

LITERACY PRACTISES IN KINDERGARTENS AND CONCEPTUALISATIONS ABOUT WRITTEN LANGUAGE AMONG PORTUGUESE PRESCHOOL CHILDREN

MARGARIDA ALVES MARTINS

Instituto Superior de Psicologia Aplicada, Lisboa, Portugal

Abstract. Our aim was to characterise the relationships between literacy practises developed in Portuguese kindergartens and children's conceptualisations about the functions and nature of written language. The participants were 16 kindergarten teachers and 160 five-year-old children – i.e. a 1:10 teacher/child ratio. We developed an observation grid to characterise their literacy practises. It covers two main aspects of the teachers' work: reading, writing and metalinguistic practises (14 items) and ways of supporting children's attempts to read and write (16 items). It was used by two observers who spent two weeks in the kindergartens. The kindergarten teachers were divided into three groups depending on their literacy practises. In order to characterise the children's conceptualisations about written language, in October and May we assessed both their perceptions of the objectives and functions of written language and their invented spelling. The results show that there are close relationships between literacy practises pursued by the three groups of kindergarten teachers and the children's conceptualisations about written language.

Keywords: literacy practices, conceptualisations, written language, preschool children

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Correspondence to Margarida Alves Martins, Instituto Superior de Psicologia Aplicada, (Higher Institute of Applied Psychology - I.S.P.A.), Rua Jardim do Tabaco, 34, 1149-041 Lisboa, Portugal. E-mail: mmartins@ispa.pt

Chinese

[Translated by Shek Kam Tse]

論文摘要：研究的目標，是要探討由葡萄牙幼稚園發展的語文活動，和兒童對書面語言的本質和功能的概念，兩者之間的關係。

參與研究共有 16 名幼稚園教師和 160 名五歲的兒童，即 1 名教師對 10 兒童的比例。我們發展了一套觀察框架去研究這些語文活動。研究涵蓋了教師工作的兩大方向：閱讀、寫作和原語言學的訓練活動（14 條題目）、支援兒童嘗試讀寫的方法（16 條題目）。觀察框架由兩位觀察員，用兩個星期時間到校觀課時使用。根據幼稚園教師的語文活動，被分為三組。為了能把兒童對書面語的概念分辨出來，我們在十月和五月，兩次評估他們對書面語的目的和功能的看法，還有他們於自創拼寫的表現。研究結果顯示，三組幼稚園教師的語文活動和他們的學生對書面語的概念有緊密的關係。

關鍵詞：語文活動、概念、書面語、學前幼兒

Dutch

Samenvatting [Translated by Tanja Janssen]

Ons doel was het kenschetsen van de relaties tussen geletterdheidspraktijken op Portugese kleuterscholen en de voorstellingen die kinderen hebben over de functie en aard van geschreven taal. Aan het onderzoek namen 16 leerkrachten en 160 vijfjarige kinderen deel: een leerkracht/kind-verhouding van 1 op 10. We ontwikkelden een observatieschema om hun geletterdheidspraktijken te karakteriseren. In het schema zijn twee hoofdaspecten van leerkrachtgedrag onderscheiden: lezen, schrijven en metalinguïstisch gedrag (14 items) en manieren waarop pogingen tot lezen en schrijven van kinderen ondersteund worden (16 items). Twee observatoren gebruikten het schema gedurende twee weken. De leerkrachten werden onderverdeeld in drie groepen op basis van hun geletterdheidspraktijk. Om de voorstellingen van geschreven taal van de kinderen te karakteriseren, onderzochten wij op twee momenten, in oktober en in mei, hun percepties van de doelen en functies van geschreven taal en hun zelfverzonnen spelling. De resultaten laten zien dat er een nauwe samenhang is tussen geletterdheidspraktijken van de drie groepen leerkrachten en de voorstellingen die kinderen zich maken van geschreven taal.

French

Résumé [Translated by Laurence Pasa]

Notre but était de caractériser les rapports entre les pratiques d'éveil à l'écrit développées dans les écoles maternelles portugaises et des conceptualisations des enfants au sujet des fonctions et de la nature de la langue écrite. Notre échantillon se compose de 16 enseignants de maternelles et 160 enfants âgés de 5 ans – soit un ratio de 1/10 enseignant/enfant. Nous avons élaboré une grille d'observation permettant de caractériser les pratiques d'éveil à l'écrit. Celle-ci couvre deux aspects principaux du travail des enseignants : la lecture, l'écriture et les pratiques métalinguïstiques (14 items), ainsi que les types d'aides apportées aux apprentis lecteurs et scripteurs (16 items). Elle a été utilisée par deux observateurs qui ont passé deux semaines dans les écoles maternelles. Les enseignants ont été divisés en trois groupes selon leurs pratiques d'éveil à l'écrit. Afin d'étudier les conceptualisations des enfants à propos du langage écrit, en octobre et en mai, nous avons évalué leurs perceptions des objectifs et des fonctions de la langue écrite, ainsi que leurs productions en écriture inventée. Les résultats montrent qu'il y a des rapports étroits entre les pratiques d'éveil à l'écrit mises en œuvre par les trois groupes d'enseignants et les conceptualisations qu'ont les enfants sur la langue écrite.

Mots-clés : pratiques d'éveil à l'écrit, conceptualisations, langage écrit, enfants préscolaires

German

Zusammenfassung [Translated by Irene Pieper]

Unser Ziel bestand darin, das Verhältnis zwischen literalen Praxen in portugiesischen Kindergärten und den kindlichen Konzeptualisierungen der Funktionen und der Natur geschriebener Sprache zu charakterisieren.

An der Studie nahmen 16 Kindergarten-Erzieherinnen und 160 Kinder im Alter von fünf Jahren, also ein Verhältnis ErzieherIn/Kind von 1:10. Wir entwickelten zunächst ein Beobachtungsraster, um die literalen Praxen zu charakterisieren. Dieses Raster deckt zwei zentrale Aspekte der Arbeit der Lehrenden ab: zum einen den Bereich Lesen, Schreiben und metalinguistische Praxen (14 Items) und zum anderen die

Förderung von kindlichen Lese- und Schreibversuchen (16 Items). Das Raster wurde von zwei Beobachtern eingesetzt, die zwei Wochen in den Kindergärten verbrachten. Abhängig von ihren literalen Praxen ließen sich die Erzieherinnen in drei Gruppen unterteilen. Um die kindlichen Konzeptualisierungen der geschriebenen Sprache charakterisieren zu können, erhoben wir im Oktober und Mai ihre Wahrnehmungen der Ziele und Funktionen geschriebener Sprache und ihre Spontanschreibungen. Die Ergebnisse zeigen enge Beziehungen zwischen literalen Praxen der drei Gruppen von Lehrenden und den kindlichen Konzeptualisierungen geschriebener Sprache.

Greek

Metafrase [Translated by Panatoya Papoulia Tzelepi]

Ο στόχος μας ήταν να χαρακτηρίσουμε τη σχέση μεταξύ των πρακτικών γραμματισμού που αναπτύχθηκαν στο Πορτογαλικό Νηπιαγωγείο και των εννοιολογήσεων των παιδιών για τις λειτουργίες και τη φύση της γραπτής γλώσσας. Οι συμμετέχοντες ήταν 16 δάσκαλοι νηπιαγωγείου και 160 παιδιά πέντε ετών, δηλαδή αναλογία δασκάλων/παιδιών 1/10. Αναπτύξαμε ένα εργαλείο παρατήρησης για να χαρακτηρίσουμε τις πρακτικές γραμματισμού που καλύπτει δύο κύριες όψεις της εργασίας του δασκάλου: ανάγνωση, γραφή και μεταγλωσσικές πρακτικές (14 στοιχεία) και τρόπους υποστήριξης της απόπειρας του παιδιού να γράφει και να διαβάζει (16 στοιχεία). Χρησιμοποιήθηκε από δύο παρατηρητές που έμειναν δύο εβδομάδες στο νηπιαγωγείο. Οι δάσκαλοι του νηπιαγωγείου χωρίστηκαν σε τρεις ομάδες ανάλογα με τις γλωσσικές τους πρακτικές. Για να χαρακτηρίσουμε τις εννοιολογήσεις των παιδιών για τη γραπτή γλώσσα, αξιολογήσαμε τόσο τις αντιλήψεις τους για τους στόχους και τις λειτουργίες της γραπτής γλώσσας, όσο και την επινοημένη γραφή κατά τους μήνες Οκτώβριο και Μάιο. Τα αποτελέσματα δείχνουν ότι υπάρχει στενή σχέση μεταξύ των πρακτικών γραμματισμού που εφαρμόζονται από τους δασκάλους των τριών ομάδων και των εννοιολογήσεων των παιδιών για τη γραπτή γλώσσα.

Polish

Streszczenie Translated by Elzbieta Awramiuk]

Naszym celem było scharakteryzowanie związku między rodzajem ćwiczeń w czytaniu i pisaniu wdrażanych w portugalskich przedszkolach a dziecięcymi konceptualizacjami na temat funkcji i natury języka pisanego. W badaniach udział wzięło 16 przedszkolnych nauczycieli oraz 160 pięcioletnich dzieci, co daje proporcję 10 uczniów przypadających na 1 nauczyciela. Aby scharakteryzować sposoby pracy nad czytaniem i pisaniem, skonstruowaliśmy formularz obserwacyjny. Obejmuje on dwa główne aspekty pracy nauczyciela: czytanie, pisanie i ćwiczenia metalingwistyczne (14 punktów) oraz sposoby wspierania dziecięcych prób czytania i pisania (16 punktów). Formularz został wykorzystany przez dwóch obserwatorów, którzy spędzili dwa tygodnie w przedszkolach. Nauczyciele przedszkolni zostali podzieleni na trzy grupy ze względu na stosowane przez nich sposoby nauczania czytania i pisania. W celu scharakteryzowania dziecięcych konceptualizacji na temat języka pisanego w październiku i maju oceniliśmy postrzeganie przez dzieci celów i funkcji języka pisanego oraz ich spontaniczną pisownię. Rezultaty wskazują na ścisły związek między stosowanymi w trzech grupach przedszkolnych nauczycieli sposobami nauczania umiejętności czytania i pisania a dziecięcymi konceptualizacjami na temat języka pisanego.

Stowa-klucze: sposoby nauczania czytania i pisania, konceptualizacje, język pisany, dzieci w wieku przedszkolnym

Portuguese

Resumo [Translated by Paulo Feytor Pinto]

O nosso objectivo foi o de caracterizar as práticas de literacia desenvolvidas em jardins de infância e relacioná-las com a evolução das conceptualizações das crianças sobre as funções e a natureza da linguagem escrita. Os participantes foram 16 educadoras de infância e 160 crianças de 5 anos (10 por educadora). As práticas foram caracterizadas através de uma grelha de observação por nós desenvolvida constituída por 30 itens: 14 que se referem à frequência com que os educadores desenvolvem várias actividades de leitura, de escrita e de reflexão metalinguística e 16 que se referem à frequência com que os educadores apoiam tentativas de leitura e de escrita das crianças e de que forma o fazem.

Esta grelha foi usada por dois observadores durante duas semanas. Na sequência desta observação, as educadoras foram divididas em 3 grupos consoante as práticas de literacia desenvolvidas. Para caracterizar as conceptualizações das crianças sobre linguagem escrita foi avaliada, no início e no final do ano lectivo, a sua percepção sobre as funções da linguagem escrita e as suas conceptualizações sobre as rela-

ções entre o oral e o escrito. Os resultados mostram que existem fortes relações entre as práticas desenvolvidas e a evolução das conceptualizações das crianças.

Palavras-chave: Práticas de literacia; conceptualizações; linguagem escrita; crianças em idade pré-escolar.

1. INTRODUCTION

Long before they formally learn to read and write, children question and hypothesise about the functions and nature of written language. They do so via a whole range of situations in which they interact with written language and with people who master and use it in their daily lives. The interactions with significant people about reading and writing have a great impact on children's literacy development (Goodman, 1985, 1996; Hiebert & Raphael, 1998; Teale & Sulzby, 1986).

When they first go to school, some children already have a range of experiences that enable them to interiorise the various functions of written language and to develop their capabilities to be real users of that language's communicative wealth in all its different forms. Others arrive at school without having had the opportunity to take part in situations in which written language has played a major role. To the latter, written language is not part of their affective and cognitive world – it has no meaning.

However, the construction of meanings and reasons to learn to read and write – the process that Chauveau and Rogovas-Chauveau (1989, 1994, 2001) called a personal reader/writer project – is fundamental when it comes to doing so. Early contacts with functional uses of written language determine the relationship that children are going to establish with their learning of that language.

Ferreiro (1984, 1988) and Ferreiro and Teberosky (1979) were among the first researchers to study children's early conceptualisations about the nature of written language.

Their work suggests that children's knowledge of written language evolves in a process over the course of which children think about the nature of writing and build up conceptual hypotheses that reflect an active reconstruction of the logic of the units that are represented by written language.

With a few differences derived from the particular characteristics of each language and with variations in the names by which the authors in question designate the various phases of evolution, this evolutionary path has been identified for a wide range of languages, including English (Sulzby, 1986), French (Besse, 1996; Chauveau & Rogovas-Chauveau, 1994; Fijalkow, 1993), Hebrew (Tolchinsky, 1995), Italian (Pontecorvo & Orsolini, 1996), Portuguese (Alves Martins, 1993; Alves Martins & Quintas Mendes, 1987) and Spanish (Ferreiro, 1988; Ferreiro & Teberosky, 1979; Ferreiro & Gomez-Palacio, 1987).

Generally speaking, on an initial level children begin by using sequences of letters that imitate words by allocating them a communicational meaning. At this level children's invented spellings do not take linguistic segments into account and are organised on the basis of grapho-perceptive criteria, such as a minimum number of letters and the ways in which those letters vary when words are written down. At this first level children essentially write using the letters that go to make up their own names.

Subsequently they begin to establish a relationship between the graphic and the phonological forms of words. In the case of languages like Portuguese, children start by using syllabic units as the basis for co-ordinating both the phonological structure of words and the activity of writing itself. They do so without any concern as to which letters they should employ. Then they begin to establish qualitative correspondences with appropriate letters; from their repertoire of letters they begin to mobilise those which best enable them to represent some of the sounds they have identified in each word. In the case of the Portuguese language the frequency with which this type of writing appears is probably explained by the structure of a language in which there are many polysyllabic words, and the syllabic structure which predominates is that of open syllables of the consonant/vowel type (Andrade & Viana, 1993; Vigário & Falé, 1993).

Later still, children begin to analyse oral language in a way that goes beyond the syllabic level. This gives rise to invented spellings in which they represent all the phonemes in some of the syllables of a word, while continuing to use single letters to denote other syllables in the same word.

Children finally evolve to the point at which they understand the structure of alphabetic notation, which is reflected in invented spellings in which the phonetic structure of the word is fully codified, even though not all the applicable orthographic conventions are respected.

These conceptualisations about the nature of written language are also gradually constructed via multiple situations involving informal interaction with reading and writing, and depend on the social experiences in which the children take part, particularly in a kindergarten context. The children's conceptualisations about written language vary depending on the quality, frequency and value of the reading and writing activities engaged in by the people with whom they are most directly in contact (Alves Martins & Niza, 1998). This is a socially defined process, in the sense that it entails shared meanings and that children are socially motivated by the sharing and the support they receive from a very early age with a view to helping them to consolidate and foster their discoveries and their involvement (Rowe, 1994). This is why kindergarten teachers can play a decisive role as promoters and mediators of significant experiences in relation to written language.

Research on the acquisition of literacy has proved the existence of correlations between these early conceptualisations about written language and success at learning to read (Alves Martins, 1996; Ferreiro & Gomez-Palacio, 1987).

The ways in which children perceive the different uses and functions of written language and conceive its relationships with speech have thus been associated with success at learning to read.

Despite the fact that a number of studies conducted in various different countries show that there are relationships between the quality of the practises pursued in kindergartens and the development of children's literacy (Adams, Treiman & Pressley, 1998; Carlino & Santana, 1996; Curto, Morillo & Teixidó, 2000, Dickinson & Tabor, 2001; Gambrell & Mazzoni, 1999; Morrow, 1995; Morrow & Asbury, 1999; Neuman & Roskos, 1997; Nixon & Topping, 2001; Pontecorvo & Zuchermaglio, 1992; Snow, Burns & Griffin, 1998; Teberosky, 1987), in Portugal there are no research-based works in which these relationships have been systematically assessed.

This is particularly due to the fact that the literacy field has only recently come to be seen as an important component that needs to be developed in children's early education. Indeed, the first time that curricular guidelines for preschool education were published was in 1997 (Ministério da Educação, 1997). This document, which was the first attempt to regulate kindergartens' educational practises, emphasises the need to facilitate the emergence of written language by providing children with "contact with various types of written text that lead the child to understand the need for and the functions of writing, thereby favouring the emergence of the written code. The way in which the teacher uses and relates to writing is fundamental when it comes to stimulating children's interest in evolving in this domain." (p.71). It also highlights the need for teachers to support children in their discovery of the written code's characteristics and functions: "The teacher's attitude and the environment that is created should facilitate a familiarisation with the written code. In this respect attempts to write – even if they are not successful – should be valued and stimulated." (p.69)

It is in this context that it is useful to undertake studies which analyse the nature and the quality of existing practises, in such a way as to understand what educational contexts are most favourable to the development of early conceptualisations about written language. If the practises that are undertaken in kindergarten contexts facilitate and promote the development of these early conceptualisations, they will reduce the probability of failure during the process of learning to read.

Hence, our aim in this research was to characterise the relationships between literacy practises developed in Portuguese kindergartens and children's conceptualisations about the functions and nature of written language.

2. METHODS

The participants were 16 teachers from kindergartens in the Lisbon and Alentejo areas, and 160 children – 10 per teacher – who were randomly chosen from the final year students in each class.

Two criteria were used to choose the teachers: at least five years' work experience as such; and that they had taught the children for the whole of the latter's three years of preschool education (in Portugal preschool education covers children between the ages of 3 and 5).

In the month of May the children were aged between 5 years and 4 months and 6 years and 3 months. They belonged to families from an average or average-to-low socio-economic stratum.

The 16 kindergarten teachers' pedagogical reading and writing practises were observed for two weeks by two observers, with the help of an observation grid.

The children were assessed in October and May, using an interview designed to analyse their personal reader/writer projects, and an invented spelling test intended to evaluate their conceptualisations about the relationships between written and oral language.

2.1 Pedagogical practise observation grid

In previous projects (Alves Martins & Santos, 2005) we used observations at various kindergartens to construct an initial version of a grid for observing pedagogical practises targeted at written language. We adapted the grid we used in the present project from that initial one.

The present version contains a total of 30 items and is divided into two main areas: reading, writing and metalinguistic practises, with 14 items; and ways of supporting children's attempts to read and write, with 16 items (see Appendix A).

The purpose of the first 14 items was to observe how often the teachers: read and wrote various types of text – literary, informative, enumerative, expository and prescriptive – with the children (items 1 to 10); read/wrote with the children in order to review texts that had been produced (item 11); promoted metalinguistic reflection activities – about oral language, written language and relationships between the oral and the written language (items 12 to 14). We defined the various types of text using the typology established by Curto, Morillo, and Teixidó (2000).

The 16 items that form the second part of the grid were designed to observe how, and how often, the teachers supported the children's attempts to read and write and organised opportunities to read and write individually, or in pairs and small groups (items 15 to 18); how, and how often, they supported children who wanted to read or write a word or a text (items 19 to 26) and children's spontaneous reading and writing (items 27 to 30).

Each item was classified on a scale of 0 to 3, depending on the frequency with which each activity was observed. The first part of the grid could thus result in a score of between 0 and 42, and the second part in one of between 0 and 48.

The grid was employed by two observers who observed and recorded the 16 kindergarten teachers' pedagogical practises for two weeks. The interrater agreement, using the Kappa statistic, was of .89.

2.2 Evaluating the children's personal reader/writer projects

In order to assess the way in which the children appropriated the functional uses of written language we conducted an interview with each child, in which we focused on the following questions:

- 1) Do you want to learn to read and write?
- 2) What do you think knowing how to read and write is for?
- 3) When you know how to read, what would you like to read?
- 4) When you know how to write, what would you like to write?

The interviews, which took place in October and May, were recorded and subsequently transcribed. They were then subjected to content analysis, the objective of which was to identify each child's functional responses.

"Functional responses" were considered to be those which referred to the various functional uses of written language. The responses were classified in accordance with the type of text they referred to: literary, informative, enumerative, expository, prescriptive.

The following are a few examples of the functional responses we obtained:

- read stories (Literary text);
 - write the children's names (Enumerative text)" (Catarina, G.1)
 - read story books (Literary text);
 - Benfica's (*football club*) scores (Informative text);
 - make lists of things that are needed (Enumerative text);
 - write stories (Literary text)" (Tiago, G.2).
 - read story books (Literary text);
 - read books about dinosaurs (Expository text);
 - go to the dictionary to read a word I didn't know (Enumerative text);
 - read how to do a game (Prescriptive text);
 - read the school newspaper (Informative text);
 - know prices and be able to go to the Continente (*hypermarket*) to do the shopping (Enumerative text);
 - make the recipes that come in books (Prescriptive text);
 - write to invite my friends to my birthday party (Informative text)" (Isabel, G.3).
- Each functional response was given 1 point.

2.3 Evaluating the children's invented spelling

In order to assess the children's conceptualisations about written language we asked them to spell their name and then to spell a set of words to the best of their ability. After spelling each word they were asked to read what they had spelled. The verbal utterings that frequently accompanied the act of spelling were recorded.

We dictated 6 words which were organised as follows: a word and its diminutive form – *gato/gatinho* (cat/kitten); words of an identical size from a linguistic point of view, but which refer to items that possess different sizes – *formiga/cavalo* (ant/horse); a dissyllabic word and a polysyllabic one – *urso/elefante* (bear/elephant); a word and its plural – *águia/ águias* (eagle/eagles).

Our classification of the children's responses was inspired by the classification grids drawn up by Ferreiro (1988) and Ferreiro and Teberosky (1979). We employed the following categories: grapho-perceptive; syllabic; syllabic-alphabetic; alphabetic.

Grapho-perceptive: Spellings in which the children made no attempt to establish letter-sound correspondences of any kind, either when they wrote, or when they read their own written productions. In spelling the different words children took account of factors such as a minimum number of letters for each word and a different combination of letters with which to discriminate between different words. The children spelled words which refer to items that possess different sizes in ways that took account of the properties of the reference items – for example, by using more letters for words that refer to large items. They wrote several letters and then read the written string globally. Figure 1 illustrates this type of spelling.

As we can see, Catarina basically used the letters in her name to write the different words that were asked of her. She varied the position of the letters in order to write the different words. In the case of words that refer to small referents – *gatinho* (kitten) and *formiga* (ant) for example – she used fewer letters than when she wrote the other words. When she wrote *águias* (eagles) she used more letters than when she wrote *águia* (eagle).

C A T A R I N A
 A T R I N
 A T R
 R I V M C
 C M I
 T A I R M
 M I N C N
 A N I S
 I R M N C

Figure 1. Example of grapho-perceptive writing: *gato-gatinho*; *cavalo-formiga*; *urso-elefante*; *águia-águias*.

Syllabic: Spellings in which the correspondence between oral and written language was based on syllabic units, as we can see in Figure 2. These children made a strict one-to-one correspondence between the oral syllables and the letters they wrote. Each syllable was represented by a random letter. They read the words syllabically.

MARCIH
 OC
 ARD
 MOR
 CIG
 AO
 JOIR
 MAO
 CIA

Figure 2. Example of syllabic writing: gato-gatinho; cavalo-formiga; urso-elefante; águia-águas.

Márcia systematically used one letter to represent each of the syllables that she was able to analyse in their oral version. She made no attempt to look for letters that appropriately represent the sounds she identified.

Syllabic-alphabetic: Spellings in which children used pertinent letters to represent all the phonemes in some of the syllables of a word, while continuing to use one letter to denote other syllables in the same word. The words were read globally. Figure 3 illustrates this type of spelling.

JOAOCARLOS
 GATO
 GATIO
 6VL
 FUMIG
 OS
 ILFT
 AGIA
 AGIAS

Figure 3. Example of syllabic-alphabetic writing: *gato-gatinho*; *cavalo-formiga*; *urso-elefante*; *águia-águias*

João Carlos used conventional letters to represent the various sounds he identified in their oral form, albeit in the case of some words such as *cavalo* (horse), *urso* (bear) and *elefante* (elephant), he was unable to represent all the sounds.

Alphabetic: Spellings in which the phonetic structure of the word was fully codified, even though not all the applicable orthographic conventions were respected.

The children used pertinent letters to represent sounds. The words were read globally. Figure 4 illustrates this type of spelling.

FRANCISCO
GATO
GATINHO
CAVALO
FORMIGA
URSO
ELEFANTE
ÁGUA
ÁGUAS

Figure 4. Example of alphabetic writing: gato-gatinho; cavalo-formiga; urso-elefante; água-águas.

Francisco used appropriate letters to represent all the sounds in the words we put to him, albeit without complying with all the applicable orthographic conventions.

The children were assessed in October and May.

3. RESULTS

Taking the observations that were made with the above grid in a classroom context as our basis, we divided the 16 teachers into 3 groups: the first contained the kindergarten teachers with total scores of 8 or less (1st quartile); the second those who scored between 9 and 67; and the third those who scored 68 or more (3rd quartile).

Group 1: Teachers who did not often engage in reading, writing and metalinguistic reflection activities with the children and who rarely supported the latter's attempts to read and write.

Group 2: Teachers who quite often engaged in reading, writing and metalinguistic reflection activities with the children and quite often supported the latter's attempts to read and write.

Group 3: Teachers who very often engaged in reading, writing and metalinguistic reflection activities with the children and who very often supported the latter's attempts to read and write.

With Table 1 we begin by presenting the mean scores and the standard deviations for the three groups of teachers in the two areas that were assessed using the observation grid.

Table 1. Mean scores and standard deviations for the three groups of teachers in the two areas that were assessed using the observation grid

	Group 1 (N=5)		Group 2 (N=7)		Group 3 (N=4)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Reading, writing and metalinguistic practices	4.80	1.79	16.70	6.80	35.75	3.95
Support for children's attempts to read and write	2.80	1.10	19.57	9.64	45.25	2.36

Table 2 shows the mean scores and standard deviations for the various items concerning the reading, writing and metalinguistic practises in the three groups of teachers.

All the reading and writing activities are less frequent in group 1 than in group 2, where they are in turn less frequent than in group 3. In all the groups there is a slight prevalence of writing-related practises over the reading-related ones.

In the first two groups the children read literary texts more often than other types of text, the frequency of which is clearly lower. On the contrary, in group 3 all the types of text were frequently read, with a particular emphasis on literary and expository texts.

Table 2. Mean scores and standard deviations for the 14 items concerning the reading, writing and metalinguistic practices in the three groups of teachers

	Group 1		Group 2		Group 3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
1 Reading literary texts	1.20	.45	2.29	.76	2.75	.50
2 Writing literary texts	.60	.55	1.57	.79	3.00	0.00
3 Reading informative texts	0.00	0.00	1.00	.58	2.25	.50
4 Writing informative texts	.40	.55	1.14	.90	2.75	.50
5 Reading enumerative texts	.40	.55	0.86	.38	2.50	1.00
6 Writing enumerative texts	1.00	1.22	2.00	1.29	3.00	0.00
7 Reading expository texts	.40	.55	1.14	.69	2.75	.50
8 Writing expository texts	0.00	0.00	1.00	1.00	2.50	.58
9 Reading prescriptive texts	0.00	0.00	.71	.49	2.00	1.15
10 Writing prescriptive texts	.40	.55	.71	.49	1.75	.50
11 Reading/Writing for revision	0.00	0.00	.57	.79	2.50	.58
12 Thinking about oral language	0.00	0.00	1.57	1.13	2.75	.50
13 Thinking about written language	0.00	0.00	1.29	.76	2.75	.50
14 Thinking about oral /written language	.40	.89	.86	1.21	2.50	.58

The first two groups wrote enumerative texts more often than any other type. In group 1 the other types of text were clearly written less often; group 2, however, did sometimes write literary and informative texts, while group 3 wrote all the relevant types of text very often. The group 1 children did not read/write for the purpose of reviewing texts they had already written, nor did they engage in activities designed to make them think about oral language and written language. The group 2 teachers did undertake such activities from time to time, but not often, whereas their group 3 counterparts did so very often.

Table 3. Mean scores and standard deviations for the frequency with which the teachers in the three groups promoted attempts to read and write individually or in pairs or small groups

	Group 1		Group 2		Group 3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
15. Supplies varied reading materials	1.00	0.00	2.43	.53	3.00	0.00
16. Supplies varied writing materials	1.00	0.00	2.14	1.07	3.00	0.00
17. Promotes situations in which the children try to read in pairs or small groups	0.00	0.00	1.00	1.00	2.25	.05
18. Promotes situations in which the children try to write in pairs or small groups	0.00	0.00	1.00	1.00	2.75	.05

Where the ways of supporting children's attempts to read and write are concerned, Table 3 sets out the mean scores and standard deviations for the frequency with which the teachers in the three groups promoted attempts to read and write individually or in pairs or small groups. As we can see from Table 3, the teachers in group 1 did not promote collaborative situations involving either reading or writing. On the contrary, those in group 3 did so very often, whereas their group 2 colleagues were somewhere in between.

As regards the ways in which the teachers supported the children when they wrote words or texts, Table 4 gives the mean scores and standard deviations for the frequency with which the teachers in the three groups promoted the various types of assistance.

Table 4. Mean scores and standard deviations for the frequency with which the teachers in the three groups promoted the various types of assistance

	Group 1		Group 2		Group 3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
19. Helps the child to look for the word(s) in or among the printed writing that already exists in the classroom	0.00	0.00	1.43	1.13	3.00	0.00
20. Helps the child to write by writing with him/her	.20	.45	.57	.53	2.75	.50
21. Asks one or more of the other children to help	0.00	0.00	1.00	1.00	2.75	.50
22. Stimulates the child by dictating whatever it is that he/she wants to write	.20	.45	1.57	.79	3.00	0.00

Table 4 shows that the group 1 teachers rarely supported children's attempts to write, while the group 2 teachers did so sometimes and the group 3 teachers did so very often, using a great variety of strategies for the purpose. The strategies most commonly employed by both group 2 and group 3 were child-to-adult dictation and the use of writing that that was already present in the classroom. It should also be noted that the teachers in group 3 very often promoted both collaboration between children and adult-assisted writing.

An analysis of Table 5, which gives the mean scores and standard deviations for the frequency with which the teachers promoted various types of assistance when children were trying to read, shows that the teachers in group 1 never helped the children in their attempts to read, whereas the teachers in group 3 did so very often and those in group 2 fell somewhere in between.

Table 5. Mean scores and standard deviations for the frequency with which the teachers promoted various types of assistance when children were trying to read

	Group 1		Group 2		Group 3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
23. Helps the child to look for similar word(s) in or among the printed writing that already exists in the classroom	0.00	0.00	1.29	.76	3	0.00
24. Helps the child to read by reading with him/her	0.00	0.00	.86	.38	2.75	.50
25. Asks one or more of the other children to help	0.00	0.00	.86	.38	3	0.00
26. Helps the child to read by leading him/her to anticipate the words, with the help of pictures that go with the text	0.00	0.00	.57	.53	2.75	.50

As was the case with helping with writing-related situations, when it came to reading both the group 2 and the group 3 teachers used the writing that already existed in the classroom to lead the children to read. The teachers in group 3 also very often resorted to inter-child collaboration, assisted reading and image-based anticipation

Table 6 lays out the mean scores and standard deviations for the ways in which the teachers in the three groups assisted children in spontaneous reading and writing situations.

Table 6. Mean scores and standard deviations for the ways in which the teachers in the three groups assisted children in spontaneous reading and writing situations

	Group 1		Group 2		Group 3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
27. Asks them questions about what he/she has written	.20	.45	1.29	.95	2.75	.50
28. Writes whatever the child has written, but in the conventional form, and confronts the two versions	0.00	0.00	1.29	.95	3	0.00
29. Asks questions about what he/she has read	0.00	0.00	1.43	.98	2.75	.50
30. Reads the text in the conventional form and confronts the child's reading with his/her version	0.00	0.00	1.29	1.11	2.75	.50

Table 6 shows that, as in the situations we have already looked at, the group 1 teachers almost never attached value to children's spontaneous reading and writing. The teachers in group 2 attached little value to such attempts, while those in group 3 encouraged the children and took the trouble to ask them what they wanted to read or

write, wrote the children's writing down in the conventional form, and either led the children to confront the two forms, or read to them and confronted the two ways of reading.

Having thus characterised the three groups of teachers' pedagogical practises, we will now present the three groups of children's results as regards their personal reader/writer projects.

Table 7 gives the mean scores and standard deviations for the functional responses of the children in the three teacher groups.

Table 7. Mean scores and standard deviations for the functional responses of the children in the three teacher groups

	Group 1		Group 2		Group 3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
October	1.10	.71	.92	.85	1.13	.85
May	1.80	1.09	3.00	1.63	6.05	1.43

As can be seen from Table 7, while in October the number of functional responses was equivalent in the three groups, in May the children from teacher group 1 gave less functional responses than their counterparts in group 2, who in turn provided less such responses than the group 3 children.

We carried out two ANOVAs, taking the three groups of teachers as the independent variable and the functional responses which the children gave in October and May as the dependent variable. In October there were no significant differences between the groups: $F(2,157)=1.11$; $p=.333$. In May such differences did exist: $F(2,157)=113.80$; $p=.000$. A post hoc analysis of the May results using the Tukey test reveals differences between all the groups.

Table 8 sets out the percentages of the functional responses of the children from the three groups, in accordance with the types of text to which they referred in May.

Table 8. Total number and percentages of functional responses of the children from the three groups in accordance with the types of text to which they referred in May

	Group 1	Group 2	Group 3
No of functional responses	108	180	242
Literary texts	39.8	39.4	33.5
Informative texts	5.5	16.7	23.6
Enumerative texts	51.9	31.7	12.8
Expository texts	2.8	12.2	26.9
Prescriptive texts	0.0	0.0	3.3

An analysis of the functional responses given by the children in the three groups shows that whereas the group 1 children primarily referred to the reading and writing of literary texts and enumerative texts, in group 2 there were already also some references to both informative and expository texts, while in group 3 there were many references to literary, informative, enumerative and expository texts.

Table 9 gives the percentages and the number (in brackets) of children at the different levels of conceptualisation about writing, broken down into the three groups of teachers

Table 9. Percentages and number (in brackets) of children at the different levels of conceptualisation about writing, as a function of the three groups of teachers

	Group 1		Group 2		Group 3	
	October	May	October	May	October	May
Grapho-perceptive	86.0 (43)	80.0 (40)	84.3 (59)	40.0 (28)	85.0 (34)	7.5 (3)
Syllabic	14.0 (7)	10.0 (5)	15.7 (11)	37.1 (26)	15.0 (6)	25.0 (10)
Syllabic- alphabetic	0.0 (0)	10.0 (5)	0.0 (0)	20.0 (14)	0.0 (0)	57.5 (23)
Alphabetic	0.0 (0)	0.0 (0)	0.0 (0)	2.9 (2)	0.0 (0)	10.0 (4)

We used the Chi Square test to determine whether there were significant associations between the levels of conceptualisation about written language and the three groups. The results show that there were no significant group-conceptualization associations in October ($\chi^2 = .07$; $df = 2$; $p = .967$), but that such associations did exist in May ($\chi^2 = 62.40$; $df = 6$; $p = .000$).

In October there were no differences between the writing produced by the children in the three groups, which was essentially grapho-perceptive and to a lesser extent syllabic. In May the great majority of the children in group 1 continued to produce this grapho-perceptive writing; those in group 2 were basically divided be-

tween grapho-perceptive and syllabic writing; while the majority of the group 3 children wrote syllabic-alphabetically and 10% of them were actually alphabetic.

4. DISCUSSION

Our aim in this research project was to characterise literacy practises used in kindergartens and to study their relationships with children's ideas about the functions and nature of written language.

On the subject of the ways in which a child appropriates the functions of written language, we found that they were related to the frequency and diversity of the literacy practises pursued by teachers. The children in group 1 referred to fewer functional reasons for wanting to learn to read and write than those in group 2, who in turn gave fewer reasons than their counterparts in group 3.

We also found that the nature of the reasons that were given varied. The great majority of the children taught by the group 1 teachers said that they wanted to learn to read and write literary and enumerative texts. In addition to these two types, the group 2 children also referred to informative and expository texts. Group 3 spoke of all the types of text very often.

Now the fact is that the types of text to which the children referred are precisely those that were most frequently used by their teachers in reading and writing activities. It thus seems to us that the teachers' practises are reflected in the ways in which the children appropriated the various uses of written language.

These results are along the lines of the ideas put forward by Carlino and Santana (1996), Chauveau and Rogovas-Chauveau, (1989, 1994, 2001), Curto, Morillo, and Teixidó (2000), Morrow and Asbury, (1999) and Neuman and Roskos, (1997), who say that it is essential that from very early on, adults – and particularly kindergarten teachers – play the role of mediators in children's experiences with the various supports for written language, by reading and writing significant, real texts that refer to the various functions of written language together with the children.

When it comes to the existing relationships between the pedagogical practises employed in kindergartens and children's ideas about the nature of written language, we found that there were differences in the children's conceptualisations, depending on the literacy practises pursued by their teachers.

We found that at the end of the year most of the group 1 children wrote grapho-perceptively; that those in group 2 produced both grapho-perceptive and syllabic writing, with around 20% of the group writing syllabic-alphabetically; and that more than half the children in group 3 produced syllabic-alphabetic and alphabetic writing.

The fact is that the pedagogical practises used by the teachers in the three groups promoted the children's opportunities to question written language and its relationships with oral language in different ways.

On the one hand, the frequency with which the three groups of teachers undertook activities involving reflection about the oral and the written language and the relationships between them was clearly different: the group 1 teachers almost did not

engage in activities of this kind; those in group 2 did so quite rarely; whereas those in group 3 did so very often.

Various research projects have shown that the abilities involved in explicitly analysing language are related to the development of literacy (Adams, Treiman & Pressley, 1998; Snow, Burns & Griffin, 1998), and in particular to children's conceptualisations about written language (Adams, 1998; Alvarado, 1998; Alves Martins & Silva, 2001; Silva & Alves Martins, 2002, 2003; Tangel & Blachman, 1992).

On the other hand, the teachers also supported the children's attempts to read and write differently, not only in terms of the regularity with which they did so, but also as regards the ways in which the support was provided.

The teachers in group 1 did not promote either collaborative reading or collaborative writing situations, unlike those in the other two groups, the difference between whom was the regularity with which they did so. The fact is that it has been demonstrated that collaborative reading and writing situations promote the development of literacy: Mata (1991a, 1991b), Nixon and Topping (2001), Pontecorvo and Zuchermaglio (1992), Teberosky (1987).

These authors have shown that inter-child interactions about written language promote the development of literacy, particularly when reading and writing activities are shared with both peers and adults (Pontecorvo & Zuchermaglio, 1992), when the same text is written simultaneously (Mata, 1991 a, b; Teberosky, 1987), and when a child writes with the support of his/her peers (Teberosky, 1987).

As regards the types of assistance that were given to children when they tried to read and write, the teachers in group 1 rarely gave help of this kind, those in group 2 sometimes did so, essentially by getting the children to dictate what they wanted to write to their teacher, while the teachers in group 3 very frequently promoted various types of help. Among the latter, we would especially note the use of writing that already existed in the classroom, and reading and writing with the assistance of the adult or of more competent peers, as suggested by Gambrell and Mazzoni (1999).

Finally, the teachers in group 1 almost never attached value to the children's spontaneous reading and writing, unlike their counterparts in the other two groups, and especially those from group 3, who frequently questioned the children about their attempts to produce and understand written language and led them to think about the latter's characteristics.

These results are along the lines of those obtained by Silva and Alves Martins (2002; 2003), who say that the transition from types of writing in which children do not establish relationships between speech and print to types of writing in which children write in a syllabic-alphabetic and alphabetic manner may possibly be facilitated by the ways in which teachers support children's attempts to read and write.

In summary, we would say that the pedagogical practises that appear to favour the development of literacy most are those in which the kindergarten teacher systematically:

- Engages in activities that entail the reading of diverse and significant texts, and promotes writing in different genres and for a variety of purposes and audiences, thereby involving the children in literacy tasks and activities that are purposeful and authentic and creating classroom cultures that foster reading and

writing motivation. At the same time he/she undertakes activities that make the children think about the oral and the written language and the relationships between the two, thereby promoting a balanced instruction of both phonics and comprehension.

- Encourages children to read and write in pairs and small groups – that is to say, implements collaborative learning.
- Supports children in their discoveries about written language by helping them to look for letters, syllables or words in the writing that already exists in the classroom and by promoting reading or writing while assisted by an adult or by more competent peers – i.e. promotes scaffolded instruction.
- Attaches value to children's spontaneous reading and writing by leading them to think about the ways in which they read and write and comparing those ways to conventional reading and writing, thus linking new ideas, skills and competencies to prior understanding, in a way that is consistent with the Vygotskian notion of acting in the zone of proximal development.

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MARGARIDA ALVES MARTINS
Higher Institute of Applied Psychology – I.S.P.A.
Lisbon
Portugal
Rua Jardim do Tabaco, 34
1149--041
E-mail: m.martins@ispa.pt

APPENDIX A

PEDAGOGICAL PRACTISE OBSERVATION GRID

Reading, writing and metalinguistic practises:

On a scale of 0 (Never) to 3 (Very often), classify the frequency with which the teacher undertakes the following activities with the children:

	0	1	2	3
1. Reading literary texts: stories, legends, poems, songs				
2. Writing literary texts: stories, narratives from daily life, poems, songs				
3. Reading informative texts: newspapers, magazines, adverts, letters, messages, invitations				
4. Writing informative texts: news items, advertisements, letters, messages, invitations				
5. Reading enumerative texts: dictionaries, encyclopaedias, timetables, schedules, maps, tables				
6. Writing enumerative texts: first names, labels, lists of words				
7. Reading expository texts: thematic books, descriptive files				
8. Writing expository texts: accounts of scientific experiments, of environment studies				
9. Reading prescriptive texts: recipes, instructions on how to conduct an experiment or play a game				
10. Writing prescriptive texts: recipes, instructions on how to conduct an experiment or play a game				
11. Reading/writing for revision purposes: in order to improve texts that have already been produced				
12. Thinking about oral language: words that begin or end in the same way, long words, short words				
13. Thinking about written language: words that begin or end with the same letters				
14. Thinking about the relationships between the oral and the written: the way in which certain sounds are represented in writing				

Support for children's attempts to read and write

On a scale of 0 (Never) to 3 (Very often), classify the frequency with which the teacher:

- | | 0 | 1 | 2 | 3 |
|--|---|---|---|---|
| 15. Supplies varied reading materials for the children to look at and try to read in accordance with their own interests | | | | |
| 16. Supplies varied writing materials for the children to try to write what they want to | | | | |
| 17. Promotes situations in which the children try to read in pairs or small groups | | | | |
| 18. Promotes situations in which the children try to write in pairs or small groups | | | | |

On a scale of 0 (Never) to 3 (Very often), classify the frequency with which, when a child wants to write a word or a text, the teacher:

- | | 0 | 1 | 2 | 3 |
|--|---|---|---|---|
| 19. Helps the child to look for the word(s) in or among the printed writing that already exists in the classroom | | | | |
| 20. Helps the child to write by writing with him/her | | | | |
| 21. Asks one or more of the other children to help | | | | |
| 22. Stimulates the child by dictating whatever it is that he/she wants to write | | | | |

On a scale of 0 (Never) to 3 (Very often), classify the frequency with which, when a child wants to read a word or a text, the teacher:

- | | 0 | 1 | 2 | 3 |
|---|---|---|---|---|
| 23. Helps the child to look for similar word(s) in or among the printed writing that already exists in the classroom | | | | |
| 24. Helps the child to read by reading with him/her | | | | |
| 25. Asks one or more of the other children to help | | | | |
| 26. Helps the child to read by leading him/her to anticipate the words, with the help of pictures that go with the text | | | | |

On a scale of 0 (Never) to 3 (Very often), classify the frequency with which, when a child reads or writes spontaneously, the teacher:

- | | 0 | 1 | 2 | 3 |
|---|---|---|---|---|
| 27. Asks questions about what he/she has written | | | | |
| 28. Writes whatever the child has written, but in the conventional form, and confronts the two versions | | | | |
| 29. Asks questions about what he/she has read | | | | |
| 30. Reads the text in the conventional form and confronts the child's reading with his/her version | | | | |