Application of Epistemological Data from Developmental Psychology to the Preschool: Towards A Modeling of the Competency-Based Approach

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ABSTRACT
Teaching practices in preschools are strongly influenced by applications of developmental psychology, which, although different, produce diverse, contradictory injunctions on several aspects of learning. These practices today draw on the Competency-Based Approach, and are perceived by teachers as bringing together several conceptions of learning and performance. However, the preschool child, in terms of development, is situated between 0/2 and 2/5 years of age, with a distorted way of thinking. This mode of thinking therefore requires the teacher to adopt a certain posture. The modelling of the competency-based approach is thus a psycho-pedagogical act. It favours spontaneity and freedom while allowing the child to deconstruct this way of thinking represented in a very practical way. The aim is to make the teacher's pedagogical approach more flexible. Developmental psychology through the cognitive axis will allow the Competency-Based Approach to be at the centre of an elucidation of the competencies development dynamics by learners and their caregivers. The aim of this paper is to understand how experimental data from developmental psychology can be taken into account to improve the implementation of Competency-Based Approach practices. The data collection tool was the semi-structured interview guide; the analysis grid was used as an analysis instrument. Discussions with 03 preschool participants made it possible to understand that preschool is not meant for the ignorant, but rather for those who know what childhood is. This would have implications for teacher training and the planning of preschool space.

Keywords: developmental psychology, preschool education, representative intelligence, preoperative stage, competency-based approach.

1. DEVELOPMENTAL PSYCHOLOGY: A DISCIPLINE APPLIED TO EDUCATION
Human developmental psychology is concerned with the personal, family and environmental factors that influence the social, cognitive and emotional development of the individual at any age; it refers to Phylogenesis. Phylogenesis is the evolutionary history of a species or group of related species (Piaget, 1969; Vygotsky, 1985; Bruner, 2002; Tsala Tsala, 1997). This area of psychology provides a general knowledge of human development and familiarity with research and intervention practices in this and many other disciplines. The current approaches, although different, study development according to two modalities: Ontogenesis and Phylogenesis, depending on the methods they use. Ontogenesis is the development of an individual from conception (fertilisation) to its final adult form. It thus includes embryonic development as well as the subsequent growth of the organism and, in the case of humans, the development of their psychology.

Developmental psychology becomes like a space between two that serves to better express itself in the other field. Today, it articulates child psychology and genetic psychology in a coherent manner. Genetic psychology therefore analyses the psychological changes that take place at the level of the individual, from birth or even from the egg, until the end of childhood or adolescence: this is Ontogenesis. Genetic psychology also focuses on the evolution of species, which is the human species: this is Phylogenesis. Developmental psychology is the branch of psychology that aims to understand how humans develop and why they develop. These questions lead to the embracing of all aspects of development, hence its importance in the field of education, which is marked by learning, and more specifically in preschool education. Learning refers to a set of mechanisms leading to the acquisition of knowledge, know-how and skills because, according to (Piaget, 1969, p. 41). "Any teaching method or programme whose application and results are to be analysed by experimental pedagogy raises problems of developmental psychology, psychology of learning and general psychology of intelligence.
Developmental psychology is a branch of psychology. Its purpose is to understand, on the one hand, how humans develop and, on the other hand, why they develop: how and why mental processes, behaviours, performances and skills change (develop or not) over the course of their human lives. This discipline encompasses all aspects of psychological development (cognitive, language, affective and social aspects) and all ages of human development, from prenatal development to death. Learning is an active process in which the child learns and constructs his or her understanding of the world through exploration, manipulation, observation, interaction, and imitation. The teacher, equipped with the tools of psychology, aims to understand that a child is a particular individual who has desires, wishes, disappointments, concerns, duties, obligations... in short, what is specific to him/her. This child, at the moment he has a passion, sorrows, sadness, at a given time. The field has thus become developmental psychology (Bruner, 1983).

Moreover, it is a field that studies the major psychological functions of the individual, i.e. memory, motor skills, language, perception, affectivity, emotions and motivation. It will try to find out why things change. It is about describing a

explaining. It is primarily theoretical and less practical compared to other branches of psychology, which are specifically interested in problems linked to a particular age or period of life. Developmental theorisations traditionally fall into three broad orientations. The first is the preformist orientation, which considers development to be predetermined by the characteristics of the species. It has several variants depending on whether the emphasis is on biological maturation, on skills present from birth (innatism) or on the predetermination of skills that manifest themselves well after birth (nativism). (Piaget, 1966; Papalia & Martorell (2018)

The second orientation draws on associationism and inherits from empiricism. It stipulates that development takes place through the links created in the life experiences of the individual. Finally, the third orientation is constructivism, which emphasises the active role of the child. Development results from the individual's "reaction" to experience, to environmental stimuli; as the reaction at a time t depends on previous reactions, we have a progressive determination of development, which is neither a preformism nor a passive associationism.

Here she combines genetic and child psychology. Child psychology talks about the child from a synthetic perspective, whereas genetic psychology only works on a function, from an analytical perspective. It is more a knowledge of fundamental research and the clinical aim is more likely to be found in child psychology. It is both basic research and an application of applied psychology. On the analytical level, it is an epistemic subject; subjects who are interested in various aspects. Synthetically, it studies the subject in its complexity. It is more of a clinical perspective. These two perspectives both account for different psychologies and both account for the child, but not in the same way. Both cannot do without each other. They have very close links with other scientific fields: ethology (animal psychology), ethnology, linguistics, ecology, artificial intelligence, cognitive sciences (psychology, analytics, neuroscience and artificial intelligence) and psychoanalysis. (Piaget, 1969)

2. PRESCHOOL: A FRAMEWORK FOR CHILDHOOD KNOWLEDGE

The kindergarten learning environment should be designed to respect the child's developmental stage and learning pace. The kindergarten schedule should also be adapted to the needs of the children. What is important to know is that unlike primary school, whose mission is to socialise, educate and qualify the future citizen, kindergarten has an educational mission, but it has more of a socialisation mission. Kindergarten must prepare the child to socialise and develop before entering primary school, as well as its requirements related to the exploration of school subjects, while stimulating the child's cognitive, conative, socio-affective and psychomotor development (Garnier, 2016; Montangero & Naville, 2019). It is therefore necessary to analyse the need to understand the specificity of a child.

It should be noted that the majority of teachers currently working in 4- or 5-year-old kindergartens have hardly benefited from initial training leading to qualifications in this field. On the contrary, they are mainly trained to work with children aged 6 to 12 in a regular classroom setting, and have had to learn "on the job" to transpose the pedagogical and didactic skills they initially developed to the specific practice of preschool. Children aged 3 to 6 have specific needs related to the development of their body, thought, language, socialisation and their relationship to time and space. Respecting their needs conditions their availability to learn but also, and above all, their health and development.

Preschool is the stage of the educational process before the age of compulsory schooling. This means that
before starting primary education, children go through a period known as preschool. Preschool is the foundation of the building blocks to be constructed. In other words, the quality of preschool education includes the quality of early childhood care and education. There is a need to create the family, social, psychological and environmental conditions in which the very young child must evolve in order to enable him or her to enter the preschool centre from the age of three to five. Given that kindergarten is intended for young children aged 3 to 5, the quality of education therefore imposes aspects on which it is necessary to act intensively and adequately in order to improve, in the interests of the child, the quality of the later stages of his or her learning. Kindergartens cannot then be like a place of temporary storage during the day where parents find babysitters in a well-formalised framework. Even less a fashion effect where the enrolment of the child is a sign of ease for its parents.

Yet many preschool teachers are not trained for preschool. This explains the often-damaging unpreparedness of young children for primary school. There is therefore a need to ensure real governance of preschool education and to introduce or develop an option for teaching at this stage of childhood in existing training courses. In this context, professionals should draw on the simple experiences of the primary school classroom to intervene (Massé, Desbiens and Lanaris, 2014).

Thus, teachers have the responsibility to respond to the needs of children. It is about identifying these needs and knowing how to consider them in order to make appropriate educational and pedagogical choices. Sleep must be sufficient in quantity, regular and take place in darkness and silence. It is a determining factor in the cognitive development of children. In nursery school, "Good sleep habits means growing healthy! ». Chrono psychologists admit that it is more important to respect the need for rest than to maximise the time of high vigilance. (Montagner, 2009). A new organisation of school time cannot therefore ignore the way in which the different times of the children-students are interwoven within the 24 hours. Each time is obviously influenced by the times that precede it, and itself influences the following times. (Montagner, 2012, p. 36). In this sense, "The organisation of the day must be a priority. Focusing only on the child in the classroom and at school makes no sense".

It is therefore time to consider school as a place of life that is based on the articulation of family time, school time and 'third time' By being involved in the organisation of preschool time, the school can create and seal new links. Therefore, Kindergartens need to fulfil three conditions in order to prepare children to enter the classroom. They should be conceived as spaces that allow each child to relax, to wipe out and to overcome fears, anxieties and anguish, and not simply as a "day care centre" awaiting the entry into school and classroom.

Teachers, educators and nursery school leaders need to be trained to ensure that they know how to provide children with emotional security, and in any case to avoid atmospheres, situations, environments and relationships that can generate emotional insecurity, and thus anxiety and anguish. It is also necessary to create a body of mediators who know how to defuse and manage conflicts. In this way, we can hope to reduce malaise, depression, absenteeism, aggressive and destructive behaviour, behavioural turbulence that is considered excessive "hyperactivity"... and violence. Respect for the biological and biopsychological rhythms of each individual.

(Piaget, 1922, 1963, 1964; Inhelder and Piaget 1966) structures with a particular representation. The concept of representation is coloured here by two distinct meanings, depending on whether we are talking about the beginning of the construction of intelligence in the child or whether we are considering the contribution of socialisation to its development. With the explosion of the development of the symbolic function and with the lightning development of the child's language development from the age of two or three until adulthood, the term representation is modified. Representation then increasingly refers to the individual's elaboration of the 'social' world, which is the rules, norms and relationships he or she has with both the physical and social environment. Representation thus corresponds to the construction of abstract relationships that the individual integrates and reconstructs, not only from his direct relationship with the world but also from his indirect relationship as mediated by discourse and by his interactions with others.

Boyd and Bee (2017) believe that teaching in kindergarten is about accepting that the child is play. It is the age of play, and therefore play is a function of the self and particularly a means of desynchronising bodily and social processes within the self. Developmental psychology should enable every teacher to understand that through play the ego symbolically dominates the different aspects of existence and favours autonomy in the school context The play context is an integral part of the assimilation and accommodation process on
which intellectual development is based. The teacher should see play as a powerful lever for learning. According to the teacher, knowledge and reasoning are acquired through the child's continuous interaction with the physical and social environment. Play provides a context that maximises the likelihood of such interaction. “Play occupies an important place in the development of the child, particularly with regard to the process of empowerment, which gradually takes on affective, cognitive and socio-cultural colours” (Morin, 2002; p.143). The level of interaction increases slightly through play.

From the age of 3, the preschool children can say sentences of a few words. They understand longer instructions and more abstract concepts better. They still have difficulty understanding time. When the preschool child wants to share an experience, the toddler can talk about what he or she has experienced during the day and with whom. He is less in the here and now, and he learns to talk about the past and the future. The toddler makes himself understood most of the time, even by people who do not know him well. His pronunciation becomes clearer. “The game provides an opportunity to test oneself or others, with the aim of demonstrating greater skill” (Bouchard and Fréchette, 2008, p. 287). Play is an important part of a child's development. Ferland (2018, p. 33) believes that teachers are unaware that play provides young children with "a subjective attitude in which pleasure, curiosity, a sense of humour and spontaneity are combined, resulting in freely chosen conduct for which no return is expected". It is a source of learning for the young child. Play also allows the child to have fun, quite simply, and touches on several aspects of the child's development, thus promoting his or her overall development. It can stimulate the senses, develop motor skills, and help acquire cognitive, emotional and social skills. This explains its importance in educational programmes, particularly in preschool.

It is in this sense that Papalia & Martorell, 2018, p,85). said “the ability to carry out a phonological analysis of oral language which leads the child to identify and then mentally isolate the elements of speech making up a spoken word from the game”. It is therefore necessary to know the child in its specificity, it is not only a teacher trained in an ENIEG (Teachers Training Institute for Primary Education in Cameroon), but rather a specialist in early childhood.

Teachers need to listen to what the preschool child wants to say, as he/she needs to practise speaking to others and develop self-confidence. The teacher should help the child by using a variety of words. Use long sentences when possible; and use a questioning strategy to better understand the child. The teacher does not give instructions without getting involved herself. He/she must play along with the child. In any case, it is important to increase the number of preschool reception and learning facilities to make them accessible to all children. On the other hand, the Cameroonian State and its educational partners must ensure that the training of those in charge of preschool is secure, but above all that the stage is set for psychology in general and developmental psychology in particular (Papalia & Martorell, 2018). Training for preschool cannot be effective if the education system does not seek to integrate developmental specialists into the school environment.

The 4 to 5 year old stage in the Piagetian perspective places the child at the representation and access to the symbol. It is a stage where the young child begins to operate through symbols on objects and thus develops representational intelligence. The child increasingly understands explanations and instructions that include more terms that are complex. He pronounces almost all sounds correctly. However, he or she may still have difficulty producing the sounds "ch" and "j" as well as certain consonant clusters such as "tr" and "gr". The teacher in project-based learning acts as a tutor, explaining the meaning of new words to the child.

It should not be simplified because learning by project consists of solving problem situations through stories that integrate elements of daily life, but above all of one's living environment. Piaget places language at the foundation of the preschool child's thinking. The illustration states: “Piaget deserves credit for recognising that the overarching theme of cognitive development in the preschool years is language acquisition” (Bee and Boyd,2017, p. 144). Language becomes a function that will serve as a foundation for all other functions necessary for that child's integral development. Therefore, the early childhood teacher should always be aware of what the child finds amusing, as the child's humour speaks volumes about understanding language. Each child is unique and learns to master language at his or her own pace. The way in which the training is carried out can, in itself, prove to be a source of blockage or personal involvement. The aim is to increase the professionalism of teachers, because professionalism places the teacher in a dynamic position as a social actor who can help the preschool child.

The aim of early childhood education is therefore to compensate for any deficits in educational stimulation in children considered to be "at risk" or living in precarious environments. This implies that teachers or educators have acquired during their training the developmental psychology skills that should help them to...
make the child more autonomous and capable of the compulsory learning (knowledge, attitudes, skills, etc.) necessary for intervention with children. Studies (Pianta, La Paro & Hamre (2008); Larivée, & Terrisse, (2010). show that these competencies are not part of the professional training regimen of preschool teachers. They are only acquired on the basis of initial training on aspects of developmental psychology.

In the same vein, Tsala Tsala (1997) deplored the fact that the preschool is an unrecognised setting, a space where some professionals take as hobby or a place of rest. Preschool practitioners must implement professional gestures, supported by a true reflective posture, capable of guaranteeing the well-being of young children. However, most preschool teachers do not know what early childhood is, which is why they are involved in a plurality of confused practices. It is in this sense that Tsala Tsala (1997, p. 89) states: “A new direction in child psychology research is to discover the specificity of early childhood. This period has been ignored for a very long time. Indeed, knowledge about early childhood has been turned upside down in recent years”.

This is to say that the teacher must develop a professional identity as a preschool teacher. He must also articulate his personal professional project with the educational project of the actors he works with in the interaction between the “I” and the “we”, that the future teacher as well as the practising teacher can build and reconstruct a professional identity from the epistemic elements of developmental psychology. It is necessary to integrate this child's way of thinking and in this sense (Bee and Boyd, 2017, p. 154) state: “preschoolers' observations and judgements of others are less consistent and coherent than those of school age, because their perceptions are based only on their most recent interactions with people”.

These experimental elements of developmental psychology make it possible to understand the linguistic environment in which the preschool child evolves. The ills to which he is exposed would influence the capacities of perception, word recognition and storage of phonological representations in memory. (Deviault, 2011). Similarly, the maternal sensitivity observed during a play situation when the child is about 1 year old, then 2 years old, is linked to the performance obtained in phonological skills tasks at 3 and 4 years old. The knowledge of letters is another ability that plays a role in preventing learning difficulties in reading, since letter recognition is the first step in the reading process.

3. PROJECT-BASED LEARNING: INTERACTIONIST THEORISING FROM DEVELOPMENTAL PSYCHOLOGY TO PRESCHOOL

The project-based approach articulates several modes of learning which, in the sense of Wenger (1998), is called varied learning. Learning through projects refers to a "the process of engaging in a practice involves the whole person, both their actions and their thoughts" (Wenger, 1998, p. 53). It is an approach which involves a particular professional and which knows how to start from the data of developmental psychology as soon as it finds itself in the preschool. Preschool thus ceases to be the place for any professional. It is a level of learning that needs specialists in psychology and developmental psychology in particular.

In line with the socioconstructivist approach of Vygotsky (1934/1997) and Bruner (1983), which is part of the interactionist axis of developmental psychology, numerous studies have indicated that the teacher contributes to the development of skills in the child during interactions. It is then the nature of the adult-child exchanges that makes the subject of these studies rather than the quantity of certain behaviours. Project-based learning is thus situated both upstream and downstream of this perspective, which puts forward the concept of ZPD. Here learning becomes effective because the child is at the centre of learning and gives meaning to it. Vygotsky defined a new approach to learning that involves the know-how to do and the daily know-how to be. For (Vygotsky, 1934, P. 243). Project-based learning consists in this sense “to give birth to, awaken and activate in the child a whole series of internal developmental processes capable of operating only when the child is in relationship with the people around him and cooperates with someone similar”. Hence the need for specialists or professionals with a deep understanding of developmental psychology. This is an acute cognitive flexibility approach.

The teacher must be able to start from existing the facts for the child, and be able to transform them into learning elements. It cannot be limited to a pedagogy of integration in the strict sense of Roegiers (2008). In project-based pedagogy, the adult provides the child with stimuli, ensuring that they are adapted to the child's level of development, in order to help the child build up. Thanks to the repetition of behaviours initiated by the teacher, the child can, little by little, become an actor in the interaction by imitating the teacher. Thus, project-based teaching in this sense is essential because of its complexity (knowledge and resources), its authenticity, its contextualisation, its globality and its capacity for generalisation (transfer to similar
situations).

Through the mastery of the elements of developmental psychology by preschool professionals, the project-based learning approach would enable preschool children to acquire sustainable skills that could help them in their education and in daily life. The preschool teacher should focus on all that is fundamental in order to guarantee a better adaptation. Project-based learning becomes in this perspective the pedagogical basis of all the components of learning. The actions and reflexes of the learner become the main source of his or her learning, it aims at putting the learner in the centre of the educational process to fight against his or her failure. (Vygotski (1934/1997) and Bruner (1983)

To this end, the teacher must be able to create meaningful and learning didactic situations. Differentiate them so that each learner is solicited in his or her zone of close development. This means that the teacher should link knowledge to social practices that are part of the child's socio-cultural environment. The training frees itself from its field of subjects and accumulated knowledge to reach the desired level which Rogiers calls "la variété écologique" (Roegiers, 2008). This principle therefore consists of getting the learner to mobilise his or her knowledge by touching on his or her centres of interest, which enables him or her to contextualise the knowledge acquired and grasp its usefulness. The APC (Competency-Based Approach) is an asset for creating and giving meaning to schoolwork and the learner becomes an active subject in teaching and the craftsman of his own knowledge.

The aim is to develop the learner's ability to be autonomous. Bruner relies on the Vygostkian concept of the zone of proximal development and uses it to designate all of the supportive and guiding interactions implemented by an adult or another tutor to help the child solve a problem on his or her own that he or she did not know how to solve beforehand. He postulated that there are three modes of representation of the world in the child. These modes are the enactive mode, the iconic mode, and the symbolic mode. Bruner (2009 p.9), states that: "In the enactive or sensory-motor mode, information is obtained through action. Thus, the young child, who still has limited experience, will examine the elements around him/her through his/her senses" It is about learning "by doing". The child who tastes, for example, a banana or a watermelon, will know from now on by means of his tongue that these fruits are different in their flavours; hence, he will know that the banana and the watermelon are certainly sweet, and thereafter he will be able to identify them respectively by their particularities: sweet and juicy.

The iconic mode or iconic representation, according to (Bruner, 2009), is the second level of representation that the child acquires. Information is represented in terms of images. This second level extends the perceptual organisation by condensing the sensory data into images without the help of action; there is an internalisation of gestures and perceptions in the form of stable schemas.

The symbolic mode or symbolic representation is the third level to which the child has access. It is that of abstract representation, of a conceptualisation of situations. The information is represented in the form of an arbitrary and abstract schematisation (without any analogical place with the represented object). These modes are acquired successively by the child during its development, and are also modes of cognitive activity available to the adult.

4. PRESCHOOL: A PARTICULAR FRAMEWORK FOR DEVELOPMENTAL PSYCHOLOGY PRACTICE

Space in kindergarten is organised according to the requirements of each child and who they actually are. To be caring, the early childhood professional must not only know the development of the young child, but also adapt to the needs of each individual and take into account the potential of each individual so that he or she reaches the best of his or her abilities. To this end, the scaffolding activity is indispensable since it aims at the pupil's autonomy, encourages greater self-confidence and allows him to see his progress in learning. A certain interdependence between developmental psychology and the preschool environment is noted at this level. The teacher's expectations are sometimes very far removed from the child's abilities and, as a result, he or she labels the productions and attitudes of these young children as failures or lack of interest. By starting from what they know and not from the objectives that the teacher would like to achieve, success becomes easier. In this sense (Gaonach & Golder, 1995, p. 233)

“The new and important social experience that children have between the ages of 3 and 5 is when they enter the kindergarten, where they can experience a continuous and intense relationship with one or more other children. Once in the group, the child has to find his or her place by learning not only to collaborate or defend himself or herself, but also to express himself or herself through different activities.”
This means that the early childhood professional must understand that the second childhood is a special case that must he handled in a certain way and that in pedagogy requires a special treatment. The preschool as an experimental framework allows developmental psychologists to ensure the quality of services offered and to promote the development of the professions teachers and psychologists. It is thus understood that education in general has allowed psychology to have a status of science. Moreover, childhood was first the concern of pedagogues before becoming an object of psychology itself. The work of the first Cameroonian child psychologists, such as Tsala Tsala (1997), highlighted the positive effects of education in the understanding of psychology. In his words he says

“the promotion of a reflection and a science of childhood has been prepared by the practical and speculative evolution of pedagogy. Indeed, the definition and research of pedagogical objectives has contributed to orienting research on a mode of thought and perception specific to childhood .... From now on, knowledge on the child will benefit from the contribution of pedagogical reflection and practice” (Tsala Tsala, 1997, p. 7).

It is understood that teaching at the preschool level without taking into account developmental psychology data is tantamount to moving away from the epistemology of psychology and thus distorting the objective assigned to this level of teaching. The study concerned three Cameroonian kindergarten teachers who had a minimum of 15 years' experience in preschool. These so-called «application» teachers seem to master the reality of preschool and the implementation of the competency-based approach. This was based on interviews and observations of classroom practices.

5. SOME SPECIAL CASES OF PROFESSIONAL PRACTICE IN PRESCHOOL

A quick review of the previous facts leads to highlighting the life stories of practising professionals. The aim of the research was to put the professionals' practices into perspective. The analysis of the activities observed made it possible to identify a diversity of activities offered to the children at a given time during the school year. It allowed us to construct an initial typology of professionals who do not make explicit the issues of knowledge of letters. The results show that all the teachers find that kindergarten is the right time to start implementing the pedagogy of precedent.

For the majority of preschool teachers, project-based pedagogical practices, when sufficiently well mastered, predict later skills in compulsory learning. Project-based pedagogy consists in learning by doing, and doing is only what happens, what is experienced in a given cultural context. Participants have difficulty articulating the enactive mode in their practice. By observing them, we realise that the child does not manipulate the elements of learning, he/she undergoes them. Not taking into account these indicators in the practice will not allow the children to perceive the desired meaning or the notion to be developed. This difficulty in considering certain aspects persists when we even question the profile of the preschool teacher.

“In order to carry out the activity on sensory and perceptive education, with the theme of the child and the plant world, I start by presenting two juicy fruits to the children that I have chosen myself. For example, I present them with an orange and a lemon. Then I ask them who has already sucked an orange or a lemon? Some of them answer with a yes while others answer with a no. I then ask them who has ever sucked these two fruits. So I explain to them that the orange is sweet while the lemon is sour and they all repeat after me.” (M.C)

“Initially, I draw the fruits on the board such as a pineapple and an orange. The aim is to teach them vocabulary related to the texture of these fruits (spicy, smooth). Then I take the small toys that we have in the classroom that are shaped like a pineapple and an orange. They take turns touching them and I ask them what the pineapple feels like? They answer it stings. How does the orange feel? They answer it's smooth.” (Z.B)

Developmental psychology remains one of the key elements in professional practice. In this perspective, situations are proposed that involve: exploration of tactile qualities (rough, smooth, soft, sharp); tactile exploration of shapes and surfaces, including closing the eyes; exploration of gustatory and olfactory characteristics (textures, smells, flavours, etc.); exploration of visual characteristics of objects: (colours, intensities, bright/dull, light/dark oppositions). The activity of sensory and perceptual education enables the senses to be activated based on individual perceptions, to make information gathering more rational and to develop representations of the world based on perceived reality.

In the light of the above, we have noted that the failure to take into account the enactive mode in the teaching/learning process in the M.C and Z.B cases in preschool does not favour the acquisition of
knowledge by these preschool children. Bruner therefore thought that activities in the preschool should be conducted in a procedural mode in which techniques and procedures are sought to make the preschool child acquire knowledge. According to Tardif, this procedural mode corresponds to the how of the action, to the steps for carrying out an action, to the procedure for carrying out an action. It is exclusively a sequence of actions; for it is only in the action performed by himself that this knowledge can be developed.

The iconic mode, or iconic representation, is the second level of representation that allows the preschool child to learn. The subject constructs representations about objects in the real world that are independent of the actions that can be performed on them. The results of the fieldwork reveal that the teachers have difficulties in teaching through this practice. This supposes that there is no internalization of gestures and perceptions in the form of stable schemas. Bruner (1983) thinks that for a better practice the teacher must illustrate with a concrete or semi concrete object. The examples must be diversified according to the age of the learners at this level. Practising project-based pedagogy means referring to a plurality of concrete aspects that are part of the child's psychology.

In order to do this, the preschool teacher must master the characteristics of the child's thinking ability at this age. If learning means establishing links, the teacher must be capable of doing so, in short, of trying. Preschool professionals are indifferent as to the knowledge of the subject to be taught, and in this sense a teacher of the Preschool section states "I think that you don't have to know psychology to teach at nursery school. I met a bit of psychology at ENIEG, but that's not what makes me a good teacher here, there are things that I learn from myself; and you can know the child without going into depth". This teacher's statement makes it possible to realise how difficult it is for preschool children to learn independently, when they are faced with professionals who have no real knowledge of the child. The Cameroonian nursery school is now the school of the resourceful, of those who try, of those who can replace a "baby sister". Indeed, the concept of professional gesture develops an approach to the teaching action that goes beyond professional skills to take an interest in the singularity of the individual, his or her biography and the specificity of professional situations. Enriched by the notions of postures and adjustment in action, the concept of professional gestures allows a comprehensive approach to work situations in which the professional reveals the meaning and values that drive him or her during his or her professional commitment.

Developmental psychology should enable preschool teachers to realise that the classroom is a living space that needs to be organised in order to encourage autonomy in young children. A preschool teacher is above all an organiser of learning situations, which the children may or may not grasp. Thus, the teacher, like the trainer, does not have the task of getting the learners to learn, but rather to ensure that they can learn. Their task is not to take charge of learning, which is beyond their power, but to take charge of creating the conditions in which learning is possible.

In this space, it is about organising a learning situation enabling each pupil to acquire a skill. This one mobilizes in interactions knowledge, abilities and attitudes on the part of the learner. In this space, thus organised, the learner must find all the elements necessary for the acquisition of the chosen competence through learning. This is the mastery of development. The cognitive development of the child and the adolescent is evoked here with reference to Piaget's socioconstructivist theory. The teacher must be able to articulate the different adaptation mechanisms of accommodation and assimilation; the teacher must master reciprocal assimilation and generalising assimilation.

The child adapts to the demands of reality because the environment imposes information on the individual, which forces him to modify his behaviour in order to understand and master the environment. The reconstruction of the world of objects on the level of representation starts from the child itself towards the outside. The child's thinking is therefore egocentric. It is important to take account egocentrism, particularly in its logical form (which appears through syncretism) and in its ontological form, (the way the child perceives reality). It reflects the child's reasoning and knowledge of things, and will be manifested in particular in verbal conduct expressing perceptual realism, which consists in attributing subjective characteristics to external reality), animism and many other facts (Bee and Boyd, 2017). The teacher needs to master the objectives and characteristic of this age.

According to Bruner, symbolic representation involves language; insofar as the child of this age learns to evoke objects or situations not perceived in the present. According to Piaget, it is a matter of the child gaining access to symbolic thought, which is defined as the ability to evoke absent objects or situations in the form of symbols. The establishment of the symbolic function will enable the child to situate himself in the pre-operative period during which access to symbols will enable him to mentally represent objects. What he
had learned through action will become a mental representation. The action becomes reflective, internalized. The teachers experience difficulties in this sense, the teacher of the Nursery class says

“I think that when we are in kindergarten, we follow a program and a division in the educational basin, so even if we do not do everything that psychology says we can still get by, I think that everyone does psychology in the normal school and the other deep things of psychology do not interest me is what is taught with all the theories of psychology, and to tell the truth psychology is too theoretical, I say that I do not find its importance here in the classrooms”

The progress made shows a disappearance of the binary structure with: more complex substitutions, appearance of temporality, coordination, more complex questioning, use of subordinates (of place, of cause), more frequent games of displacement (of words in the sentence). The teacher, through her professional gestures, must consider language as a condition of coherence and stability of the young child's representations. Language occupies an important place when we know that there are preschool professionals who do not even make the child speak.

Language is a necessary emotion. At the psychological level, since the child is considered a social being, the absence of emotional contact can be greatly detrimental to his or her development and survival. In the kindergarten classroom, the young learner must find all the elements necessary for the acquisition of the chosen skill. This means that whether or not the teacher is present, the classroom, through professional gestures and thanks to the elements of developmental psychology, should allow the pupil to transform it into a learning space in which he or she lives experiences to which he or she must adapt. To adapt is to learn. Education is not a reserved field; it is open to other fields specifically developmental psychology.

CONCLUSION
At the end of the analysis, it turns out that the professional gestures used by kindergarten teachers pose a problem for learning in second childhood, insofar as they do not master the psychological functioning of the child of this age. This can be seen in the fact that they reduce the sensory and perceptual education sessions to vocabulary and speech activities. There is therefore a failure in pedagogical practices whose different modes of cognitive activity are the enactive mode, the iconic mode and the symbolic mode. According to Bruner (2000; 2002) these modes of cognitive activity enable children to develop their sensory acuity (senses), to represent something without having it in front of them, to communicate their thoughts to themselves and to others, to say what they are doing and what they think they are doing. This being said, as long as the experimental data of developmental psychology do not become the guiding principle of the preschool child, the realization of the pedagogical act will always remain precarious.

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