

ANALYSIS OF FACTORS FACILITATING STUDENT LEARNING IN HIGHER EDUCATION: THE CASE OF FUTURE HEALTH PROFESSIONAL STUDENTS

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ABSTRACT

Context: This work is part of the evaluation of learning for nursing at the My Youssef hospital center in Casablanca. The purpose of this study was to describe the factors facilitating learning in a clinical setting.

Method: As part of the training of nursing students, a direct questionnaire based on a framework inspired by the training theory developed by Merrill (2000) in his work on instructional design where he defined the first principles of instruction, was used to collect data from 75 nursing students.

Results: the analysis of the results showed that 5 factors facilitate the learning, and consequently, the development skills of the nurses' students in clinical environment. Indeed, the averages of the scores calculated for the five factors show that for the students questioned, accompanying learners is the most important factor (28%), followed by that relating to the motivation (24%), of the active participation of the learners (20%), respect for rhythm and style of learning (16%), and feedback (12%).

Conclusion: the learning factors documented in this study may be a premise for decision-makers, trainers, nurse managers and clinicians to find solutions to the learning difficulties of nursing students.

Keyword: Accompanying learners, active participation of the learners, feed-back, motivation, rhythm and style of learning.

1. INTRODUCTION

In the literature, few studies have focused on the analysis of factors that promote nursing learning in a clinical setting. This study aims to describe the factors facilitating learning in a clinical setting.

Clinical teaching, which refers to all the courses included in the training program, plays a large part in the training of a nurse and helps to develop the skills necessary to practice the profession.

In Morocco, Professor Harouchi (2010) [1], points out that: "in the field of health, the best example is that of the health sciences student able to recite from memory the signs of an illness and incapable of solving the problem in front of a sick person. It seems that this phenomenon spares no level of education nor any of the systems centered on the pedagogy of content".

The nursing environment has been identified as critical to the development of nurses' learning (Ballard & Trowbridge, 2004) [2].

The research question is as follows: "What are the factors that promote learning in a clinical setting?"

2. THEORETICAL FRAMEWORK

2.1 Clinical teaching

Nursing education is largely based on clinical placements. According to Spencer (2003) [3], clinical teaching is defined as: [...] the form of communication and application of theoretical, technical, organizational and relational knowledge that takes place in an environment likely to provide the student has the opportunity to situate his/her knowledge in a real overview of clients. It allows him/her to move from theory to practice by promoting the integration of knowledge through repetition.

Immersion in a clinical setting should allow students to learn by confronting experiences. This approach is commonly referred to as "experiential learning".

According to Legendre (2007) [4], this is a learning model that advocates (student) participation in activities that are as close as possible to the knowledge to be acquired, skills to be developed, and attitudes to train or to change. The objective of the internship is to promote the construction of links between knowledge acquired in an academic environment and their use in a health care environment, by immersing students in authentic environments. The concept of experiential learning is thus sometimes understood as an attempt at reconciliation between the "theory" and "practice" poles of the training (Courtois and Pineau, 1991) [5].

2.2 Factors facilitating learning

2.2.1 The theory of instruction developed by Merrill

This theory is based on the evaluation of teaching. He has examined a number of theories of instructional design and models in an attempt to determine the basic principles that apply to all of these different approaches (Merrill, 2002, First Principles of Instruction) [6]. He called these principles the first principles of instruction. Here is the statement:

- The principle of demonstration: learning is favored when students have to observe a demonstration;
- The principle of application: learning is promoted when learners apply the new knowledge;
- The task-centered principle: learning is fostered when students commit to a task-centered on the didactic strategy;
- The activation principle: learning is promoted when learners apply knowledge or experience;
- The principle of integration: learning is promoted when learners integrate their new knowledge into practice in their daily lives.

At the end of this theory, we tried to classify the factors of this study in five stolon:

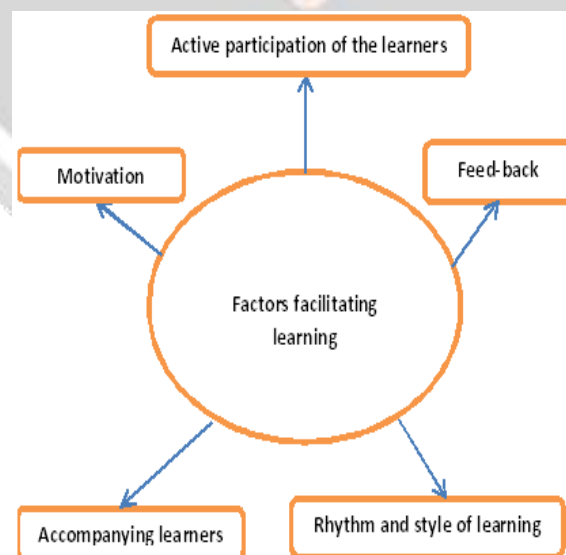


Fig. 1 Factors facilitating learning

3. MATERIALS AND METHODS

3.1 A Study design

To better explore the issue of learning in the clinical setting, a descriptive study was chosen. This one aim more precisely to describe, according to a quantitative descriptive approach, the factors facilitating the apprenticeships in practical internship.

This experimental research took place in the context of the practicum of hospital nursing, at My Youssef hospital in Casablanca, between March 1st and May 1st, 2019.

3.2 The target population

The target population consisted of 75 nursing students enrolling in semester 4 multipurpose nurse option and having followed a module on basic nursing (51 females and 24 males, aged between 19 and 25 years).

After receiving complete information on the purpose and content of the experiment, all students gave their consent.

3.3 Data collection and analysis

The data collection was spread over a two-month period using the direct questionnaire.

The self-administered questionnaire consists of two parts. The first part is devoted to collecting the characteristics (age, sex, level of education) of the participants. The second part is dedicated to factors that promote learning in a clinical setting.

4. ANALYSIS OF THE RESULTS

Table -1: Factors promoting nursing learning in a clinical setting

Rang	Factors facilitating learning	Number	%
1	Accompanying learners	21	28
2	Motivation	18	24
3	Active participation of the learners	15	20
4	Rhythm and style of learning	12	16
5	Feedback	9	12
Total		75	100

The data in this table show that: accompanying learners in internship is the most important factor reported by 28% of the surveyed people, 24% of respondents find that motivation facilitates nursing learning, 20% see that learning depends on active participation of the learners, according to 16% of respondents rhythm and style of learning is also involved in the process of learning care and only 12% of those interviewed see that feedback facilitates learning in a clinical setting.

5. DISCUSSION AND PERSPECTIVES

At the end of this work, we have shown that nursing learning in a clinical setting depends on five factors:

5.1 Accompanying learners:

Accompanying learners in their learning is an essential factor for successful learning, given the new role of the learner who becomes active in learning.

This orientation is based on the idea that learning is transforming what we already know by integrating new data, that we learn best if we build our own knowledge while we are confronted with a problem and learning to learn is a basic skill for any individual.

Accompaniment is not only about knowledge, subject matter, but also about the course of teaching and the way of learning. "The act of learning is an adventure! Precautions, forecasts, prerequisites prepare learning" (Kramer, 1974) [7].

A teaching / learning cycle can be compared for the learner to a journey into a complex and unknown universe. This trip can be easier and more attractive if the traveller perceives the interest, knows what is the purpose, the itinerary, the steps, the means, the how, if this trip is made to several in the exchange and sharing and finally, if we can be guided in case of need.

Many support measures for students are implemented in many institutions: information on studies and methodological support:

5.1.1 Information accessible to all:

The learner who has this information will be able to approach his/her learning with confidence, Romainville (2007) points out that: "It is the best informed students who succeed the best [8]."

5.1.2 Methodological accompaniment:

The development of methodological skills is currently one of the priority objectives of most education systems. In the survey conducted among students who had failed at the end of their first year of studies at the Catholic University of Louvain in 1999-2000, 40.30% of students reported having encountered difficulties with the method working (Galand, 2005) [9].

5.2 Motivation:

Learning is not only an intellectual process; it is also an emotional process in which motivation plays an essential role. "When a student is really motivated, his/her performance is much closer to his/her maximum possibilities than when motivation is lacking (J.-J. Guilbert, 1990) [10]."

The use of the active methods as well as the feedback techniques in internship reinforces the motivation.

5.3 Active participation of the learner:

Teaching is not just passing on knowledge, but facilitating learning, developing skills, harnessing the learner to cope with the problems of active living.

This implies that we teach the learner to analyse, interpret, reason, formulate hypotheses, discuss, evaluate, decide, innovate...

Activity cannot be taught by passivity: it requires methods that rely on the active participation of the learner. The individual learns better if he/she is personally engaged in an action, that is to say, thinks, discovers for himself/herself and experiments with his/her solutions; we better remember what we learn by joining the gesture and the word (Braxton, Miller and Sullivan, 2000) [11]. This is the reason why contemporary pedagogies are more and more focused on learning and not just on teaching and seek to give a more active role to the student.

5.4 Feedback

Learning without feedback is as if a boat targeting a specific destination was sailing without a compass! Feedback is essential; it is based on the principle that the student learns better if he/she receives accurate information on his/her progress (Sanders, 2005) [12]. This factor is respected by all the methods favouring the discussion between learners and teachers, as well as by the formative evaluation. It can detect learning difficulties and process them in time.

5.5 Respect for rhythm and style of learning

The learning rhythms vary according to the individuals; some learn faster than others. A learner who takes twice as long as the rest of the group to solve a problem does not necessarily have insufficient capacity, but simply a slower pace.

The same is true of learning styles: some are visual, others auditory, some intuitive, others analytical or logical. Giving learners access to the most appropriate learning situations makes it possible to respect the different styles and learning rhythms. This implies strengthening the skills of teachers in the field of differentiated pedagogy. As pointed out by Tardif (2005): "Increasing the efficiency of the education system means optimizing situations for all and, first and foremost, those with the most learning difficulties. Differentiated pedagogy is essentially about making sure that each learner is, as often as possible, placed in a fertile situation for him/her [13]."

6. CONCLUSIONS

To conclude, designing pedagogical devices to foster learning requires a good understanding of learning mechanisms and its ingredients.

This study shows that there are five main factors favoring learning in the classroom. Thus, learning is facilitated when:

- The knowledge to be acquired is shown, justified and demonstrated (accompanying learners).
- New knowledge is practiced (motivation).
- Learners are engaged in solving real problems (active participation of the learner).
- The rhythm and style of learning are respected.
- Learners receive accurate information on their progress (feedback).

In the end, the learning factors documented in this study may be a premise for decision-makers, trainers, nurse managers and clinicians to find solutions to the learning difficulties of nursing students.

The small number of students (75 in total) and the contextual character (only one hospital) do not make it possible to generalize the results. Moreover, the representativeness of the sample cannot be asserted, the conceptual maps made by the students having been anonymous.

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