

English across the curriculum – What makes a bilingual program more or less effective?

*Prof. Dr. Thorsten Piske, Institut für Sprache und Literatur, Abteilung Englisch
Pädagogische Hochschule Schwäbisch Gmünd
E-Mail: thorsten.piske@ph-gmuend.de*

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1. Different approaches towards bilingual education

- **The term "bilingual education"** is used in two fundamentally different ways (e.g. Baker³2001):
 - a) teaching approaches involving more than one language
 - b) teaching approaches using two languages as languages of instruction so that learners become highly proficient in these languages
- **Many different terms are used in the literature, e.g.**
 - content and language integrated learning (CLIL)
 - immersion
 - teaching content through a foreign language
 - content-based second language teaching
 - language-enhanced content learning
 - language enriched education
- **mainstream bilingual education**
- **The terms "CLIL " and "Immersion"**
 - Just like the term "bilingual education", the term "CLIL" is an umbrella term, whose definition is rather vague:
 - **"Content and Language Integrated Learning (CLIL)** involves teaching a curricular subject through the medium of a language other than that normally used." (*European Commission*)
 - "CLIL refers to any dual-focused educational context in which an additional language, thus not usually the first language of the learners involved, is used as a medium in the teaching and learning of non-language content" (*CLIL Compendium*)
 - The acronym CLIL is used as a generic term to describe all types of provision in which a second language (a foreign, regional or minority language and/or another official state language) is used to teach certain subjects in the curriculum other than the language lessons themselves. (*Eurydice 2006, p. 8*)
- **As Edelenbos et al. (2006, pp. 93-94), point out, the term CLIL is interpreted in rather different ways:**

"CLIL [...] is a keyword which is appearing increasingly and can be interpreted very broadly, from teaching a 15-minute sequence about apples as part of a lesson on fruits, to teaching some topics within a year in the foreign language, to teaching one or more subjects in the other language. [...] If the term CLIL refers to programs with at least 50 per cent of subject matter teaching in the other language, 'immersion' is also used."

⇒ Due to its rather vague definition, CLIL can be put and is put into practice in many different ways.

- The 50% criterion appears to suggest that the term "immersion" is defined more precisely.
- However, there are also different types of immersion programs (e.g. Baker³2001):
 - Early immersion:
The program begins in kindergarten or even at the infant stage.
 - Delayed or middle immersion:
The program begins when children are 9 or 10 years old.
 - Late immersion:
The program begins at secondary school level.
 - Total immersion:
The whole curriculum is taught in the foreign language.
 - Partial immersion:
Close to 50% of the curriculum is taught in the foreign language.
- The results of a large number of international studies and of studies carried out in Germany have shown that early total immersion programs are the most successful bilingual programs (for overviews, see Wode 1995, Wesche 2002, Piske & Burmeister 2008).
- Piske & Young-Scholten (2009, p. 262) summarize some of the characteristics of successful immersion programs in their glossary entry for immersion:

"Immersion (IM): [...] In a teaching context, the term refers to the use of the language to be learned as the medium of instruction to teach any subject. IM produces the best results if (a) the intensity of contact with the new language is high, that is, if at least 60-70% of the total teaching time is devoted to IM; (b) if IM is continued for at least six to seven years; and if the input for the new language is structurally rich and not limited to selected structural areas only. Structural diversity can be achieved by including all subjects and all situations that may occur."

2. Examples of early immersion programs at German elementary schools

(e.g. Wode 1995, Burmeister & Pasternak 2004, Piske & Burmeister 2008)

- In 1999, non-private elementary schools in Northern Germany began to introduce early English immersion programs.
 - In 2008, three non-private elementary schools in Baden-Württemberg also started to introduce early English immersion programs.
- Program features:**
- Northern Germany:
All subjects, except for German language arts, are taught in English.
 - The students are exposed to English for about 70% of the time and to German for about 30% of the time.
 - Baden-Württemberg:
Only MeNuK and BSS are taught in English.
 - Over time students will be exposed to English for about 50% of the time and to German for about 50% of the time.

- English is not taught as a subject in Northern Germany, but may be taught as a subject in Baden-Württemberg.
- The students learn English because
 - they are actively involved in classroom activities
 - they are asked to speak English as often as possible
- The students learn to read and write in German.
- However, the English writing system is also present from the start.
- A literate environment is created and English words and sentences can be found on posters, wall dictionaries, work sheets, etc. from the start.
- The students are mostly taught by German-speaking teachers with a very good command of English.
- The immersion programs are always offered as alternatives to the regular programs.
- The immersion programs are attended by both children from German families and by children from migrant backgrounds.
- The immersion programs are attended by both children with and without prior knowledge of English

3. Instructional methodology in immersion programs

(e.g., Snow 1990, Burmeister & Pasternak 2004, Burmeister 2006)

- **Ten of the most important strategies used by immersion teachers** (according to Snow 1990):
 - a) Extensive use of body language
 - b) Predictability in instructional routines
 - c) Drawing on background knowledge to aid comprehension
 - d) Extensive use of realia, visuals, manipulatives
 - e) Review of previously covered material
 - f) Building redundancy into the lessons
 - g) Explicit teacher modeling
 - h) Indirect error correction and negotiation of meaning
 - i) Variety of teaching methods and types of activities
 - k) Use of clarification/comprehension checks
- **According to Burmeister (2006), the following four principles are crucial for successful immersion programs:**
 - 1) *Scaffolding*: Scaffolds help students
 - a) to organize their school days and their lessons and
 - b) to develop self-confidence when using the new language

Example:

- Using a weather routine at the beginning of each science lesson by asking questions such as "What's the weather like today?" "Is the sun shining or is it raining?"



2) *Creating comprehensible contexts:*

- Teachers have to
 - a) build redundancy into their lessons by using repetition, paraphrase, restatement and synonymy,
 - b) help students associate language with concrete referents by extensively using pictures, real-life objects, movies etc.,
 - c) link the abstract with the concrete by associating language with pantomime, gestures and facial expressions.

3) *Multisensory learning:*

- Teachers have to create learning environments that enable their students to learn by using all senses.
- The students have to manipulate, explore and name real-life objects (*hands-on activities*).

4) *Negotiation of meaning:*

- Teachers do not only indirectly correct their students' utterances, but they also comment on the content of these utterances.
- Thus, they do not only provide useful feedback, but also additional "enriched" input.

4. Answers to frequently asked questions

How do the students' skills in the foreign language develop over time?

(see, e.g., Piske 2006, Piske & Burmeister 2008)

The first three pictures of the picture story "*Frog, where are you?*" (Mayer 1969)



Transcript 1. Excerpt of a picture story told by student no. 8 at the end of grade 1.

IE Don't show me the pictures.

8 There is a dog and a boy, and the d/ dog *looking* in a glass, and in the glass *sitting* a frog, and the moon *shining*.

IE Hm, mhm!

8 And then the boy are *sleeping*, and the dog *sleeping*. And then the boy *looking* in the glass, and the frog is/ is not there.

IE: English-speaking interviewer.

Transcript 2. Excerpt of a picture story told by student no. 8 at the end of grade 1.

8 Ehm one night a little boy # ehm has **caught** a little frog and **puts** him in a glass, and # ehm # then he **took** the glass and **bring** it in his bedroom, and then he **looks** at the little frog, and the frog **thinks** when the little boy **sleeps**: "I **go** out in the forest to my family" and ehm # the light is on, and the little # dog ehm **looks** in the glass exactly on the frog.

IE Mhm.

8 And when the frog # ehm **go** out of the glass in the night, the little dog and the little boy are **sleeping**, and ehm # the # moon is **shining** in the window, and # ehm all is **standing** around and is dark. And when the day **comes** and the ehm # sun **shines** on the glass and the little boy ehm **wakes up** and the dog a/ as well ehm # the # glass was empty because the frog ehm in the night **go** ehm to his family again # in the forest.

IE: English-speaking interviewer.

- **Do students in bilingual programs show deficits in the development of their first language?**
 - In studies examining students' reading and writing skills in German, immersion students obtained better results than students who received their instruction in German. (e.g. Bachem 2004, Zaunbauer & Möller 2006, 2007)
 - These results correspond to the results of international studies. (e.g. Genesee 1987, Turnbull et al. 2001)
 - **Do students in bilingual programs show deficits in the development of subject knowledge?**
 - In studies examining subject knowledge (e.g. in maths) immersion students obtained results that corresponded to or were slightly better than the results obtained by students who received their instruction in German. (e.g. Zaunbauer et al. 2005, Zaunbauer & Möller 2006, 2007)
 - These results correspond to the results of international studies. (e.g. Genesee 1987, Bournot-Trites & Reeder 2001)
 - **Are students in bilingual programs able to express their subject knowledge in their first language?**
 - In studies on subject knowledge carried out in German, immersion students obtained results that corresponded to the results obtained by students who received their instruction in German. (e.g. Zaunbauer et al. 2005, Zaunbauer & Möller 2006)
 - These results correspond to the results of international studies. (e.g. de Courcy & Burston 2000, Bournot-Trites & Reeder 2001)
 - **Does participation in a bilingual program hinder general intellectual or cognitive growth?**
 - Bilingual programs have been found to exert positive effects on cognitive abilities such as concentration, divergent thinking and creativity. (e.g. Bialystok 2005)
 - In the bilingual programs that have been implemented in Germany so far hardly any student "opts out" of these programs.
 - **Do all students benefit from bilingual programs?**
 - When children start school, at least one their languages should reflect a stage of development typical of their age. (e.g. Cummins 1982, Wode 1995, Elsner 2007)
- ⇒ Parents have to make sure that their children's first language can develop in an age-appropriate way.
- ⇒ In general the results obtained in Germany support Wesche's (2002, p. 362) conclusion that early immersion is "the most effective means of school second language instruction yet developed for majority language children."

5. Summary and Conclusions

Characteristics of successful bilingual programs

- According to the results of many international studies and studies carried out in Germany, successful bilingual programs are characterized by the following features (e.g., Wode 1995, Wesche, 2002, Piske 2007, Piske & Burmeister 2008):
 - a) The earliest possible school starting age
 - b) Continuous and extensive exposure to the foreign language over an extended period of time (at least 6 to 7 years)
 - ⇒ It has to be made sure that the bilingual programs can continue in secondary school.
 - c) Frequent use of the foreign language in diverse and motivating contexts (the more subjects are included the more successful the program)
 - d) Authentic and enriched input provided by teachers with at least almost native-like skills in the foreign language
 - e) A variety of teaching methods and types of activities (teachers recognize a diversity of general learning styles and of language learning styles)
 - f) Students whose other language(s) is (are) developed in an age-appropriate way

Implications for teachers

- According to the "Bildungsstandards für Englisch. Grundschule – Klassen 2,4", teachers working in Baden-Württemberg should actually integrate elements of bilingual learning and teaching into their lessons as often as possible:

"Die Einbettung der Zielsprache in Sachfächer als Beitrag zum bilingualen Lehren und Lernen ist [...], wann immer möglich, anzustreben. Gerade in den letzten beiden Lernjahren wird dieser Zugang zunehmend systematisch genutzt." (S. 68)
- **CLIL/immersion teachers will be most successful if they**
 - a) have at least almost native-like skills in the foreign language,
 - b) are willing and able to teach a curricular subject continuously in the foreign language (just teaching individual units or modules in the foreign language has been shown to be less effective),
 - c) are able to create motivating learning environments which engage the learner in understanding and using the foreign language,
 - d) are willing and able to apply a large variety of teaching methods,
 - e) are willing to spend a lot of time creating their own teaching materials (there is a lack of teaching materials developed for CLIL),
 - f) are willing to cooperate with other teachers working in bilingual programs (there is a lack of specific courses for teachers interested in bilingual programs),
 - g) are willing to put up with their colleagues' criticism (teachers not involved in bilingual programs often feel neglected because bilingual programs often receive a lot of public attention).

Selected References

- Bachem, J. (2004). *Lesefähigkeiten deutscher Kinder im frühen englischen Immersionsunterricht*. Unveröffentlichte Magisterarbeit. Universität Kiel.
- Baker, C. (2001). *Foundations of bilingual education and bilingualism* (3rd ed.). Clevedon: Multilingual Matters.**
- Bialystok, E. (2005). Consequences of bilingualism for cognitive development. In: Kroll, J.F./de Groot, A.M.B. (Ed.). *Handbook of Bilingualism: Psycholinguistic Approaches*. Oxford: Oxford University Press, 417-432.
- Bournot-Trites, M. & Reeder, K. (2001). Interdependence revisited: Mathematics achievement in an intensified French immersion program. In: Wesche, M. (Ed.). *French Immersion and Content-Based Language Teaching in Canada. The Canadian Modern Language Review. Special Issue 58*, 27-43.
- Burmeister, P. (2006). Immersion und Sprachunterricht im Vergleich. In: Pienemann, M., Keßler, J.-U. & Roos, E. (Ed.). *Englischerwerb in der Grundschule*. Paderborn: Schnöningh/UTB, 197-216.**
- Burmeister, P. & Pasternak, R. (2004). Früh und intensiv: Englische Immersion in der Grundschule am Beispiel der Claus-Rixen-Grundschule in Altenholz. Fachverband Moderne Fremdsprachen fmf, Landesverband Schleswig-Holstein (Ed.): *Mitteilungsblatt August 2004*, 24-30.**
- Cummins, J. (1982). Die Schwellenniveau- und die Interdependenz-Hypothese: Erklärungen zum Erfolg zweisprachiger Erziehung. In: Swift, J. (Ed.). *Bilinguale und multikulturelle Erziehung*. Würzburg: (Königshausen & Neumann), 34-43.
- de Courcy, M.C. & Burston, M. (2000). Learning mathematics through French in Australia. *Language and Education* 14, 75-95.
- Elsner, D. (2007). *Hörverstehen im Englischunterricht der Grundschule: Ein Leistungsvergleich zwischen Kindern mit Deutsch als Muttersprache und Deutsch als Zweitsprache*. Frankfurt a.M.: Peter Lang.
- Edelenbos, P., Johnstone, R. & Kubanek, A. (2006). The main pedagogical principles underlying the teaching of languages to very young learners. Languages for the children of Europe. Published research, good practice and main principles. In: *Final Report of the EAC 89/04, Lot 1 study (October 2006)*. Download available at: http://ec.europa.eu/education/policies/lang/key/studies_en.html
- Fischer, U. (2007). Von Herausforderungen und Chancen: Was erwartet eine Schule bei der Einführung des Bilingualen Unterrichts? *Grundschule* Heft 4/April 2007, 32 – 34.**
- Genesee, F. (1987). *Learning through two Languages: Studies of Immersion and Bilingual Education*. Cambridge, MA: Newbury House.
- Kersten, K.; Fischer, U., Burmeister, P. & Lommel, A. (2009). Leitfaden für die Einrichtung von Immersionsangeboten in Grundschulen. Download available at: <http://www-fmks-online.de>**
- Lepschy, A. (2007). Yellow cows and blue horses. Kunstunterricht in der zweiten Klasse – englisch immersiv. *Grundschule* Heft 4/April 2007, 41 – 44.
- Mayer, M. (1969). *Frog, where are you?* New York: Pied Piper.
- Piske, T. (2006). Zur Entwicklung der Englischkenntnisse bei deutschsprachigen Immersionsschülerinnen und -schülern im Grundschulalter. In: Schlüter, N. (Ed.). *Fortschritte im frühen Fremdsprachenlernen – Ausgewählte Tagungsbeiträge Weingarten 2004*. Berlin: Cornelsen, 206-212.
- Piske, T. (2007a). Implications of James E. Flege's research for the foreign language classroom. In: Bohn, O.-S. & Munro, M.J. (Ed.). *Language Experience in Second Language Speech Learning. In Honor of James Emil Flege*. Amsterdam: John Benjamins, 301-314.
- Piske, T. (2007b). Wichtig ist nicht nur ein früher Beginn: Zum Erlernen von Fremdsprachen an Kindertageseinrichtungen und Grundschulen. In: Plieninger, M. & Schumacher, E. (Ed.). *Auf den Anfang kommt es an – Bildung und Erziehung im Kindergarten und im Übergang zur Grundschule*. Schwäbisch Gmünd: Gmünder Hochschulreihe Band 27, 133-151.

Piske, T. & Burmeister, P. (2008). Erfahrungen mit früher englischer Immersion an norddeutschen Grundschulen. In: Schlemminger, G. (Ed.), Erforschung des bilingualen Lehrens und Lernens: Forschungsarbeiten und Erprobungen von Unterrichtskonzepten und – materialien in der Grundschule. Baltmannsweiler: Schneider Verlag Hohengehren, 131-151.

Piske, T. & Young-Scholten, M. (eds.) (2009). *Input Matters in SLA*. Bristol: Multilingual Matters.

Schlemminger, G. (2006). Die Studiengänge Europalehramt – ein Beispiel für Bilinguales Lehren und Lernen in der Lehrerbildung. In: Schlemminger, G. (Ed.). *Aspekte Bilingualen Lehrens und Lernens. Schwerpunkt Grundschule*. Baltmannsweiler: Schneider Verlag Hohengehren, 69-94.

Schröder, K., Harsch, C. & Nold, G. (2006). DESI – Die sprachlichen Kompetenzen unserer Schülerinnen und Schüler im Bereich Englisch. *Zentrale Befunde. Neusprachliche Mitteilungen* 3, 11-32.

Turnbull, M., Lapkin, S. & Hart, D. (2001). Grade 3 immersion students' performance in literacy and mathematics: Province-wide results from Ontario (1998-99). In: Wesche, M. (Ed.). *French Immersion and Content-Based Language Teaching in Canada. The Canadian Modern Language Review. Special Issue* 58, 9-26.

Wesche, M. B. (2002). Early French immersion: How has the original Canadian model stood the test of time? In: Burmeister, P., Piske, T. & Rohde, A. (Ed.). An Integrated View of Language Development: Papers in Honor of Henning Wode. Trier: WVT – Wissenschaftlicher Verlag Trier, S. 357-379.

Wode, H. (1995). *Lernen in der Fremdsprache: Grundzüge von Immersion und bilingualem Unterricht*. Ismaning: Hueber.

Wode, H. (2001). Mehrsprachigkeit in Kindergarten und Grundschule: Chance oder Risiko? *Nouveaux cahiers d'allemand* 19, 157-178.

Zaubauer, A. C. M. & Möller, J. (2006). Schriftsprachliche und mathematische Leistungen in der Erstsprache. Ein Vergleich monolingual und teilimmersiv unterrichteter Kinder der zweiten und dritten Klassenstufe. *Zeitschrift für Fremdsprachenforschung* 17, 181-200.

Zaubauer, A. C. M. & Möller, J. (2006). Schulleistungen monolingual und immersiv unterrichteter Kinder am Ende des ersten Schuljahres. *Zeitschrift für Entwicklungspsychologie und Pädagogische Psychologie* 39, 141-153.

Zaubauer, A. C. M., Bonerad, E.-M. & Möller, J. (2005). Muttersprachliches Leseverständnis immersiv unterrichteter Kinder. *Zeitschrift für Pädagogische Psychologie* 19, 233-235.

A lot of useful information is provided on the following website:

<http://www.fmks-online.de>