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Classroom literacy practices in low- and middle-income countries: an interpretative synthesis of ethnographic studies

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ABSTRACT

Surveys in low- and middle-income (LMI countries) reveal persistently low levels of learning among children in disadvantaged communities. Against this background, our synthesis of ethnographies aims at a fresh interpretation of classroom practices to clarify instruction-related barriers to literacy attainments. The review focuses on the period from 1990, the year of the UN Declaration of Education for All, to 2014. Sixteen studies focusing on children up to Grade 4 from eleven LMI countries met criteria for methodological rigour. The synthesis, structured within socio-cultural and psycholinguistic frameworks, examined vignettes of teacher- and child-initiated talk and activities related to language and literacy learning. Trends captured include instructions that are light on explanation, skewed towards reinforcing orthographic knowledge, and leaving the advancing of children's broader linguistic and general knowledge to incidental learning. Learning from the peer group is common and, in bi- and multilingual settings, use of home language as a learning resource is uncommon. It is proposed that a cultural analysis of choral lessons, writing for learning, peer tutoring and community-specific preferences for language of instruction is required to understand whether embedding inference-focused interventions within these practices will promote more effective teaching and learning.

KEYWORDS

Classroom observation; literacy practices; educational disadvantage; ethnography; integrative synthesis

Introduction

Literacy practices in the classroom bear influences from many directions including the theoretical and ideological debates of the times. A longstanding debate in the field is whether it is better to adopt a meaning-based approach to reading instruction or code-based phonic methods. Choosing one or the other approach, or a combination of the two, means deciding on the content of the curriculum in the first years of instruction. Extensive psycholinguistic research, especially about phonological and morphological processing, and about poor readers (dyslexia), has been particularly influential (e.g., National Reading Panel, 2000). The area has been further informed by research on the role of the home literacy environment and of school effectiveness in promoting literacy skills (e.g., Senechal & LeFevre, 2014; Sylva, 2014).

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These lines of research are, however, mostly located in high-income countries and are therefore informed by languages of instruction, classroom practices and literacy environments limited to these contexts. Despite such contextually narrow validation, several instructional choices made in high-income countries have made their way into low- and middle-income countries (LMI countries). There is now a growing consensus that, despite waves of educational reform informed by research in high-income countries, the assimilation of 'good practices' is patchy especially into pre-service teacher training (e.g., Ghana, Kenya, Mali, Senegal, Tanzania and Uganda: Akyeampong, Lussier, Pryor & Westbrook, 2013). Teacher reports suggest a strong domination of teacher-led interactions in the classroom (e.g., Ethiopia: Asegdom, Desta, Dufera & Leka, 2006; Frost & Little, 2014). Large scale surveys of primary schools such as ASER, EGRA, READ, SACMAQ and UWEZO meanwhile paint a grim picture of low literacy attainments among children in public or private school systems serving disadvantaged communities in LMI countries. Against this background, we present here a critical interpretative synthesis of ethnographic studies to bring fresh light to our understanding of the phenomenon of classroom literacy practices and help clarify the barriers to higher educational attainment. Such a synthesis represents efforts at 'trying to interpret and understand the world ..., arranging (configuring) information and ... developing concepts' (Gough, Thomas & Oliver, 2012, p. 3). Our synthesis adopts this perspective, to ask the question: what are the 'attributes' of classroom literacy practices in different contexts in low-income countries? The synthesis draws on trends captured in 16 high quality studies and from theoretical knowledge outside these primary studies to arrive at what Gough et al. (2012, p. 6) call a 'mixed knowledge synthesis'.

A useful theoretical approach to understanding different literacy instruction practices is the socio-cultural perspective. Within this perspective, literacy use and acquisition has been characterised as contextual, situated and ideological (Street, 2000). The emphasis is on what people do with literacy. Literacy is viewed as a social practice, deriving its meaning from the context as much as from the psychological processes involved in the act of reading and writing. Within this perspective, literacy practices are linked to a broader social power structure. Earlier, Heath (1983, p. 25), who observed literacy activities in a working-class community in the United States, concluded that 'literacy has different meanings for members of different groups, with a corresponding variety of acquisition modes, functions, and uses'. Heath underlined that these findings have implications for schools; it is possible that the differences seen in classroom-based literacy practices emerge out of a difference across individual communities in the functions of literacy that are valued, acquired and used.

Complementing the socio-cultural perspective is the psycholinguistic perspective which is concerned with the associations between language, cognition and literacy. A useful framework is the Reading Systems Model (Perfetti & Stafura, 2014). Within this view, reading draws upon many types of knowledge including linguistic, orthographic and general knowledge about the world. This knowledge base may simultaneously support or limit several component reading skills, including decoding and word recognition, comprehension of the stated and implied meaning in texts, and monitoring the generation of meaning against the situation being described in the text. These component skills draw upon cognitive and perceptual processes ranging from visual discrimination of symbol shapes to drawing inferences by making connections and filling gaps during passage reading. Within this framework, individual differences in reading attainment are seen as stemming from variations in knowledge or in specific cognitive processes, all of which are further conceived as inter-connected and with

reciprocal influence. A 'pressure point' in the system that has received considerable research attention is 'Lexical Quality' (Perfetti, 2007). Lexical quality refers to the clarity and sharpness of word representations in the lexicon at the level of orthography and meaning. Without high quality representations word recognition during reading will be slow and generation of meaning for text comprehension will be compromised. Other pressure points to consider include weak orthographic knowledge (e.g., unfamiliar letters) and weak general knowledge (e.g., unfamiliar text genres, unknown details about a topic).

Drawing upon the socio-cultural perspective and the reading systems framework, this paper will synthesise findings from studies that have used ethnography as method, methodology or 'specific epistemology and ontology' (Lillis, 2008, p. 355) to examine classroom literacy practices within schools in low- and middle-income countries. The ethnographic account is descriptive, with interpretation of trends in the observations. A rigorous review of ethnographies will likely cover a wide range of socio-cultural and linguistic contexts, and while we do not claim that these contexts will be similar, we expect that the sheer diversity of contexts may offer insights about how literacy instruction is conceived and delivered within school systems serving disadvantaged urban and rural communities.

Methodology

This interpretative synthesis was part of a larger review of evidence regarding foundation learning and literacy in developing countries (Nag, Chiat, Torgerson & Snowling, 2014). The review focused on low- and middle-income countries identified from listing by the World Bank and OECD. The review covered the time period from 1990, the year of the UN Declaration of Education for All, to December 2014. Primary data arising from experimental, observational and intervention studies were included while policy documents, opinion pieces and other reviews were excluded. The synthesis reported here examined data on classroom literacy practices in school systems serving disadvantaged urban and rural communities, and arising from ethnographic methods and perspectives. We devised search strategies using a combination of indexed keyword terms and free text search terms identified by scanning database thesauri and background literature already known to the project team. The literature searches involved two waves of electronic searches[1] through databases covering education, mental health, economics and social care, and additional collation of sources identified from citation chasing and a call for suggestions from key academics. A total of 13,605 papers were found.

We conducted two waves of checks—pre-screening and screening—to shortlist papers for procurement of full texts. The inclusion criteria during pre-screening checked the study title and/or abstract for relatedness to topic, target countries and age band. The inclusion criteria in the screening phase focused on study design. Pairs of reviewers made independent decisions on every paper. If there was agreement to include the study it was included. If one reviewer included and the other excluded a study, a third person arbitrated. At this stage a study inclusion was preferred if there was any ambiguity about whether a study met our criteria or not. Specific to the classroom practices review, a total of 33 papers were shortlisted at the end of the screening phase.

The procurement rate for the review on classroom practices was high (~ 90%). Non-procurements were mainly for doctoral theses and papers published in technical journals from the LMI countries. We next checked the full texts of procured studies against inclusion criteria specific to the classroom practices review: a) the study should be with children

Table 1. Brief description of the studies.

Country	Paper	Sample	Community	School type	Ethnography method
Eritrea	Asfaha & Kroon, 2011[1]	Grade 1, nine schools	urban, rural	government schools	observation, interview, documents
Ethiopia	Cianca, 2012[1]	Grade 3 (and G 7), one school	urban	private 'budget' school	observation, interviews, documents
Ghana	Akrofi, 2003[1]	one G1 class, 5 sets of parents and children	urban	public school	observation, interviews, documents
India	Dyer, 2008[1]	teachers of Grades 1–5	urban	government 'municipal corporation' school	teacher diary, workshops
	Saigal, 2012[1](Case Study 1)	one primary teacher in a single teacher school serving Grades 1–5	rural	government school	participant observation, interviews, documents, field notes
Kenya	Mount-Cors, 2011[1]	mothers with limited literacy and with children in Grade 2 in three schools	semi-urban, rural	government school system	participatory observation, interviews, field notes
	Dubeck, Jukes & Okello, 2012[2]	40 Grade 1 or 2 teachers in 24 schools	small towns, rural	'public schools'	observations, post-observation conversations, interviews
	Lisanza, 2014[2]	one Grade 1 classroom, 2 teachers	rural	government school system	observations, interviews, field notes, documents
Mauritius	Owodally, 2012[2]	one preschool class and 3 teachers	urban	government pre-school	observation, interview, documents
Mexico	Azuara, 2009[1]	two Grade 3 children, their families and teachers	indigenous	government school	participatory observation, interviews
	Azuara & Reyes, 2011[1]	one Grade 1 child	indigenous	government school	participatory observation, interviews
Pakistan	Farah, 1991[1]	pre-school to Grade 5, one girls' school	rural	government school	participatory observation, interviews
Peru	de la Piedra, 2006[1]	small village community with one school for KG to G5	rural	government school	participatory observation, interviews, documents
	de la Piedra, 2010[1]	small village community, Grade 5 children	rural	'community school'	participatory observation, interviews
South Africa	Mkhize, 2013[2]	poor rural communities, Grade 4, additional observations: Grade 1	rural	public school	participatory observation, interviews
Tanzania	Wyse, Sugrue, Fentiman & Moon, 2014[2]	grades 1–7 in a single school	urban 'informal settlement'	government school	participatory observation, interview, field notes

Note: [1] = study shortlisted in first wave of searches,
[2] = study shortlisted in second wave of searches.

between pre-school and Grade 4 from low income families and/or marginalised communities, and who typically enrol into highly subsidised schools, and b) the data should be from observations and interviews either with teachers or members in the child's community. The final inclusion criterion was based on an appraisal of methodological standard as high or medium quality. Individual studies received a rating of 'high' when they demonstrated adherence to principles of appropriateness, rigour, validity and reliability, and demonstrated principles of conceptual framing, transparency and cogency. Studies with some shortcomings were rated as 'moderate', and those with several shortcomings were rated as 'low' and excluded from the review. Other reasons for exclusion at this stage were when the full texts showed that, although the topic of research was relevant, the study did not follow an ethnographic approach (e.g., Akyeampong et al., 2013), the participants were outside the school grades of interest (e.g., Protacio & Sarroub, 2013) or the focus was not specifically on literacy (e.g., Frost & Little, 2014). All papers were independently read by the first and third authors for data extraction and to assign a quality rating.[2] Discrepancies in filling out the synthesis matrix (described below) or in quality rating were dealt with through discussion until a consensus was reached. A total of 16 studies met final criteria. The synthesis of attributes of classroom practices from studies shortlisted from the first wave of searches was validated against the studies included in the second wave. Table 1 gives brief details of these primary studies.

Synthesis matrix

The first draft of a matrix to guide the synthesis was developed based on the field experience of the authors in LMI countries (e.g., Asfaha, Kurvers & Kroon, 2009; Nag, 2007; Nag & Snowling, 2012) and a review of the literature on socio-cultural and psycholinguistic variables and classroom processes specific to two representative countries (Eritrea, India). For each study, the reported observations were mapped to one or more *component skills of literacy*. We specifically examined the practices observed to promote broader oral language skills (vocabulary, syntax), print awareness, letter (symbol) knowledge, manipulation of symbol units (e.g., blending, segmentation), reading accuracy and speed, reading comprehension, spelling and writing, and meta-linguistic awareness. These component skills were chosen because they cover literacy learning typically expected in the primary school years irrespective of LMI country, language or writing system (e.g., Asfaha et al., 2009; Babayigit & Stainthorp, 2010; Nag & Snowling, 2012). For each of these component skills of literacy we extracted reports and observations about *teaching practice* as reflected by classroom activities and talk surrounding literacy and texts. Specific descriptions in each study were mapped to one of four dimensions: teacher talk, child talk, literacy practice or other features of literacy learning (see Appendix). For interactions initiated by teachers, thematic extractions were further classified as a) use of questions and answers for instruction (the Socratic method), b) drill exercises and phonics based activities, c) reading stories and 'whole language' activities, and d) reciprocal interactions between teacher and pupil to clarify, correct and reinforce instruction. For interactions among children, descriptions were tagged to a) pair and/or group work, b) children asking questions to teachers, and c) chorus or sing-song lessons. The dimension on literacy practice covered instances of reading (e.g., reading in front of the class) and writing (e.g., copywriting). Other features of literacy learning covered patterns of language usage specific to bi- and multi-lingual contexts, and the contexts of learning outside the school setting. A 'general' section captured talk by teacher or child on matters

other than literacy learning, and any other description that was not covered elsewhere in the extraction template. Together, this multi-dimensional matrix of teaching practice and specific component skills of literacy offered a common frame for configuring evidence across diverse contexts.

The analysis of the synthesis matrix was through thematic extraction of the 'what' and 'how' of literacy practice captured in each vignette or observation. Here, 'what' refers to the activity or interaction reported in the study (e.g. teaching about print), and 'how' refers to the chosen teaching method (e.g. copying from labels of boxes). A further step was to arrange the information and develop the meta-concepts that would capture the key facets in the research reviewed. These procedures may be seen as an attempt at 'configuring' the available research literature into an interpretative synthesis which 'seek[s] to push beyond the original data to a fresh interpretation of the phenomena under review' (Barnett-Page & Thomas, 2009, p. 8). From extractions of teacher talk, child talk and literacy practices around reading and writing, we first present the language learning context, followed by findings about literacy learning and child-to-child learning.

Findings

Language learning context

The demands of literacy learning are relatively less when literacy instruction is in the child's home language, whereas learning literacy in a second language also requires spoken language acquisition. In our review, literacy acquisition is in a second (or third) language for an overwhelming majority of children (see Table 1). The teachers in these contexts play critical roles in allowing or disallowing the use of home languages during literacy instruction. The patterns of language usage differ considerably (see language learning context, Table 2). While in some contexts switching between L1 and L2 is allowed freely in the classroom (Mkhize, 2013), in other situations the home language is 'used as a support' (Owodally, 2013) or mainly the language of instruction is allowed (Akrofi, 2003); in yet others there is a mix of all three (Dubeck, Jukes & Okello, 2012). Planned school activities to build bridges between the child's home and school languages are conspicuously absent in all but for a sub-set of teachers (e.g., Dubeck et al., 2012). Instead, the home language surfaces during play and unsupervised time (e.g., during paired work, Farah, 1991), and in a community's attempt to connect home and school (Azuara & Reyes, 2011; de la Piedra, 2006). One important reason for what is considered an acceptable language for use in the classroom is the teacher's views of the value of home language in second language learning (e.g., see Mkhize, 2013). A mother's perception that children have to 'teach themselves' (Mount-Cors, 2010, p. 194), captures the learning situation for many second language learners in her coastal town in Kenya but may also speak for children in several other settings examined in this review. As Dyer (2008, p. 248) points out, 'Children's own language is not understood to be a pedagogical resource.'

Literacy learning context

Literacy instruction across all classrooms in the review prioritises accuracy and getting the 'correct' answer (see literacy learning context, Table 2). The teaching approach is didactic and interactions are characterised by teachers asking closed-ended questions and children giving

Table 2. Language, literacy and child-to-child learning contexts in the studies.

	Language learning context		Literacy learning context		Child-to-child learning context	
Study (country)	Medium of instruction (language(s))[1]	Use of home language(s) in class	Key literacy practices	Key unit of instruction	Spontaneous peer tutoring	Scripted peer tutoring
Asfaha & Kroon, 2011 (Eritrea)	a) MI = L1 b) MI = L2 (Arabic)	a) NA b) rare	chanting, chorus reading, recitations, drills of decoding and writing, memorising the letters or word spellings	letters, syllables, words	good students help weak ones	
Cianca, 2012 (Ethiopia)	MI is bilingual (English & Amharic)	yes	reading in unison following teacher, copy writing from board, feedback by teacher on written work	word, passage, story		buddy reading
Akrofi, 2003 (Ghana)	MI = L2 (English)	rare	choral repetition, copying from the board, look & say, read aloud as a class and individually	word, phrase, sentences, story		
Dyer, 2008 (India)	MI = L2 (Gujarati)	rare	chorus, repetition, questions & answers, handwriting practice	symbol, syllable, word	bright child help average performers	
Saigal, 2012 (India)	MI = L2 (Hindi)		emphasis on rote learning, code-focussed drill, very few instances of storytelling and children re-constructing stories	symbol, syllable, word, story		
Mount-Cors, 2010 (Kenya)	MI = L2 & L3 for some (Kiswahili, English)	yes	copywriting ('write while dozing' p. 168), reading storybooks			
Dubeck, Jukes & Okello, 2012 (Kenya)	MI is bilingual (English, Swahili)	varied across schools	emphasis on whole words, choral reading, drills of decoding ('word detection task' p. 55	syllable, word		
Lisanza, 2014 (Kenya)	MI = L2 (Kiswahili)	yes, by children only	choral reading, riddles, copying, spelling, hand writing, drawing, individual students reading in front of class	syllables, words, story, grammar	peer-tutoring	
Owodally, 2012 (Mauritius)	MI = L3 (English) L2 is French	yes	copying words, letters, names	print awareness ('cosmetic')		
Azuara, 2009 (Mexico)	MI = L2, with some L1 instruction (Spanish, Maya)	rare, 'only for directions or clarifications' p. 119	reading loud, choral/ round robin reading, drilling, writing assignments, copy writing practice	vowels, consonants, syllables, sentences	'helped each other to build understanding' p. 394	

Azuara & Reyes, 2011 (Mexico)	MI = L2, with some L1 instruction (Spanish, Yucatec Maya)	rare	drill of 'isolated features', reading syllables, copying, choral/ round robin reading	vowels, consonants, syllables, sentences		
Farah, 1991 (Pakistan)	MI is bilingual (Urdu and English)	yes	recitation, memorisation, choral reading, copying practice, one leads and others repeat	words, sentences, 'essays'	'help is always available from peers or from girls in the higher grades sitting next to them' p. 67	
de la Piedra, 2006 (Peru)	MI = L2 (Spanish)	yes, by children only	dictation, copywriting words, syllables, sentences ('planas'), value decoding over comprehension	syllables, words, formal features of text	teaching each other, taking 'diverse roles' p. 393	collaborative group work (e.g. to write an official letter of request)
de la Piedra, 2010 (Peru)	MI = L2 (Spanish)	rare	memorising, copying, writing practice, highlighting key sentences, collective reading; sharing "theory' of reading and writing' (p.108)	sentences, formal features of text	collective reading	
Mkhize, 2013 (South Africa)	a) Grade 4: MI = L2 (English) b) Grade 1: MI = L1	yes	echo/ choral/ loud reading, drilling, memorization, recitation, spelling loud in unison, copying	intonation, syllable, word, sentence		
Wyse, Sugrue, Fentiman & Moon 2014 (Tanzania)	MI = L2 (English)	yes, 'to aid simple and complex forms of understanding by the pupils' p. 65	chanting, questions & answers, copying, choral response	phrase, sentence, story		pair /group work ('memorising the dialogue and conversing with each other' p. 67)

Note: [1]MI = Medium of instruction, L1: child's home language, L2: child's second language, NA = not applicable because child's home language is the medium of instruction in school.

answers, either in unison ('choral response') or when being called upon to respond. Reports on 'talk about books' initiated either by the child or by the teacher are conspicuous by their absence. There are only a few instances of shared book reading as typically understood in the literature from high-income countries where the teacher is a role-model of skilled reading and children assume responsibility for the component in the reading task of which they are capable. Devotional practices play an important role in promoting literacy in many of the communities observed (Azuara & Reyes, 2011; de la Piedra, 2006; Farah, 1991), and it is in this outside-the-classroom context that there were instances of shared reading of religious texts.

In many of the studies, vignettes also reveal a focus on punctuation and presentation: 'Children are expected to read clearly and write neatly' (Azuara & Reyes (2011, p. 187). In addition, we find only limited use of explanation-based correction and feedback. One study from rural Peru captures the preferred literacy practices as follows: 'basic decoding skills and the formal features of texts, sentences, and words were valued over understanding, construction of meaning, and student creativity' (de la Piedra, 2006, pp. 388–389). Put differently, there is a 'playing down [of] the meaning-making, more playful and more entertaining functions and uses of print' (vignettes from an urban pre-school in Mauritius, Owodally, 2013, p. 77). This review did not focus on the later grades, though there is evidence that literacy practices tend to remain focused on the mechanics of reading and writing (Grade 7 in Cianca, 2012). One impact of such a skew in literacy instruction is on poor quality narrative writing skills ('devastating results', de la Peidra, 2006, p. 392). A further impact is on reading comprehension, as is proposed for Grade 4 children in South Africa: 'It is possible that the students struggled with the inferential questions because of the predominance of lower-order thinking questions in class' (Mkhize, 2013, p. 114).

The data set is rich with descriptions of how literacy instruction is biased for orthographic knowledge. Repeated practice and different forms of drill are integral to the teaching-learning approach (literacy learning context, Table 2). While the drills are prescriptive, the process varies from teacher to teacher. One teacher in a congested urban colony in India spoke about 'writing big on the black board' to teach about the symbol set of Gujarati (Dyer, 2008). Another teacher in a village school in India spoke about using familiar words to introduce the symbol set to children who were learning to both read and speak in the school language, Hindi (Saigal, 2012). An example from a Grade 1 Zulu language classroom in South Africa shows how 'the *p*-sound group' is practised: '... by writing the sound *p*- on the board and combining it with the vowels: *pa, pe, pi, po, pu*' (Mkhize, 2013, p. 118). Vignette 1 captures another typical session for teaching the symbol set in alphabetic Saho in a Grade 1 classroom in Eretria. Here and in other vignettes across languages the preference for syllables (other than words and sentences) as units of language in drill exercises to support literacy acquisition stands out. Such syllable-focused drill supports orthographic knowledge about sound-symbol mapping and is distinct from the phoneme-focused synthetic phonics popular in English speaking high-income countries (e.g., National Reading Panel, 2000). The preference for syllable-based instruction is an advantage in the initial phase of learning because syllable units in a word are more accessible than the phoneme (Asfaha et al., 2009; see also Nag & Snowling, 2012). But when the practice persists in languages that are essentially phonemic in sound-to-symbol mapping, then the reason is likely one of tradition or availability. None of the studies in the review describe locally-responsive phoneme-level programmes.

Vignette 1: Symbol-sound linkages: vignette of teacher [T] and student(s) [S/Ss] interaction (Asfaha & Kroon, 2011, p. 240)

T: [wrote on the blackboard *ba* and asked students to read]

S1: *a*

S2: *abo*

S3: *a - abo*

S4: *ab …*

S5: *ba*

T: *ba ba ba ba*

Ss: *ba ba ba ba*

T: *bu bu bu bu*

Ss: *bu bu bu bu*

Chorusing the alphabet, a rhyme or a section of the school lesson is a very noticeable aspect of many of the classrooms. The singsong class may be led by an older or more able child; or students 'echo reading after the teacher' (Mkhize, 2013) in 'choral repetition' (Dubeck et al., 2012). Such group recitation occurs daily, and sometimes quite often through the school day, giving the child a predictable routine. In some contexts, teachers judiciously mix chorus with individual responses (e.g., 'small questions in between', Dyer, 2008) and explicit feedback (e.g., to children's blind repetition: 'Do not sing a song; look at the book.', Lisanza, 2014). We also find that vocabulary building activities are rare within these second language settings, and where recorded, the activity does not deepen vocabulary knowledge or support the development of high quality lexical representation. Instead, the methods veer toward further supporting orthographic representation of the word (e.g., Lisanza, 2014). Vignette 2 captures one further way in which vocabulary teaching occurs in the classroom.

Vignette 2: New word learning: vignette of teacher [T] and student(s) [S/Ss] interaction (Mkhize, 2013 pp. 93-94)

Teacher: [cueing Sihle] Said Themba.

Sihle: [repeating after the teacher] Said Themba. On the other side of the huge hill lay a piece of sheet iron.

Teacher: [interrupting] On the other side of the huge hill. Say huge.

Students: [in unison] Huge

Teacher: Again.

Students: Huge

Teacher: If something is huge it means it is big (stretching her arms to show the meaning of the word huge) Yes, it's a huge hill.

Copywriting is common in all early grades studied. There is evidence that, for the adults in some of these communities, copywriting is a personal way of immersing oneself in written language (e.g., the copying of love poems, songs and tracts from religious texts, de la Piedra, 2006; 2010), suggesting deeply embedded cultural roots for this classroom practice. No study

included in this synthesis reported lessons for creative writing or activities to support the child as author (except in Lisanza, 2014 where simple oral riddles and drawing to illustrate are included). In classrooms observed in rural Peru, de la Piedra (2006, p. 392) notes that 'children were so used to copying prepared texts from the board, that it was very difficult for them to create an original text for their own purposes'. A recurrent out-of-classroom practice in some communities is to engage with written communications about events occurring in and around a place of worship (Azuara & Reyes, 2011; de la Piedra, 2006; Farah, 1991), and home tutoring that mainly asks the child to do copywriting (Akrofi, 2003).

Apart from the practices described above, the studies also show that children and teachers have individual solutions for improving literacy skills including extensive copy writing, repetition till committed to memory, underlining important tracts (lines on the page) to be read and re-read till recognition becomes automatic, and reading along with a more skilled community person (e.g., de la Piedra, 2006; 2010). It is possible that the motivation for these literacy practices is associated with the type of assessment common in these contexts. Two clear indications of this association are: irrespective of writing system and earlier exposure to print, teachers expect that children should know the symbol set within a fixed number of weeks (alphabetic and alphasyllabic systems: Asfaha et al., 2009; de la Piedra, 2006; Dyer, 2008) and they often assess children's learning as satisfactory when there is a faithful reproduction of teachers' lessons (Azuara & Reyes, 2011; Mkhize, 2013).

The child-to-child learning context

A repeated theme across the studies is peer tutoring (see child-to-child context, Table 2). Also known as buddy teaching, the practice has older children helping younger ones or a higher achieving child helping an average or struggling child. Such paired and small group work among children, mostly spontaneous in nature, supplements teacher input, though in some contexts the peer tutor/student tutor can become the sole instructor for the youngest and the weakest in the group (e.g., Farah, 1991). One intervention which was a structured third-language reading programme recruited 'cross-age buddies' and reported improvement in spoken language skills and motivation of both children in the pair (Grade 7 and Grade 3 pairs, Cianca, 2012). Importantly, in peer groups and during child-to-child tutoring, children often seek clarifications to understand the task at hand (e.g., Cianca, 2012; Farah, 1991; Lisanza, 2014). Such clarification-seeking by children is typically absent in student–teacher interaction within the same classrooms.

Discussion

We set out to provide a map of the qualitative research about classroom literacy practices in schools serving disadvantaged urban and rural communities in LMI countries. The synthesis located vignettes in ethnographies of classroom practices which described moments capturing learning/teaching of literacy skills. The targets and methods of instruction, the classroom talk surrounding these and other activities were carefully recorded using a matrix developed for the review. We particularly examined practices around print awareness, symbol knowledge, reading, writing, building broader oral language, and meta-cognitive skills. We also examined teaching methods by looking for reports of talk about literacy and/or texts, either teacher- or child-initiated, and opportunities for practice. Strengths of our study are its

scope (1990–2014) and validity checks through two independent waves of searches and data extraction. It may be argued that a singular matrix biases the review towards commonalities of classroom practices within LMI countries. However, a structured extraction of details from multiple studies has the potential to offer novel insights. This section gives an interpretative synthesis of the findings under the headings of the curriculum, the contexts of learning, the attributes of instruction and the importance of peers.

The curriculum

A pressing issue in LMI countries is the vexed problem of how a country's educational policy objectives are translated into classroom practice. Teacher interviews and classroom observations in Timor-Leste (Quinn, 2013) show for example that the transacted curriculum is twice removed from the stated objectives: first, there is a mis-match between the language education policy and individual teachers' understanding of the policy, and second, between individual teachers' interpretation of the policy and their classroom practice. Among the possible factors for failure to implement policy in practice are entrenched attitudes towards the teaching-learning process (e.g., local language vs. English instruction: Lucas, McEwan, Ngwara, & Oketch, 2014; conversation with teacher vs. listening/watching teacher: Frost & Little, 2014). Similar observations recur in the studies suggesting that the daily routines of classroom literacy practice are very different from the 'formal' curriculum of policy documents available in the country (e.g., Eritrea: Asfaha & Kroon, 2011; Kenya: Dubeck, et al. 2012; Mauritius: Owodally, 2013; Mexico: Azuara, 2009; Tanzania: Wyse, Sugrue, Fentiman, & Moon, 2014). Where materials to promote literacy have been supplied, teachers had not yet included these into teaching practice (e.g., reluctance to lend storybooks to children for fear of damage, Akrofi, 2003; 'emphasis on syllabus completion', Saigal, 2012, p. 1016). Classroom practices do not keep pace with methodologies implicit in newly prescribed government textbooks (e.g., in India, Dyer, 2008), instead they reflected either traditional, religious-cultural routines such as chanting and sing-along, or rote-memory based practices teachers themselves had learned as students. Further, there is good evidence from this synthesis that pre- and in-service courses are failing to provide teachers with methods that teach for meaning and understanding (e.g., Asfaha & Kroon, 2011; Dubeck, et al., 2012; Saigal, 2012; Wyse et al., 2014). In summary, teachers bring their experiential, cultural and ideological background to shape classroom practices, subtly changing interventions that aim to implement meaning-focused and learner-centered pedagogy. These findings confirm that the impact of in-service training on educational reform will remain low if 'embedded and tacit' cultural constructs are unacknowledged during the reform process (Clarke, 2003).

The context of learning

It is widely accepted that for teaching to be effective it should be relevant to the learner. Several studies describe a disregard for children's background knowledge and a failure to scaffold the learning of new topics. Ignoring home culture, literacy artefacts in the community and family practices with print may be particularly damaging when parents have low levels of literacy. Only a few examples are available of connections between classroom activities and daily life: writing a missive (Azuara, 2009), noticing print in the environment ('The teacher then distributes the boxes to the children, asking them to draw the box, colour

it and write exactly what is on the box', Owodally, 2013, p. 74), and using children's names for sound awareness ('whose name starts with 'n'... ?', Dyer, 2008, p. 24). The repeated 'disconnect' is best captured in the words of a schoolgirl's parent in rural Pakistan: 'teachers do not transfer skills to everyday requirements' (Farah, 1991, p. 79).

A further disconnect is around the home language and the school language. At one level, findings from the studies converge with evidence from research using other methodologies (e.g., Lucas et al., 2014; Quinn, 2013) showing diversity in patterns of L1-L2 usage across public funded systems in LMI countries. On the other hand, there are tensions that drive a wedge between the language of the home and the school. Families can take the position that home language is most relevant for home matters and non-essential for either literacy learning, or for advancement through school and later social mobility (e.g., de la Piedra, 2010). Teacher attitudes may also work in tandem to undervalue home language, with robust evidence across all studies that the child's linguistic heritage of songs, stories, poems and proverbs are ignored in school. One reason could be that teachers do not have proficiency in the child's home language, alternatively, the teacher may come from a different socio-cultural and/or linguistic setting (e.g., Dubeck et al., 2012; Farah, 1991; Mkhize, 2013). In addition, children have to meet unrealistic targets for the rate at which they can learn the school language and develop literacy as, for example, Dyer (2008, p. 248) stated: 'Teachers' diaries reflect their expectation that children should know all the letters of the alphabet within a very short time after arriving at school.' The absence of children's books in the home language (Akrofi, 2003; Azuara & Reyes, 2011; de la Piedra, 2006) arguably becomes a further reason for the home-school 'disconnect'.

The attributes of instruction

Increasingly, the evidence from controlled studies in LMI countries shows that an emphasis on dialogue and guided feedback ensures comprehension and the development of high quality memory representations (e.g., Bangladesh: Opel, Ameer, & Aboud, 2009; Kenya & Uganda: Lucas et al., 2014). In contrast, many contexts in LMI countries are focused on chorus and copy work. These aspects of the literacy instruction classroom are used to introduce and practise a range of skills from letter recognition to learning spellings of words, construction of sentences and answers to questions about passages in school texts. Such practice in all its variations is economical because it does not require additional materials and hence does not strain limited resources. Even so, the implication of singsong lessons and copywriting is that both deep instruction and the 'relevance question' (Mount-Cors, 2010, p. 167) are ignored. The predominance of practices such as the singsong lesson and copywriting lends credence to concerns that the worldviews of teachers about the teaching–learning process influences their propensity to apply newly introduced techniques with the depth, specificity and frequency needed (e.g., India: Clarke, 2003; Kenya and Uganda: Lucas et al., 2014). However, there is also variety in the practice of both the singsong lesson and copywriting, suggesting that a responsive approach to teaching is far from absent (e.g., teaching the 'akshara' (symbol set) by Indian teachers in Dyer, 2008; Saigal, 2012; local language game 'vitendawili' (riddles), Lisanza, 2014).

An inference from this synthesis is that much is left to the child's incidental learning. Perhaps because of this, individual differences in literacy attainments within a particular grade are very marked in many developing countries; those children who can infer quickly

are able to pull ahead leaving others far behind. These self-generated (rather than teacher-explained) inferences may be for a wide range of component skills of literacy, including understanding symbol-sound mapping, the structure of narratives, and the links between idea units.

In addition, the decontextualised nature of teaching practices means that making links between discrete concepts is left to the child. Mapping school-based lessons to 'out-of-syllabus', real-world information is also left to the child. In other words, much depends on unplanned experiences and spontaneous insight, and this in turn means that a lot depends on the child's own profile of strengths such as level of phonological awareness, vocabulary knowledge, and ability for inference making. In terms of the Reading Systems Framework (Perfetti & Stafura, 2014), classroom literacy practices do not address the knowledge bases that support literacy learning, and leave the growth of individual cognitive skills for literacy development to undifferentiated classroom practices.

The importance of peers

Many of the settings featured in the review are collectivist in orientation (e.g., rural agrarian communities) where the child learns from the group, and the tutor-role is natural for older siblings and peers. The spontaneous evolution (and/or scripted use) of a child-to-child approach therefore has an intrinsic value and has begun to appear in measurement of teacher effectiveness in LMI countries (e.g., 'There is enhanced peer support among learners', Lucas et al., 2014, p. 967). The method can provide a solution (albeit an imperfect one) to class management and lesson planning. However, an unwanted consequence may be that teachers focus on older and/or brighter children in class, leaving the rest to catch up. Moreover, there is a possibility that older and/or brighter children may assume roles that reproduce the teacher-centred practices they are familiar with, undermining the friendly learning atmosphere assumed in peer learning contexts.

Gaps in the evidence

Taken together, the studies give evidence that constraints on literacy instruction in schools are at the linguistic, pedagogical, structural, social and cultural levels. We did not find research on the integration into literacy instruction of the rich oral traditions of each of the communities observed. What remains to be assessed is whether teachers would be more effective if they developed literacy materials using indigenous resources that are embedded in their ways of living (e.g., use of local sound games for promoting phonological awareness). It is plausible that the roots of choral practice are cultural and need serious research attention. We also did not find research to challenge synthetic phonics or other scripted methods although there was reference to how these were stamping out indigenous methods (Azuara, 2009; de la Piedra, 2006, 2010; Mount-Cors, 2010) and a recommendation that materials entering the classroom must have greater cultural resonance (e.g., Azuara, 2009).

Another gap in the literature is the absence of evidence pertaining to interactions between within-child factors (e.g., when children show initiative for literacy activities) and contextual factors (e.g., when mothers with very limited formal literacy skills try to engage with teachers), and how these mediate the pace of literacy development and attainment of

advanced skills. There is also a need for measuring learning environments across and within schools to both capture classroom literacy practices within a comparable metric, and give specificity to what needs attention during literacy instruction in the classroom. Finally, there were more papers in our review about children with a home language that is different from the school language, pointing to the need for more ethnographic and qualitative studies examining literacy gained in the child's home language.

Conclusions

In this interpretative synthesis we set out to clarify instruction-related barriers to literacy attainments using the deep insights gained from 16 high quality ethnographies of literacy practices in and around public funded or highly subsidised school systems for children up to Grade 4 in eleven LMI countries. Vignettes of teacher- and child-initiated talk and activities related to language and literacy learning in these contexts show low focus on explanation of concepts and connecting to the child's world of experience. Instruction is skewed towards reinforcing orthographic knowledge rather than the broader linguistic and general knowledge. Often the teacher asks and children recite in unison, and feedback to children is biased against original narratives. Learning from the peer group is common and much is left to self-generated and incidental insight. Introduction of children to written language rarely involves real world applications, reinforcing a perception of literacy as aligned with schooling only. This perception, together with the poor print environment of disadvantaged communities, means that many children can take very little of their literacy learning to life outside the classroom. Among all the component skills of literacy in the review, the most devastating impact of these classroom practices is described during reading comprehension and expressive writing activities. A final point is the remarkable continuity of the profile of classroom practices over time (1990–2014). This mirrors the recurrent finding of low attainments in many LMI countries and the stalled translation of policy into classroom practice in the same contexts.

This interpretative synthesis is of value for policy makers, monitors of educational reform, early grade interventionists, teacher trainers and anybody interested in supporting the teacher and child in the literacy learning process. By systematically unpicking the 'what' and 'how' of literacy instruction we propose that early grade literacy programmes should target skills and concepts that are required for fluent reading with understanding, use the local linguistic resources and build on cultural preferences in order to be effective. Findings from our interpretative synthesis suggest there is value in a cultural analysis of choral lessons, writing for learning, peer tutoring and community-specific preferences for the language of instruction. Such an analysis has the potential to clarify whether embedding literacy interventions into these practices would broaden readers' knowledge and thereby their literacy attainments

Notes

1. A detailed document about the search strategy is available from the first author.
2. YA was the author of one shortlisted paper (Asfaha & Kroon, 2011). This paper was therefore assessed by other members from the larger review team.

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Appendix. Data Extraction Template: Summary Sheet

Bibliographic details	
Research question(s)	
Participant details	
Country	
Age and Grade	
Social Stratifiers	
Sample size	
Sample selection	
Language of school instruction	
Home language	
Study Design	
E.g. Ethnography (interview and participant observation); Case Study; Focused Grp Discussions	
Home learning environment	School environment:
Examiners	
Designation & qualification (researcher, teacher, field staff, specialists, volunteers)	
Mode & Length of Training	
Quality Assurance	
For administration, for scoring	
Report by Author(s)	
Conclusion by Author(s)	
Limitations, future directions by Author(s)	
Notes:	
Overall judgment of quality	
High: Demonstrates adherence to principles of appropriateness/rigour; validity and reliability; likely to demonstrate principles of conceptual framing, openness/ transparency and cogency; should be more than a personal account	
Moderate: some deficiencies	
Low: major or numerous deficiencies	

	Literacy learning outcomes/ contexts									
Teaching methods	**Broader oral language skills**	**Print awareness**	**Letter knowledge**	**Manipulating language units (e.g., blending)**	**Word reading**	**Reading speed & accuracy**	**Reading comprehension**	**Spelling and Writing**	**Metalinguistic awareness**	**General**
Talking about literacy/text (by teacher)										
Question and answer (Socratic method)										
Drill exercises ('phonics')										
'Reading' stories ('whole language' activities)										
Correcting and giving feedback										
Talking about literacy/text (by child)										
Pair/group work										
Asking questions to teacher										
Chorus, sing-song lesson, games, etc.										
Not about reading or writing										
Practice of reading and writing										
Reading practice (including reading in front of class)										
Basic writing practice (including sand & air writing)										
Copying practice										
Creative writing practice										
Other features of literacy learning										
Use of languages (L1, L2 or mixing L1 and L2)										
Out-of-school literacy learning										
General										