104 - DEVELOPMENT OF FUNDAMENTAL MOTOR SKILLS IN READINESS STATE FOR ALPHABETIZATION: A COMPARISON WHITH 6-YEAR-OLD STUDENTS

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INTRODUCTION

Childhood is a child's most intense period, when there are fantasies, body movements, ludic behaviour... when there is the interest to know, touch, feel... in order to learn.

According to Freire (1994), "the act of getting to know is as vital as to eat and sleep, and I can't eat or sleep for someone else. This get-to-know act is the preparation for child's development as a whole in its socio-cultural aspect.".

In today's society, children stay more and more enclosed in their apartments and change activities that require more body movement for video games, for example. With that come the troubles caused by the lack of stimilus for the motor abilities, leading to a gestural and mimical impoverishment.

For Gallahue and Ozmum (2003), the cognitively and physically normal child progress in their development in a sequential way, influenced both by maturity and experience, that means, "environmental conditions, including oportunities for practice, encouragment and learning are essential for the development of mature fundamental movement standards."

Creative spontaneity and availability translate the possibility that the organism so educated has to react globally to an emergency situation according to its previous experience. If this spontaneity expresses itself initially at the level of motor and affective behaviour, it will be translated later on by the attitude of the organism to carry out new syntheses and explore at the mental level what it has experienced at the body level. (LE Bouch, 2001).

According to Freire (1994), for a child in their first childhood, body action must prevail over mental action. The child has just started to learn to think, whereas they should already be an expert in body action. Teachers should be permanently concerned with the motor abilities. They should ensure that their students can run, jump, turn, roll, balance, etc. Therefore they shoudn't forget that these abilities are the expression of a human being, an integrated organism.

Integration of movement through ludic activities and handling of concrete materials favour motor development and abstraction capacity. It is from this moment on that the child begins to learn the basic concepts together with the body "self". Therefore it is the teacher's intervention and objectives together with parents and the environment that will make the difference in this base development.

This base education for the beginning of alphabetization has to do with a well stimulated psycho-motor education. Lê Bouch (2001) says that this base is essential to any normal or with-problem child, as it guarantees the functional development, according to the child's possibilities, and favours their affectivity to expand and balance itself through interchange with the human environment through stimulus assimilation and accomodation.

Readiness is determined by children's primary contacts with culture as well as the nature of their interaction with the social and cultural elements. When a child is helped by an adult to solve a problem, they show a significant difference in their development. (OLIVEIRA, 2006).

Psycho-motor Education

Psycho-motor education aims at helping the child to get an operatory body image, referring not only to the content but also to the structure of the relation among the parts and the whole body, and an organizing unity, instrument of relation to reality, because it is through the body "self" awareness that the child will have the capacity to interiorize and the awareness and expression of exterior data. (TISI, 2004).

Some authors like Oliveira (2001), Fonseca (1995), state that psycho-motor abilities are developed in an hierarchized way and that, duly stimulated, they allow the child to develop completely their cognition. These abilities, despite being hierarchized, must be continuously shaped in the child, as psycho-motor work does not finish with the satisfactory accomplishment of the activities for now. It is necessary to gradually increase the difficulty level according to the child's progress in terms of abilities.

"Psycho-motor education must be considered as base education at elementary school. It determines every pre-school and school learning; it leads the child to be aware of their body and laterality, place themselves in space, master time, skillfully achieve the coordination of their gestures and movementes and it develops child's intelligence as well. It must be practised since early childhood, perseveringly carried out. It allows to prevent inadaptations, which are very difficult to correct once structured." (LÊ BOUCH, 2001)

From the proper stimulation of these abilities in a ludic way through fun, games, music, passages, messengers among others, the child will probably have a satisfactory development, both at motor and cognitive level, making it easier to carry on the teaching-learning process.

Psycho-motor function and "Readiness" for Alphabetization

Psycho-motor function in infantile education, allows, according to Tisi (2004), to adjust the individual coordination or coordination with other children. As for the school, the priority must be the ludic motor activity, source of pleasure, allowing the child to continue their organization regarding the development of perceptive analysis attitudes.

During infantile education the child undergoes stimulations to be "prepared" for alphabetization as soon as they get to elementary school. With that the child needs to acquire some capacities which are necessary for alphabetization, such as auditory perception, symbolic relation between two objects, and learn the meaning through exploration, stimulation (listen and represent), understand the concept of word and overcome their difficulty to infer vocable units and/or wrong allocation of vocable frontier and recognize sentences (LEMLE,2002).

Besides these capacities that the child will acquire during the process of preparation for alphabetization, it is necessary that the child already has basic motor maturity to understand and direct writing and reading (from left to right).

According to Drovet (1990), the child is ready to learn when they present a set of conditions, capacities, abilities and

aptitudes considered prerequisites for the beginning of any learning process. These prerequisites are acquired during child's development according to the stimulation that they get. At 6 it is expected that the child has already acquired such abilities to join the beginning od the alphabetization process. This process should start according to the development and not to the age. As the alphabetization begins, the child must undergo assessment to check their capacities, aiming at finding out difficulties and motivate them.

According to Valett, quoted by Dovet (1990), the prerequisites for alphabetization are grouped in six big development areas: development of general motor functions, motor-sensorial interaction, motor-perceptive abilities, language development, conceptual abilities and social abilities.

"It is necessary to check the level of maturity of specific functions for the beginning of six-year-old students' alphabetization who join school. The coherent and desirable solution to make the students able to be alphabetized would be to institute compulsory infantile education for children aged 3 years old up, where tey could get any necessary stimulation for their full development." (Drovet,1990).

Importance of the Teacher

Tisi (2004) tells about the importance for teachers to work together, looking for the same objective, which is children's full development. "Physical education plays an important role in education, as its mainly purpose is to organize the neuro-psychological functions. It aims at the same time to favour the manifestation of individual aptitudes and the acquisition of capacities drawn from human patrimony."

For Daole (1995), teachers are social players and their importance is anchored on a set of representations whose base is their concrete experience in the world..

Education's mainly activity is part of culture transmission and aims at changing the individual, adding knowledge, developing certain understanding and appreciation, allowing students to be to able to carry on activities that they wouldn't be able to otherwise. The child knows their environment so that they can change both qualitatively and quantitatively according to to their adaptative interaction as they grow up. (ROBERT E VALET, 1977)

This child's interaction with knowledge happens through stimuli, interventions, suitable guidance and adjustment, wich facilitate their learning. The agents of this process are the teachers.

As teachers grow aware of the importance of interdisciplinarity and integration among themselves, the teaching-learning process will be better and richer. /

METHODOLOGY

Sample

20 six-year-old students of a municipal school in Ipatinga, MG, Brazil, participated in this study and seven ot these didn't undergo infantile education, that means, they started going to school at first grade of first cycle . The other 13 underwent at least one year of infantile education.

Tools and Proceedings

To assess motor development, it was used Gallahue and Ozmun's test (2003) corresponding to 6-year-old age, through 6 motor abilities conveniently chosen: dynamic balance, jump, kick, run, throw and catch. The results were used according to author's classification: S starter, E elementary and M mature.

The assessment took place in the school's yard through a circuit., where the assesser observed and asked the student to repeat the movement, if necessary, according to authors's instructions.

To evaluate students's readiness for alphabetization it was used Hildret and Griffiths's R Shape Metropolitan Promptness Test (MPT) adapted and stantardized by Poppovic (1966). This test has 6 subtests: word, sentence, information, similarity, number and copy tests, with a supplementary one: "draw a man". PMT test aims at analysing vocabulary, concentrated attention capacity, visual and auditive perception, visual-motor correlation, movement coordination, tendance for inversion and necessary elements to learn mathematics.

The assessment took place in group, in students' classroom, during regular class time, following all aplication intructions, according to PMT manual.

The results encountered were used in combination with PMT classifaction table.

Ethical Precautions

To use the data it was requested authorization from the Municipal Education Office of Ipatinga MG, Brazil, as well as a free declaration signed by students's parents. The necessary care was taken to preserve participants' identities, as well as their physical and moral integrity.

RESULTS AND DISCUSSION

The aim of this study was to compare students that did not undergo infantile educationt to students who underwent at least 1 year of infantile education, regarding the development of their fundamental motor abilities and their "readiness" for alphabetization.

According to the table below, the students number 8, 9, 13, 15, 16, 19 e 20 didn't undergo infantile education, they started their school trajectory at the first year of elementary school (6 years old). The students number 1, 2, 3, 4, 5, 6, 7, 10, 11, 12, 14, 17 and 18 had at least one year of infantile education.

The table below shows the students' classification according to Gallahue and Ozmun (2003)'s six fundamental motor abilities tests in the phases: S starter, E elementary, M mature. According to the authors, students of this age range (six years) should be at "mature" phase for these abilities. At PMT, the students should be at least in the "medium" classification to have a satisfactory performance, according to Popovic (1966).

STUDENTS	FUNDAMENTAL MOTOR ABILITIES						T.M. READINESS
	Dynamic balance	Jump	Kick	Run	Throw	Catch	
1	E	E	E	M	E	E	MEDIUM
2	E	E	E	M	E	E	MEDIUM
3	E	E	M	M	M	M	M.INFERIOR
4	E	E	M	M	M	M	MEDIUM
5	E	E	M	M	M	M	SUPERIOR
6	E	E	E	M	M	M	SUPERIOR
7	E	E	M	M	E	E	MEDIUM
8	I	I	E	E	E	E	INFERIOR
9	I	I	E	E	E	E	INFERIOR
10	E	E	E	E	E	E	MEDIUM
11	E	E	M	M	M	E	MEDIUM
12	E	M	E	M	M	E	SUPERIOR
13	E	E	E	M	M	M	M. INFERIOR
14	E	M	M	M	M	E	MEDIUM
15	I	I	E	E	E	I	M.INFERIOR
16	E	E	E	E	E	E	M.INFERIOR
17	E	E	M	M	M	M	MEDIUM
18	E	E	M	M	M	E	MEDIUM
19	I	I	E	E	E	I	M.INFERIOR
20	I	I	I	E	E	E	M.INFERIOR

According to Gallahue and Ozmun, a more detailed evaluation is recommended for children who present abilities in the classification Starter and Elementary in general in order to identify exactly which part of child's body is slow. According to the authors, six-year-old children should have these abilities in phase “mature”.

In the table above we can observe that the 8, 9, 13, 15, 16, 19 e 20 students are those who didn't undergo infantile education. They present a level of motor development inferior to the expected for their age, that means, they present motor abilities in the classifications “Starter” and “Medium-inferior”. At MPT these same children are at levels “Inferior” or “Medium-inferior”, which shows that there is a relation between motor learning and readiness for alphabetization, that is, we conclude for the importance of body experience and psycho-motor abilities as a preparation for the beginning of the alphabetization process.

Student 3, despite presenting only two abilities in elementary and having undergone infantile education, presents level “Medium-inferior” regarding readiness for alphabetization. This result, according to Popovic, identifies a slower maturity level and point to emotional facters.

The other students, (1, 2, 3, 4, 5, 6, 7, 10, 11, 12, 14, 17 e 18) despite having undergone infantile education, don't present satisfactory motor development for their age according to the expected in the fundamental motor test, that means, no student presented “mature” phase in all assessed abilities. We conclude, therefore, for the need to improve these abilities in order to improve the students' development as well..

CONCLUSION

With the obtained results we notice a direct relation between psycho-motor education and “readiness” for alphabetization, that is, students who underwent infantile education had “medium” classification for readiness for alphabetization at PMT (9 students), “superior”(3 students) and only one student in the “medium-inferior” classification, which, according to Poppovic might be due to a slower maturity level or emotional factors. The same students presented only “elementary”and “mature” phases at the Fundamental Motor Ability Test.

The students who didn't undergo infantile education presented classifications “inferior” and “medium-inferior” at PMT and more than one ability in starter phase at the Fundamental Motor Ability Test.

This result shows the imporatance of the base work mentioned by several authors, that is, the importance of psycho-motor ability stimulation for a good school development, mainly to start alphabetization.

It shows as well that authorities and parents are aware of the importance of infantile education schools and the benefits they bring for children development.

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DEVELOPMENT OF FUNDAMENTAL MOTOR SKILLS IN READINESS STATE FOR ALPHABETIZATION: A COMPARISON WHITH 6-YEAR-OLD STUDENTS

ABSTRACT

This study aimed to compare six-year- old students who didn't undergo infantile education to students who, at least, had a one-year infantile education, in terms of their fundamental motor ability development and their "promptitude" for literacy. 20 (twenty) students aged six years old, both male and female, took part in the study and, among them, seven didn't undergo infantile education. In order to evaluate the fundamental motor abilities, Gallahue and Ozmun test (2003) was used, correspondent to the age of six years old, through six chosen abilities in a convenient way: dynamic equilibrium, jump, kick, run, throw and catch. To evaluate the students' promptitude for literacy, the "R Type Promptitude Test" (TMP) by Hildret and Griffiths was used with adaptation and standardization by Poppovic (1966).

Through the obtained results, it's noticed a direct relation between psycho-motor education and "promptitude" for literacy, that means, students who underwent infantile education had "medium" (9 students), "superior" (3 students) and "medium-inferior" (only one student) classifications regarding their promptitude for literacy according to the TMP test. Poppovic analyses the only "medium-inferior" classification as a consequence of a slower degree of maturity and/or emotional reasons. These same students were placed in the "elementary" and "mature" phases. Students who didn't undergo infantile education were placed in the TMP test, in the "inferior" and "medium-inferior" classifications and in the Fundamental Motor Ability Test they presented more than one ability in the initial phase.

Keywords: psycho-motory, promptitude and Literacy.

DÉVELOPPEMENT DES HABILETÉS MOTRICES FONDAMENTALES ET ÉTAT DE "PROMPTITUDE" POUR L'ALPHABÉTISATION: UNE COMPARAISON PARMI DES ÉLÈVES DE SIX ANS

RÉSUMÉ

Le but de cette étude a été comparer des élèves de six ans qui ne sont pas passés par l'éducation infantile à des élèves qui ont eu, au minimum, un an d'éducation infantile, concernant le développement de leurs habiletés motrices fondamentales (HMF) et leur "promptitude" pour l'alphabétisation. 20 (vingt) élèves de six ans, des sexes masculin et féminin, dont sept ne sont pas passés par l'éducation infantile et treize ont eu au moins un ans d'éducation infantile ont participé de l'étude. Pour évaluer les HMF, on a utilisé le test de Gallahue et Ozmun (2003) correspondant à l'âge de six ans, au travers de six habiletés choisies de façon convenable: équilibre dynamique, sauter, donner de coups de pieds, courrir, lancer et attraper. Pour évaluer la promptitude pour l'alphabétisation, on a utilisé le "Test de Promptitude Forme R" (TMP) de Hildret et Griffiths, adaptation et standardisation de Poppovic (1966). On a vérifié une rélation directe entre éducation psychomotrice et "promptitude" pour l'alphabétisation, c'est-à-dire, les élèves qui sont allés à l'école infantile, ont eu, pour la promptitude, un TMP "moyen" (9 élèves), "supérieur" (3 élèves) et seulement un élève "moyen inférieur", ce que, selon Poppovic, peut être dû à un dégré de maturité plus lent ou à des facteurs émotionnels. Ces élèves ont présenté les fases "élémentaire" et "mûre", et aucune habileté dans la phase "initiale". Les élèves qui ne sont pas allés à l'école infantile ont eu un TMP au niveaux "inférieur" et "moyen inférieur" et ont eu plus d'une habileté dans la fase initiale pour les HMFs.

Mots-clés: motricité, promptitude et alphabétisation

DESARROLLO DE LAS HABILIDADES MOTORAS FUNDAMENTALES Y ESTADO DE "PRONTITUD" PARA LA ALFABETIZACIÓN: UNA COMPARACIÓN ENTRE ALUMNOS DE SEIS AÑOS

RESUMEN

Este estudio tuvo como objetivo comparar alumnos de seis años que no pasaron por la educación infantil con alumnos que estuvieron por lo menos un año en la educación infantil, cuanto al desarrollo de las habilidades motoras fundamentales (HMF) y la "prontitud" para la alfabetización. Participaron del estudio 20 (veinte) alumnos con edad de seis años de los sexos masculino y femenino. De esos, siete no pasaron por la educación infantil y trece estuvieron por lo menos un año en la educación infantil. Para evaluar las HMFs, se utilizó el test de Gallahue y Ozmun (2003) correspondiente a la edad de seis años, a través de seis habilidades elegidas de forma conveniente: equilibrio dinámico, brincar, chutar, correr, lanzar y coger. Para evaluar la prontitud para la alfabetización, se utilizó el "Test de Prontitud Forma R" (TMP) de Hildret y Griffiths, con adaptación y estandarización de Poppovic (1966). Se verificó una relación directa entre la educación psíquicomotora y la "prontitud" para la alfabetización, o sea, alumnos que pasaron por la educación infantil tuvieron, para la prontitud, la clasificación "medio" (9 alumnos), "superior" (3 alumnos) y solamente un alumno "medio inferior" en el TMP. Según Poppovic, este último puede tener resultado de un grado de maturidad más lento y/o de factores emocionales. Estos mismos alumnos presentaron las HMFs en las fases "elemental" y "maduro" y ninguno en la fase "inicial". Los alumnos que no pasaron por la educación infantil presentaron el TMP en las clasificaciones "inferior" y "medio inferior" y en las HMFs presentaron más de una habilidad en la fase inicial.

DESENVOLVIMENTO DAS HABILIDADES MOTORAS FUNDAMENTAIS E ESTADO DE "PRONTIDÃO" PARA ALFABETIZAÇÃO: UMA COMPARAÇÃO COM ALUNOS DE SEIS ANOS

RESUMO

O objetivo do estudo foi comparar alunos de seis anos que não passaram pela educação infantil com alunos que tiveram no mínimo um ano na educação infantil quanto ao desenvolvimento das habilidades motoras fundamentais (HMF) e a "prontidão" para a alfabetização. Participaram do estudo 20 (vinte) alunos com idade de seis anos do sexo feminino e masculino, desses, sete não passaram pela educação infantil e treze alunos tiveram no mínimo um ano na educação infantil. Para avaliar as HMF, foi utilizado o teste de Gallahue e Ozmun (2003) correspondente à idade de seis anos, através de seis habilidades escolhidas de forma conveniente: equilíbrio dinâmico, saltar, chutar, correr, lançar e pegar. Para avaliar a prontidão para alfabetização, foi utilizado "Teste de Prontidão Forma R" (TMP) de Hildret e Griffiths, adaptação e padronização de Poppovic (1966). Verificou-se uma relação direta entre educação psicomotora e "prontidão" para a alfabetização, ou seja, alunos que passaram pela educação infantil tiveram a classificação quanto a prontidão segundo o TMP em "médio" (9 alunos), "superior"(3 alunos) e apenas um aluno na classificação "médio inferior" que, segundo Poppovic, pode ser em decorrência de um grau de maturidade mais lenta e ou fatores emocionais. Estes mesmos alunos nas HMF apresentaram-se na fase "elementar"e "maduro", em nenhuma habilidade na fase "inicial". Os alunos que não passaram pela educação infantil apresentaram no TMP na classificação "inferior" e "médio inferior" e nas HMF apresentaram mais de uma habilidade na fase inicial.

Palavras chaves: motricidade, prontidão e alfabetização.