



Perspectives on Emergent Literacy in Bilingual Children

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Abstract

The term literacy is quite fascinating to speech-language pathologists and audiologists as the roots of literacy emerge from listening and speaking, i.e., communication skills. The complex and intricate connections between literacy and communication warrants a close examination of the skills that facilitate development of literacy related skills in young children. The development, however, is often subtle as children abstract the prerequisites by way of use of language for communication. Given the nature of association between language and literacy, it becomes necessary to understand the various dimensions and components of language that support a child to learn literacy skills. While there is fairly satisfactory information in respect of the above on children from monolingual population, very little information is available to date on bilingual children from linguistically diverse countries. This perspective article on emergent literacy in bilingual children has drawn information from many sources to reflect on the current status of emergent literacy in bilingual children in contrast to monolingual children. The article also reflects the author's perspective on pertinent issues of advocacy, policy making, and language of instruction along with promotion and facilitation of emergent literacy skills in bilingual children to meet the vision of Literacy by 2020.

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Introduction

In the context of advanced technological world, to be a literate person is a bliss!! It is increasingly noticed in the semi-rural and urban population that as soon as a person gets up in the morning, the first job is to check social media links on cell phone or any other gadget. An individual's knowledge of language plays an important part in social media activities that emerge through the process of learning to be literate. Literacy, however, is not an automatic skill that develops with age. There are many precursors to literacy acquisition, one of the most important is understanding language and playing with the components of language as though it is a tool for learning literacy. The early stage of learning prerequisite skills for literacy acquisition is called as the emerging stage of literacy. The emergent literacy stage moves forward to conventional literacy stage with systematic training during the school years. A child's progression toward conventional literacy includes developing an understanding of concepts about print (for example, a picture or a printed word carries meaning), the principle underlying letter to sound correspondence (for example, the letter 'p' goes with the sound /pa/), and a sense of story that helps to expand the vocabulary

knowledge and the relationships among the linguistic entities with reference to its form, function and use. To reiterate the above, a continuous emerging and evolving process that results from one's experiences and manipulations with language in literacy contexts is termed as emergent literacy.

It is amazing to note that majority of activities carried out at home with young children lead to the stage of emergent literacy without our understanding of its importance. For example, young children are engaged in activities such as singing rhymes, pretend reading, playing with spoken words, listening to &/or retelling stories, experimenting with writing and drawing materials. Such activities facilitate connections between the spoken language and the print in the text, letters and sounds, expansion of the vocabulary of the child through exposure to the home language and involvement of parents. To illustrate the above with an example, sentences such as 'The hare is beautiful' and 'The hair is beautiful' are read by a parent to a child during story reading/story telling time. How does a child understand that the words pronounced similarly ('hare' and 'hair') have different meanings if the context is not stated? Either an illustrated context (spoken or pictorial) of a zoo (relating to the first sentence) or a group of girls chatting (relating

to the second sentence) guides a child to appreciate the meaning. The underlying core element to understand sentences is therefore, contextual knowledge acquired through the process of language acquisition and learning.

Language acquisition and language learning are generally viewed as two distinct terms. While language acquisition is viewed as a process of acquiring language spoken at home or in the surrounding social environment by children, language learning happens through formal instructions, often given in the school set-up. Alternately stated, the first or the native language used at home is 'acquired' and the second language imposed in the school instructional system, particularly in Asian as well as European countries with linguistic and socio-cultural diversities is 'learnt'. Owing to the distinction between acquisition and learning, the children are generally classified as either 'monolingual' (if only home language is acquired which of course, would be the school language in majority of the countries) or 'bilingual' (if home language is acquired along with learning a second language in the instructional system of school). However, the construct of bilingualism is never as simple as stated above. Bailystock and Hakuta (1994), Rao, Shanbal and Khurana (2010) present detailed discussions on the prevailing issues of defining bilingualism from socio-cultural and diverse linguistic perspectives.

Given the distinctions between the process of acquisition by monolinguals and learning by bilinguals, one can expect differences in the development of emergent literacy skills in bilingual children. Accordingly, a direct influence of the type of language status of a child (monolingualism vs. bilingualism) on the nature of emergent literacy skills can never be undermined. In order to understand the various perspectives of emergent literacy in bilinguals, it is important to realize the precursors and factors that facilitate or inhibit various skills that make-up the construct of emergent literacy.

Emergent literacy

Emergent literacy is generally thought of as occurring before formal reading instruction begins (Ezell and Justice, 2005). The process of literacy acquisition in general recognizes numerous forms of early literacy behaviors such as developing sensitivity to speech sounds (for example, the word 'banana' has three sounds /b/, /a/ & /n/), playing and manipulating with oral language (for example, chunking the word 'banana' into three units or syllables /ba/, /na/, & /na/), identifying familiar shapes and letters in a print. For example, recognition of letter 'P' and/or word 'PEPSI' and 'POTATO' as shown in Figure 1. It is often seen that a child chooses his/her preferred soft drink or chips from a set of printed icons although they look

very similar in size and shape. How does a child do this? The child has the emergent literacy skills to identify the 'logos' (words as images) by patterns (length of the word, shape of the word, distinct letter shapes, etc.,) to choose the preferred item. Alternately stated, the emergent literacy skills guide the child to choose the item. Additionally, the emergent skills are also fostered by experiences that permit and promote children's meaningful interactions with oral and written language (Sulzby & Teale, 1991). These experiences and understandings give rise to general literacy-related knowledge and specific print skills and oral language competencies. They learn to use multiple vocabularies besides developing sensitivity to finer distinctions in speech sounds. They also develop knowledge about the relationship between speech and print and learn to express themselves through scribbles and shapes on paper. Additionally, through exposure to oral language, preschool children develop listening comprehension, vocabulary, and other related language facility. Such early literacy experiences of a child influence his/her conventional literacy acquired in later years. Yet, not all the children begin school with similar experiences concerning exposure to or use of print knowledge, be it through magazines, story books, newspapers or any other literacy related activities at home carried out by adults. Children from different social contexts are likely to have varied literacy related experience and therefore, not all the children begin acquisition of literacy with uniform emergent literacy skills. This calls for a clearer understanding of the prerequisite skills necessary for developing emergent literacy skills in the early childhood period.

Dimensions of emergent literacy

Traditionally, it was believed that children with good oral language facility are ready for reading and also to receive formal instructions in reading. The term 'reading readiness' was coined to categorize children as those who are either ready to receive formal instructions in reading or not. As a consequence, the expectations for academic success of children with reading readiness were much higher than those who are not ready because of poor oral language facility. Such a notion was also supported from research findings which stated that children who entered school without understanding the link between their oral language experiences and formal instruction (for example, bilingual children from a different native language background than that of the medium of instruction) did not advance at the same rate in learning to read and write as those who did make the connection (monolingual children having the same native language as that of the medium of instruction). These initial understandings are treated important in identifying children 'at risk' for literacy failures who are described as



Figure 1: Print awareness through logos. (Source: www.google.com)

those children being behind in their early language and literacy experiences.

In the recent years however, a significant transition in thinking has evolved moving away from 'reading readiness' to a more comprehensive conceptualization of 'emergent literacy'. The term emphasizes a developmental language continuum that begins during infancy and continues throughout adulthood. The concept of emergent literacy embraces this broader connotation suggesting that each aspect of language influences and in turn, is influenced by each and every dimension of language and literacy. Therefore, the term emergent literacy implies a holistic and interactive dimension of literacy comprising listening and speaking leading to reading and writing. Since children use their oral language skills to learn to read and write and, in turn, use reading and writing to advance (enhance) their oral language skills, there exists a reciprocal relationship between listening-speaking with reading-writing (Figure 2).

Components of emergent literacy

The four dimensions of emergent literacy (listening, speaking, reading and writing) derive their foundation from three major components—the oral language, phonological awareness and print awareness. All the three components are intricately woven with each other as shown in Figure 3 indicating that the individual components are not mutually exclusive but facilitate each other. Phonological awareness skill is the ability of a child to be aware of and manipulate the speech sounds that make up a meaningful unit of oral language. The most simple phonological awareness skill is the ability to appreciate the similarity (rhyming) in speech sounds (for example, 'cake' and 'bake'). When a child is able to produce a few words that begin with /s/ (for example, soap, socks, sauce, etc.,) words that end with /n/ sound (for example, pen, bun, hen, ten, etc.,) or is able to recall from memory novel ver-

bal items used during a language game by children (either from the same language or from a different language or words that do not make sense), it is evident that the child is processing phonological information that helps to manipulate speech sounds in a purposeful way. Although children learn to speak a language at an early age, they acquire this knowledge in an abstract way at a later age without an ability to reflect about it. Children become aware of the concept of sounds, words and sentences in the continuum of developing phonological awareness skills. This is the beginning stage of emergent literacy that gives firm foundation for later conventional literacy.

Print awareness refers to the ability of a child to understand that written words convey meaning similar to that of spoken words and it may be used for communication purposes. Also that different letter patterns convey different meanings similar to how differences in tongue and lip movements produce different speech sounds. It is a skill describing one's knowledge that language may be produced in written as well as oral form. A child who shows an awareness of the print meaning but is unable to read or decode the print to its constituents would be considered to be in emergent literacy stage. For example, if a child follows instructions by reading logos (see Figure 4) or conveys his ideas and thoughts through set patterns of scribbling s(h)e is said to be developing emergent literacy skills.

Oral language is a set of complex skills concerning comprehension and production of simple vocabulary through discourse. The term describes children's understanding and use of language expressed through speech. Generally, children understand words they hear in their environment before using them in their everyday speech. Oral language comprises of multiple skills such as vocabulary, ability to form sentences supported with the ability to comprehend meaning in context and being aware of differences in words and sounds through good listening. Good listening facilitates good oral language that in turn supports good reading. Since language and literacy skills hold a reciprocal rela-

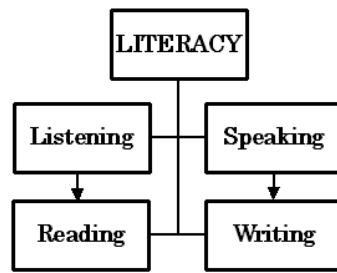


Figure 2: Dimensions of emergent literacy

tionship with each other, it can be implied that the structure of a language would have an impact on literacy acquisition. The impact, however, is often seen largely on bilingual-biliterate¹ children who learn structurally different languages such as English and Hindi.

Emergent literacy in bilinguals

Considering the scenario of a child using two (or more) languages for communication (bilingual or multilingual) and that multiple components often differ depending on the structure of a language, one would expect qualitative differences in emergent literacy skills between a monolingual child and a bilingual child. Also, the term ‘bilingual child’ itself has received several connotations depending on the school of thought or the purpose for which the term is employed. The terms ‘bilingual students’, ‘language minority students’, ‘English-as-a-second-language (ESL) students’, ‘second-language-learners’, ‘limited-English-proficient-students’ and ‘limited-English-speaking (LES) students’, or ‘English Language Learners (ELLs)’ in general, reflect the idea that the children who are learning a second language (be it English or any other language) show poorer skills for literacy acquisition relative to their native language (home language). Despite their depressed skills in the second language, the bilingual children need to make complex connections be-

tween their native language (home language) and school language to decode the words when they acquire literacy in two languages placing higher demand during their emergent literacy stage. The words of the two languages may have similarities in speech sounds with differences in meaning (for example, ‘pa:lu’ indicating ‘milk’ in Tamil language but means ‘share’ in Kannada language) that gets further compounded with the use of logos/script to denote in visual/written mode.

For those bilingual children whose experience with literacy happens in the language that is not their home language, the cognitive skills associated with literacy are being learned at the same time as the linguistic system that is encoded in writing. This is the language in which children might be at greatest risk for possessing inadequate grammatical knowledge and insufficient background concepts of literacy, print, and text. Under such circumstances, there will be a cost to literacy (Bialystok, 2001) but it does not condemn bilingual children to inferior literacy skills if reading is acquired though the weaker language. Instead, it suggests that the children must acquire skills in several areas of competence such as acquiring concepts and experiences about the social, linguistic, and cognitive dimension of reading (Bialystok & Herman, 1999) as preparation for learning to read. Since all these dimensions are often different for bilingual children than for monolinguals, it reflects the higher demand imposed on a bilingual child to develop the emergent literacy skills.

¹Generally, children who learn to use two languages for communication are said to be bilinguals and those who learn to read and write in two languages are biliterates.

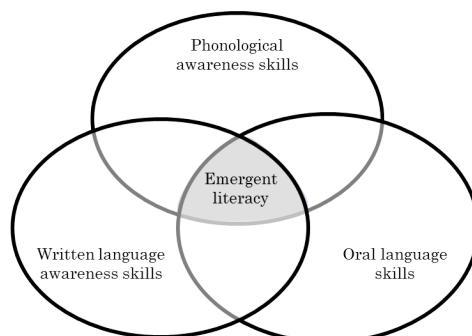


Figure 3: Components of emergent literacy skills

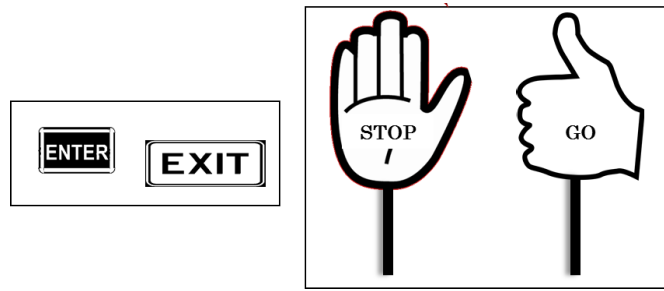


Figure 4: Logos indicating instructions

The National Reading Panel (NRP, 2000) offers support for the above stating that the oral language, print knowledge and phonological processing skills that are crucial factors (also called as precursors²) for emergent literacy skills in monolingual children are also necessary for bilingual children developing emergent literacy skills in a second language (L2). Since the language of written text maps onto oral language, L2 learners need to develop some proficiency in the school language. For example, it is well known that phonemes are the smallest units of speech sounds, ability to be sensitive to, be aware of and to manipulate these small units in a second language requires not only linguistic knowledge but also cognitive skills such as awareness, identification, discrimination, and manipulation to process these small units. On a similar note, Phonological memory (short term memory for sound-based information, for example, repetition of sequences of words, digits or verbal material including phrase and sentence repetition), Phonological naming (efficiency of retrieval of phonological information from permanent memory, for example, naming the individual sounds of a spoken word, say ‘watch’), Rapid verbal naming skills (the speed with which an individual performs on a phonological task, for example, rapid naming of fruits and vegetables either with picture cueing or recalling from memory) are equally important to be facilitated in bilingual children to promote emergent literacy. Apart from awareness to the phonological constituents of speech sounds, a child’s sensitivity to phonological processing is determined by the characteristics of a given language as well as its script. One should not assume that the phonological principles that apply to alphabetic orthography apply to other orthographies as well (such as logographic, syllabaries and semi-syllabaries). Phonological awareness that is so crucial for acquisition of reading in alphabetic orthographies is not so for non-alphabetic orthographies (See Rao, Shanbal and Khurana, 2010 for more details). On the contrary, it is reported that the specific phonological skills develop as a consequence of exposure to

the alphabetic scripts in the course of learning to read English (alphabetic script) in schools provided one of the languages of the biliterate child happens to be English or any other language with alphabetic script.

In support of the above premise, the cross-linguistic literature on contrastive phonology highlights the distinct differences in the phonological features of languages, the most important being the temporal (timing) and the frequency composition of speech sounds. The inherent differences in the phonological properties of speech sounds of different languages suggests that the measures that are employed for one language (say, English) cannot be directly applied to another language (say, Hindi, an Indian language). Accordingly, phonological processing in a bilingual-biliterate child who is in the emergent literacy stage should be examined taking into consideration the features of the language in question. Drawing support from Indian studies that examined the phonological processing abilities of bilingual-biliterate children (Karanth, 1992; Karanth & Prakash, 1996; Prema, 1998; Prema, 2006; Prema et al., 2010 among others), it can be said that caution needs to be exercised while assessing and also for setting up yardstick for precursors to emergent literacy in non-alphabetic languages such as those in Indian languages.

Despite the poor knowledge of the second language for communication purpose, the bilingual children developing emergent literacy skills in a second language (L2 learners) are likely to have skills unavailable to the monolinguals such as enhanced metalinguistic awareness, code-switching, translation skills from first language (L1) to the second language (L2). It is generally believed that the specific components that are precursors to L1 literacy skills (oral language, phonological awareness or print knowledge) lead to transfer of emergent literacy skills from first language to the second language. Although the quantum of transfer is highly debated, these skills offer advantages to a bilingual child and therefore, should be considered during as-

²Precursor skills have also been referred to as predictive, foundational, or emergent literacy skills. These are skills that children acquire before the beginning of conventional or formal literacy instruction in elementary school. Whereas, conventional literacy skills refer to skills such as decoding, oral reading fluency, reading comprehension, writing, and spelling. Conventional skills can be thought of as being more sophisticated, mature, or later-developing manifestations of reading and writing.

assessment of emergent literacy skills.

Assessment of emergent literacy

Assessment of emergent literacy skills is a challenge since there is very little knowledge on the precursors to emergent literacy as well as consensus on the precursors particularly with debates on the language specific skill behaviours. However, from a larger perspective, a child may be examined if s(h)e is becoming aware of print and recognizing some letters, drawing and scribbling, produces understandable responses to questions during storytelling and book reading (around two years of age); mimic 'reading' from favourite books focusing mostly on telling stories from pictures book (around three to four years of age). From the age of four years, one may notice that the children make a progress from telling about each picture individually to sequencing or weaving a story from picture to picture using language that sounds like reading or written language, using mock handwriting by forming scribbles and random strings of letter-like forms. They also show the skills of reading their own mock writing with the intention to create meaning using the vocabulary that sounds like reading. Often such readings demonstrate the intonation patterns of the adult reader and language used in the book. These developmental skills during emergent literacy period merge with the conventional literacy, the boundary line however, being very thin and hazy and also not being uniform across children as there are many factors that either hasten-up or slow down emergent skill behaviour in a child.

Owing to the controversies and poor consensus about the precursors of emergent literacy that need to be assessed, the National Early Literacy Panel (NELP, 2009) after a meta analysis of studies proposed five variables as strong predictors and six others that are conjunct with these five predictors for emergent reading and writing skills. Table 1 shows the strong predictors.

In addition, Concepts About Print (CAP) i.e., knowledge of print conventions (e.g., left-right, front-back) and concepts (book cover, author, text); Print Knowledge (combination of elements of alphabet knowledge, CAP & early decoding); Reading Readiness (combination of alphabet knowledge, CAP, vocabulary, memory, and phonological awareness); Oral Language (ability to produce or comprehend spoken language, including vocabulary and grammar); and Visual Processing (ability to match or discriminate visually presented symbols) are reported to consistently predict literacy achievement at the end of kindergarten or beginning of first

grade for both preschoolers and kindergartners. This emphasizes that preschool children should be assessed on different dimensions of emergent literacy skills at different time periods in order to get a complete understanding of their emergent literacy behaviour (see Khurana, 2011 for more details).

Author's perspectives on emergent literacy in bilingual children

The construct³ of emergent literacy that evolved in the last 4-5 decades has been critically evaluated over the years to develop a firm concept⁴. Yet, the term 'emergent literacy' (also called as early literacy) has remained enigmatic till date because of the nature of its characteristics that get defined depending on the socio-cultural and linguistic diversities. Although efforts have been made to understand the dimensions and the components of emergent literacy behaviour in children, there appears to be a vacuum when one encounters a bilingual child for assessment as well as facilitation of early literacy behaviours. However, one need not despair at this juncture since the greatest strength for bilingual children is their available cognitive advantage and that should be focused during assessment as well as facilitation of emergent literacy skills.

It is heartening to note that in the recent years, considerable attention has been paid to conduct commendable research studies to fill in the vacuum. Consequently, empirical information on the differences between monolingual children and bilingual children during the developmental phase of early literacy behaviours has been documented particularly from linguistically diverse countries. Awareness and knowledge of emergent literacy behaviours and its significance for bilingual children has made potential contribution to view from positive perspective on issues such as advocacy, educational policy decisions on the medium of instruction, exposure to number of languages during developmental period, home language vs. school language, teacher proficiency in the school language vs. children's success in early literacy behaviours. The available information support the cognitive advantage derived through exposure to languages besides emphasizing that communication by the 'not so proficient teachers' is more important than the specific linguistic units per se used by a teacher. Since cognition, language and literacy go hand-in-hand, there is bound to be advantages to bilingual/multilingual children over monolingual children in the development of early literacy behaviours. India is fortunate enough to inherit language diversity in its population and therefore, chil-

³An idea or theory containing various conceptual elements, typically one considered to be subjective and not based on empirical evidence

⁴An idea of something formed by mentally combining all its characteristics or particulars that is an intuited object of thought which functions as a prototype or model of new product or innovation

Table 1: Predictors of emergent literacy skills

Sl. No.	Skill	Description
1	Alphabet Knowledge	Knowledge of the names and sounds associated with printed letters
2	Phonological Awareness	Ability to detect, manipulate, or analyze the auditory aspects of spoken language (including the ability to distinguish or segment words, syllables, or phonemes), independent of meaning
3a	Rapid Automatic Naming of:	Letters or digits: the ability to rapidly name a sequence of random letters or digits
3b	Rapid Automatic Naming of:	Objects or colors: the ability to rapidly name a sequence of repeating random sets of pictures of objects or colors
4	Writing or writing name	Ability to write letters in isolation on request or to write one's own name
5	Phonological memory	Ability to remember spoken information for a short period of time

dren are immersed in two or more languages right from their early childhood by virtue of its cultural and linguistic diversity. If provisions are made for intense exercises and experience-rich environment for development of emergent literacy skills, the dual demand on bilingual children to make complex connections for both oral language and literacy skills can be met with ease. Taking advantage of this favourable context that India is blessed with, sincere efforts should be made to nurture emergent bilingualism and emergent biliteracy.

It is universally accepted that there is great demand on an individual to be cognizant of print (words and sentences) in all walks of life in today's literate society. Yet, there are a considerable percentage of individuals who fall behind in their literacy skills. It is fairly well established that monolingual children with inadequate skills during their early literacy stage are those who begin school with less knowledge and skill in verbal abilities (oral language), ability to attend to the sounds of language as distinct from its meaning (phonological awareness), poor familiarity with the basic purposes and mechanisms of reading, and letter knowledge (print awareness). Consequently, they also fail in their social expectations leading to psychological and emotional problems. Since the foundations of oral language skills are the stepping stones for successful literacy, it is strongly proposed to develop oral language skills in the earlier years so that failures in literacy can be easily prevented. This premise holds true even for bilingual children.

An important primary step toward preventing literacy failures in higher grades is to design and implement strategies to reduce the number of children with inadequate literacy-related knowledge and skill. For a linguistically diverse country, the preventive efforts have to be further intensified to

reduce the magnitude as well as the severity of the problem. Additionally, the prevention of literacy failures has larger implications on a country's manpower resources as well as its economy. The cost for rehabilitation of persons with literacy failures who manifest considerable severity in their later years is much higher when compared to that for planning and implementing activities to facilitate and promote emergent literacy skills. Prevention programs are considerably less expensive and more effective than treatment that further supports the need to work on facilitation of emergent literacy skills to safeguard the interest of the individual as well as the society and the country at large. Considering all these, our mission to contribute to the growth of literacy is facilitation and promotion of emergent literacy skills in both monolingual as well as bilingual children so that we can contribute our mite to the vision of Dr. A.P.J. Abdul Kalam and Dr. Y.S. Rajan noted in their book, *India 2020: A Vision for the New Millennium*.

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