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Language and Literacy: Children's Experiences in Multilingual Environments

Raymonde Sneddon
Department of Education and Community Studies, University of East London,
Longbridge Road, Dagenham, Essex RM8 2AS, UK

The present study investigates the language use and literacy practices of 36 children (aged three-and-a-half, seven and 11) from a Gujerati and Urdu-speaking Muslim community in north-east London. These experiences are explored in the children's three-generation families, in the community and in school through interviews, recordings and observations. They are related to the children's educational achievement and whether or not they make use of a local community cultural and religious centre. The findings suggest that children who have access to the culture and leisure facilities of a community centre maintain a higher level of linguistic vitality in Gujerati and are more creative story tellers in both Gujerati and English than children who do not have these opportunities. Support for Gujerati in the home is oral rather than literacy-based and does not have a significant direct impact on children's achievement in literacy. Support for literacy in English is related to books, and does have a positive impact. Overall, by age 11, children are performing above the norms for monolingual English-speaking children of a similar background, are fluent speakers of a dialect of Gujerati and are becoming literate in Urdu for religious purposes.

Introduction

Inner London is famous for its linguistic diversity and this fact is reflected in the school population. Employment opportunities in the 1960s attracted workers from the Commonwealth countries in particular. They settled with their families in working-class areas of London where housing was accessible and they created facilities to support the linguistic, religious and cultural needs of their communities. Linguistic diversity has been further increased by the more recent arrival of asylum seekers. The present study of the language and literacy experiences of a community of children of primary school age was carried out in a London borough in which over 70% of children currently in school originate from new minority communities. The area is also known as one of the most economically deprived in Britain.

As a primary teacher over a period of 17 years in the borough I specialised in teaching children who were learning English as an Additional Language. A study of the impact of home literacy practices in five local linguistic communities on children's achievement in school at age 11 (Sneddon, 1993) identified a group of Gujerati speaking Muslim children who were receiving substantial amounts of support in the home for literacy in both Gujerati and Urdu. This was significantly related to higher achievement on the London Reading Test (LRT) (a test of reading comprehension taken by all children in the borough; LRT, 1991). The study also investigated support for English literacy in the children's homes and this was found to be related to higher achievement for all language groups studied. The design of that study did not enable inferences to be made as to why some

parents supported their children in the languages of the home and some did not. However local knowledge suggested that a community centre set up by the Gujerati Muslims may have played a role. The study described in this paper was designed to explore in greater depth, through a focused investigation in Gujerati speaking families, the home literacy experiences of children in a multilingual environment and the factors that may have an impact on these. The following questions guided the investigation:

- In a multilingual context, what kinds of support for literacy do parents provide for their children in English and in the languages of the home?
- What impact do both these kinds of support have on children's achievement in the classroom in English? Is there evidence of a transfer of skills from home languages to English?
- In the context of very varied language backgrounds and levels of bilingualism, what language experiences in home and community influence children's own use of language? Does involvement with an organisation that supports the community's language and culture have any impact on this?
- Does the linguistic vitality of a community have any influence on children's literacy experiences in the home?

The Language and Literacy in the Multilingual Family study attempted to answer these questions and to explore the relationship between them. It investigated in detail the language use of 36 children and their families in a wide range of domains, their literacy experiences in home and community, their literacy achievement in English as measured by standard tests as well as their oracy skills in Gujerati and English (Sneddon, 2000).

The present paper provides a brief description of the wider study, then focuses on that part of it that relates children's literacy experiences to their educational achievement. It includes a short description of the community chosen for the study, the theoretical framework and methodology used, key findings and a discussion of these.

The Gujerati Muslim Community in North East London: Origins and Language Use

The Gujerati Muslim community settled in north-east London directly from the district of Surat in the state of Gujerat in India. Many people came from the area around the village of Bardoli. Relationships with Gujerat have remained close. The community generally has a lower socioeconomic status than most Gujeratis in Britain and has tended to be less upwardly mobile (Bawa, 1996). Although less prosperous and, initially, less directly involved in their children's education, the community is in many ways typical of other Gujerati communities described by the Linguistic Minorities Project (LMP, 1985) and Dave (1991), particularly with respect to their capacity to organise and provide facilities for their members. As practising Muslims they need to have daily access to mosques and to religious classes (Madressas) for their children and therefore tend to live close to each other.

The community speaks a dialect of Gujerati, sometimes known as Surati and those who have not had access to education in Gujerati (this includes adults educated in Britain and most children) experience difficulty with the 'pure

Gujerati' of written texts. The community makes varying use of Urdu, the more prestigious language commonly used by Muslims in India. The relationship between Gujerati and Urdu use in the community is complex. Urdu is used for religious education and, for some, in formal speech situations and for the reading of literature and the quality press. Although the Qur'an, learnt in Arabic, can be studied and interpreted through the medium of any language, the use of Urdu for this purpose is culturally important to the community. However, in most of the population studied, Urdu is not used as a language of communication within the family. Gujerati, on the other hand, is the language of everyday communication and in many families English, in varying degrees, is also used for this purpose. The extent to which languages are reserved for different domains varies from family to family and, within families, from generation to generation.

Adjacent to a teaching mosque in the north of the borough is a community centre, established in 1980, that provides a wide variety of services including leisure activities for children and acts as a focus for the members of the community who live close to it.

Theoretical Framework

Investigating the questions referred to above and the relationship between them required research into different areas of academic study. The following provides a brief summary of the areas of investigation most directly relevant to the findings reported here.

Language maintenance and shift

The level of language proficiency reached by children in their mother tongue is likely to be influenced by sociolinguistic variables such as the extent and range of use made of that language in the home and community. This is well documented by research on language maintenance and shift (Fishman, 1972: 1989). In majority communities the range of domains in which the language of the home is used is likely to be influenced by social class and parental education. The same principle generally applies to minority communities, with the range of domains additionally influenced by the status of the home language in society and an individual family's social networks. The concept of domains was used in the present study to investigate the range of opportunities in which children and their parents could use Gujerati or Urdu (for example in school, the workplace, in sporting activities, shopping etc.).

The importance of the density of social networks as a factor in language maintenance and shift has been documented in different minority communities (Gal, 1979; Li Wei, 1994; Milroy, 1987). Density is also a factor in determining whether families have access to printed material and other media in the home language. In dense communities shops, businesses, community centres and religious institutions are readily to hand and provide both opportunities and the need to use literacy. Such communities ensure that children experience a print environment that includes the language of the home (Saxena, 1994). In the absence of any form of mainstream bilingual education, community centres and mother tongue schools may provide the only access to literacy in the mother tongue for children from minority communities (Li Wei, 1998).

Literacies in home and school

As there have been very few studies of the relationship between home and school literacy in minority communities, account has been taken of the findings of studies of monolingual English speaking children. The Bristol study (Wells, 1986) and the work of Tizard and Hughes (1984) have documented how literacy experiences in the home have a positive impact on children's achievement in school. They have also revealed that the nature of these and of the oral language environment in working-class homes in particular is little known to or acknowledged by schools. Where homes adopt the home reading strategies recommended by the school a number of studies have shown that children obtain higher reading scores on school tests (Hannon, 1995). The Haringey study established that even when parents' English is limited they can support their children successfully both by hearing children read and by encouraging them to read (Tizard *et al*., 1982). The work of Eve Gregory in the Tower Hamlets area of east London has focused specifically on the literacy practices of Sylheti speaking parents and how they support their children's literacy, often with the help of older siblings (Gregory, 1996; 1998). Gregory also noted what little account schools generally took of such literacy experiences within the family (Gregory & Biarnes, 1994).

Bilingualism in education

In the more general field of the education of bilingual children research is notorious for having produced contradictory findings. The extensive reviews of the literature by Hamers and Blanc (1989) and Baker (1996) have documented research (mainly prior to the 1960s) which holds bilingualism responsible for low educational achievement, particularly with respect to children from minority communities as well as studies that show that, in generally more privileged circumstances, bilingualism can result in cognitive benefits (Bialystok, 1991, 1992). Throughout the 1970s and 1980s Cummins developed a theoretical framework to provide an explanation for these apparently contradictory findings (Cummins, 1984). This framework is of particular interest to the present study because it provides the theoretical basis for key texts that are used in the training of teachers working in the field of English as an Additional Language (Cline & Frederickson, 1996; Gibbons, 1991; Gravelle, 1996; Hall, 1996).

According to Cummins, children may derive benefits or suffer deficits as a result of their bilingualism depending on a number of factors. These include the level of proficiency that they have achieved at the point when they encounter education in the second language; the length of time available and the educational context in which they acquire communicative and more academic language skills; the relative status of their first and additional languages in the wider society; and whether or not they have access to education in their first language (Cummins, 1980; Thomas & Collier, 1997).

A factor in the Cummins framework and one that is central to the present study is whether children have the opportunity to develop essential concepts and literacy skills in their mother tongue either in the home, the community or the school. The Common Underlying Proficiency theory hypothesises that such skills acquired in one language will transfer to another and enable children to

achieve a more balanced and intellectually enriching form of bilingualism (Cummins, 1984).

Methodology

The design

A longitudinal study of children's developing bilingualism would have been ideal for investigating the questions for which I was seeking answers. As the time scale available did not allow for this, a cross-sectional design was chosen, with children in three age groups. The sample was chosen from the general population through information provided by a research assistant who belonged to the community, by the Local Education Authority, by the headteachers of local primary schools, by staff from the Community Centre, from my own knowledge acquired through many years of work and residence in the area.

In an attempt to reduce the many dimensions of variation that are known to affect children's educational performance attempts were made to match as closely as possible the sample chosen on a number of variables: all children chosen were born in Britain, belonged to families who spoke primarily Gujerati in the home and had knowledge of Urdu and were in mainstream primary schools with similar intakes and policies regarding bilingual children. As testing the effect of use of the Community Centre was one of the aims of the study, one half of the children were chosen from families who lived near the Centre and made use of its facilities and the other half from families who lived further away and did not. A matched pair design was developed. In addition to the above variables, children were matched in pairs across the two groups according to gender, age within four months, number of siblings, position in family, mother's level of education, father's level of education, father's occupation, and type and ownership of housing. Children were chosen from three age groups: aged three and a half and just starting at nursery school; aged around seven years and in Year 2 of the National Curriculum; aged around 11 and in Year 6, their final year of primary schooling.

Thirty six children were chosen for the final sample as represented in Table 1.

Table 1 The matched pair design of 36 children

Gujerati/Urdu speaking Muslim children			
Group 1: Users of community centre		Group 2: Non-users of community centre	
3 boys aged 3	3 girls aged 3	3 boys aged 3	3 girls aged 3
3 boys aged 7 (Y2)	3 girls aged 7 (Y2)	3 boys aged 7 (Y2)	3 girls aged 7 (Y2)
3 boys aged 11 (6)	3 girls aged 11 (Y6)	3 boys aged 11 (Y6)	3 girls aged 11 (Y6)

Quantitative data

In order to obtain answers to the questions, data were collected and quantified as follows:

- on the *language use* of mothers, fathers and children within both the immediate three generation and extended family and in a range of domains that included work, leisure and sport for parents, school, playcentres, sport, Madressa etc. for children; the parents and the 7- and 11-year-old children estimated their language use using the 'Three Languages Box', a device designed to provide a visual representation of Gujerati, Urdu and English used that I could interpret in percentages; the language use of the younger children was estimated by their mother; an 'Index of Interaction Opportunity' (IIO) was developed from these percentages and the domains outside the home, for parents and for children (this process is described in Sneddon, 1998);
- on *literacy experiences* within the family: on the basis of information provided by parents about literacy materials in the home, families were rated as making high (3), moderate (2), low (1), or no use of Gujerati, Urdu and English literacy;
- on *support for literacy*: parents provided information about story telling, reading to their children and hearing their children read, how often and in what languages this occurred; each child had an index for English and one for Gujerati/Urdu based on the frequency of occurrence of each of these three events (never: 0; sometimes: 0.1; once a week: 0.4; twice a week: 0.5; every day: 1). For children aged 11 it was specified that the questions related to an earlier period, when the children were aged three to seven.
- *scores on standardised tests* for English (and for maths, as a rough measure of general ability) were obtained for children aged seven and 11 from the school and the Research and Statistics Unit of the Local Education Authority as well as Stages of English Language Development (Hester, 1990) which are widely used with bilingual children to chart their development on a four-point scale; the younger children completed a test on Knowledge About Print based on a simplified version (suitable for children younger than those for whom the original test was developed) of Marie Clay's test (1979); a modified 'Draw a Person' test (based on Harris, 1963) was used to establish general intellectual maturity.

Where tests of statistical significance have been carried out, the conventional level of $p = < 0.05$ has been used as the threshold of significance.

Procedure

The home interviews

These were arranged in the families' homes by the research assistant who was present and assisted me in all of them. In response to a lengthy questionnaire, parents provided the quantitative data referred to above as well as the socioeconomic and educational information required for the matching process. The questionnaire also requested more qualitative information: about literacy events witnessed by children, about who in the family was involved in supporting the children, about how and where books were obtained, about use of media, about

children's language development, about code-switching practices, about their attitude to language and cultural maintenance, about the parents' relationship with their child's school and knowledge they had about how their child was taught to read. Open-ended questions at all stages encouraged discussion of the different issues raised. The qualitative data and parents' comments were used to illustrate and help interpret the other information provided.

The story books

At the end of the family interview the research assistant and I left a dual text story book in Gujerati and English and asked parents to read it to the children in both languages. The books used were The Very Hungry Caterpillar (Carle, 1992) for the youngest children, the Naughty Mouse (Stone & Desai, 1989) for those aged seven and the Raja's Big Ears (Desai, 1989) for those aged 11. Two weeks later the research assistant visited the family and recorded the children retelling the story in Gujerati. Within the same interval of time I visited the children in school and recorded them retelling the story in English. These recordings were transcribed and analysed in both languages and were intended to establish children's fluency in the two languages that they used most.

The school interview

About two weeks after the family interview I visited all children in their schools. As well as being asked to retell the story, the children aged three and a half completed the tests referred to above. The children aged seven and 11 were interviewed about their own language use. All children gave this issue a great deal of thought. They enjoyed this part of the interview which triggered interesting discussions about language use and code switching.

Key Findings

The finding out part of this study was particularly rewarding as families made me welcome, children were enthusiastic about describing their use of language and some schools invited me to talk to the older children about language diversity. The confines of a short paper preclude the detailed reporting of all the findings in relation to language use, literacy experiences and the educational achievement of all 36 children and their families. The following section presents key findings directly related to the children themselves.

Spoken language use

The children heard a little Urdu and a great deal of Gujerati and English spoken around them in the home, and varying amounts in the community. Children followed the pattern that has become common in communities that originate in immigration (Fishman, 1989), by which they spoke almost entirely Gujerati (with a little Urdu) to their grandparents, both English and Gujerati to their parents and a great deal more English to their siblings.

Role of the community centre

Children who made use of the Centre had greater opportunities to use Gujerati outside the home (mean Index of Interaction Opportunity: 5.2) than children who did not (mean IIO: 3.9). These greater opportunities were in turn

Table 2 Estimated percentage of Gujerati and Urdu spoken by children within their immediate family

To grandparents		To parents		To siblings	
Gujerati	*Urdu*	*Gujerati*	*Urdu*	*Gujerati*	*Urdu*
90%	8%	58%	5%	31%	7%

related to the children's use of Gujerati with their siblings: Spearman's *rho* correlation coefficient for the relationship between children's IIO as above and their use of Gujerati with their siblings is 0.42, *p* = 0.007 (1-tailed). Table 3 shows that, although it diminishes with age, children who use the Centre's facilities continue to use a fairly high proportion of Gujerati with their siblings (very little Urdu was used in this context), whereas children who do not have virtually ceased to use the language among themselves by age 11.

Literacy experiences

Table 3 Estimated mean percentage of Gujerati used by children in all age groups to their siblings

	Centre users	*Non-users*
Children aged 3	58%	55%
Children aged 7	52%	23%
Children aged 11	37%	1%

The investigation of literacy in the home revealed a complex pattern of experiences and practices. Materials in the homes visited reflected the families' educational and religious backgrounds. These materials were in English, Urdu, Gujerati and Arabic and different languages were used in different areas of people's lives. All families had the Qur'an and some had other religious texts in Arabic. Most families also had books on religious matters in Urdu for both adults and children, and some had newspapers in that language. Two thirds of the families had books and magazines in Gujerati for both adults and children. Children did not own large numbers of books; those they had were often obtained from market stalls. They relied mainly for their reading material on books borrowed from school or the public library. Families commented on the fact that schools sent books home with the children from the earliest days in nursery. About half the parents in the sample had some knowledge of how the teachers taught reading, having either attended a 'reading evening' or discussed their child's progress in some detail with the teacher.

As demonstrated in Figure 1, families who made use of the Community Centre had significantly more literacy materials in Gujerati than those who did not. Little difference was found between the groups for either English or Urdu.

Children in most families witnessed the kind of literacy events described by Bhatt (1994), Kenner (1997) and Saxena (1994): older siblings' homework from school in English and from Madressa in Urdu, family correspondence in Gujerati, business work brought home by parents, generally in English. Some
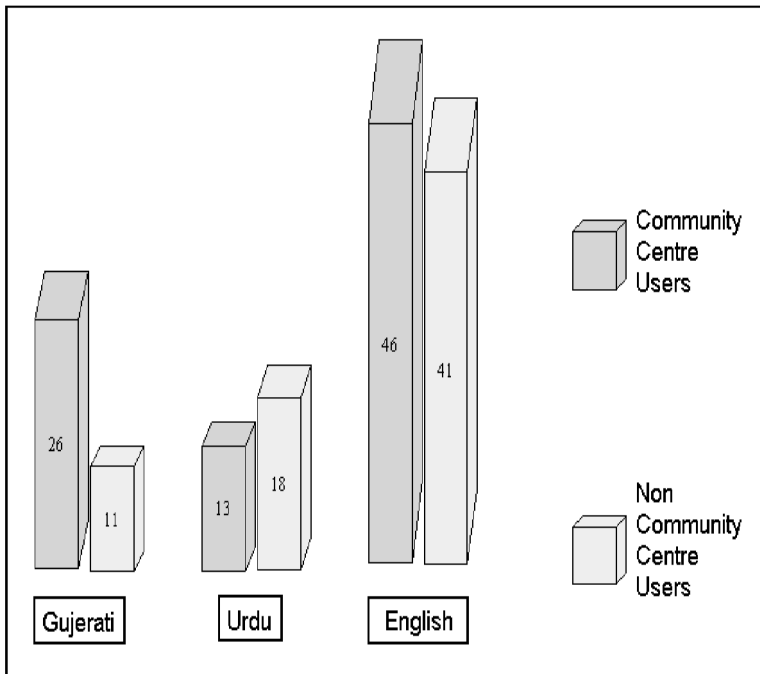
Figure 1 Total scores for literacy practices in Gujerati, Urdu and English in families who use the Community Centre and families who do not

older children played an active part in the latter, helping their parents with offi-cial correspondence in English. A few families provided some basic language instruction for their children in Gujerati or Urdu, though I was surprised to find that this was considerably less than in the study mentioned in the introduction (Sneddon, 1993). Where families did this, it was modelled on the traditional way of teaching used in the Madressa for Urdu.

Support for literacy

The mean literacy support scores (as defined in the section on methodology) are presented in Table 4; a clear pattern emerged from them. Story telling occurred largely outside the context of books and was mainly in Gujerati. Parents told traditional stories as part of their children's moral education as well as to keep them in touch with life and family in Gujerat. Story telling in Gujerati was much more common among families of children aged three and seven who used the Centre than among families who did not, but no difference was found for families of older children. Only two families provided substantial support in Urdu for their 11-year-old daughters.

Reading to children in Gujerati or Urdu was less common. Where it occurred it was generally related to moral and religious education and often involved an explicit discussion of the message of the story or text. Children's fiction in Gujerati or Urdu is not widely available locally: some families used dual text

Table 4 Mean literacy support scores for Gujerati/Urdu and English for children in all three age groups

Age	Language	Girls +CC	Boys +CC	Girls -CC	Boys -CC
3½	Guj/Urdu	0.17	1.07	0.10	0.07
3½	English	1.7	2.27	1.37	1.93
7	Guj/Urdu	0.16	1.03	0.1	0.06
7	English	1.7	2.26	1.36	1.93
11	Guj/Urdu	0.71	0.86	1.43	0.30
11	English	1.66	1.83	1.16	1.50

Note: Scoring key for frequency: never: 0; sometimes: 0.1; once a week: 0.4; twice a week: 0.5; every day: 1; scores for telling stories and reading to children are aggregated for all children and one for hearing children read for those aged 7 and 11.

books when these were provided by the school, others asked friends visiting Gujerat to bring back books.

With respect to English, most families had adopted the model of reading recommended by the school. The parents of most young children read English picture books to them and the parents of many older children both read to them and heard them read until they developed a satisfactory level of fluency.

As mentioned above, at the time of the study the children in the sample had no access to teaching in Gujerati, the main language of communication in the community. Due to the great importance placed on religious studies and the prestige of Urdu for this purpose, literacy instruction was in that language. Whether or not they made use of the Community Centre parents were strongly in favour of their children having access to literacy in all their languages, but they also recognised that spending two hours a day in religious instruction after school left their children little time. For most children the use of Urdu was confined to the religious domain and it was little used for everyday communication.

A visit to the Madressa adjacent to the Community Centre was particularly revealing. Observation of the children learning in Urdu frequently showed them answering complex comprehension questions on Urdu text and negotiating meaning in all of their three languages. Although teaching Urdu was the main aim, explanations of vocabulary and text were most likely to be given in Gujerati or English, whichever was the language most familiar to both the teacher and the children. The teaching style included whole class, group and paired work. The teacher circulated among groups or called individual children to read. Children were instructed in reading to a high standard, but written composition was not taught. It is unfortunate that no reliable measure was available to me to assess children's literacy skills in Urdu: the regular tests the children took were primarily designed to assess religious knowledge.

Achievement in school

The patterns of achievement in literacy were found to be very complex and to vary according to age, gender and whether or not the children's families used the Community Centre. Given the very small number of children in each cell, statistically significant relationships are scarce.

At age three and a half support for Gujerati/Urdu is positively related to

Table 5 Kendall tau correlation coefficients, relating KAP scores to support for literacy scores for Gujerati/Urdu and English

	English literacy support	*Gujerati/Urdu literacy support*
Boys aged 3 KAP	0.64*	0.64*
Girls aged 3 KAP	-0.32	0.31

Note: * indicates that the relationship is significant at the 0.05 level.

achievement on the Knowledge About Print test, but is only significant for boys. Support for English is also significant for boys, but negative for girls, as demonstrated in Table 5. The apparent gender differences could be an artefact of the sampling: the matching of children within four months proved, at that age, to be insufficiently close and, presumably by chance, age variation was greater among boys than among girls.

At age seven gender effects are also strong: all but one of the girls has achieved or exceeded the expected Level 2 on the Key Stage 1 test for reading, whereas only half the boys have. The evidence from parental interviews suggests that parents are providing a high level of support for the children whose progress gave them cause for concern. Several commented that once the children had achieved a basic level of fluency support tended to drop off. This is probably the reason for the low or even negative relationships between literacy support and achievement in both English and home languages: for Gujerati/Urdu support there is no relationship for girls and a strongly negative one for boys (Pearson correlation coefficient $r = -0.72$); for English, the relationships is negative (but not significantly so on a 1-tailed test) for both boys ($r = -0.22$) and positive but not significant for girls ($r = 0.39$).

By age 11, the support for literacy that children experienced when they were younger seems to have borne fruit. There are no notable differences between boys and girls. Support for English literacy, in line with the findings of the Haringey Study (Tizard *et al.*, 1982) is very significantly related to children's achievement on the London Reading Test. The Pearson Correlation Coefficient $r = 0.69$; with $p = 0.006$, this is significant on a 1-tailed test. The support for Gujerati/Urdu is positively, but not statistically significantly related and there is little evidence of a positive transfer of skills ($r = 0.1408$). There are two possible reasons for this: whereas support for literacy in English is substantial and almost entirely based around an interaction with text, the support for Gujerati is essentially oral and there is little direct experience of literacy available for transfer from Gujerati to English; Table 4 shows that, in most instances, the amount of support for English is very much greater than for Gujerati/Urdu.

The cross-sectional model revealed children in the early stages of bilingualism at age three and a half, developing as more confident, but still not fully experienced, speakers of English at age seven. By age 11 they were accomplished speakers of English and performing on a test of reading comprehension at a level noticeably higher than their monolingual peers: the mean LRT score for boys was 106 and for girls 104.5; for monolingual children in the borough at the time the mean was 100.3.

Children's narratives

The recordings of children's stories in English and Gujerati confirmed the impressions created at interview. The narratives and the children's approach to telling them provided evidence of their fluency in their dialect of Gujerati, but were also interesting in their own right. An analysis of word length, vocabulary used, sentence structure and references to underlying meaning revealed a strong relationship between the children's two main languages. The Pearson correlation coefficient between the word count in Gujerati and English was $r = 0.7093$ for children aged seven and $r = 0.8545$ for children aged 11, both of which are significant with $p > 0.0005$ on a 1-tailed test. It was noticeable that the children who were the most confident and told the most detailed and dramatic narratives in English also did so in Gujerati. No significant relationship was found between children's reading scores at age 11 and the length of the stories they told. This is not particularly surprising as all children had the necessary reading skills to understand the story fully.

These tapes and their transcripts are currently the subject of a more extensive investigation. The close relationship between the two languages suggests the possibility of a transfer of skills by means of the Common Underlying Proficiency (Cummins, 1980; Verhoeven, 1994) at the oral level that was not apparent in the children's reading performance.

Discussion

The study was designed to explore questions that arose, in relation to education, from the language and literacy experiences of children from a multilingual minority community: the impact of language maintenance and shift on the children; the role of community facilities in supporting ethno-linguistic vitality; the impact of parental input into children's literacy development; the transfer of skills from one language to another; and the possibility of a relationship between all these factors.

The experiences of the 36 children are varied and the findings complex. As the large amount of data obtained from the children and their families on language use and on literacy support was self reported, estimates of the percentage of a particular language used as well as the frequency of occurrence of particular literacy events have to be considered as guidelines only. The small number of children studied and the large number of variables make quantitative analyses hazardous and the results of these too have to be treated with caution. However, where relationships are strong enough to reach statistical significance in spite of the small numbers, they have revealed interesting relationships that would not have emerged in a purely qualitative study. The patterns that have been revealed have suggested answers to the questions asked and may help in the formulation of new ones that can shape further investigations.

Language maintenance and shift: Role of the community centre

Research into language maintenance and shift has identified population density as a positive factor in language maintenance (Fishman, 1989). In the present study the matched pair design was created to test the possible effect of the Community Centre on the linguistic vitality and literacy practices of the children

and their families as well as on the children's educational attainment. A key issue throughout this investigation has been the relationship between the linguistic vitality of families and their use or non use of the Community Centre. The vexed question of causation cannot be settled through correlational data. The questionnaire confirmed that use or non use of the Centre was essentially due to geographical distance rather than to families' attitudes to culture and language maintenance, as these were found to be similar in both groups. Children whose families use the Centre are more likely to be told stories in Gujerati and to have literacy materials in the language in the home. However the most significant impact of the Centre that emerges from this study is the effect it has on the linguistic vitality of children aged 11 through the provision of culturally and linguistically appropriate leisure activities. This provision significantly increases the size of the social networks and the range of domains in which children can use Gujerati with their peers. This factor could be expected to have an impact on the longer-term prospects for linguistic vitality in the community.

Issues in multilingualism and multiliteracy

According to the framework developed by Cummins (1984) to provide an explanation for the apparently contradictory findings of research into bilingualism, the children in the present study are likely to be at an educational disadvantage. They are part of a minority community, from modest social backgrounds, users of languages that are not highly regarded in the mainstream community and they have no access to mother tongue education in their mainstream schools. Low levels of educational achievement could be expected and are indeed found in some similarly situated communities in the UK (Gillborn & Gipps, 1996).

The children, at the point where they start nursery, have a hugely varied range of developing skills that reflect the experience and practice of their several languages within the home. Once they start nursery, their communicative skills in English develop rapidly. By age seven the children are almost all competent in communicative English. However, although some are losing confidence in their ability to communicate readily in Gujerati there is no evidence of simple linguistic subtraction (the second language replacing the first). Their story telling reveals a strong relationship between their narrative skills in both languages. The seven-year-old girls in particular are already achieving at a higher level than the norm for their age group. By age 11 the children have a deeper understanding of English and a sufficient command of academic language to perform at a slightly higher level than monolingual English children on a test of reading comprehension. Their skill in the language of story is apparent in their English narratives. A few of the stories told are sophisticated and detailed and reveal a command both of standard English idioms and of the non-standard variety used locally by their monolingual peers. By this age, the children are clearly more at home with English than with Gujerati in a formal narrative context. Their handling of the formal language of story in their dialect of Gujerati is far less confident than in English and they are more inclined to use an informal communicative style. However all the children can tell a lively story in both languages and the relationship between their narrative skills in both is even stronger than for the seven-year-olds.

Cummins' research has revealed a transfer of skills from first to second

language where children have had the opportunity to develop concepts and/or have been educated in their first language. He found that the Common Underlying Proficiency operates even when scripts are different (Cummins *et al.*, 1984). Verhoeven's work (1994) with Turkish/Dutch bilinguals demonstrates that this transfer can operate in both directions. The second question which guided the present study was concerned with finding out whether, in the absence of any formal schooling in Gujerati, the parental support provided for literacy in the home would be sufficient to provide the children with skills that could transfer and positively affect their literacy in English.

With respect to Gujerati the amount of input, however rich it may be in story telling experience for some of the children, is not sufficiently based on literacy to provide transferable skills in that area. At age three and a half the children in the present study have few literacy skills in Gujerati or Urdu to transfer. At age seven the children are just beginning to learn literacy in Urdu as part of their religious studies and the support that they receive in Gujerati is still primarily oral. The experience of literacy is still not there to transfer.

By age 11 few have had any opportunity to learn to read and write in Gujerati. Literacy skills in the first language used for communication are still not available for transfer. The present study did not anticipate how modest was the amount of literacy available to the children in that language and notes that this has actually decreased throughout the 1990s. The statistical analysis relating family literacy support with achievement in English, while indicating a small positive relationship for children aged three and a half and 11, does not produce a statistically significant relationship overall.

However, the fact remains that, by age 11, the children are performing well on tests of reading comprehension compared to their monolingual peers. By this age all the children, whether they receive much support from their families or not, have been learning Urdu for several years. The language is not much used for communication and is reserved for the religious domain. It is taught through a process by which meaning is constantly being negotiated backwards and forwards between two or three languages in a very academic context. This may well be hard and confusing for children initially, especially as their use of the language in their daily lives is very limited. However it may well be that this experience is informed by the children's work in English in the classroom and that, in turn, it provides the children with strategies that transfer back into their explorations of meaning in English. These experiences in Urdu were not anticipated in the research design and the issue deserves further investigation.

Another possible effect of the religious studies of the children (in a social, rather than a strictly linguistic, perspective) that was not anticipated may be their impact on the boys' literacy. In a general context where boys' achievements in literacy are significantly lower than girls' (E.O.C./OFSTED, 1996) at all levels in their school education, the same patterns might have been expected in the community under investigation. The pattern is apparent in the seven-year-old children. With respect to the high level of literacy skills in boys aged 11, it is possible that both the high status and the compulsory nature of the Urdu teaching and the Qur'anic studies are beneficial to boys' reading. Current research indicates (Barrs, 1993) that boys of that age choose to read less than girls. The boys in the present study have no option but to attend their Urdu classes. More importantly

perhaps, their knowledge of the Qur'an and their religious studies provide them with status in a society in which these skills are highly valued in men, thus perhaps increasing their motivation to acquire high levels of literacy. An additional factor in boys' achievement may also be the active role which a number of fathers play in hearing their children read.

The evidence of transfer of skills that was not evident in terms of literacy may well be present in the children's recorded narratives. There is a strong relationship between narrative skills in Gujerati and in English and it is even stronger in the older children. This may suggest the kind of two-way transfer investigated by Verhoeven, by which the process is influenced both by story telling experiences in the home in Gujerati and in school in English.

The relationship between literacy in the home and the school

It would appear that the schools attended by the children in the study were reasonably successful at building positive relationships with the families in the sample. Half of the families felt well informed about their children's progress and about the methods used for teaching them to read. The majority of families had taken on board the model of literacy recommended by the school and were reading to their children and hearing them read in English regularly using books provided by the school. However the findings of Gregory referred to above were confirmed (Gregory, 1996; Gregory & Biarnes, 1994) in so far as, although schools in the present study had positive attitudes to the children's bilingualism and most stocked dual language books, few teachers had any knowledge of the language use and literacy practices in the children's homes. The study revealed a considerable under-estimation of children's linguistic skills. In particular there was a lack of knowledge of the nature of the religious education that the children experienced after school and of the complex negotiating of meaning across three languages that it involved.

Research findings discussed earlier in this paper (such as the Haringey Project) on the positive effect of parental support in the home have been supported by the present study. Support for English literacy is heavily backed by the authority of the school and currently by major government initiatives. It is well resourced in so far as schools provide high quality texts for children to read at home, and generally monitor the process. The amount of support provided by parents for English is virtually double what they provide for Gujerati/Urdu and most of it is based on interaction with texts, whereas almost all of the Gujerati support is oral. What is very clearly evident in the data is that the experiences of support in the family for the languages of the home, if they fail to produce a noticeable improvement in English through a transfer of skills, as was predicted, do not detract from this in any way and have the additional advantage of producing children who can function socially in their community, tell stories in Gujerati, interpret Urdu texts in a religious context and negotiate meaning in three languages.

Conclusion

The model of bilingual cognitive development proposed by Cummins refers to sequential bilinguals brought up speaking one language in the home and

schooled through another. In particular the Common Underlying Proficiency is designed to explain the process of transfer of communicative and academic language skills from one language to another. The experience of the children in the present study does not fit easily into this model. Some of the children are sequential bilinguals, encountering little English in the home before they start school, whereas others are simultaneous bilinguals, speaking both English and Gujerati in the home. The children's multilingualism reflects the model experienced in India by their parents whereby different languages are used for different purposes and an individual's communicative skills may be strong in one language while academic skills are stronger in another. The full complexity of the children's experience is natural within their home and community but is not acknowledged by the school.

The focus on empowerment in more recent Cummins work (Cummins, 1986, 1996) as well as the concept of additive and subtractive outcomes for bilingual children (Hamers & Blanc, 1989) point to the importance of maintaining linguistic vitality in a given community. There is some evidence from the present study that self help in a community makes a difference to linguistic vitality and may make some difference to children's educational outcomes. The educational achievement of children in such a rich and complex language and literacy environment is the product of a number of factors, many of which are not easily quantifiable. Key factors cannot easily be isolated and causality is hard to establish. Factors such as the support provided for young children by a geographically and socially stable community were not considered in the present study. Explaining a complex reality requires the development of increasingly complex theoretical frameworks.

The statistical analyses of findings in the present study, however inconclusive, suggest that bilingualism in no way detracts from children's achievement in English by the time they reach the end of their primary schooling. Equally it has revealed that there is not, in the community, access to a full education in either Gujerati or Urdu.

Communities intent on maintaining their language and identity alive in the context of an assimilationist society need to consider how best to provide the positive context in which these can continue to flourish and to press the educational authorities for the needs of their children to be met. The study has revealed in the children a considerable achievement in literacy in English, fluency in spoken Gujerati in a range of domains including story telling, an understanding of close textual work across a range of languages developed from their religious studies at Madressa and, for the better scholars, an ability to read Urdu, in formal and religious domains. This represents a very considerable achievement in the face of unpromising educational circumstances. If the children's multilingual experiences (which are, after all, the norm in many countries the world over) were acknowledged in schools, they could be put to greater use. The children could be supported in making connections between their languages, thereby encouraging the transfer of skills. To this end a closer collaboration between organisations that provide mother tongue teaching and mainstream schools would be beneficial. If the skills that children have in the languages of the home were valued and developed, language shift in the community might be less rapid

and the children might derive the kind of intellectual and educational benefits documented in the research studies on 'elite' balanced bilinguals.

Correspondence

Any correspondence should be directed to Dr Raymonde Sneddon, Department of Education and Community Studies, University of East London, Longbridge Road, Dagenham, Essex RM8 2AS, UK (sneddon@uel.ac.uk).

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