DESIGN AND USE OF AN ANALYSIS GRID FOR INITIAL TEACHER TRAINING - CASE OF REFLECTIVE ANALYSIS MODULE

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Abstract- This research focused on the development of an analysis grid and its use in the analysis of the reflective dimension in the training of future Moroccan teachers in addition to the theoretical approaches and training engineering recommended. Indeed, we first proceeded to the design of an analysis grid inspired by the works of Altet, Perrenoud and Vacher. The indicators adopted concern the training contract¸ the analysis approach¸ the family of situations analyzed¸ the autonomy of the actors¸ the support of future teachers and finally the certification evaluation. We then proceeded to analyze the official framework documents as well as the initial teacher training mechanisms in relation to the reflexive practice. The main results show the interest of the analysis grid that we designed and that permitted to identify the elements to be improved in the initial training of future teachers in relation to analysis of practices and reflective analysis in particular.

Keywords: Reflexivity, Analysis of Practice, Teaching Practice, Initial Training, Professionalization

1. INTRODUCTION

Reflective analysis of teaching practice is a crucial step in the academic development of future teachers. It is a cognitive process aimed at understanding and changing one's practice as well as improving professional skills for a better management of one's teaching functions, including teaching practices. In fact, the development of a reflective culture among trainee teachers on their practices and their guidance by their trainers can only favor their autonomy so that they will be enabled to better structure their teaching-learning strategies, customize their interventions to the needs of their learners, and consequently improve their practices. By the way, Goi and Huver [8] define reflexivity not only as an object of training but also as a vehicle for it. In this context, Morocco has conformed to international trends by integrating the notion of reflexivity into the training of future teachers that, Initial teacher training is conducted at the two areas of training, namely the CRMEF and the school establishments.

The initial training of teachers takes place in two training areas, namely the Regional Center for Education and Training Professions (CRMEF) and schools. In this context governed by an alternating system, the analysis of practices has its place and should support the theory-practice interface [1]. The main objective of this work is to design a model grid allowing the analysis of training devices on reflexive practice and then apply it on the Moroccan curriculum as a case study in order to draw a critical portrait of the latter.

2. RESEARCH QUESTION

Teaching is a complex practice [4] integrating several epistemic, psychological, social, institutional, didactic, and pedagogical dimensions [10]. This multidimensionality leads to different practices and constraints specific to each teacher, hence the interest of a professionalizing approach to the teaching profession. Indeed, professionalization is a major lever for improving the quality of teaching and consequently learning [20]; it aims to develop the teacher's skills to enable them to confront the evolving complexities of teaching situations. This process of professionalization is long and slow, but it can be supported through reflective practice, which would guarantee permanent and continuous professional improvement.

In the Moroccan context, the importance of the analysis of teaching practices was underlined in the initial teacher-training curriculum in 2012 [15]. However, it is only for the year 2018-2019 that this dimension was introduced in the training program as a module aiming at the professionalization of the teaching profession and the development of a reflective posture [14]. The purpose of this research work is to shed light on the status of reflective practice in Moroccan initial teacher training and attempt to answer the following main question:

Does the training system satisfy the criteria mentioned by Legault [12] who considers that for an effective and active reflective analysis practice, it is necessary that it be structured, instrumented and supported by theoretical and practical inputs?

3. CONCEPTUAL FRAMING

Reflective analysis has been the topic of research for over a hundred years [21]. Dewey presented the first foundations of this concept at the beginning of the 20th century in his book "How we think", in which he interrogated human action and man's recognition of it to transform and improve it towards problem solving. Schön [21] later elaborated the concept by emphasizing the relationship between reflection and action in his book "The Reflective Practitioner". Indeed¸ Schon's work allowed the status of reflective analysis to progress from a professionalism considered solely from the perspective of applied science, devoid of articulations to a professionalism focused on the practices of actors and their implications in their professional action [8]. Since the 1980s and in the context of a worldwide movement to promote the quality of teaching, reflective analysis has been integrated into professional teacher training in a transversal manner [8] and into initial training program. Thus, the teacher's model "Reflexive Practitioner" seems to impose itself on the international level. [21] describes this concept as an inclusive and open paradigm and insists as specified by [24] on the reflexive posture and the knowledge to analyze who should have bases of scholarly knowledge since the analysis focuses on the real and therefore mobilizes concepts and theories [21].

This concept of reflexive practitioner is defined by the teacher's ability to develop reflection, which [26] characterizes as systematic, reproducible, evolutionary, and autonomous reflection in order to act and transform. This perspective of autonomy and transformation is also part of the processes of metacognitive practices. The same author [26] maintains that beyond the applicationist logic, the reflexive practitioner is built in the active relationship that he maintains with elements of training and himself. Before discussing the why and how to train reflective teachers and given the multidimensional, polysemic, and complex nature of the concept Reflection, it is essential to specify the meaning adopted in this research as well as the resulting notions. After analysis of the influences of Descartes, Dewey, Schon and Fendler cultural feminism (2003) He highlighted the ways in which different historical influences have contributed to the complexity of the meanings of reflection in the research and practice of teacher education. The author explains this range of meanings as follows.

The reflection is a manifestation of self-awareness, a scientific approach to planning for the future, a tacit, and intuitive understanding of practice, a discipline for increasingly professional practice, a way to tap into one's authentic inner voice, a way to become a more effective teacher and a way to improve the quality of teaching to become a more effective teacher, and a strategy to redress and redress the injustices of society. Donnay and Charlier [7] define reflection as the cognitive process required to analyze a situation, whereas reflexivity concerns both reflection on the situation and reflection on reflection. Concerning the Reflexive Practice, we adopt the definition of Balas-Chanel [3]: "Reflexive practice is a mental process that aims to learn from lived experiences, through a return of consciousness to itself, on a regular and voluntary basis, with the object of becoming aware of how it acts and reacts, in professional or formative situations". Vacher [25] places reflexive practice at the interface experiential knowledge/Theoretical knowledge. It allows the development of a perspective of functional union between the experience of internships and theoretical contributions. It is part of a constructivist and socio-constructivism perspective on the development of professionalization and professional empowerment.

Several searches have underlined as specified by Altet and al [2] the need to integrate the reflexive dimension into teacher training and its interest in the construction of professional knowledge through action and reflection in and on action and awareness of action. This orientation is also motivated by the fact that the reflexive posture is not spontaneous. In the same vein Chaubet [6] states that the preparation of future teachers would avoid their phagocytization through the organizational culture of the workplace and thus the reflex of unreflective practice. The interest in training reflective practitioners, as pointed out by some authors [28, 29], lies in the existence of a potential link between reflective practice and teacher effectiveness.

For Vacher [26] reflective practice would support the teacher in his process of accepting the complexity of teaching and its confrontation with a view to transforming his practices. Several authors who believe that reflexive practice offers teachers the opportunity to evaluate their practices [27] and regulate their actions [21] highlight this impact of reflexive practice on teaching. This author insists on the importance of developing reflective practice among teachers since it offers them the opportunities to accumulate knowledge of experience; to evolve towards professionalization; cooperate with colleagues and develop their innovative capabilities. Consequently, the training system must allow the development of cognitive processes and the orientation of analysis by promoting the emergence of constructive shifts, which are the driving force of learning and the awareness of these gaps in order to analyze and study them [26]. When developing a training system, it is important to consider as specified by Vacher [26] three key objectives: the development of analytical capacity and the construction of the ability to work in a team and the construction of a training and professional comfort.

The first objective is aimed at developing an analytical approach based on a multidimensional approach taking into account the multidisciplinary dimension¸ the needs of the actor and its resources. The second objective is concerned with communication and relational aspects from a co-building and developing the culture of teamwork and the collective dimension thus guaranteeing a gain at the level of acquisition since exchanges and socio-cognitive conflicts can only be beneficial to the improvement of its own practices and those of the other members of the group. The third objective finds its legitimacy in the place occupied by professional comfort in the development of a reflexive practice. The basic principles for the development of a training system for the development of reflective practice are recorded in the diagram, which represents the reference framework proposed by Vacher in French [26].
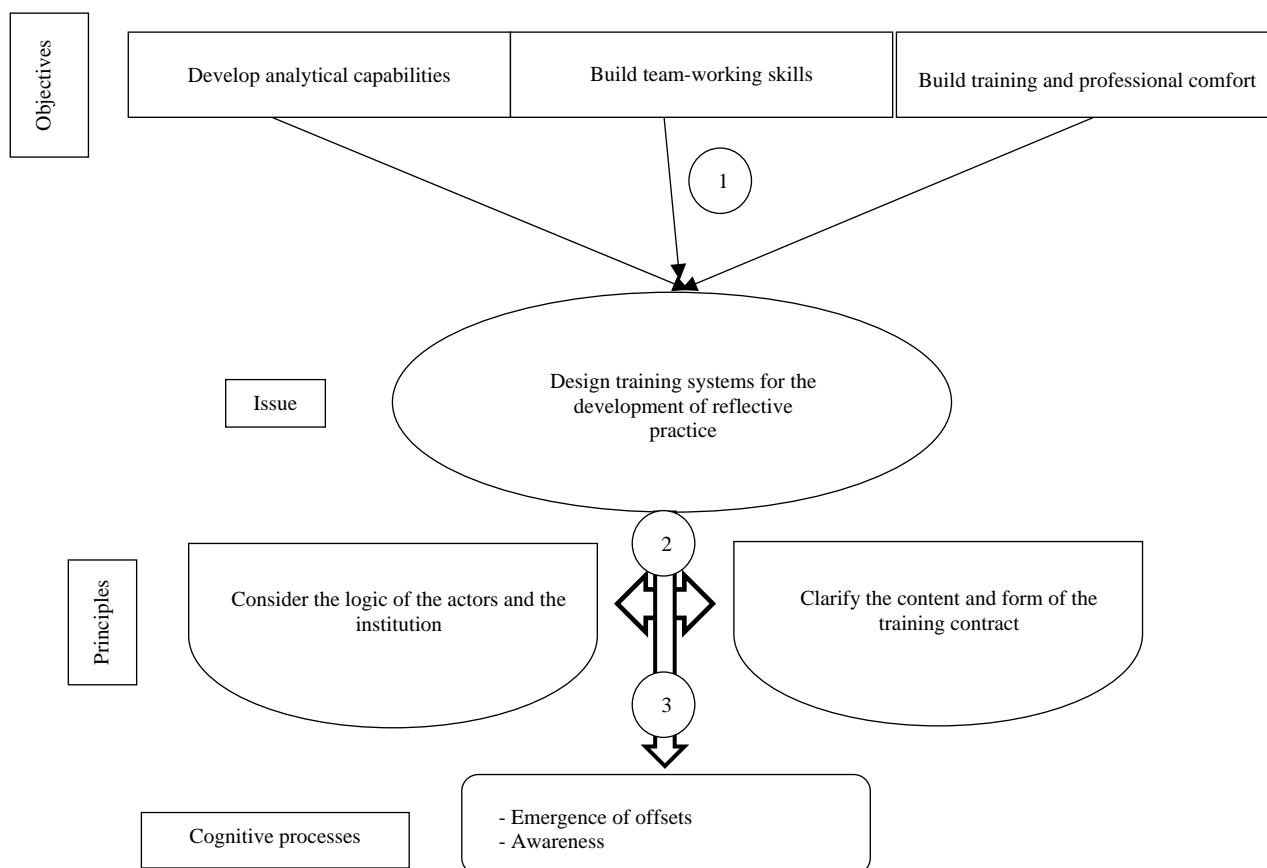
Figure 1. The grid based on the ARPPEGE device

4. RESEARCH DESIGN

This research is based on a descriptive and analytical method of official documents and the training system of future Moroccan teachers related to reflexive analysis. The analysis of the official documents was realized by two researchers in didactic and a pedagogical inspector.

First, we looked at the history and the place that reflexive analysis occupies in the training of future teachers in Morocco. We then proceeded to analyze the official documents and training system using an analytic grid inspired by literature [2, 11, 21, 25, 26 and 30].

This grid in Figure 1 is essentially based on the ARPPEGE device (Reflective Analysis of Professional Practice in Exchange Groups). This system is intended for teachers in initial and in-service training and has been tested and validated in the French context for fifteen years and in other contexts and countries. It has considerable formative and transformative potential [30].

The criteria adopted in this grid cover the terms of reference, the training contract, the analytical approach, the family of situations analyzed, the autonomy of the actors, the accompaniment and the certification evaluation. Each of the criteria has indicators as illustrated in the results and discussion section and the scale adopted is as follows:

• Present and clear: refers to the presence of all indicators related to each of the criteria and the presence of functional links between them.

• Absent: refers to the total absence of indicators related to the criterion.

• Present but unclear: refers to the absence of certain indicators related to the criteria and/or the functional link between them.

5. FINDINGS AND ANALYSIS

5.1. Brief History and Place of Reflexive Analysis in the Training Curriculum of Future Teachers

An analysis of the frame of reference for initial teacher education reveals that since 2012 it has been organized in modular system based on the acquisition of professional skills. This professionalizing project is structured around two training areas, namely the CRMEF and the schools and is carried out in one year. The reflexive dimension and the analysis of practices are cited as one of the essential pillars of teacher education (framework document) [15].

This framework document encourages to consciously reflecting on their individual or group practice before, during, and after the action in the following steps:

• Verbalizing and analyzing a given activity

• Question difficulties and good deeds and look for the causes of these difficulties

• Criticize, regulate and model good practices

The framework proposes as means of reflexive analysis of teaching practices action research projects accompanying class projects co-evaluation and metacognitive activities. However, these approaches to appropriation of reflexive practice are proposed without any theoretical contribution or support. The definition of reflexivity and reflexive analysis is recorded in a glossary at the end of the document.

It is only in 2018 that the reflective dimension takes shape in the initial teacher training system as a module entitled "Workshop on the analysis of professional practices". In the guide to procedures for the management of initial teacher education, it is recommended that it be consider in research projects involving trainee teachers. Since 2020-2021, the training of future teachers has been done in two years rather than one year. The first year is given to the CRMEF while during the second year of training the teacher trainee assumes full responsibility for the class. The modular approach is still in force with the aim of articulation and complementarity.

The reflexive dimension is mentioned in a two-and-a-half-line paragraph where it is stated that this dimension is taken into account in the professional development of future teachers thus ensuring the link between the CRMEF and the socio-professional environment (Guide to procedures for managing initial teacher education for the year 2020-2021). In the same document, among the activities proposed to the CRMEF in the second year, workshops on the analysis of practices are cited. In the section on the description of the modules, we limit ourselves to a reminder of the objective of the module "Workshop of analysis of professional practices". We note that as part of a collaboration between the Ministry of National Education and the European Union, the "Education 2" program, which took place in 2015-2018, has integrated a line of development of reflexive analysis. Indeed, workshops have been initiated in this regard at the level of some pilot academies but access to the results is coded and therefore inaccessible to the analysis and therefore it was not possible to integrate it in the present research.

In conclusion, the initial training arrangements for Moroccan teachers clearly specify the value of reflexive analysis but do not present any theoretical treatment of this concept or clear models that could guide trainers in the implementation of the module dedicated to reflective practice, the majority of which have not received academic training in the field. This type of analysis cannot be effective without it being equipped, structured, and guided. The official documents analyzed briefly deal with approaches to the development of reflexive analysis and not with its process and analysis tools. In this context, its operationalization, either in the field of training for future teachers or at school level, would not seem obvious or would present difficult challenges.

5.2. The Results of the Analysis of the Curriculum via a Grid

The results of the analysis are set out in Table 1. These results reveal the absence of a theoretical frame of reference, defining the central concept "reflexive Analysis", its different models, the different approaches and analysis tools. However, theoretical references play a crucial role in the modelling and verbalization of practices related to reflexive analysis, the results of this analysis, and the transfer of such practices in new professional situations [5].

In the same perspective Perrenoud [22] states that the ability to think, observe, link, and analyze in a reflexive context requires the appropriation of concepts belonging to conceptual fields, to typologies and fragments of theory and that it would be reductive to believe that it is enough to reflect on one's practice to be logical, attentive, good observer and have a good memory.

The reflexive dimension does not appear as the object of an act of contract discussed in the official documents analyzed, which could generate resistance among the teacher trainees regarding the development of this dimension [23]. The training offers a reflexive analysis approach and means or channels without specifying functional links between the two. What means for such case, such context and such mode of work (individual or collective). We note that no document has tools for analyzing practices or their structure.

The proposed approach seems to support work that is more individual while collective work is of great contribution on learning, allows the confrontation of ideas, the destabilization and the regulation of erroneous conceptions, guide towards a Co-construction of practices [10]. At the level of the 3rd criterion as suggested in the guides of initial training of future teachers the family of situations covers professionalizing situations (micro-teaching- role play- presentation- case study- seminar-etc.) and those related to internships in schools knowing that the period of internships was shortened during the 1st year of training with the recent reform. There is a lack of criteria for choosing situations to create shifts and awareness promoting the development of reflexive posture and analytical skills [26]. In the same document it is specified the role of accompanying persons and analysis tools. Certainly, the support provided by various stakeholders is one of the most important pillars of the initial training of teachers and which aims to support novice teachers throughout their training, either in the CRMEF, or during the placements in professional situations, offering moments sometimes formative and sometimes evaluative.

However, what remains to be specified and specified: At what times of the training? How long will the teacher be accompanied? And with what tools? In order for support to be effective and efficient, it must be part of a structured and tooled approach and shed light on well-defined priorities [9]. The validation of the development of reflexive practice by a certificated evaluation method is totally absent except for the requirement of the validation of the module "Workshop of analysis of professional practices" whose test focuses on theoretical contributions or situations that do not allow the measurement of the evolution of reflexive practices of each trainee teacher. The proposed training attempts to develop the reflective dimension among teachers from isolated practices in the absence of a clear and cohesive model, structured and equipped, offering a clear contract on the objectives and modalities of training, work and evaluation.

Moreover, a study on the conceptualization and implementation of reflective practice in twelve initial and in-service teacher training institutes in Europe [31] confirmed the important contribution of reflective practice

to the change of teaching practices and consequently to the improvement of the quality of teaching. These institutions from France, Belgium, Italy, Sweden, United Kingdom, Austria, agree, despite their conceptual differences, on the fact that reflective practice acquires autonomy for the teacher, a certain professional security and a commitment to decision-making based on a theory/practice alternation, where the concept of reflective practice constitutes a central element of any training module. Equipped with various support tools, teachers will individually and / or collectively put their didactic, pedagogical, affective and social practices as an object of reflection and this in the two training spaces, namely the training institute and the schools. Accompaniment by trainers and teachers of training courses in a logic of collaboration and improvement is crucial. The latter should participate in the formative and summative evaluations [31].

The validation of the grid, which we designed and used, as an analytical model is being corroborated by this study and Vacher's work [30]. Indeed, the criteria and the indicators composing the analysis grid are decisive and essential for any quality training system.

Table 1. Results of the analysis

Criteria		Present and clear	Absent	Present but unclear
Reference framework (Concepts-different approach to analysis- the different tools- the different models- etc.)			▨	
Contract training	At the level of objectives			▨
	The methods of training			▨
	At content level			▨
	At the level of analytical procedures		▨	
	The importance of reflexive practice		▨	
Analysis process	Individual			▨
	Collective			▨
	Tooled			▨
Family of situations analysed	Personal professional situations	▨		
	External case study			▨
	led to offsets			▨
Actors' autonomy	Guarantee	▨		
	Secure	▨		
Accompaniment	Evaluative	▨		
	Formative	▨		
Certificate evaluation			▨	

6. CONCLUSION

Reflective practice today is at the heart of the new curricula for initial teacher education, given its crucial role in creating meaning and links between experience and theory and in shaping professional identity. Such training must be based on devices constructed of clear and coherent elements, guided by determinants guaranteeing the effectiveness of these devices. The theoretical clarification of the model(s) of reflective practice makes it possible to frame the choice of targeted knowledge, the type of situations necessary for the development of analytical knowledge, and the modalities and tools of formative and certifying evaluation. Such an approach based on one of the models of reflective practice, equipped and structured, can only favor the articulation between theory and experience. The absence of such a model affects the quality of training that is intended to be professionalizing since it hinders the effective development of the culture and reflective posture of future teachers.

The current situation of initial teacher training in Morocco threatens to undermine the development of this dimension among novice teachers; therefore, there is a need to rethink initial training in terms of determinants for developing reflective practice in an effective and efficient way. We note that the practice analysis training system is being developed by a team mandated by the supervisory ministry, but the results to date haven't yet been shared.

RESEARCH PERSPECTIVES

Based on these findings and this context, the current research of the authors focuses on the practices of trainers in the absence of a structured mechanism dedicated to reflexive practice and the development of tools based on the joint theory of situations, which are in progress experimental.

NOMENCLATURES

CRMEF   Regional Centre for Education and   Training Professions

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