because I felt that I should be at work and contribute in the department." (P4)

Most participants were released from work for online meetings, supervision meetings and face-to-face meetings, but neverthless found it difficult to leave the workplace. This meant that the manager and their colleagues did not gain the impression that they were actually students.

"Our employers have no knowledge of this type of study. They probably do not realise that we read much more in our spare time than students who attend regular studies. Most colleagues find it terrific that we are almost never absent from work." (P5)

This indicates that they tried to play down their student role at work, yet were sad and frustrated that their student situation was not taken into account by colleagues and management.

# 3.4.2. Conflicting expectations pertaining to academic assignments in one's leisure time

In the arenas of everyday life, such as home and leisure, there were many obligations that were important and had to be fulfilled. Furthermore, they had not expected to spend so much of their free time on their studies. One commented:

"At home, finding tranquility and sitting down and reading on your own can be challenging." (P7)

The student role was not confirmed when they sat alone studying, felt lonely and had little contact with fellow students.

### 4. Discussion

The aim of this study was to investigate how adult students experienced a blended learning master programme in order to better understand the learning process.

The analysis revealed one overall theme: Aspiring for competence in a multifaceted everyday life. Four main categories emerged from the analysis: Acquiring professional competence, Struggling to manage diverse forms of communication, Demanding task juggling and Confused student role.

In the following the findings will be discussed in light of a sociocultural learning theory. The discussion is organized into three sub-sections with the following headings: Learning environments, Interaction and dialogue and The challenge involved in mediated tools, representing the characteristic aspects of sociocultural learning reflected in the present study.

### 4.1. Learning environments

The learning environment is emphasized as a cental component of the learning process. The participants described the study situation on the basis of their busy everyday life. They characterized the situation as a hectic existence in which they had to juggle between different roles, tasks and social activities to fulfill their commitments in the various arenas in which they were engaged. The student role was at times experienced as both unclear and lonely, as they found themselves studying at work, at home and on the web, but without being acknowledged as hard working students by others. The academic workload required more planning and was more time consuming than expected. The switch between practical work and settling down to read books and solve academic assignments could be challenging.

Lave and Wenger [31] approached learning from the study of the everyday life of man and claimed that learning primarily takes place through participation in *a community of practice*. They explained that a socialization process is required to become a full member of a community of practice. This may be interpreted to mean that the students lack some of the knowledge required to be a full member of this Master's community of practice after one year of study. It may also indicate that the students have developed a great deal of competence that reflects their social learning. The participants in the present study had completed the first part of the master's programme and had access to a wide range of ongoing activities such as information, resources and opportunities for participation. Although they are not newcomers, they still experience loneliness and insecurity in relation to fellow students in some areas.

Nortvig and co-workers [15] show that when technology is integrated into blended learning courses it can facilitate student interaction, but it can also constitute one of the key challenges for students in such courses [18]. In a literature review including 15 studies, Mozelius and Hettiarachchi [32] demonstrated that a blended learning programme must not only be about distributing learning content, but should also include students' social and emotional needs.

One finding in the present study reveals some elements of emotional loneliness in the student role, not only at work, but also at home and in university-related activities. The participants rarely met fellow students and missed collaborating with them in natural settings. McLaughlin & Sillence [33] underline that the transition to a higher educational level may carry a risk of loneliness tied to the

process of managing an academic workload. However, students who were more successful in building social connections on their courses, and formed a small core network of friends appeared to buffer against academic loneliness. Students often commented that these small peer networks, rather than academic staff, were the best resource for assistance with academic issues during their studies [33]. Westerlaken and co-workers [16] found that post-graduate healthcare professionals on a blended learning programme experienced added value of social interactive online preparation due to collaborating and interacting with each other. They provide guidance to teachers on how to adapt their teaching style to a blended learning approach in order to collaborate with the students on the development of a good learning process.

### 4.2. Interaction and dialogue

Interaction and dialogue are also basic elements of learning in sociocultural theory. The participants in the present study doubted their own competence both when it came to using the chat function and when they had to collaborate on written assignments. They feared that fellow students would think they did not fit in if they did not ask wise questions or write well formulated sentences. In online chat, one gets to know the other primarily through writing. When a relationship is not influenced by visuality or orality, physical presence or vocal discourse, one is moved by the words alone when reading the other's message and when others read one's own message [34]. Online writing can therefore be experienced as both impersonal and amputated, leading to a refusal to write and distancing from the learning situation. Therefore, a recommendation seems to be to limit online writing when the whole class is assembled. Another recommendation is to facilitate social interaction online with small discussion groups, which is supported by Westerlaken and co-workers [16].

In the present study online supervision groups seemed very important to the participants, as such small groups constituted a safe context for discussion and learning. This was a different communication situation to the online meetings, where they used the chat function to comment on the lectures. In the supervision groups they could talk, instead of writing and ask questions without being afraid of negative reactions. They could also hear how fellow students experienced study assignments, what they found challenging and get ideas on how to organize their situation. This indicated that fellow students could be important resources for practicing critical reflection processes. The collaboration provided theoretical perspectives and practical know-how at a level where they felt comfortable enough to contribute. The participants emphasized how much they learned from giving and receiving feedback. The advantage of arranging supervision groups is in line with Holzweiss and co-workers [35]. They found that the web students' best learning experiences were activities that allowed for the creation and sharing of knowledge, critical thinking and problem-solving assignments, discussion forums and group projects. This may be interpreted to mean that students attending blended learning programmes learn more by sharing knowledge in a virtual social space where sociocultural learning principles are adapted to their special situation, than by studying alone at home and listening to lectures. When alone, the participants do not receive fellow students' opinions and feedback, thus misunderstandings may not be resolved. Vygotsky described a person's ability to solve problems with the help of others and highlighted the meaning of collaboration through language and communication to reach one's learning potential [6].

The experiences of the supervision groups indicate that there is a need to create room for multiple voices. It is the tension between diverging voices that creates the potential for new understandings [36]. In the supervision groups, the students received feedback on their opinions, which came from various and at times conflicting perspectives. This enables students to critically reflect on the various perspectives and become familiar with the language and practices of the discipline together with the supervisors who provide the norms of the discipline and have an expert position. Supervision groups seem to enhance the learning process in blended learning master programmes.

### 4.3. The challenge involved in mediated tools

In the present study mediated tools refer to the use of digital aids. The participants expressed that both the technical challenges and the digital communication was demanding. Communicating through a screen, being unable to orally ask questions and having to write both quickly and clearly, were daunting. In addition, when one's computer skills are limited and there is no one in the immediate vicinity to ask for help, both perseverance and a strong motivation are required. Rasheed and co-workers [18] describe technology as one of the main challenges faced by students in blended learning. Most of the technological challenges that students encounter indicate their inability to make proper use of the available technology for studying.

Compared to younger students, adult students often have low self-confidence when it comes to mastering the various online procedures. On the other hand, Neroni and co-workers [37] investigated the relationship between learning strategies and academic performance and revealed that non-traditional students, such as those attending a blended learning programme, are more persistent than traditional students when facing challenges.

Despite challenges, the participants in the present study acquired relevant knowledge that made them safer as professionals. The digital situation was new and unfamiliar and attending online meetings when at work was demanding. However, the study programme could be completed despite all the challenges.

An emphasis on collaboration and group work is recommended on these arenas too. In addition, blended learning institutions should provide full-time support for students to enable effective use of technology for their online activities.

## 4.4. Strengths and limitations

Nine adult students participated in two focus group interviews and provided rich and nuanced data about how they worked to acquire professional competence and an academic stance in a multifaceted everyday life. Two of the authors developed the thematic interview guide, and led the focus group interviews as moderator (last author) and co-moderator (first author). The moderator did not know the students, whilst the co-moderator was involved as a teacher during the first year of the blended learning programme. By virtue of knowledge about the study programme, the co-moderator could support the moderator with additional questions relevant to the aim of the study. The relationship between the focus group participants and the researchers can be considered asymmetric, as teachers have the greatest power. To counteract the risks of bias such as withholding negative information, efforts were made to encourage the students to provide honest versions of their experiences. Guldvik [38] emphasized that when participants are in the majority, they will gain increased power, which was the case in our study. The moderator asked openended and follow-up questions, as well as requesting the students to verify the interpretation of their statements. Knowledge emerged about factors perceived as useful for promoting learning, as well as challenges that hindered the students' learning process. The atmosphere during the focus group interviews was relaxed and

the students willingly talked about their experiences and the dynamic interaction between them was rich. Dependability refers to the degree to which data change over time [39]. The same questions were posed in both focus group interviews. The groups differed in that one group started by focusing on positive experiences and only toward the end of the interview mentioned factors that needed to be changed, while the other group started by expressing the negative aspects but gradually became more positive. It seemed that both groups provide a balanced representation of the advantages and disadvantages of attending the education programme.

The research process is described in detail and the analysis carefully outlined to strengthen the transparency of the study [39]. All three authors took part in the reflexive and analytical process and discussed the interpretation of the data until consensus was achieved. No decisions were made without mutual understanding and agreement, which is deemed to strengthen the intersubjectivity of the findings. A member check of the interpretation of data and findings is recommended to strengthen the credibility of qualitative studies [39]. However, we did not ask the participants to confirm the findings of this study for practical reasons, which represents a limitation.

Transferability refers to whether the results can be transferred to other groups or settings [39]. Only nine out of 31 eligible students consented to participate, which is less than one third of those who received an invitation. One possible reason for the low participation may be that the interviews took place at the face-to-face meeting after the conclusion of the teaching day, thus many students may have been tired and needed free time to socialize with fellow students rather than take part in a focus group interview. A more suitable time for the interviews would probably have led to a larger number of participants. The transferability of the findings may therefore be limited. However, the two interviews lasted for about three and a half hours and provided rich information. Our findings correspond fairly well with results from other studies investigating blended learning programmes, which contributes to strengthening the credibility.

The study is presented in line with the COREQ checklist.

### 5. Conclusions

The aim of the study was to gain knowledge of how adult students experienced a blended learning Master programme. The participants appreciated the opportunity to take part in further education and experienced that the programme helped them to acquire professional competence relevant for practice. Online supervision groups seemed to promote the learning process. Neverthless, they had to struggle to manage the diverse forms of communication, fulfil demanding tasks and cope with the confused student role.

A blended learning programme is a recommended solution for prospective students who live in rural areas, are employed and responsible for children and other family-related tasks.

Further research on this topic should interview blended learning students at the end of the programme, to investigate possible changes in experiences throughout the programme.

### **Funding**

This study was supported in part by Inland Norway University of Applied Sciences, Faculty of Health and Social Sciences, NO-2418 Elverum, Norway. No external funding.

### **CRediT** authorship contribution statement

**Bodil Gjestvang:** Conceptualization, Methodology, Validation, Investigation, Writing - original draft, Project administration, Funding acquisition. **Sevald Høye:** Conceptualization, Validation, Writing - review & editing, Supervision. **Berit Arnesveen Bronken:** Conceptualization, Methodology, Validation, Investigation, Writing - review & editing, Supervision.

### **Declaration of competing interest**

The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

### Acknowledgements

The authors would like to thank the participants in the study for their time and willingness to participate and for providing rich and valuable information. Thanks also to the proof reader Monique Federsel for excellent work.

### Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.ijnss.2020.11.001.

### References

- [1] Stevens CR. Hybrid program design: what works for adult learners in a professional degree program? Johnson & Wales University. Dissertations Publishing; 2017. p. 10276528.
- [2] Kao IC. A study on the impact of the occupational performance of teachers in adult education institutions on instructional satisfaction. MATEC Web Conf 2017;119:01038. https://doi.org/10.1051/matecconf/201711901038.
- [3] Illeris K. A comprehensive understanding of human learning. Contemporary Theories of Learning. Routledge; 2018. p. 1–14. https://doi.org/10.4324/ 9781315147277-1.
- [4] van Rhijn TM, Lero DS, Bridge K, Fritz VA. Unmet needs: challenges to success from the perspectives of mature university students. Can J Stud Adult Educ 2016;28(1):29–47. https://cjsae.library.dal.ca/index.php/cjsae/article/view/ 4704
- [5] DeChambeau R. Mixed-mode course design and delivery. In: Authentic instruction and online delivery. CreateSpace; 2011. http://hdl.handle.net/20. 500.11803/513.
- [6] Kozulin A, Gindis B, Ageyev VS, Miller SM. Vygotsky's educational theory in cultural context. Cambridge: Cambridge University Press; 2003. https:// doi.org/10.1017/cbo9780511840975.
- [7] Dysthe O. Dialog, samspel og læring [Dialogue, interaction and learning]. Oslo: Abstrakt forlag; 2001.
- [8] Mahieu R, Wolming S. Motives for lifelong learners to choose web-based courses. Eur J Open Dist E Learn 2013;16(1):1–10.
- [9] Page J, Meehan-Andrews T, Weerakkody N, Hughes DL, Rathner JA. Student perceptions and learning outcomes of blended learning in a massive first-year core physiology for allied health subjects. Adv Physiol Educ 2017;41(1): 44–55. https://doi.org/10.1152/advan.00005.2016.
- [10] Jobe RL, Lenio J, Saunders J. The first year: bridging content and experience for online adult learners. J Continuing High Educ 2018;66(2):115–21. https:// doi.org/10.1080/07377363.2018.1469074.
- [11] Bawa P. Retention in online courses: exploring issues and solutions: a literature review. SAGE Open 2016;6(1). https://doi.org/10.1177/2158244015621777. 2158244015621777.
- [12] James T, Seary K. Why aren't they attending class like they are supposed to? A review into students' perception of the value of class attendance. Stud Success 2019;10(1):115–29. https://doi.org/10.5204/ssj.v10i1.1111.
- [13] Caulfield J. How to design and teach a hybrid course: achieving student-centered learning through blended classroom, online and experiential activities. Stylus Publishing: 2012.
- [14] Ahmed HMS. Hybrid E-learning acceptance model: learner perceptions. Decis Sci J Innovat Educ 2010;8(2):313–46. https://doi.org/10.1111/j.1540-4609.2010.00259.x.
- [15] Balle SH, Petersen AK, Nortvig AM. A literature review of the factors influencing E-learning and blended learning in relation to learning outcome, student satisfaction and engagement. Electron J e Learn 2018;16(1):46–55.
- [16] Westerlaken M, Christiaans-Dingelhoff I, Filius RM, Vries B, Bruijne M, Dam M. Blended learning for postgraduates; an interactive experience. BMC Med Educ

- 2019;19(1):1-7. https://doi.org/10.1186/s12909-019-1717-5.
- [17] Zhang W, Belgium VUBB, Zhu C. Review on blended learning: identifying the key themes and categories. Int J Inf Educ Technol 2017;7(9):673-8. https:// doi.org/10.18178/ijiet.2017.7.9.952.
- [18] Rasheed RA, Kamsin A, Abdullah NA. Challenges in the online component of blended learning: a systematic review. Comput Educ 2020;144:103701. https://doi.org/10.1016/j.compedu.2019.103701.
- [19] O'Regan K. Emotion and e-learning. J Async Learn Network 2003;7(3):78–92.
- [20] Vo HM, Zhu C, Diep NA. The effect of blended learning on student performance at course-level in higher education: a meta-analysis. Stud Educ Eval 2017;53:17—28. https://doi.org/10.1016/j.stueduc.2017.01.002.
- [21] Rønning WM, Grepperud G. Studiesituasjon og studiestrategier hos voksne, fleksible studenter. I: Rønning WM (red), Den usynlige student. Voksne i fleksibel høyere utdanning; 2007. p. 103–22.
- [22] Artino Jr AR, Jones II KD. Exploring the complex relations between achievement emotions and self-regulated learning behaviors in online learning. Internet High Educ 2012;15(3):170-5. https://doi.org/10.1016/ j.iheduc.2012.01.006.
- [23] Mavropoulos AA, Sipitanou A, Pampouri A. Training of adult trainers: implementation and evaluation of a higher education program in Greece. Int Rev Res Open Dist Learn 2019;20(1):279–87. https://doi.org/10.19173/irrodl.v20i1.4143.
- [24] Khiat H. Academic performance and the practice of self-directed learning: the adult student perspective. J Furth High Educ 2017;41(1):44–59. https:// doi.org/10.1080/0309877x.2015.1062849.
- [25] Zerquera DD, Ziskin M, Torres V. Faculty views of "nontraditional" students: Aligning perspectives for student success. J Coll Stud Retent: Research, Theory & Practice 2018;20(1):29-46. https://doi.org/10.1111/1467-9566.ep11347023. 10.1177/1521025116645109.
- [26] Knowles MS. The modern practice of adult education from Pedagogy to Andragogy. Cambridge Adult Education: Prentice Hall Regents, Englewood Cliffs. NI 07632: 1980.
- [27] Kitzinger J. The methodology of Focus Groups: the importance of interaction between research participants. Sociol Health Illness 1994;16(1):103–21. https://doi.org/10.1111/1467-9566.ep11347023.
- [28] Graneheim UH, Lundman B. Qualitative content analysis in nursing research:

- concepts, procedures and measures to achieve trustworthiness. Nurse Educ Today 2004;24(2):105–12. https://doi.org/10.1016/j.nedt.2003.10.001.
- [29] Graneheim UH, Lindgren BM, Lundman B. Methodological challenges in qualitative content analysis: a discussion paper. Nurse Educ Today 2017;56: 29–34. https://doi.org/10.1016/j.nedt.2017.06.002.
- [30] Rickham PP. Human experimentation. code of ethics of the world medical association. declaration of Helsinki. Br Med J 1964;2(5402):177. https:// doi.org/10.1136/bmj.2.5402.177.
- [31] Lave J, Wenger E. Situated learning: legitimate peripheral participation. London: Cambridge University Press; 1991.
- [32] Mozelius P, Hettiarachchi E. Critical factors for implementing blended learning in higher education. Int J Inf Commun Technol Educ 2017;6(2): 37–51. https://doi.org/10.1515/ijicte-2017-0010.
- [33] McLaughlin CJ, Sillence E. Buffering against academic loneliness: the benefits of social media-based peer support during postgraduate study. Act Learn High Educ 2018. https://doi.org/10.1177/1469787418799185. 146978741879918.
- [34] van Manen M, Adams C. The phenomenology of space in writing online. Educ Philos Theor 2009;41(1):10–21. https://doi.org/10.1111/j.1469-5812.2008.00480.x.
- [35] Holzweiss PC, Joyner SA, Fuller MB, Henderson S, Young R. Online graduate students' perceptions of best learning experiences. Dist Educ 2014;35(3): 311–23. https://doi.org/10.1080/01587919.2015.955262.
- [36] Dysthe O, Samara A, Westrheim K. Multivoiced supervision of Master's students: a case study of alternative supervision practices in higher education. Stud High Educ 2006;31(3):299–318. https://doi.org/10.1080/03075070600680562
- [37] Neroni J, Meijs C, Gijselaers HJM, Kirschner PA, de Groot RHM. Learning strategies and academic performance in distance education. Learn Indiv Differ 2019;73:1–7. https://doi.org/10.1016/j.lindif.2019.04.007.
- [38] Guldvik I. Troverdighet på prøve. Om gruppeintervju som metode for å produsere valide data for politiske diskurser. Tidsskr Samfunnsforskning 2002:43(1):30–49.
- [39] Lincoln YS, Guba EG. But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. N Dir Progr Eval 1986;1986(30):73–84. https:// doi.org/10.1002/ev.1427.