

# DIDACTIC PRACTICES OF TUNISIAN TEACHERS IN HIGH SPORTS INSTITUTE AND PHYSICAL EDUCATION IN THE LMD SYSTEM

*Anouar Bettaieb*

*High Institute of Education and Lifelong Learning, Tunis, Tunisia*

## Abstract

This article focuses on the analysis of the didactic practices of teachers in Tunisian high institutes of sports and physical education (HISPE). In the LMD system. Optionally, the manner in which this reform is lived, concreted and manifested in the reality of university education through their teaching practices.

The analysis of the corpus of the population studied through the methodological tool used (observation checklist) has shown that the education category called "Teaching differently in the LMD system" is 84% against 6% for the second category "Learning differently in the LMD system" and 9% for the third category. "Evaluate differently in the LMD system."

**KEYWORDS:** Reform. LMD. Teacher Training. Didactic. Skills. Didactic approach of teaching practices.

## 1. INTRODUCTION

Seven years after the launching of the LMD reform in Tunisia, the different parts involved in the training of physical education teachers, whether they are (trainers, users) are led to wonder about the issues, content, modalities, approaches and strategies for vocational training of these future teachers as part of the LMD system. The arrival of the LMD system in 2006 requires the Tunisian University a new mission that of support for the dissemination of professional knowledge as intended or covered by the design of the LMD system. This reform also requires new teaching and learning practices. However, as *Legendre*, (2004) noticed that «the change of educational practices and training can not be decreed. They follow a contextual logic and dynamics of evolution depends on the receipt and understanding of the reform, its meaning, its objectives and its goals by stakeholders. »

### I - Conceptual Framework

We analyze the keywords below of this article through the review of the published literature.

#### 1. REFORM

"Any reform tends to return to restructuring in a form already installed. Its main feature is to be a form imposed non-negotiable, his firmness and closing is related to the establishment of a text defining the changes to be made." (Cross, p 84)

Curriculum reform in general (education, or university) will not be recognized after defining its specific objective, its methods and its evaluation and monitoring criteria. It would be superfluous to systematically bring objections and rejections that may arise reforms, the only refusal of actors, renunciation, their fears of adventure or their conservatism and attachment to inaction. This stigma can stifle the real issues at a reform, especially as it risks turning the consultations on a debates deaf and precipitating the resignation and disengagement of the actors. A reform that can not base a new representations, new practices and new perspectives would be a waste of time and waste of energy and resources.

For any reform, it is desirable to think of a strategy that is based on a set of principles that are involved at various levels such as:

- Teaching content.
- Methods for teaching.
- Teachers' training.
- The administration of the university system
- The relationship between the university and its environment
- The steering system

#### 2: The LMD (Licenceor Bachelor, Master, Doctorate) reform:

Since 2006 under Decree No. 3123 of 22/9/2008 that defines the general framework of the Education regulations and the conditions for obtaining national licences in different fields and specialties of training the Tunisian university system has experienced an overall reform by creating new sections and educational streams converged with university education in European countries. "Develop a flexible training system and comparable with widespread international systems" JORT (official journal of Tunisian republic) 30/9/2008 N° 79 p3094.

It is in this context that we find the LMD reform (Bachelor-Master-Doctorate), formally adopted in July 2005. The main objective of reform is to raise the entire University system at an international standard.

In this sense, it is evident to equip them, so they can continue to learn and practice, independently, all their long lives, so that they will be able later to reuse their skills in different contexts. "Training a new generation of graduates able to adapt to a changing world" (JORT, Article 3, p. 3094).

Besides, this reform calls to:

**- Teach otherwise at the university:**

Teaching otherwise in the LMD system is based on the use of modern teaching techniques. Especially the know how to use the new technology of information resources and communications. To come into a new university teaching approach in terms of competence following a constructivist approach seems thorough and effective. The transition to the LMD system introduced new requirements in the teachers work, these can be summarized in:

- Working towards the empowerment of the learner. (The student)
- Worrying about the effective success for all learners, rather than from the perspective of selecting the best.
- The transition to the LMD's aim is to improve the ability of universities to import useful transferable, operating and producing Knowledge.

**- Learn differently at university:**

The organization of training in the LMD, requires:

- A student who is able to take advantage of all resources made available to him to learn and improve his skills: Human resources (teachers and academic advisors), materials resources (handouts, libraries and online data bases), time management capacity, etc.
- A student able to hold and persists throughout this long way keeping a clear and realistic vision till the end of his training in order to realize a better professional integration.
- A student able to become autonomous, independent, an active learner who believes in personal work.
- A tutoring, for an individualizing orientation.
- An effective and regulating initiative to invest in research and scientific investigation. (Technology, courses, materials for experiences) etc.

In order to adapt the requirements of the LMD, every student should be aware of three important areas:

- be conscient of himself.
- be informed.
- be prepared to take several and different learning paths.

**- Evaluate Otherwise at university**

Evaluate otherwise at university in the LMD system, means valorize and not sanction or select, which means reviewing the whole evaluation system and especially increase the range of assessment tools.

Diagnostic assessment can take place at the beginning of the sequence and allows to recognize students who have or do not have the prerequisites. It leads to submit to an appropriate education for their needs.

Besides, we have the "formative assessment" Scriven, (1967) insists that "mistakes" during the process were part of a normal process of learning. We also note that formative assessment is part of a training system. It takes place throughout the process of teaching and leads to the decision to continue the process or go back on already seen parts. This type of formative assessment is to ensure that the means of training corresponds to the learners' characteristics. « As part of a formative assessment, regulation's aim to ensure that the terms of educational organization of the training system are adapted to the characteristics of the students and their individual needs ». (Bahloul, M., 2003, P84).

**3- Professional didactic**

The professional didactic "in fact is the analysis of the activity made by men in order to help the development of their skills" (Pastre, 2011, p. 1) Professional didactic studies the construction and the development of professional skills from job analysis. It is interested in working situation in some professions or specialty.

In this case of research, the analysis of practices that belongs to the ISSEP teachers may be a chance for them to develop their skills.

**4- Didactic approach of teaching practices. (Joint action professor - student teaching)**

The concept of joint action in didactics can be included in a theoretical approach the teacher and student relationship / particular in any teaching situation -Learning. When I speak of "didactic action" we should understand "what individuals do in places (institutions) where we teach and where we learn (Sensevy, 2007)

**4- 1: The structural elements of the didactic relationship**

Sensevy, (2008) by « educational game » means the set of communication that is updated in transactions which express the didactic relation. It's a ternary relation between the teacher, the student and the knowledge. This relationship is the very basis of the choice of descriptors selected by the theory of joint action in education. In order to describe the didactic action of the teacher in relation to the action of the student. Sensevy, Mercier and Schubauer – Leoni, (2000) distinguish four structural elements of the didactic relationship:

**4- 2: quadruplet (define, devolve, control, institutionalization)****- Define (see / give):**

The process by which the action of the didactic partners agree on how to name and describe objects constituting the situation that will be managed together during the lesson. (Schubauer - Leoni, 2008). This is to establish the framework of the situation, such as determining the purpose of the task, determining the performance criteria and the material and human development. These rules will allow students to play "good game" using "good things". Sensevy et al, (2000) state what may define a situation (in other words) highlighting the referential dimension of collaborative work, or by indicating what the activity presented by the students, can be kept as suitable and a constitutive rule set.

**- Regulate (identify, indicate, and redevelop):**

This means what the teacher has to do, that the student "*stay in the job*" and build winning strategies. Amade - Escot (. 2003, p 242), this process returns to "all activities involved to modify the constraints and the variables of the situations, and permit to regulate the school information sources in order to maintain the good conditions of interaction( student (s) and knowledge teaching) . "The regulation does not deal with the gap between what the student has done and what he has to do, but it aims to the maintaining of the educational relationship. This is also why the teacher can intervene in the work of a group to clarify the status of an error based on certain teaching principles that guide the action.

For these authors, during the regulation, the teacher can refer to the past through the previous teaching in order to advance knowledge or indicate in the behavior of a student what appears to be the purpose of such production.

Schubauer – Leoni, (2008) adds that the regulatory process is to manage uncertainty. Indeed, when students are faced with a new situation, the teacher does not know if they will overcome the difficulties, that's why he has to manage these uncertainties with them to help them to acquire new knowledge. Marsenach and Mérand, (1987) consider that it's in moments of regulation that the action of the teacher is crucial to the student to learn because it guides them to the relevant reference.

#### **- Devolving:**

Devolving « is a process by which the teacher ensures that students take their share of responsibility to realize the task (example : solve the problem in a terme time, in a very specific environment «Brousseau, (1986).For Sensevy & al( 2000) it is a process that completes didactic work: the teacher must mobilize every minute all technics that allow students to take on new conditions relating to matters that they personally proposed, as well those related to the collective work organisation .

\*For Assude, Mercier & Sensevy, (2007) devolution is the commitment of students, guided by the teacher in a particular language game on interactions with environments of a didactic situation. Engage students in this process, suppose that the teacher has great practical skill based both on a priori knowledge of the possible reactions of students in a given time, and instant control different reactions of learners.

**- Establish:** The process in which the teacher explains for students what kind of knowledge and practices they need to remember because they are the main point of the learning process . The institutionalization concerns the knowledge produced during the game. These four basic structures of didactic relation have the function (Sensevy et al, 2000) to ensure the progress of instructional time, the advancement of knowledge over time (chronogenesis) shared responsibilities of the actors in relation to read game (topogenesis) and evolution, by changing the parameters of the task, the system of co-constructed by the teacher objects and taught (the *mésogénèse*).

#### **V. TEACHERS TRAINING**

Any teaching-learning processes is based on the concept of interaction. "You can actually define the teaching-learning as an interactive process, at the intersection of four dimensions or sub-systems interlinked in a situation" (Altet, 1994, p.8)In order to professionalize any profession "the actors must build a base of specific professional knowledge, a knowledge base (Holmes Group, 1986, 1995) , recent knowledge of educational science, teaching, research on teaching, training and organizations. Altet, Paquay and Perrenoud (2002, p 80).

#### **VI. Professionnel skills**

The evolution and adaptation of a professional in his trade are closely linked in his ability to mobilize and develop his skills. He should learn how to identify and evaluate professional skills. Usually a competence refers to a set of elements that the subject can be mobilized to deal with a situation successfully. « A competency can be defined effectively in the action in a situation ». (Jonnaert 2002 p 30).

## **2. MATERIAL AND METHODS**

This research focuses usually "on the statements and actions of a person involved in a specific context .Although it is possible to collect purely individual premises (for example), through interviews, to observations, or recorded speech analysis "Huberman and Miles (1991, p161)

The aim, through this deep analysis of different premises, is to try to capture the totality of a situation. The advantage of this approach is to get a fine understanding of the situation. ....Indeed, this type of investigation is typical of qualitative approaches that helps to describe and understand (Lessard-Hébert et al, 1996). In our study, "the premises is processed according to the principles of qualitative analysis (Miles and Huberman, 1991)"

If the study sample (seven cases) is not representative of the population of ISSEP teachers in Tunisia it can produce some light on the reality of teaching practices. "Qualitative researchers usually work with smaller samples of individuals" (Huberman, 1991)

Moreover, it is not possible to study all the actions of everyone in all circumstances even for one case. Qualitative research is essentially an investigative and lighting process is a search for inductive order.

#### **I: The Grid as a measurement tool**

Our study aims to identify teaching practices of the Tunisian teachers ISSEP by the LMD system. The distribution of the analysis grid in areas or categories can certainly be discussed, the thematic units or indicators in the categories shown in the grid can sometimes be delicate to choose some indicators and sacrifice others.

## 2: The validity of the measurement tool

The notion of validity refers to the process by which the researcher ensures the quality of its system. It concerns, according to De Ketele, (1983) the adequacy of observed facts with the purpose of the investigation (valid at large) and the match between what needs to be observed and what is actually observed (valid in the sense restricted).

Our research is included in an exploratory qualitative approach as a comprehensive, descriptive investigation.

## 3. RESULTS AND DISCUSSION

This obtained results concern only the sample chosen for our study .that's why we can't generalize them for all tunisian university teachers in the ISSEPS

### Category 1:

#### Teaching Otherwise

The LMD reform stipulates that teachers must change their teaching methods, from traditional pedagogy centered on the transmission of knowledge towards a more interactive teaching, focusing on students and their learning, or learning difficulties.

This study was carried out in the field by the observation of seven teachers working in Sfax ISSEP including a teacher who teaches mastery (old system as Witness case)

This experiment gave the following results spread over the three categories.

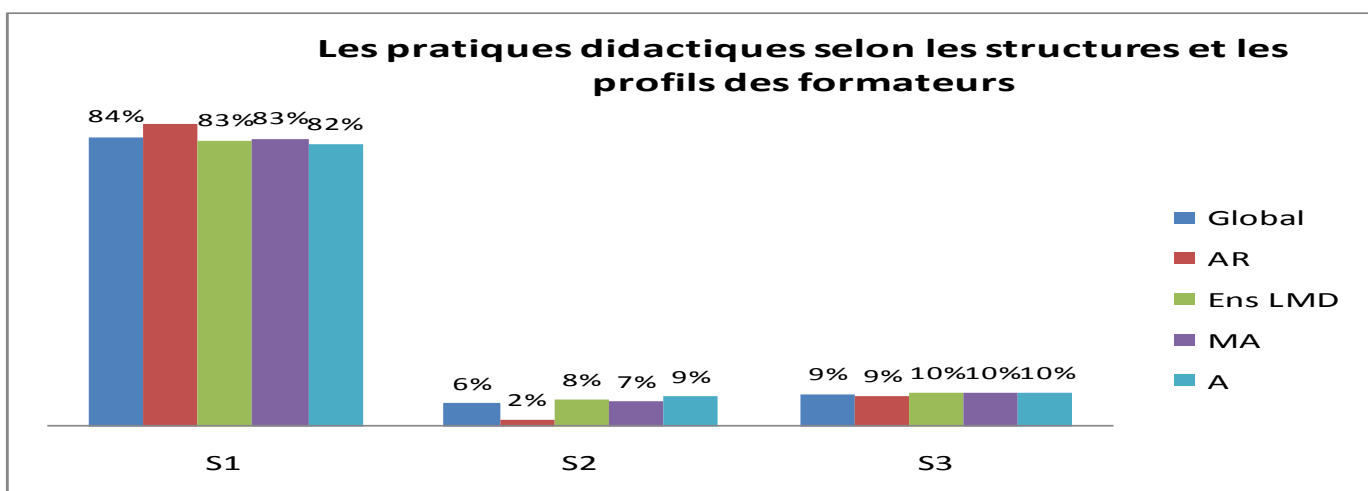
**Table 1: Global distribution of teaching practices and grade as indicators of categories.**

CATEGORYS	INDICATORS	Global	Old regime	Teachers LMD	Teachers LMD	
					Masters Assistants	Assistants
C1 : Otherwise teaching	Co-construction of knowledge/	10%	7%	10%	13%	6%
	Contextualizes the knowledge	10%	19%	8%	8%	9%
	Develop specific instructions	3%	5%	3%	3%	2%
	Establishes debates and inter cognitive conflicts	2%	0%	2%	3%	0%
	Transmits knowledge, requirements and indicated Using	58%	56%	58%	54%	65%
	Use new technology	1%	2%	1%	2%	0%
C :2 Otherwise learning	work Devolution trainer / student	3%	2%	3%	3%	3%
	Implementation Group pedagogies	0%	0%	0%	0%	0%
	student support	2%	0%	2%	3%	1%
	Implementation of project pedagogies	2%	0%	2%	1%	4%
	Project evaluation by students	0%	0%	0%	1%	0%
C : 3 Evaluate other wise	Made of formative assessment followed Feed Back	3%	5%	3%	3%	3%
	Operates errors constructively register	0%	0%	0%	0%	0%
	Valuation of individual work of studentsV	3%	2%	4%	4%	2%
	Evaluates student skills	2%	0%	3%	3%	3%
	Regulates its action following/ the evaluation	1%	2%	0%	0%	1%
Total		100%	100%	100%	100%	100%

### Lexicon

- A: Assistants
- M A: Master Assistants
- AR: Old Regime
- LMD ENS: Teachers regime LMD
- C1: Category 1: Teach otherwise
- C2: Category 2: Learning differently
- C3: Category 3: Evaluate otherwise

To better visualize the results in each category we include the following histogram:



**Histogram 1: teaching practices using structures and profiles of the teaches**

The results in Table 1 show that the educational dominant behavior observed among teachers is "the transmission of knowledge to students" with an overall rate of 58% among teachers of the new LMD system and 56% of teachers in former regime (Mastery). These percentages show that the educational practices of teachers remain relatively traditional (Lecture, frontal teaching etc ...), while the LMD reform invites teachers to teach differently: group work, interactivity, introduction of new teaching approaches (Approach problem case studies, origination ...)

Through the results shown in Table 1, we note that the LMD teachers are more traditional teachers "old regime" (58et 56% respectively). A survey conducted in 2000 (long before the LMD reform) by Edips laboratory (University of Tunis), already showed that 76% of teachers surveyed, "teaching is imparting knowledge to students" (Chabchoub, 2002).

To interpret the results of the first category of our analytical framework, we note that the main feature to reveal is that it is the most sought structure from our study sample and that some is the trainer's degree. This teaching category called "Teaching differently the LMD system" is 84% against 6% for the second category "Learning differently in the LMD system" and 9% for the third category. "Assessing differently in the LMD system".

It is important to note that the high percentage of the first specific category for education in the LMD is due to the solicitation of an instructional behavior (indicator No. 5 at the gate) that of the transmission of knowledge by trainers giving instructions and taxation guidance when teaching-learning process. The overall rate of the sample at the No. 5 indicator was 58% against 42% for the 5 other indicators. The level of education in the former regime, the rate is 56%.

Regarding teachers who teach in the LMD rate is 58%. The category of trainers 'lecturers' is 54%, while the assistants recorded a rate of 65%. This difference is due to the lack of novice experience.

By referring to the analysis, the necessary instructions and guidelines by the LMD reform, teaching in the LMD system must be based on the use of modern teaching techniques. Therefore the control and use of technological resources of information and communication is essential. (The overall rate of our study sample as regards the use of ICT is only 1%). The results recorded following the analysis reveal that stakeholders of training (Teacher / Students) should emphasize the widespread use of ICT for easy access to information.

The Co-construction of knowledge "Teacher / Student" is only 10%; the participatory approach of students is very low here. Besides, the LMD reform calls for the empowerment of students to be the architects of their own activities by taking initiative and awareness of being actors of their training in their orientation before the sessions tutorials to prepare media was present: presentations, public or individual projects the door -folio, study cases, preparation of surveys, studies etc.

Moreover, the behavior revealing the adoption of modern pedagogy are here quite low. To consider:

- ♣ Establish socio-cognitive conflict in the classroom: 2%
- ♣ Contextualization of knowledge: 10%
- ♣ Co-construction of knowledge: 10%

(See details on Table 1) to better visualize all these rates and their distribution on the three categories we present the following histogram:

#### 4. CONCLUSION

Membership in a university teaching approach in terms of skills following a constructivist approach seems thorough and effective. This depends on the design of the teacher in teaching and mastery of different teaching approaches to contextualize and adapt educational interventions methods.

We distinguish the highest goal through the adoption of the LMD system is to improve the teaching skills of our university to convey useful knowledge, transferable, operative and produisants. The trainer forms so that students succeed in their studies efficiently.

The category learning Otherwise accounts for only 6% of all behaviors .Dispatched on the old and the new regime that gives: 8% for the LMD and 2% for the old regime (mastery) .There does have a slight progress during the transition to the LMD system, but this is insufficient.

Dispatched by grade, this category gives 9% and 7% assistants to the Master Assistants. Again, the age seems to play a role (albeit not quite enough) in improving teaching behaviors.

We will now analyze in more detail the components of this category:

- Devolution of labor Teacher / Student: 3%
- Group Education 0%
  - Student Support 2%
  - Project Pedagogy 2%
  - Evaluation of projects by students 0%

All percentages quoted are low (0-3%). This shows that the teaching behaviors of teachers do not favor the "learn differently" strongly advocated by the LMD reform.

About the category 3: Evaluate other analytically, these behaviors are divided as follows:

- Made Of training evaluation feedback + 3%
- Operates errors 0%
- Valorise Personal work of students 3%
- Evaluates students' skills 2%
  - Regulates its action following answers 1%

All of these relatively low rates (0-3%) show that teachers have not changed their method of evaluation, for example by introducing more modern techniques (Portfolio, continuous assessment, évaluationformative ...)

So it seems that the summative evaluation is pregnant despite the appeal of the LMD reform.

The results of this study shows that:

- Teachers have not changed the way they teach, contrary to the objectives of the LMD reform. Indeed they continue to favor a frontal teaching dominated by imparting knowledge to students.
- Regarding to learn differently, we do the same finding, since we observed no new teaching technique, such as group work, project pedagogy etc.
- As for the evaluation of students, it seems that the traditional techniques of summative assessment (restitution of knowledge) are pervasively present.

Thus, we observed no new technique by considering the LMD reform for the assessment of student skills.

We also note that the process of formation of future physical education teachers should be formulated in terms of professional skills.

In conclusion the observed teachers do not materialize essential didactic principles of the reform LMD, namely: to teach differently, learn differently, and evaluatein a different way..

## 5. RECOMMENDATIONS

### Discuss

As a critic for the implementation of the LMD system in Tunisia for the license in Physical Education and Sports, Ministry makers are expected to take into account the framework set by the Bologna Declaration. Is that they have taken account of the specificities of the discipline of physical education in its institutional, cultural, social and economic Tunisia? In another part, if we take the example of Portugal to implement reform or BMD system STAPS, they began by developing a restructuring process (F. Carrero da Costa, 2005 P 14.) eight steps:

- 1 / Delineate places of social and professional intervention.
- 2 / inventory functions and areas of professional profile.
- 3 / Defining the final skills training (curriculum objectives-targets)
- 4 / Sort and prioritize skills.
- 5 / Select knowledge mobilization in the activation of each competency.
- 6 / Distribute knowledge from disciplines and organize the sequence of their learning.
- 7 / Set disciplines unit credit and start disciplines annually.
- 8 / Develop operational educational programs in each discipline. To professionalize the entire training. We should focus all training on professional projects of learners in the definition:
  - Objectives and learning activities in terms of skills.
  - The content of the training in line with the labor market.
  - Professionalization in close connection with the self-creation of employment.
  - a professional scheme taking into account the logic of tutorials projects, university-business alternation, evaluation of internship credit accumulation. A set of issues that remain outstanding from our study:
    - Should priority disciplinary approach, bringing together trainers of the same subject in the proposed activities or adopt plural and transversal models that take into account the "didactic" disciplines?
    - Should be based on a reference defining the powers of the "good teacher" or develop a benchmark that takes into account all aspects of the teacher-researcher profession?
    - What structures put in place? What goals? What logic supply (training)? What guidance logic? What size of research?
      - In The profession of teaching, often the term "educational development" is used to signify the teaching activity (course, program, organization) and the term "professional development" for all the dimensions of academic carrier.
    - For whom we should give the instructional development?
    - What kind of personal should evaluate the lessons?
    - Which links built between educational and career development (in terms of tenure and promotion)?
    - Should there be separate statutes to modulate the careers of faculty based on their actual investment?
      - The training strategy should start from problems related to the teaching of physical education first and a support system for the teachers by experts in professional didactics.

## 6. REFERENCES

1. Altet, M., Léopold, Paquay, L., Perrenoud, Ph. (2005), *Formateurs d'enseignants, Quelle professionnalisation?* Bruxelles : De Boeck,
2. Amade-Escot, C. (2004): *La didactique des activités physiques et sportives : Cours master, ISSEP du Kef*
3. Amade-Escot, C. (2003). *La gestion interactive du contrat didactique en volley ball: agencement des milieux et régulations du professeur*, In C. Amade (Eds.) *Didactique de l'éducation physique – Etat des recherches* (pp.240-264). Paris: Editions Revue EPS.
4. Amade-Escot, C. (2008). *La didactique*. Paris: Revue EPS. Collection
5. Amade -Escot, ch. (dir.). (2002). *Didactique de l'éducation physique*. Paris: Revue EP.S.
6. Amade-Escot, C. & Venturini, P. (2009). *Le milieu didactique : d'une étude empirique en contexte difficile à une réflexion sur le concept*. *Education & Didactique*, 3(1), 7-43.
7. Amade-Escot, C. (1988). *La rénovation des contenus. Renouveau de la pensée didactique en EPS*. *Cahiers pédagogiques*, n° 262, (pp. 36-38).
8. Association des Universités Africaine (2008) *Le guide de formation du LMD à l'usage des institutions d'enseignement supérieur d'Afrique francophone*, Accra. Consultée le 21 décembre 2011 (<http://www.aau.org> <http://www.ADEAnet.org>)
9. Assude, T. Mercier, A. & Sensevy, G. (2007). *L'action didactique du professeur dans la dynamique des milieux*. *Recherches en didactiques des mathématiques*, 27(2), 221-252.
10. Bahloul, M. (2003). *La pédagogie de la différence*. Sfax : Editions Med Ali
11. Barbier, J-M. (1985), *L'évaluation en formation*, Paris : PUF
12. Berbaum, J. (1989) *Apprentissage et formation*. « Que sais-je ? », Paris : P.U.F.

13. Bernard, H. (1992). Processus d'évaluation de l'enseignement. Théorie et pratique. Laval (Québec) : Editions Etudes Vivantes.
14. Blanchard-La ville, C et Fablet, D. (2000), L'Analyse des pratiques professionnelles, Paris : l'Harmattan.
15. Bos, J.C. et Amade-Escot, C. (2004). Les nouveaux programmes d'EPS en France: analyse de l'échec de deux tentatives de renouveau. Archaïsme des enseignants ou résistances à l'idéologie postmoderne ? In P.h. Jonnaert et A. M'batika. Les réformes curriculaires, regards croisés. Québec : Presses de l'Université du Québec
16. Bosman, CH. Gérard, F-M, Roegiers, X. (Eds), (2000), Quel avenir pour les compétences? Bruxelles ; De Boeck.
17. -Bourdoncle, R. (2000). « Professionnalisation, Formes et dispositifs », Recherche et Formation, n 35, p.117 -132.
18. Brousseau, G. (1978). L'observation des activités didactiques. Revue Française de pédagogie, N°45(p.130-139).
19. Brousseau, G (1990). Le contrat didactique : le milieu. Recherches en didactique des mathématiques,( p. 309-336)
20. Brousseau, G (1986). Fondements et méthodes en didactique des mathématiques. Recherches en didactique des mathématiques, p. 50-51.
21. CCE, (1993). Gestion de la qualité dans l'enseignement supérieur européen. Méthodes et mécanismes. Bruxelles : Commission des communautés européennes.
22. Chabchoub, (2006), Quelles compétences pédagogiques pour enseigner au Supérieur ? Tunis : L'Atured
23. Chevallard, Y. (1985). La transposition didactique. Grenoble: La Pensée sauvage.
24. De Ketele, J.M. (2000). Approche socio-historique des compétences dans l'enseignement. In C. Bosman, F.M. Gerard et X. Rogiers, Quel avenir pour les compétences ? Bruxelles : De Boeck.
25. Chevallard, Y. (1991). La transposition didactique du savoir savant au savoir enseigné, Grenoble: Editions La pensée sauvage.
26. Chevallard, Y. (1992). Concepts fondamentaux de la didactique : perspectives apportées par une approche anthropologique. Recherches en didactique des mathématiques, vol.12 n°1 ,73-112
27. Claudine, B. et Dominique, F. (1999) Développer l'analyse des pratiques professionnelles dans le champ des interventions socio-éducatives. Paris: L'harmattan.
28. Cohen, A Soulier, A. (2004), Manager par les compétences, Paris: Liaisons.
29. Cros, F. (1996) L'innovation en éducation et en formation. Clamecy, NIL
30. De Ketele, J-M et . Roegiers, X. (1993), Méthodologie du recueil d'informations. Fondement des méthodes d'observation, les questionnaires d'interviews et d'études de documents, Bruxelles : De Boeck
31. De Ketele, J.M. (1986), L'évaluation : approche descriptive ou perspective, Bruxelles : De Boeck
32. Désautels, J. Et Larochelle, M. (2004). Les programmes d'étude à l'heure du constructivisme et du socioconstructivisme. Quelques réflexions. In P.H. Jonnaert et A. M'batika. Les réformes curriculaires regards croisés. Québec: Presses de l'Université du Québec.
33. Donnay, J. Romainville, M . (1996) Enseigner à l'université Un métier qui s'apprend ? Bruxelles : De Boeck
34. Durkheim, E. (1926). Education et sociologie. Paris: Alcan
35. Evequoz, G. (2004) Les compétences clés. Paris: Liaisons.
36. Fèbvre, L. (1958). Le problème de l'incroyance au XVIe siècle. Paris : PUF.
37. Forquin, J.C. (1987). Le débat sur l'école et la culture chez les théoriciens et sociologues de l'éducation en Grande Bretagne (1960-1985). Thèse de doctorat d'Etat. Université des sciences humaines de Strasbourg (USHS).
38. Forquin, J.C. (1989). Ecole et Culture. Le point de vue des sociologues britanniques. Bruxelles : De Boeck
39. Gal-Petitfaux, N., Saury, J. (2002). Analyse de l'agir professionnel en éducation physique et en sport dans une perspective d'anthropologie cognitive, Revue Française de Pédagogie, 138, 51-61.
40. Giovannini N. (2001) Crise sociale et fonctionnalisation de l'éducation, In, Allard Habermas, J. (1973). La technique et la science comme « idéologie ». Paris : Gallimard.
41. J.-G. Blais, M .Laurier, M. Lévesque, G. Pelletier et J.M. Van der Maren. In Jean Donnay, Marc Romainville. Enseigner à l'université Un métier qui s'apprend (chapitre 7) Bruxelles, De Boeck
42. Jonathan. Ph, (2004) la transposition didactique en question : pratiques et traduction (article de la revue française de pédagogie n° 149, octobre, novembre, décembre 2004, p 29-36
43. Jonnaert, Ph, (2002). Compétences et socioconstructivisme. Bruxelles, De Boeck.
44. Klein, G. (2005). La qualité de l'éducation physique et du sport dans le contexte international: profils de compétences et réseaux d'institutions. Document de travail. Séminaire d'experts de l'éducation physique et du sport. Porto Novo, Bénin 16-19 mai 2005.
45. Le « LMD » La réforme universitaire en sciences du sport, Toulouse EPS mai, juin 2005.
46. Le Boterf, G. (1991). L'ingénierie et l'évaluation de la formation. Paris, Editions de l'Organisation.
47. Le Moigne, J.-L. (1994). La théorie du système général. Paris : PUF
48. Legendre, M.F. (2004). Constructivisme et socioconstructivisme, des fondements théoriques à leur utilisation dans l'élaboration et la mise en œuvre du nouveau programme de formation. In Ph. In P.H. Jonnaert et A. M'batika. Les réformes curriculaires regards croisés. Québec: Presses de l'Université du Québec.(p 24).
49. Leutenegger , F. ( 2000). L'observation en classe ordinaire de mathématiques. Colloque « autour de la théorie des situations didactiques », Bordeaux, France.



50. Leutenegger, F. (2003). Etude des interactions didactiques en classe de mathématiques : un prototype méthodologique. Bulletin de psychologie, 56 (4), 559-571.
51. Jonnaert et A. M'batika. Les réformes curriculaires regards croisés. Québec: Presses de l'Université du Québec. (p 24).Leplat, J. (1997). Regards sur l'activité en situation de travail.Paris : PUF.
52. Leplat, J., & de Montmollin, M. (Eds.) (2001). Les compétences en ergonomie. Toulouse. Ocarès.
53. Martinand, J.L. (2006). Contenus d'enseignement, didactique et rapports entre disciplines et savoirs. Texte de présentation au conseil scientifique de l'Inrp.
54. Mariane, F. Bernadette, N. Philippe, P. Marc, R. (1989). L'étudiant apprenant, Grille de lecture pour l'enseignant universitaire. Bruxelles, De Boeck,
55. Marsenach, J. (1991). Education Physique et Sportive: Quel enseignement ? Paris : INRP
56. Marsenach, . &Mérand,R. (1987) . L'évaluation formative en EPS dans les collèges. Paris: INPR, Rapport de recherche.
57. Pastré, P. (2011), La didactique professionnelle Approche anthropologique du développement chez les adultes, Paris : PUF
58. Perrenoud, P. (1993). Curriculum: le formel, le réel, le caché. In J. Houssaye (Ed), La pédagogie : Une Encyclopédie pour Aujourd'hui. Paris: ESF.
59. Perrenoud, P. (1999). Dix nouvelles compétences pour enseigner. Invitation, .Paris: ESF.
60. Plante, J. (2003). Quelques enseignements tirés de la mise en œuvre d'une réforme curriculaire. Biennale de l'Association pour le Développement de l'Education en Afrique .Grand Baie, Maurice, 3-6 décembre 2003
61. Postic, M. et De Ketele, J.M, (1988), Observer les situations éducatives, Paris : PUF
62. Scallon , G. (2000), l'évaluation formative, Bruxelles : De Boeck.
63. Sensevy& Mercier, A (2007)Agir ensemble : l'action didactique conjointe. In G. professeur et des élèves .Rennes: Presses Universitaire de Rennes.
64. Sensevy, G. (2008). Le travail du professeur pour la théorie de l'action conjointe en didactique. Une activité située .Recherche et formation, 57,39-50.
65. Sensevy, G., Mercier, A., Schubauer-Leoni, M.L. (2000) .Vers UN modèle de l'action didactique du professeur à propos de la course à 20. Recherches en didactiques des mathématiques, 20, 3, 263-304.
66. Schubauer – Leoni M. L. (1997). Interaction didactiques et interactions sociales : Quels phénomènes et quelles constructions conceptuelles ?Skolé, 7, 103-134.
67. Schubauer – Leoni M. L. (2002). Didactique comparée et représentations sociales. In AFIRE (Eds), L'année de la recherche en sciences de l'éducation. (pp.127-149).Paris: AFIRE.

### **Address for correspondence**

**Authors: Anouar bettaieb:** High Institute of Education and Lifelong Learning, Tunis, Tunisia

**Email: [anouarb\\_univ@yahoo.fr](mailto:anouarb_univ@yahoo.fr)**