

# Lived Experiences of Postgraduate Diploma Community Nursing Students with Flipped Learning at the Higher Institute of Health Specialties

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## Abstract

**Background:** Flipped learning is an innovative teaching and learning strategy that enhances student-centred learning. This study aimed to explore postgraduate diploma nursing students' lived experiences with flipped learning in the Community Health Nursing Practice Program at the Higher Institute of Health Specialties in Oman.

**Method:** A hermeneutic phenomenological qualitative approach was used in the study, and six Omani students were interviewed.

**Findings:** Thematic analysis revealed four themes: procedural experience of flipped learning, perceived benefits and challenges, instructor-student roles, and comparison with lecture-based learning.

**Conclusion:** The study findings revealed that flipped learning enhanced engagement, critical thinking, and independent learning, but posed challenges like increased workload. The study offers insights for curriculum reform and highlights the importance of contextualizing flipped learning within Arab nursing education to meet evolving educational and professional demands.

**Keywords:** Flipped Learning, Nursing Education, Postgraduate Students, Phenomenological Study

## Introduction

Traditional lecture methods dominate nursing education, limiting opportunities for active student engagement and the development of practical skills.

In recent years, Flipped Learning (FL) has emerged as an innovative, student-centred instructional strategy that addresses these challenges by reversing the conventional classroom model (1). Instead of passively receiving information during lectures,

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students in FL environments engage with learning materials before class and apply knowledge through active, collaborative activities during scheduled sessions <sup>(1)</sup>.

Evidence suggests that FL enhances academic performance, critical thinking, teamwork, and practical readiness <sup>(2,3)</sup>. Moreover, it equips learners with the 21<sup>st</sup>-century skills necessary to meet current healthcare market demands <sup>(4)</sup>. Despite these benefits, FL remains underexplored in many nursing education settings, particularly in Arab regions.

This study aims to explore the lived experiences of postgraduate diploma nursing students using FL in the Community Health Nursing Practice(CHNP) program at the Higher Institute of Health Specialties (HIHS).The study seeks to answer the following research questions:

1. What does it mean to be a postgraduate diploma nursing student using FL in the CHNP program at HIHS?
2. What are the benefits of FL as perceived by postgraduate diploma nursing students in the CHNP program at HIHS?
3. What are the challenges of FL as perceived by postgraduate diploma nursing students in the CHNP program at HIHS?

### Frame of Reference

In 1980, Malcolm Knowles introduced the Adult Learning Theory, known as andragogy, which focuses on teaching adults <sup>(5)</sup>.Unlike pedagogy, which centers on teaching children, andragogy emphasizes that adults are self-directed learners who prefer learning by doing, value relevance, draw on prior experiences, engage their senses, and thrive with goal setting. They tend to learn differently from children and take ownership of their learning process.

This theory underpins the current study's aim and research questions. FL, as a teaching approach, aligns with the core principles of Adult Learning Theory. FL encourages autonomy, promotes active knowledge-seeking, and involves minimal instructor supervision. It also fosters collaboration, as students organize, present findings, and share experiences with peers, enhancing engagement and critical thinking.

### Literature Review

Compared to the conventional lecture approach, FL provides a more dynamic and student-centred learning experience<sup>(6)</sup>. It has been shown to reduce lecture time, offer hands-on learning, and enhance students' preparedness and motivation <sup>(7)</sup>. Additionally, FL can improve academic performance, engagement with course materials, comprehension, self-confidence, and critical thinking skills<sup>(8)</sup>.

Furthermore, FL in higher education has been shown to offer a cost-effective, student-centred approach to accommodate growing enrolments and can mitigate funding and structural issues that prioritize faculty research over student learning <sup>(9)</sup>. Meanwhile, it equips students with the 21<sup>st</sup>-century skills needed to address global challenges and the knowledge required to meet current market demands<sup>(4)</sup>. Students with strong academic backgrounds as well as a set of practical knowledge, skills, and abilities are always preferred by employers. Employers prefer hiring employees with the skills and dispositions to bring ideas to life<sup>(10)</sup>. Due to the outdated teacher-centred teaching methodology, the traditional education system has failed to develop essential employability skills, behaviours, traits, and competencies, as argued by <sup>(3)</sup>. In the traditional teacher-centred teaching approach, the development of necessary abilities and inspiring students by personalizing learning around their interests are disregarded. Students are unable to integrate their theories into practice in a real-world working environment.

In Arab countries, nursing education is moving towards adult learning strategies, and flipped learning has been implemented in teaching nursing students. However, most of the existing studies on FL have been conducted in Western contexts, highlighting a gap that this study aims to address.

### Methodology

#### Study design

A qualitative research design guided by a hermeneutic (interpretative) phenomenological methodology was used to address the study's aim and research questions. This study is underpinned by the philosophical traditions of Heideggerian

hermeneutics<sup>(11)</sup> and Gadamerian hermeneutics<sup>(12)</sup>. Hermeneutics is the classical discipline focused on the theory and practice of interpretation, particularly understanding the meaning behind texts and human experiences. It involves uncovering hidden meanings within context<sup>(12)</sup>. Hermeneutic phenomenology aims to gain a deeper insight into the lived experiences of individuals by exploring their interactions within historical and cultural contexts<sup>(13)</sup>.

### Recruitment of participants

Six postgraduate diploma nursing students from the CHNP Program were recruited from the HIHS in Oman from December 2024 to February 2025. HIHS was established as the Oman Specialized Nursing Institute in 2001. It has since expanded to offer nine different specialized health programs at the postgraduate diploma level. The institute was the first of its kind in the Gulf Cooperation Council (GCC) region to offer specialized programs.

Participants were selected using a convenience sampling method. While purposive sampling is commonly used in qualitative research, convenience sampling was utilized in this study due to easier access to participants and availability during the data collection process. Of the seven eligible students, six agreed to participate in the study. One participant declined to participate. The main reasons for non-participation were lack of time due to academic and clinical commitments. The mean age of participants was 37.5 years. Most of them (83%) had clinical experience in Community Health Nursing, while a few (16%) did not. Table 1 presents the inclusion and exclusion criteria, and Table 2 outlines the participants' demographic data.

### Data collection

Eligible participants were invited to participate at their convenience in a 45–60-minute semi-structured online interview, scheduled around their academic and examination commitments. All interviews were conducted via Zoom, and verbal consent was obtained. Participants' anonymity was maintained by replacing their names with reference numbers (P1–P6). Care was taken to ensure that the participants' quotes did not contain information that would enable others to identify them. Participants'

confidentiality was maintained by assuring them that their personal information would be saved in a password-protected computer, and no one could access it except the research team.

Interviews were recorded, encrypted, and stored securely at the HIHS. Participants were informed of their right to withdraw at any time without consequences. Sharing the same native language helped enhance understanding of cultural meanings. Interview questions were prepared in English and translated into Arabic by the first author, a fluent Arabic speaker. To ensure accuracy, one interview transcript was professionally translated and back-translated; no discrepancies were found. Reference<sup>(14)</sup> emphasized that having the same researcher conduct and translate interviews enhances both the authenticity of the data and the researcher's familiarity with participants' cultural context. The process of data collection stopped upon reaching data saturation, as no new data emerged and similar information was reiterated.

### Data analysis

All interviews were transcribed verbatim from audio recordings and subsequently translated from Arabic to English. Data transcription and translation were completed immediately following each interview. Although software such as NVivo is often effectively used in qualitative research, manual analysis was selected for this study as it aligned better with the researcher's preferred working style. Manual analysis, despite the recognized advantages of tools like NVivo, involves analysing and examining data without relying on electronic or automated methods. This process includes reviewing the data, organizing it with codes or categories, and interpreting the underlying meanings to ensure deep engagement with the material.

To maintain consistency with the study's philosophical foundations, the data analysis approach was grounded in hermeneutic phenomenology. The analytical framework adopted, which incorporated both qualitative methodology and philosophical hermeneutics, was based on the principles outlined by Ajjawi and Higgs<sup>(15)</sup>. The process followed six systematic steps. Four major themes emerged: procedural experience of flipped learning, perceived

benefits and challenges, instructor-student roles, and comparison with lecture-based learning. Discussions between two researchers were conducted to refine and finalize the themes generated in this study. Table 3 provides an integrative thematic analysis grounded in hermeneutic philosophical principles.

## Findings

### Procedural experience of FL

The participants cited the procedural experience of FL, through group gathering, the process starts with searching for information, writing, and presenting.

Group gathering helps us to learn more by sharing ideas and learning from each one. (P2)

The process of FL starts with searching for information, which helps students better understand the session's content. (P1)

In FL, we write information that helps in remembering it for a longer time. (P4)

My active role as a learner, searching for information, and presenting it, helped me in the process of retrieving data. (P4)

It is a good strategy because, as a group, we search for information, discuss with our colleagues, and present the information. (P2)

Data analysis suggests the importance of following the procedural steps in FL sessions for the students to get the maximum benefits in terms of understanding and retrieving the information.

### Perceived benefits and challenges of FL

#### Perceived benefits of FL

The Participants reported several benefits of FL, including being active learners, a participative and energetic strategy, understanding the information, and a better retrieval process. Also, FL helps the students to become lifelong learners.

#### Students are active learners

Some participants expressed the role of FL in supporting the students to become active learners in the class.

Utilizing FL as a learning strategy helps the students become active learners, wherein they

are responsible for achieving the session learning objectives. (P6)

Students are active learners and are responsible for their learning. They are engaged in the learning process. (P5)

The findings of the data indicate that utilizing FL in class helps students become active learners and take responsibility for their learning.

### A participative and energetic strategy

Some participants noted the role of FL in keeping the students participating in the classroom and sharing their experiences and ideas with their colleagues.

FL helps the students to participate in group activities because it mandates that every member in the group participate and share their experiences. (P3)

To reflect on my limited experience in Community Nursing, I learnt a lot from my colleagues during the group discussions in classes with FL. (P5)

FL is an interactive and enjoyable learning strategy. I enjoyed the class because of the discussion and interactions with the group and the teacher. (P4)

It is a helpful strategy, which helps the students to engage in the class and with the group members. (P2)

One participant highlighted the paramount role of FL in helping students become more energetic.

FL is a learning strategy that provides energy in the class. I feel very energetic because of the movement. I didn't remember that I fell asleep at those sessions with FL. Moving, thinking, and searching for the information helps the students to be more energetic. (P1)

The findings of the data suggest that FL helps the students to be more energetic, which might be due to the involvement of both the mind and body in the process. This is evidence of the utilization of critical thinking and the movement of the body during the class.

### Understanding and retrieval of the information

Some participants indicated that FL supports students in better understanding the information, helping them achieve their learning goals and retain the knowledge for a longer period.

FL enhances the students' understanding of the session contents. (P5)

FL is a more useful strategy for retrieving the information. (P1)

The information is stuck more in our minds because we search and share ideas as a group. (P2)

The information stays for a long time, and we can utilize it for other courses. (P6)

FL is a learning strategy that helps adult learners to achieve their learning objectives. In a group task, group members share information and discuss it; this process helps the students understand and achieve their learning objectives. (P5)

The data analysis reveals that the effectiveness of FL lies in its emphasis on active student engagement, suggesting that learning through doing rather than passive listening enhances both comprehension and long-term retention of information.

### Enhancing lifelong skills

Some participants reported the role of FL in enhancing lifelong skills, including critical thinking, and becoming more resilient and confident.

FL enables students to be more self-resilient and confident in achieving their learning objectives and understanding the information. (P4)

In FL, we as students have power in the class; we can ask our colleagues questions. I believe asking questions enhances the critical thinking process. (P6)

I had utilized the information that I learned in FL sessions in other sessions and my oral presentations, which further helps me to understand the content more critically. (P4)

### Perceived challenges of FL

The participants reported some challenges of FL, including time, preparation of the information at

home, the personality of the learners, and a lack of resources.

### Time

One participant expressed that the session time is limited compared to the objectives of the session.

FL requires more time to accomplish the task, and we have a huge number of learning objectives. From my perspective, it is not advisable to utilize FL for a long time or many learning objectives. (P1)

Another participant reported the importance of having the session of FL at the beginning of the day.

I prefer that the class with FL should be done in the first or second hour in the timetable, not at the end of the day. One time, the faculty applied at the beginning of the day, it was more useful than the second time when she applied at the end of the day. I felt tired and could not enjoy the task. (P2)

The other participant suggests that FL should not be applied to many objectives and for a long time.

Flipped learning should not be applied to many learning objectives or for the whole day. It is a time-consuming process and needs a lot of energy. (P3)

The findings suggest the importance of considering time in terms of the quantity and quality of the utilization of FL. This might reflect the students' peak consideration time, which increases in the morning and decreases at the end of the day.

### Preparation of information at home

One participant expressed that preparing the information at home is a challenging process.

As a postgraduate student, unlike an undergraduate student, I encounter challenges in terms of being a mother and having children. This increases the challenges in preparing for the FL sessions at home. (P1)

The data analysis reveals that FL utilization might be affected as adult learners have commitments and responsibilities toward their families.

### **Personality of the learner**

One participant reported that the learner's personality could be a challenge in the utilization of FL.

The personality of the learner affects the learning process, as those learners who have shy behavior will have their learning process affected. They have challenges in participating in classroom discussions and presenting information to the entire group. (P2)

The data finding shows that the learner's characteristics might be a barrier to the implementation of the FL process.

### **Lack of resources**

All participants agreed that the lack of resources, such as updated books, online journals, and the availability of the internet, could be major challenges in the full utilization of FL.

In our library, despite having good books, these books are not up-to-date. Therefore, I believe it is important to have access to online updated books and scholarly articles. Sometimes we have stress because of limited resources. (P1-P6)

In our institute, we as students do not have access to the internet, the utilization of FL requires having good internet, and we are used to using our data. As you know, the process of uploading online books and articles consumes a lot of internet. This causes anxiety. (P1-P6)

The data analysis suggests that having limited resources could hinder the process of utilizing FL and have psychological impacts on the students.

### **Instructor-student roles**

Participants reported the roles of instructor and student in the FL process.

#### **Role of the instructor**

Some participants perceived the facilitation role of the instructor as paramount in the teaching and learning process.

The instructor has a facilitating role; therefore, it is imperative to have experience for a successful process of learning and achieving the session objectives. (P1)

The teacher has an important role in making the class more interactive and enjoyable. (P5)

It depends on the instructor's style of conveying the message. (P4)

The findings imply that the effectiveness of FL largely depends on the instructor's expertise, as their ability to facilitate interactive and engaging sessions is crucial for fostering meaningful learning experiences.

#### **Role of the student**

All the participants agreed that students have a major role in FL sessions.

In FL, the students are dependent on themselves and not on the instructor for achieving their learning objectives. The students have a major role in terms of collecting data and presenting it. The information is not delivered by the instructor; it is not a spoon-feeding strategy. (P1-P6)

#### **Comparison with lecture-based learning**

Participants compared the FL strategy with lecture-based learning in terms of acquiring lifelong skills.

FL is an innovative teaching and learning strategy that helps students acquire critical thinking and problem-solving skills. This occurs as a result of students are responsible for their learning and not get the ready information. Whilst in lecture-based sessions, just to be more specific, those sessions utilized the PowerPoint presentation as a teaching and learning strategy, the instructor took the lead of the class by reading the information on the slides. We, as students, are passive learners and listeners only. (P2)

FL is a learning activity based on discussion and problem-solving, which helps the students to think critically, unlike a PowerPoint presentation, which is based on the teacher presenting the information. (P1)

All participants perceived the PowerPoint sessions as boring

Most instructors utilize PowerPoint presentations as the main teaching strategy, which we describe as very boring and time-wasting. When we had to utilize FL in our sessions, we enjoyed ourselves

and did not feel bored at all. Therefore, we would recommend utilizing such innovative strategies for our future sessions in all courses (P1-P6)

One participant reported the importance of utilizing mixed teaching and learning strategies.

Combining FL with PowerPoint and using the board is more effective for students, as it keeps

them engaged and encourages class participation. (P1)

The data analysis reveals that FL has distinct characteristics in terms of developing the students' lifelong learning process compared with lecture-based strategies.

**Table 1: Participants' inclusion and exclusion criteria**

Inclusion criteria	<ul style="list-style-type: none"> <li>a) Postgraduate diploma nursing students</li> <li>b) Enrolled in the Community Health Nursing Practice program at the Higher Institute of Health Specialties</li> <li>c) Willing to provide informed consent</li> <li>d) Willing to be audio-recorded</li> <li>e) Willing to describe their lived experiences</li> </ul>
Exclusion criteria	<ul style="list-style-type: none"> <li>a. Postgraduate diploma nursing students enrolled in programs other than the Community Health Nursing Practice at the Higher Institute of Health Specialties</li> <li>b. Decline or are unable to provide informed consent to participate in the study</li> <li>c. Refusing to be audio-recorded</li> </ul>

**Table 2: Participants' demographic data**

Participant code	Age	Years of clinical experience
P1	38	18 years
P2	35	14 years
P3	33	12 years
P4	35	15 years
P5	43	18 years
P6	41	20 years

**Table 3: Integrative of thematic and philosophical principles**

Ajjawi & Higgs' (2007) interpretive analysis steps	Braun & Clarke' (2006) thematic analysis steps	Philosophical hermeneutic principles
Stage 1: Immersion	Familiarisation with the data	<ul style="list-style-type: none"> <li>Preunderstanding</li> <li>Use of reflective diary</li> <li>Fusions of horizons</li> <li>Preliminary interpretation of the text to facilitate coding</li> </ul>

Continue.....

Stage 2: Understanding	Code generation	Use of the hermeneutic circle Codes represented participants' horizons
Stage 3: Abstraction	Categories generation Subcategories generation Manually grouping categories and subcategories into subthemes	Subthemes represented my horizons
Stage 4: Synthesis and theme development	Grouping of subthemes into themes Development of themes	Use of hermeneutic circle
Stage 5: Illumination and illustration of phenomena	Naming and defining themes Linking the literature to the themes identified above	Reconstructing interpretations into stories Completion of the hermeneutic circle
Stage 6: Integration and critique	Producing the report	

### Discussion

Four themes were generated from the data: procedural experience of flipped learning, perceived benefits and challenges, instructor-student roles, and comparison with lecture-based learning. This study confirmed that FL has a significant impact on the postgraduate diploma nursing students' learning process in the CHNP program at HIHS. Some participants describe the procedural steps of FL. Although they highlighted searching, writing, and presenting the information as the most important steps, they did not state watching online, digital videos, and doing exercises as part of homework to prepare for lessons. A systematic literature review concluded the importance of utilizing online materials and video in classes of FL classes<sup>(16)</sup>. These instruments revolutionized education, communication, and ideas in the digital age<sup>(16)</sup>. However, the reason for the participants not using the online materials might be due to the generation gap. These participants graduated from the Nursing Institute since long time ago, and this could create a generation gap as the participants are postgraduate students who have experience of being nurses for more than ten years.

Some participants expressed that being active learners is one of the important benefits of utilizing FL. Active learning is also known as student-centred learning, which is generally defined as any

instructional method that engages students in the learning process. In short, active learning requires students to do meaningful learning activities and think about what they are doing<sup>(17)</sup>. This definition is in line with the current study findings, in which the students were involved and engaged to prepare the session information and present it to their entire group. The concept of active learning is underpinned by a constructivist philosophy, one of the more influential paradigms in contemporary educational theory, which holds that knowledge cannot be 'transmitted' but requires the active construction of meaning by the learner<sup>(18)</sup>. One of the challenges expressed by participants is that shy participants have difficulty in group discussions and presenting information. This finding was not discussed in previous research. A current scoping review reported that one of the challenges is resistance toward FL, as students were not happy to switch from lecture-based to FL<sup>(19)</sup>. These findings were in contrast with the current study, where participants expressed that PowerPoint presentation is a boring strategy and they recommend being replaced with FL.

### Strengths and limitations

To the best of our knowledge, the current study is the first to explore the lived experiences of postgraduate Omani diploma nursing students enrolled in the CHNP program with the utilization of FL. These findings provide a basis for future qualitative

studies on the utilization of FL in higher education in this population. Furthermore, the adoption of an interpretative phenomenological approach generated in-depth data on the impact of the utilization of FL on the lived experiences of postgraduate Omani diploma nursing students studying in the CHNP program. The strength of this study lies in the in-depth nature of the interviews and openness of the participants' responses, which are integral to an interpretive phenomenological approach. A limitation of this study is that fewer participants were recruited than planned to owe to the limited postgraduate diploma nursing students enrolled in the CHNP program. Furthermore, the audio-only interviews limited the observation of facial expressions, which may have provided valuable nonverbal clues. In a qualitative study, researchers' assumptions and prior knowledge inevitably influence the interpretation and generation of data. Therefore, in this study, such influence was considered by the researchers through maintaining a reflexive note to minimise potential bias while presenting the data as narrated by the participants. Yet the possibility of influences affecting the process of data collection and analysis cannot be entirely ruled out.

### **Conclusion**

This study contributes to understanding the experiences of postgraduate Omani diploma nursing students enrolled in the CHNP program with the utilization of FL. Despite of commonality of the current study's findings and previous studies, one of the distinct findings was that the personality of the learner could be a challenge in the utilization of FL. The participants expressed FL as a positive learning strategy compared with PowerPoint as a boring and passive strategy. It is essential to recommend the implementation of innovative teaching and learning strategies in the higher education system of Oman.

### **Further research and practice**

Future research should explore the long-term impact of flipped learning on academic performance and student engagement across higher education colleges in Oman. It would also be beneficial to investigate how individual learner characteristics, such as personality types or learning styles, influence the effectiveness of FL. Additionally, studies could

examine the perspectives of educators to identify the benefits and barriers to implementing FL and to develop tailored professional development programs. From a practical standpoint, institutions should consider piloting FL approaches in different nursing and health programs, assessing their scalability, and integrating technology and pedagogical training to ensure sustainable implementation.

### **Declarations**

#### **Ethical considerations**

Ethical approval was obtained from the Higher Institute Research and Newsletter Committee on 12<sup>th</sup> December 2024 (Ref: MOH/HIHS/2024), and all procedures followed were in accordance with the ethical standards.

#### **Consent to participate**

All participants provided verbal consent to participate in the study.

#### **Consent for publication**

The consent form was read to all participants, and they agreed to the statement, 'I agree that any data collected may be published in anonymous form in academic books, reports, or journals'.

#### **Declaration of conflicting interest**

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

#### **Funding statement**

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#### **Data availability**

The authors confirm that the data supporting the findings of this study are available within the article (and/or) its Supporting Information Materials.

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