



Healthy Bilingual Diet:

A Key to Enhancing our Brain Power and
Quality of Life

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Starting point

Focus discussion exploring reasons for underachievement with 14 year old Bengali speaking boys students in an inner London school:

Student F:

“Miss, we underachieve because we speak two languages.”

Student R:

“That is not true!

I read in a scientific journal: it improves your brain!”

Implications and questions

What messages are currently communicated in schools/education settings and wider community to make bilingual students internalise attitudes to 'bilingualism as a problem':
Bilingualism as the reason for underachievement?

What do educators need to do to ensure that everybody in the school and wider community is aware that
'bilingualism is a resource',
and especially bilingual children and families?

Education practice

Still dominated by the deficit model of bilingualism:

Discourse which reflects the deficiency thinking about bilinguals:

“children with problems / difficulties in English”,

“children with no language”,

“severe EAL”,

“children with bilingual problems”.

England National Data

2012	Primary %	Secondary %
EAL	17.5	12.9
English	82.4	86.7
Unclassified	0.2	0.3
2009		
EAL	15.2	11.1

Research evidence

A group of experts who participated in the Institute of Education research (IOE, 2008) expressed concerns that secondary bilingual pupils self-identify as monolingual due to deficit models attached to bilingualism in mainstream schools. The issue of opting for a monolingual profile and dismissing bilingualism as a resource is further supported by the evidence that many bilingual children often experience their home languages as of little value in the education system and perceive them of value only in communities (The Nuffield Foundation, 2000, Hanoman and Mehmedbegovic, 2004, QCA, 2006, Mehmedbegovic, 2008, 2009, 2011).

Evidence: Deficit model

48 interviewed teachers, TAs and SENCOs reported that EAL children are often seen as:

- Not very bright;
- Slow learners;
- Unable to access the curriculum fully;
- Only understanding the most basic concepts;
- Possibly SEN.

(Mistry and Sood, 2009)

LUCIDE Project 2012

84 Teachers, school leaders and Ofsted inspectors shared their insights:

High percentage of EAL children is seen as detrimental to British children in schools.

Multilingualism is often perceived with suspicion by English only speaking public.

Government is only interested in promoting languages for economic purposes.

Different attitudes in schools: Turkish and Mandarin are supported and recognised, Cantonese and African languages are not.

Evidence from schools

Secondary PGCE students who participated in the PGCE pilot, EAL as an Additional Strand, 2010/11 funded by the TDA, were charged with a task of shadowing a bilingual learner in order to understand experiences of bilingual children. All of them, without exception, reported that in their 15 placement secondary schools in London bilingual children were placed in low ability sets even when they outperformed students in one or even two sets up.

‘Miss, who needs the languages of immigrants?’

- 15-year-old bilingual student expressing her perceptions about the value attached to minority languages in her new context.
- A Kurdish and Arabic speaker, a recent arrival from Iraq who is new to English and somebody with the ambition to work in tourism.
- Within 11 months of living in England this student has not only received, but has adopted a low value message in relation to minority languages or, as she terms them, ‘immigrant languages’.

What is in the question?

The experience of the education system, which is failing bilingual learners.

Issues of inequality, power and marginalisation.

The fact that a young person at the time of choosing the direction of her future occupation in a global city such as London is not encouraged to explore how the skills she has in different languages can be used as resources- issues of equality of opportunity and social justice.

Hierarchy of languages

An interviewed MP commented on the interview statement: Bengali has no value. It is only valued by people who speak it. Employers want French or other European languages. It is a waste of time. (Pimlico student)

by saying: *'This student is right – Bengali has no value. It Does not matter to this country if people speak Bengali or not, in terms of our culture. Bengali could matter if the Indian economy grows and it can be used for business purposes. Welsh and Gaelic are home languages. There is more political imperative and more political clout behind preserving those languages as a part of our own cultural identity.'*

(Conservative MP, Interview data, Mehmedbegovic, 2011)

Equality of languages

Languages provide the same value in one aspect:

Cognitive advantages of bilingualism which are the same for any combination of languages: English-French; English-Bengali, English-Welsh.

Why Healthy Linguistic Diet?

Concept of Healthy Linguistic Diet is based on the principle that all languages used by school children need to be supported in order to maintain and develop further for the purposes of cognitive benefits.

Schools, governments, individuals all need languages of immigrants.

What is Healthy Linguistic Diet?

Envisaged as a strategy which would:

- Provide structured space for children and adults to discuss 'being bilingual' with the aim of raising awareness of benefits of bilingualism;
- Provide consistent flow of affirmative messages with the aim of eliminating misconceptions about bilingualism as a problem and bad practices based on these misconceptions;
- Encourage children and adults to develop behaviours and habits which would support life-long development of bilingual competencies.

Evidence: focus

Bilingual pre school children demonstrate better focus on task while ignoring distractions than their monolingual peers.

A similar enhanced ability to concentrate, a sign of a well functioning working memory, has been found in bilingual adults, particularly those who became fluent in two languages at an early age.

Managing two languages helps the brain sharpen and retain its ability to focus while ignoring irrelevant information.

(Bialystok E, 1999)

Evidence:

physical enhancement

Bilingual adults have denser gray matter (brain tissue packed with information processing nerve cells and fibers), especially in the brain's left hemisphere, where most language and communication skills are controlled. The effect is strongest in people who learned a second language before the age of five and in those who are most proficient at their second language. This finding suggests that being bilingual from an early age significantly alters the brain's structure. (Kovelman I, Baker SA, Petitto LA, 2008)

Evidence: bilateral use

Bilinguals show significantly more activity in the right brain hemisphere than monolingual speakers, particularly in a frontal area identified as the source of the bilingual advantages in attention and control. This expanded neural activity is so consistent on brain scans that it has been labeled as: “neurological signature” for bilingualism.

(Kovelman I, Baker SA, Petitto LA, 2008)

Evidence:

clinical research

The studies involving bilinguals and monolinguals provide evidence which covers differences in a variety of variables:

- visual presentation and processing,
- audio processing,
- cortical activity of each hemisphere,
- levels of the right hemisphere engagement,
- levels of lateralisation;
- heterogeneity in the hemispheric organisation.

(Hammers and Blanc, 1989)

Evidence: Enhanced performance

Cummins (2000) lists 160 studies from different countries and contexts:

all of which provide evidence that bilingual children perform better across the curriculum.

Main points ...

According to Cummins (1991):

- exposure to two languages provides broader linguistic experiences with the access to a wider range of thinking modes;
- switching between the two languages exercises flexibility in thinking;
- the conscious or subconscious comparison of two languages, resolving interference between languages, using the knowledge of one language to advance the other result in a high level of metalinguistic skills.

Main points ...

Vygotsky (1962):

Bilingualism enables a child to see his/her language as a particular system and to approach the language in a more abstract way and in more general categories.

Latest evidence

Point to bilingualism as a big hope in equipping ourselves better to engage with the threat of dementia:

‘Executive brain power’, developed by the use of two languages, has been identified as a key factor in prolonging quality life in later life and fighting off onset of dementia by 3 to 5 years (Bialystok, Craik and Luk, 2012).

Latest evidence

Researchers from University of Edinburgh examined medical records of over 600 people :

- people who spoke two languages did not show any signs of three types of dementia for more than four years longer than those who were monolingual;
- The fact that bilingual advantage is not caused by any differences in education is confirmed by the fact that it was also found in illiterates, who have never attended any school;
- Bilingualism can be seen as a successful brain training, contributing to cognitive reserve, which can help delay dementia.

Highest priorities

Dr Bak, University of Edinburgh:

"These findings suggest that bilingualism might have a stronger influence on dementia than any currently available drugs. This makes the study of the relationship between bilingualism and cognition one of our highest priorities."

What implication does this have on highest priorities for bilingualism in education?

Education priorities

It is necessary to shift the thinking throughout the education system, from policy makers, to school leaders, practitioners, learners and parents.

Bilingualism is a source of cognitive advantage so significant for one's quality of life that it is not only an education imperative to promote it, but a moral one too.

Double benefits

By promoting activities which are crucial for an extended dementia-free life, we are at the same time offering enhanced cross curriculum performance for bilingual children and all those eager to learn other languages, which every school leader and teacher should be interested in.

Healthy Linguistic Diet

Needs to become an integral part of our efforts to bring up children in the spirit of the Healthy School Initiative leading to a healthy life style.

Adults should be included too – bilingual and monolingual.

Healthy Linguistic Diet

Consists of:

- providing regular and rich opportunities for engagement and use of both or several languages;
- providing access to and sharing relevant knowledge on values and advantages of bilingualism;
- providing access to formal recognition of bilingual skills: examinations and qualifications.

Implementation

Envisaged as:

- Driven by creative approaches: bilingual theatre;
- Inclusive for bilinguals and monolinguals, children and adults;
- Embedded in the school ethos and policy.

To conclude:

The National Audit Office estimates that nationally, dementia costs health and social care services £8.2 billion each year. Alzheimer's Research UK has estimated that the overall cost of dementia to society as a whole is £23 billion a year. But it is estimated that savings of £80 million could be made every year by improving hospital care.

What savings can be made by promoting bilingualism –
Healthy Linguistic diet?

To conclude

Loss of home language is often presented as a natural language shift

Evidence shows that underprivileged communities suffer more language loss than the affluent once.

Language loss is a loss for all who aim to achieve:

- Better attainment across the curriculum;
- Better equipped workforce for a globalised world;
- Better self esteem at the individual level;
- Longer dementia free lives – significant savings for society.

Post key note task

Use every opportunity to enhance your brain executive control and 'charge your batteries':

- Speak to a colleague today in a different language;
- Read on internet about bilingualism and dementia in a language of your choice.
- On a long term basis – consider what you can do for your mental enhancement on a regular basis in the same way that you consider: cooking a healthy meal or being physically active.
- Share Healthy Linguistic Diet with adults and children.