1. Introduction

On 19 and 20 April 2011, Cambridge International Examinations hosted a symposium on bilingual education. Delegates were invited to present and discuss papers on key questions. The following is a summary of the presentations. The full papers can be viewed at: http://training.cie.org.uk/courses/course/view.php?id=924

2. Why bilingualism?

Key points from David Marsh’s paper

*The benefits of bilingualism: insights from the neurosciences*

Overview

- Scientific reporting on languages and the brain is rapidly expanding.
- Neuro-circuitry of the bilingual mind offers the potential for cognitive advantage.

Cognitive flexibility (capacity to think and to adapt thinking)

- The bilingual mind has the potential to look at things from different perspectives.
- Bilinguals have multi-competences - the extra capacity which may emerge as a result of knowing more than one language.
- Bilinguals have enhanced skills in searching for structure and seeing patterns when handling perceptual tasks
- Enhanced cognitive flexibility may be relevant to emerging competences for the Information Age, such as navigating information and looking at issues from different perspectives

Problem solving

- Bilinguals tend to be better at problem-solving which is cognitively demanding, including:
  - Abstract thinking
  - Creative hypothesis formulation
  - Higher concept formation skills
  - Separating types and significance of information
  - Multi-tasking capabilities.
- Bilinguals tend to have superior executive function: they control attention, determine planning and categorising, and inhibit inappropriate responding.

Learning in general

- Bilingual classes can achieve better results than monolingual classes, not only in language, but also in their other subjects.
Bilinguals may have enhanced memory functioning.

Even low levels of ability in the second language are related to metalinguistic advantages.

**Interpersonal competences**

- Bilingualism helps to nurture communication awareness and skills, including:
  - Contextual sensitivity
  - Interactional competence in communication
  - Abilities in differentiating languages in contextually sensitive ways.

**Language awareness**

- Bilinguals show greater flexibility in adapting to new linguistic systems and greater awareness of language patterns.

**Decline of cognitive processes as a person ages**

- Changes in the executive function and working memory resulting from knowledge of more than one language may slow down the decline of cognitive processes as a person ages.

*David Marsh has worked on multilingualism and bilingual education since the 1980s in different parts of the world. He coordinated the European team which launched the concept Content and Language Integrated Learning (CLIL) as a Europe-wide educational initiative in 1994.*

### 3. How do children become bilingual?

**Key points from Dora Alexopoulou and Napoleon Katsos’ paper**

*Different patterns of L2 learning: language, cognition and education*

**Overview**

- Speaking more than one language in not uncommon. Some surveys suggest up to two thirds of children worldwide are currently raised with two or more languages.

- However, the circumstances under which the second language(s) is learned can vary dramatically, and is important in determining the cognitive and linguistic profile of the learner.

**Types of bilingual learners**

- Individual differences in the amount of input received in each language, the type of input (formal education or naturalistic), motivation, cognitive profile and other factors contribute towards creating a unique experience of bilingualism for each learner.

- Three categories of bilingual learner
  - *Simultaneous learners*: those exposed to two languages from birth or from a very early age (typically before age 3)
Successive or sequential learners: those exposed to a second language from the age of 3 onwards

Second language learners: those exposed to a second language aged 8 or older, including adolescents and adults learning a second language.

Challenges
- Sequential learners will usually experience a ‘silent phase’ when first encountering the second language. This is in fact an intensively active learning phase when the child is absorbing grammar and vocabulary.
- A typical challenge is distinguishing language delay from language impairment.

Advantages
- For all three types of learners, speaking a second language may have profound socio-economic and cultural advantages, as well as certain linguistic and cognitive advantages.

Implications
- Understanding bilingualism requires a commitment on behalf of the individual, their families and education systems. It is important for parents and the education system to provide rich and sustained input in each language, as well as pragmatic motivation for the child to use their languages.
- In cases of concern, clinical guidelines recommend evaluating a bilingual child’s progress in both the dominant and the non-dominant language using culturally appropriate assessment tools, and compiling a rich case history.
- The positive effects on cognition and communicative competence are not dependent on which specific languages are being learned. It is important to bear this in mind in the face of attitudes where bilingualism is ‘tolerated’ only if the languages learned are ‘useful’ or ‘prestigious’.

Dora Alexopoulou is a Senior Research Associate at RCEAL, leading the Education First Unit at the University of Cambridge to promote research in second language learning of English and innovation in language teaching through a systematic cross-fertilisation between linguistic research and teaching techniques. Dr Napoleon Katsos is Senior Lecturer in the Department of Theoretical & Applied Linguistics at the University of Cambridge. He is a founder member of the Cambridge Bilingualism Network.

4. How can schools build bilingual education?

Key points from Dr Peeter Mehisto’s paper

Bilingual education: management considerations

Overview
- Developing a high-quality, sustainable bilingual programme is a complex undertaking.
Some of the complexities of bilingual education originate in the multiple perceptions, understandings and actions of stakeholders. Therefore, principals need to build their capacity to lead and/or navigate stakeholder cooperation and joint learning.

Content teachers as language teachers

- In bilingual education it is important for content teachers to support language learning.
- However, content teachers often have difficulty seeing themselves in this dual role.
- Even if aware of the need to teach language, content teachers have not often been prepared to do this.

Developing language proficiency

- Jim Cummins contrasts everyday social language with academic language – Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP).
- Educators can mistakenly assume that when students have achieved BICS they have also achieved CALP. Several years and systematic effort is required to develop CALP.

Mastering academic content

- Faced with teaching challenging academic content to students who are not proficient in their second language, teachers could mistakenly resort to task reduction and simplification.
- Clearly defined standards in all curricular areas is a central mechanism for maintaining high expectations.
- Intended content and language outcomes need to be established and discussed amongst teachers and with students. For students to be motivated, to be able to achieve and to plan their own learning, they need to know what is expected of them.
- Rich language scaffolding can also release cognitive resources for processing challenging content concepts and contribute to building a psychologically secure learning environment.

Other pedagogical challenges

- Some of the other pedagogical challenges include fostering critical thinking with limited language; avoiding excessive translation; fostering dialogic teaching & learning; and creating well-structured opportunities for communication with speakers of the second language.

Supporting teachers

- Enthusiasm and intrinsic motivation alone cannot sustain bilingual programming. It is important to find ways of offering support to teachers.
- Novice teachers need special support, e.g. mentoring and access to teaching materials produced by more experienced colleagues.
• Instead of focusing primarily on examination results, principals who focus on co-constructing professional learning communities, with distributed leadership and effective pedagogical practices, are likely to witness improved student motivation and improved examination results.

• For principals to get accurate information, teachers need to feel safe and trust that they can speak out without negative consequences. It is important to build relational trust within the school and with other stakeholders.

• A school timetable can facilitate co-operation by giving teachers who need to work closely together the same planning periods. A typical agenda for a planning session could include agreeing on a common language outcome for the week; looking for opportunities for integration; sharing problems and seeking solutions; and sharing resources and celebrating success.

• Following this symposium Peeter authored a book *Excellence in Bilingual Education: A Guide for School Principals*, co-published by CUP and CIE.

*Dr Peeter Mehisto is a bilingual education consultant and author. He has researched factors contributing to successful CLIL programme development, as well as potential barriers to the implementation of CLIL initiatives.*

5. How can schools develop language policies?

**Key points from Dr Conrad Hughes’ paper**

*Language Policies: Supporting student learning in bilingual education*

**Context**

• To export a language policy wholesale from one system into another can be dangerous.

• Policies should not be artificial documents, divorced from the day-to-day realities of language use in the school. A policy should only be put in place if it is helping learning.

• Policies must take into account the needs of your learners and your cultural context, in order to create environments that encourage your learners to explore, take risks and learn meaningfully.

**Where do you want to get to?**

• The policy is about the “near side” – the issues which we deal with every day.

• However, the policy only exists to take us to the “far side” – the place where we want to get to. Policies should work backwards from the “far side”, to determine appropriate classroom and school practice.

**Separation of languages or not?**

• There are a number of ways of separating language: by time, teacher, place, subject and age.

• Separating languages has the advantage of allowing for clearly organised structure.

• Some favour a more integrative approach.
Bilingual models

- Baker’s seven typical models of bilingual education include:
  - Three ‘weak’ forms which produce limited bilingualism, or even monolingualism.
  - Four ‘strong’ forms with more ambitious outcomes of bilingualism, biliteracy and biculturalism.

Designing and implementing the policy

- Collaborative planning and close interaction between subject and language teachers is essential (if it is not bilingual teachers integrating two or more languages into their teaching).
- Schools should consider separatist or integrative conventions, financial, spatial and curriculum logistics, in the light of student’s backgrounds and knowledge destinations, if the decisions taken are to be sound and educationally valuable.

Dr Conrad Hughes is Director of Education at the International School of Geneva, Campus des Nations.

6. What are some of the challenges for teachers?

Key points from Justyna Proksza’s paper

Challenges encountered by teachers whose level of L2 is low, and useful strategies when working with different age groups

Research

- Justyna’s paper presents the results of a small study in her school in Poland, based on lesson observations and teacher interviews.
- The research provides an overview of common issues faced in the school’s classrooms.

Basic communication skills versus academic language

- The language skills of content teachers are often judged upon their ability to demonstrate good social language and fluent responses within conversation. However, these teachers may not feel confident and prepared for academic teaching and classroom management.

Five common problems identified

1. accuracy of pronunciation and grammar
2. fluency and sounding natural
3. oral skills when teaching specific subjects and age groups
4. language needed to teach content and skills to develop higher order thinking skills
5. language for classroom management

Strategies

- Teaching methodology integrating language and learning skills with content
Curricular model that teachers can actually deliver through the L2
Teaching strategies that are age-appropriate

Justyna Proksza is a geography teacher at a private secondary and lower secondary school in Katowice, Poland. She co-operates with the Association of Polish Adult Educators in Torun and has participated in many conferences and methodological workshops on bilingual education.

7. How can teachers support learners?

Key points from Timothy Chadwick’s paper

Academic language support across the curriculum

Overview

Many of students studying for Cambridge IGCSEs have English as a second language. This paper argues that to give students the tools for success in such exams, it is essential to support students to develop their academic language.

Different types of language use

- The language that students are exposed to in the classroom has three components: Basic Interpersonal Communication Skills (BICS); classroom language; and Cognitive Academic Language Proficiency (CALP).
- BICS: is the students’ social language. A student’s level of BICS is usually high in comparison to their Cognitive Academic Language Proficiency (CALP).
- Classroom language: is the language which frames the lesson, e.g. giving instructions. This language is repetitive and so students become familiar with it.
- CALP: this is the academic, content language of the lesson. This is the language that students will need in order to demonstrate their understanding.

CALP

- At word level, CALP includes the specialised vocabulary that the student will need. For example, in Geography this could include: glaciation.
- At sentence level, CALP can involve functional language and specific grammatical structure. For example, prediction: “If we heat the mixture, we think that x will occur”.

Why do teachers need to provide support?

- Fluency in BICS does not mean proficiency in CALP. A teacher may be able to chat at length with a student about their free time activities, and then be handed a written assignment that reflects none of the fluency, complexity or clarity of thought evident in the conversation.
• All students need support with academic language as they probably only experience this type of language in their school lives.

• Support with academic language serves several purposes. It can support students whose language is weak, it keeps all students on topics, and it reinforces a teacher’s instructions.

• There is a need to unpick the cognitive processes needed in the Cambridge IGCSE classroom and link them to functional language (e.g. define, evaluate, predict, compare).

What kind of support is needed?

• Content teachers have a dual responsibility to teach content and support language. However, many content teachers lack the language awareness, training or support to be able to do this. Teachers of content subjects may need tips on how to:
  o use the functional language in the classroom
  o select and present vocabulary that needs to be pre-taught in a content lesson.
  o distinguish between language useful for any subject, and language that is subject-specific
  o identify the language used in and expected by Cambridge IGCSE exam questions and instructions
  o consider, when planning lessons, the language requirements and how students can be supported.

• The English language curriculum should ideally be integrated with the content curriculum, and language and content teachers should jointly identify the demands of the content subject and plan support.

• Language teachers should provide real examples from content classes.

• Following this symposium, Timothy authored a book *Language Awareness in Teaching: A Toolkit for Content and Language Teachers*, co-published by CUP and CIE.

*Timothy Chadwick has worked in education in a variety of countries and contexts, including high-school, university and British Council teaching, exams work, teacher-training and materials writer on a large Content Language Integrated Learning (CLIL) project.*

8. How does Cambridge provide professional development in bilingual education?

Key points from Guy Nicholson and Paul Beedle’s paper

*Developing a Pathway of Professional Development Opportunities: The Benefits of Awards*

Overview

• This paper describes three Cambridge qualifications for teachers in bilingual education:
  o The Teaching Knowledge Test (TKT), CLIL module, offered by Cambridge English Language Assessment
The Certificate for Teachers in Bilingual Education, offered by Cambridge International Examinations
The Diploma for Teachers in Bilingual Education, a more advanced qualification being developed by Cambridge International Examinations

These qualifications have different, but complementary and compatible, purposes.

Guy Nicholson is Assessment Group Manager at Cambridge English Language Assessment.
Dr Paul Beedle is Assistant Director, Education, at Cambridge International Examinations.

9. What does bilingualism mean for Cambridge?

Key points from Helen Imam’s discussion paper

Is every Cambridge international student a bilingual student?

What do we mean by ‘bilingual schools’?

- Here at Cambridge, we believe that we are sitting on a wealth of bilingualism.

- Cambridge supports schools with varying linguistic profiles, including:
  - monolingual schools, focused on achieving through a first language (e.g. a school in the UK)
  - monolingual schools, focused on achieving through a second language (e.g. an international English-medium school)
  - bilingual schools, focused on students achieving through two or more languages across the curriculum (e.g. some subjects through L1 and some through L2).

- However, the picture is not always straightforward. For example, some schools may describe themselves as ‘English-medium’ schools, but in fact could be said to be running bilingual education programmes if they teach at least one non-language subject through the learners’ first language.

- On the other hand, other schools may call themselves ‘bilingual’ schools to draw attention to the teaching of English as a subject within their curriculum, but are in fact monolingual schools.

- Both examples illustrate the high status of English in attracting students. But they also demonstrate the difficulties in defining what exactly is mean by ‘bilingual education’ and the differing extent to which two or more languages can be used throughout the curriculum.

- Even in monolingual schools, there may be ‘bilingual students’ if the school has a multilingual population.

What do we mean by ‘bilingual students’?

- When using the phrase ‘bilingual’, are we referring to a student who is bilingual? E.g. someone who is proficient in two or more languages.

- Or are we referring to a student aiming to be bilingual? E.g. someone who is learning via a bilingual education programme.
Or indeed, going beyond this, it could be argued that ‘bilingual issues’ are broader than ‘bilingual education programmes’, and can affect any school where a child needs to use more than one language in their life, be it in school, home or the community.

We believe that a bilingual child could therefore be defined as any student who needs to use more than one language in their community, regardless of their level or range of proficiency.

Why is bilingualism important to Cambridge?

- A broad definition of ‘bilingual’ allows schools to include and foster bilingualism rather than for it to appear unattainable
- Precise terms for ‘bilingual education’ allow schools to distinguish between formal bilingual education programmes (strong or additive bilingualism) and more informal bilingual approaches towards learning (weak or relative bilingualism).
- Bilingual success depends on bilingual goals. A bilingual strategy could identify your societal goal (e.g. assimilation or pluralism) and associated linguistic goal (e.g. limited bilingualism or bilingualism with biliteracy), where you are now (language input, motivation) and a plan on how to reach your goal.
- Schools could consider their role in legitimising and increasing the status of the first language, in using it as a resource and a learning tool in class, and in encouraging parents to use it at home.
- Children and teenagers can go through phases of denying and then reclaiming their cultural and linguistic background, and will need to be supported through these phases.

Helen Imam is Education Manager at Cambridge International Examinations.

Key points from Stuart Shaw’s discussion paper

Identifying key issues in bilingual assessment: a most ‘thorny’ issue

Overview

International assessments in a wide range of subjects are being prepared for and delivered through the medium of English. These are taken by many candidates whose first language is not English, which raises a number of issues relating to language awareness and assessment.

Literature review

- Cambridge commissioned a review of the literature on key questions for bilingual education from the ESRC Centre for Research on Bilingualism in Theory and Practice and College of Education and Lifelong Learning Bangor (University of Bangor).
- Bilingual assessment is an issue that needs to be developed and researched in order to accommodate the bilingual continuum in which bilingual children operate

Cambridge research

- Cambridge has undertaken studies designed to address specific questions in relation to its own assessments. For example: What level of English and language skills are needed to access Cambridge assessments?
The focus of a recent language study has been the Cambridge International General Certificate of Secondary Education (IGCSE) in Geography, History and Biology.

Practical outcomes

- Findings from the research have contributed to the Cambridge question writing process and awareness of potential language issues confronting an international candidature.
- Outcomes have also led to a ‘CALP guide’ – a language toolkit designed for content teachers.
- Work on aligning Cambridge’s English qualifications to the CEFR is underway.
- Echoing Garcia’s concerns, it is crucial that future bilingual assessment practice “can tap the pluriliteracies of multimodal texts which bilingual children must produce in the twenty-first century”.

*Stuart Shaw is Principal Research Officer for Cambridge International Examinations.*