Psychological Strategies for Learning and Appropriation of Knowledge by Learners of Lubumbashi's University

Makonga Lubaba Popopo[1], Kunda Kapwata Alvin[2], Ilunga Kimunwa Désiré[3]

Assistants at the University of Lubumbashi

Abstract: *The present study deals with learning and knowledge acquisition strategies for second-grade students in the educational sciences of the Faculty of Psychology and Educational Sciences at the University of Lubumbashi. At the end of the fieldwork, it emerges that the learners use several types of strategies of learning and appropriation of knowledge, including individual and collective work, reading of course notes, attendance at classes; in case of incomprehension of the lesson they are helped by the teachers, the scientific elders and members of the family in the same science; they do research on the internet and in the libraries to deepen and appropriate the acquired knowledge.*

Keywords: psychological strategies, learning, and appropriation of knowledge

1. Introduction

Today, the success of learners has become a leitmotiv for any teacher worthy of the name, especially as the success of the learners is a guarantee of the success of the didactic action.

Some learners index teachers in the cause of their failure and yet they spend anchor and saliva to transfer knowledge, skills and know-how to them.

In the teaching-learning process, the teacher uses some strategies to transfer knowledge and skills to learners.
This evidence leads to the implementation of psychological strategies for the appropriation of knowledge among learners.

These are ways and means created and used by the learners themselves to facilitate the understanding and assimilation of the knowledge transmitted in the audience during the didactic contract.

Throughout this precious moment of learning, everyone plays their part because active pedagogy places the learner at the center of their learning.

To this end, JONNAERT (1999) gives the model to be followed by any actor of teaching during the teaching-learning process. He argues that each educational actor has a role to play during the didactical contract:

a) Role of the teacher during the teaching-learning process
The teacher has a great job during the lesson because he has the mission to educate and acquire one or more knowledge (s) to the learners, and to follow the case of each learner by giving solutions to their difficulties.

In this regard, the above-mentioned author specifies that, on the one hand, the teacher organizes the interactive dimension by placing knowledge to be learned in problem situations. They allow the learner to build interactions between his own knowledge and the knowledge to be learned, and on the other hand, he is the guarantor of the proper functioning of social interactions within the didactic relationship. He has to manage them effectively through the didactic contract which he shares with his students. Finally, the teacher organizes the space and time for school learning.

LANSMAN and TOURNEUR quoted by Philippe JONNAERT (1999) consider for their part that teaching activities are a set of operations and conditions put in place by the teacher to facilitate the learning of students.

The teacher must create, prepare the learning conditions, put the pupils in this situation, manage and regulate the related procedures of these learners. He will also have to evaluate the results of the learning process and possibly make the necessary adjustments. This is to say that the role of the teacher is to support the learners in order to remedy their difficulties to guarantee success in their studies.

b) The role of the student during the lesson
When the student leaves his home to school, it is with a mission of going to learn where it is necessary that he behaves responsibly.

Philippe JONNAERT (1999) reveals a dual role of the student during the learning process, namely:
- The one to learn;
- That of creating new knowledge.

But the concept of "learning in a school environment" specifies the part of the way traveled by the student to create his school knowledge. Even if the teacher prepares the learning conditions as such, he remains under the sole responsibility of the learner.

When we talk about learning knowledge, we talk about the learner's own behaviors, operations, interventions, or questions. The teacher only partially controls the situation (condition) in which he places the pupil for this learning to take place.

The teacher creates context and situations that are conducive to learning, he manages the situational learning and participates in the didactic contract but the learning process stricto sensu is under the only responsibility of the one who learns, even if it is another who manages the context. This situation is comparable to a mother who goes to the maternity to give birth, whatever the efforts made by the nurses to assist her in this situation; she also must provide an effort to achieve a good result: the birth of the baby without any trauma.

About the foregoing, we have found that the use of learning strategies and the appropriation of learner-provided knowledge by teachers becomes an important means for any learner seeking academic success. Starting from what has just been mentioned; our concern is summed up in one single question:

What are the learning and appropriation strategies used by second graders in education science at the Lubumbashi's University?

In an anticipated way, we stipulate that the second graduates in education sciences at the University of Lubumbashi will use learning strategies to appropriate the knowledge transmitted by their teachers.

That is to say:
- They would study individually and collectively;
- They would exchange with each other and with the teachers;
- They would be helped by their teachers or a family member or a senior scientist of the district in case of incomprehension of any matter;
- They would attend classes regularly and participate in teaching;
- They would have updated course notes.

To make this study concrete, we pursue the following objectives:
- Identify the learning and knowledge-sharing strategies used by students of the Second Graduate of Educational Sciences, Faculty of Psychology and Educational Sciences at Lubumbashi University;
- Propose new learning and knowledge acquisition strategies for their benefit.

To verify the hypothesis of this research, the survey method materialized by the observation, the maintenance and the percentage for the data processing were used as an approach in this scientific investigation.

2. Theories on Learning

There are several learning theories categorized according to the treated aspects: cognitive, conative and affective:

According to the *cognitive aspect*, Michel PERRAUDEAU (2010) states that it is possible to reveal three main models in learning: one that gives primacy and interiority to the student, one that promotes the predominance of external factors and one that emphasizes the effects of interactions.

The importance given to the student as author of his learning or self-structuring is found in some theories such as:
- *Maturationism*:

According to the proponents of this approach, maturation regulates growth. At this level, the environment has little impact since maturation is related to the development of the nervous system of the subject. The learner has innate traits and tendencies that determine learning.
- *Behavioralism*:

According to the behavioral conception, knowledge constitutes the center of learning. Hence, the teacher in dispensing his course must prevail because its learners (0-16 years) do not yet know how to pose a responsible behavior.
- *The interactionism*:
This conception privileges the interactions between learners and their teachers. In these interactions, the learner has the lighting on the shadows he had before teaching and it is in this process that he manages to appropriate the knowledge transmitted by his teacher.

Cognitive aspects are functions that activate data processing, produce knowledge, and facilitate learning. They determine the place of mental functioning when performing learning tasks. Here the learner must appropriate the theoretical knowledge learned from his trainer by manipulating the psychological learning strategies.

Conative appearance
The term conative includes what is in the field of motivation, confidence, self-esteem, stress, affects...

In the conative register, terms that teachers consider synonymous are used by mistake. This is how stress and anxiety are sometimes used in an undifferentiated way:

- **The stress** :
It is an adaptive response of the body to a solicitation that is exerted on it. Stress is an ordinary situation of everyday life, which affects everyone and is more or less easily managed according to the subjects;

- **The fear** :
It is an emotional state of tension and its object may be common. For young children, naming one's fear is one way to begin to tame it. It is important to qualify the fear (see the fear of noise, insects, wolf), but being afraid without the possibility of identifying the cause can be a source of anxiety;

- **Anxiety:**
It can be defined as a higher stage of anxiety. It causes a feeling of oppression. For fear of unhappiness or feeling of suffering. Faced with these feelings, the subject feels helpless, if he is not helped, the state can continue, extend to new situations of life and take a pathological dimension;

It is an emotional state of tension whose source is not always well known. If the components of the anxiety-generating situation are not, or are poorly identified, it can sometimes become a permanent feature of the subject in relation to what is said above.

In this aspect, the teacher must teach with love or empathy. That is, without frightening, insulting, traumatizing, stressing and frustrating the learner when the learner did not give the right answer.

Emotional aspects

The emotional aspects play an important role in the reality of learning, here the entourage must show great interest to the learner who identifies with an influential person in his community.

In all learning, the learner must become aware of everything he does, which is the transition from practical knowledge to thoughtful knowledge. So this learner has to conceptualize knowledge in action.

Thus knowledge comes from the action of the subject and from the representation he has made of the object learned during his absence.

To this end, the website http://www.crame.u-bordeaux2.fr/pdf/strategies_apprentissage.pdf reassures that metacognition is the ability to become aware of one's abilities and the results of one's actions, to make a judgment on oneself, to regulate one's actions.

Thus, control strategies make it possible to:
- Know what you are doing (machine learning or significant, low or good level);
- Estimate his progress;
- Evaluate the effectiveness of his work;
- Estimate your chances of success.

In order for the learner to appropriate the knowledge transmitted to him by the teacher, he must:
- Have self-esteem and that of one's teacher;
- Have initiative, collaborative and above all participative spirit;
- To be disciplined, malleable, diligent and applied to classes;
- Develop curiosity to learn;
- Be focused and attentive on the relevant points of the course.

To enable the learner to appropriate the knowledge, the trainers must:
- Place it in favorable conditions for learning;
- Adapt teaching to his age;
- Show him love and trust.

3. Methodology

Our scientific investigation was conducted for a period of six months from January to June 2017 at the Faculty of Psychology and Education Sciences which is one of the faculties of the University of Lubumbashi which opened its doors in academic year 1996- 1997 that the functioning of the faculty was effective.

In her research, MWENZE WA KYUNGU Eric (2016) states that today she is in her twenty-first year of operationalization.

a) Geographic Location
The Faculty of Psychology and Educational Sciences is located on public avenue, in the GAMBELA I district of Lubumbashi. It is bounded on the north by the university cities, on the south by the administrative building of the university, on the east by the General Intendance and on the west by the KASAPA road.

b) Objectives
This faculty aims to train qualified personnel in psychology and education sciences to meet the needs felt in the sectors:
- Secondary, higher and university education;
- Public and private companies;
- Specialized centers and houses for the rehabilitation of children, young people and adults;
- Both public and private administration;
- Mental health;
- Trade;
- Specialized research, training and intervention in psychology and education sciences, etc.

c) Importance
From the same source, the reopening of the Faculty of Psychology and Educational Sciences at the University of Lubumbashi proved necessary for:
- Allow the many finalists of the educational humanities to pursue their university studies in a faculty corresponding to their study program;
- Respond to the real needs of the immense province of Katanga and neighboring provinces in psychologists and pedagogues;
- Bridging the gap of postgraduate teachers in the psycho-educational component;
- Providing secondary education in the province of Katanga and neighboring provinces with qualified teachers in psychology and education sciences;
- Provide the University of Lubumbashi with the scientific and academic staff necessary to face the pedagogical and psychological content courses offered on campus in the different faculties.

d) Operation
The Faculty of Psychology and Educational Sciences has an organic structure devoted to the faculties as the basic organ of the universities in their functioning.

e) Organization
This faculty has in its operation:
- A deanship;
- A department of psychology;
- A department of educational sciences;
- An aggregation department;
- An administrative and financial secretariat;
- Accounting;
- A stewardship;
- An beadle office and
- Library

Since her creation to these days, she has known the following deans:
- HABIMANA-MAKAMBA: from 1996 - 1997
- NGANDU BAKATU: from 1996 - 1997

- NKINKO MUNYA RUGERO: from 1997 - 1998
- FUMUNI BIKURI: from 1998 - 2000
- RADJA BIN SAÏDI: from 2001 - 2004
- NGOY FYAMA BITAMBILE: from 2005 - 2017
- KALUMBA NGOY: from 2017 to these days.

Our population consisted of 63 students from whom we had extracted an occasional sample of 49 students, that is, we had investigated only the students who were present during our fieldwork.

To verify our hypothesis and achieve the assigned objectives, we used the survey method, which is considered by MSHINI BIN LUHEMBWE (2008) as a method based on a written communication or a conversation between the interviewer and the interviewee in order to collect the information. Information on specific social phenomena and according to well-defined rules.

It was useful because it allowed us to easily and surely collect the necessary data from our respondents.

This method was accompanied by observation techniques, free maintenance and percentage for data processing. We saw these students and we talked with them.

The interview was useful because its use does not concern the formulation of questions in advance; it was for us a flexible guide, leaving the freedom to the respondents to express themselves during our exchange, with the aim of gathering information.

The percentage allowed us to process the information collected from the students after observation and interview. The formula that was used for data processing was as follows:

Percentage formula : $\frac{n \times 100}{N}$

4. Results

In this part of our study, we present the results in tables and each table is accompanied by a commentary explaining its content using the percentage technique.

Table 1: Strategies for Appropriation of Knowledge by Learners

Learning Strategies	Enrollment	%
Attendance at classes	2	4.1
Reading of course notes	5	10.2
All strategies	42	85.7
Total	49	100

This table illustrates the situation according to which 42 students (87.5%) use all the strategies to pass promotion and to appropriate the knowledge transmitted by the teachers; 2 others (4.1%) are regular in the course and the remaining 5 (10.2%) are limited to reading lecture notes to pass promotion.

Table 2: Strategies for misunderstanding a subject

Answers	Number	%
The help of a family member	4	8.2
The help of a senior scientist in district	42	85.7
Have the explanation with the teacher	3	6.1
Total	49	100

This table reveals that 42 students (87.7%) are assisted by a senior scientist in the neighborhood in the event of a learning difficulty in any subject, 4 of them or 8.2% are helped by members of their families have evolved in the same field, and the remaining 3 (6.1%) receive explanations from teachers in the same field.

Table 3: Individual Study of Courses

Answers	Number	%
Yes	49	100
No	-	-
Total	49	100

This table gives us the information that 49 students or 100% individually study the courses.

Table 4: Reading Class Notes in a Group

Answers	Number	%
Yes	49	100
No	-	-
Total	49	100

This chart shows that 49 students or 100% read class notes with their friends or co-workers.

Table 5: Exchanging with friends

Answers	Number	%
Yes	49	100
No	-	-
Total	49	100

This table gives us the information that 49 students or 100% exchange with friends on the course notes.

Table 6: Conduct Course Research

Answers	Number	%
yes	42	85.7
No	7	14.3
Total	49	100

This table proves that 42 students (85.7%) are conducting research to deepen the knowledge learned in courses and 7 others (14.3%) re-read only the courses.

5. Discussion of the Results

After presenting and analyzing the results of this study, we go to the stage of discussing them.

Referring to the information found on the field, we can say that most students to pass promotion and appropriate the knowledge transmitted by the teachers, they are assiduous courses, conduct research to deepen the knowledge had in the audience near teachers, read lecture notes individually and collectively, they organize time for exchanges on the courses with friends, in case of a lack of understanding of the subject, they use the explanations of other teachers in the

same field or they are assisted by senior scientists or by a family member who has progressed in this qualification.

This goes hand in hand with the idea of Marguerite ALET (2000) who considers that what is played in groups is beyond the conversation between peers, that what is happening there is not a simple exchange around practices or a confrontation of points of view. It characterizes the analysis device around the following three points:

- It is finalized: the construction of the professional identity goes through the development of a reflexive conduct on the behaviors and skills put or to be implemented in the daily practice;
- He is accompanied: the trainer, considered as expert, is able to hypothesize about the situation reported by the trainee, to analyze it, to bring the interested person and the peer group towards the search for leads. Alternative actions;
- It is instrumented: tooled knowledge, elements of theory, help analyze and understand the situations mentioned.
- They make it possible to orient the work of analysis either towards a didactic dimension, towards an educational dimension, or towards a more subjective and clinical approach.

FUMAT, VINCENT and ETIENNE (2003) consider the exhibition as the speech of a narrator, without interruption, and finds, very often, its origin in a disorder, a malaise, a professional difficulty. Exploration is a time when members of the group relaunch or ask questions to the narrator to clarify a particular aspect of the story. After the questioning phase, the group must interpret or formulate hypotheses to facilitate elucidation and at this point the narrator is speechless and has only time to listen to his group interacting with the questions. At the end of the group's friends' responses, the narrator can then react to the assumptions made.

This situation is still supported by Alain BAUDRIT (2005) who reassures us that functional interdependence allows coordination between group members on the basis of a breakdown, by themselves, of tasks and activities. It relies heavily on social skills such as knowing how to listen or speak, being able to organize with others or overcoming possible disagreements. Collective problem-solving or activity-building strategies are increasingly favored.

As a result, PIAGET (2001) explains the phenomenon of accommodation-assimilation. Assimilation is what the subject will easily appropriate because learning is not in opposition to what he already knows. Accommodation is when the new knowledge contradicts the representations or schemas of the learner. This mechanism is longer and can cause the subject to go through phases of rejection or repression, but it is found that accommodation serves as more stable constructions.

From the above, our results corroborate with those of other authors because to achieve a good result, students work individually, collectively, read the course notes, attend classes, are helped by their scientific elders and family members. Field, do research on the internet and in libraries

to deepen and appropriate the knowledge provided by teachers.

6. Conclusion

We have come to the end of this study which focused on the psychological strategies of learning and appropriation of knowledge by the learners of the University of Lubumbashi.

In conducting this research, we started from the preoccupation of knowing the learning and learning strategies used by second graders in education science at the University of Lubumbashi, to which we answered in advance that these learners would make use of individual and collective studies, exchanges with their teachers, family members or scientific elders, attendance and maintenance of course notes.

To make this study concrete, we set ourselves the objectives of identifying strategies for learning and appropriation of the knowledge manipulated by students of second-level education sciences at the University of Lubumbashi; and proposes new strategies that can increase their success rate.

To verify our research hypothesis, the survey method materialized by observation, maintenance and percentage for data processing were used in this scientific investigation.

After presenting and discussing the results, we consider that our objectives have been achieved because we noted the following in the first part:

- Students work individually and collectively;
- They read the course notes and keep them up to date;
- The majority of them are regular in class;
- They are helped by their scientific elders and family members of the same field;
- They do research on the internet and in libraries to deepen the knowledge provided by their teachers.
- In the second part, to increase the rate of their success, we propose to students the following strategies:
- Create a psychopedagogical device of exchanges between the learners themselves, between them and the teachers or even their scientific elders of the same field ...;
- Create a sharing of lessons in the course where a student who has mastered a chapter or part of the course can take care of others by facilitating their understanding;
- Sharing of course chapters to one or a group of students for their use in order to come, in turn, to explain their understanding to others in plenary;
- Ask for the head only for the preparation of the courses written in the tests by avoiding other activities likely to overwork (movies, alcoholism ...).

Faced with this observation, we say that our respondents manipulate learning strategies to appropriate knowledge transmitted by their teachers. We do not think we have exhausted all the subject matter under investigation, we hope that subsequent investigations can be focused on teaching strategies.

References

[1] ALAIN BAUDRIT,.(2005). *Cooperative learning, origins and evolutions of a teaching method.* Brussels : De Boeck edition.

[2] FUMAT Y., VINCENS C. and ETIENNE R.,(2003). *Analyzing Educational Situations.* Paris: ESF.

[3] *http://www.crame.u-bordeaux2.fr/pdf/strategies_apprentissage.pdf;*

[4] MARGUERITE ALTET,.(2000). *The analysis of practices, a vocational training approach ? Research and Training.* Paris: PUF.

[5] MASHINI BIN LUHEMBWE,.(2008). *The administrative organization of the secondary schools of the Fungurume city.* Lubumbashi: Memory unpublished UNILU/FPSE.

[6] MICHEL PERRAUDEAU,.(2010). *Learning strategies.* Paris: Armand Colin.

[7] MWENZE WA KYUNGU E,.(2016). *Faculty guide.* Lubumbashi: UNILUPRINT.

[8] PHILIPPE JONNAERT,.(1999). *Creating learning conditions.* Brussels: De Boeck.

[9] PIAGET J., (2001). *Psychology of intelligence.* Paris: Pocket edition.

[10] VYGOSKY L,.(1987). *Problems of general psychology.* New York: Plenum Press.

[11] XAVIER & J-M DE KETELE(2001). *A pedagogy of integration : competence and integration of Knowledge in education.* Brussels : De Boeck .