Studies on the effectiveness of heritage language teaching – state of research, research problems, need for research

15A Background text Hans H. Reich

1. Fundamental question

The efficacy of heritage language education is generally not just questioned because of curiosity and interest. Rather, the question in itself already suggests that this kind of education is subject to review. Arguments are sought for and against its justification within the school system. The research on native language education therefore is not as much about the methodology, teaching and learning materials or organizational issues within the school, nor about about the effects of language structure and linguistic-sociological characteristics of the various native languages on the learning process and success, but whether the participation in heritage language education contributes something to the learning success in the host countries or not, or possibly even prevents it.

How this question is to be understood needs to be examined more closely. It could be construed in a way that questions whether the services performed are recognized within the educational system, and if they are recognized just as much as part of the overall success in school as the performance in other individual subjects. However, the question is rarely intended that way. It's meaning could also be interpreted in the sense of what heritage language education means for reaching the key objectives of the educational system, which applies to all curriculum subjects, or whether it enhances language awareness, strengthens intercultural competence or the ability of autonomous learning. Such possible effects have not yet been subject to scientific research, possibly because the question is mostly understood as whether or not heritage language education in its current form furthers or compromises the integration of the students into the school system of the immigration country or, if learning in the native language promotes or rather hampers the acquisition of the school language and educational language of the immigration country.

This is a somewhat unusual query, as generally it is not subject to question whether the study of physics contributes to the learning of mathematics, or if French lessons improve the students' performance in English.

However, in the case of heritage language education, these questions are raised, and they attract a relatively considerable interest. There is no shortage of engaged, pedagogically and politically motivated opinions and statements on this issue. The following presents only those publications which meet scientific standards, however.

2. Research in the US

A highly critical view of heritage language education has been taken by Hopf (2005; 2011) relative to US-American research of the 1970s, which traces the relationship between instructional time spent in class for interactive work on educational tasks ("time on task"), and the performance of students. He argues that "the more time migrant pupils spend actively learning L2 [= second language or school language; editor's note], the higher the competences they develop in it. Conversely, if they invest their – always limited! - time in learning L1 [= first language; editor's note], there is naturally much less time available for other things" (Hopf 2011, p. 26). This argumentation is questionable, however, as it turns an entirely verifiable general didactic statement into an unverifiable kind of unfounded competition between subjects and without explanation why only heritage language education is considered as competition for learning German. (Ultimately, subjects like English, sports, art, math and other subjects take up a lot of learning time). Hopf's theory needs to be revisited.

This task was first assumed by Söhn (2005). She goes back to US-American research on the "effectiveness of bilingual education") and untertakes a critical review of more recent research. She focuses primarily on two meta-analyses, works that analyze a larger number of individual studies and summarize their results. Her conclusion: there are "no indications that bilingual education programs have a negative effect on school performance in the second language (L2). This was analyzed particularly with regard to the influence on the reading competence. This relatively certain basic statement that bilingual education and the additional teaching of and in the native language does not hurt, would also imply that the <time-on-task-hypothesis> (...) could not be validated in this context. If part of the available classroom hours are used for instruction in a language other than the regular school language, it does apparently not automatically lead to inferior performance in the second language and in the other subjects" (as mentioned above, p. 64).

The American researchers agree on another point: heritage language education significantly improves the competence level in the language of origin beyond what is acquired in daily communication (see ibid. page 60).

Although this may appear trivial at first sight, it should definitely be noted for its beneficial impact, considering the language situation in the migration and the often difficult teaching conditions.

Where the American researchers disagree, are the potential positive effects on second learning acquisition, e.g., English in this case. To guote once again Söhn: "For the hypothesis, that bilingual programs, or heritage language education, not only have a neutral but a positive effect on L2 competence and the school performance in L2, the current state of research has no clear nor reliable evidence. The effect varies between neutral and in part, significantly positive, depending on the teaching model and other contextual characteristics" (as mentioned above, p. 64; see also Esser 2006, p. 387–398). Moreover, the studies which appeared in subsequent years in the US have not been able to end the debates. The most recent overview (Grooms 2011) concludes with the determination: "Although a greater part of the research supports the assumption that bilingual education programs are superior to those that only provide English, in the final analysis, it does not provide conclusive evidence of a specific type of instructional model, such that there continues to be room for debates and different decisions in educational policy and teaching practices" (as mentioned above, p. 147).

It is mostly an issue of methodological weaknesses of many investigations and problems of comparability among various models in the US that prevent a definite conclusion. From the point of view of

German-speaking educational systems, we would also add that "bilingual education" in the US is not directly comparable with the models of heritage language education in Germany, Austria and Switzerland, as they may perhaps correspond to a smaller part of the US-American models and are ultimately embedded in other education policy contexts.

3. Research in German-speaking areas

Relevant scientific investigations in German-speaking areas are rare and limited in scope. Their small sample size cannot be compared with those of American dimensions.

An investigation, conducted in the canton of Zurich in the years 2005/06, was comprised of 51 Albanian-speaking students and 29 Turkish-speaking students (grades 4-6) who attended HLT, and 46 students who did not attend HLT. Its purpose was to ascertain the impact of heritage language education on the level of performance and the learning progress within a year in Albanian, Turkish and German, respectively (Caprez-Krompàk 2010; presented in more detail in chapter 15B). This was based on the results of written tests (C-Tests) in both languages. For Albanian, it can be clearly stated that students who attend HLT achieve a higher performance standard and faster learning progress than those who do not attend HLT, and that the difference is statistically significant. The results in Turkish do not contradict that, but they are statistically not sound enough, based on the sample circumstances, to allow for definite conclusions to be drawn. In the case of German, it was evident that the learning progress of the Albanian-speaking students depends almost exclusively on the previously attained proficiency in German, whereas participation in native language education played next to no role in this regard. (In the case of the Turkish-speaking students, the analysis of their development in German was waived, due to the aforementioned low sample confidence.) The first larger study in the German-speaking area therefore resulted in a conclusion that is guite similar to the focus of current discussions in the US.

In the years 2006–2008 an investigation was conducted in the kindergartens of the city of Zürich (Moser et al 2010), which compared the learning progress of 181 children who, for two years were systematically stimulated in their first language, and 118 children who were exclusively taught in German.

The first languages were Albanian, Bosnian/Croatian/Serbian, Portuguese, Spanish and Tamil. The research focused on learning progress in terms of phonological awareness, vocabulary and knowledge of alphabetic characters in first readings in their native language and their second language (German), respectively. It became evident that in both languages, progress was determined quite strongly by the level of previously acquired knowledge, whereas the question of whether promotion of first language occurred or not, has not played a determining role. In terms of knowledge of alphabetic characters and first readings, it was determined that the acquired competences in the first language had a fairly strong influence on the competences in German. This study also ascribes a relatively minor role to native language education. In light of the children's linguistic situation, the authors would leave the question open as to

whether the quantity and quality of instruction can be considered sufficient to produce transfer effects (as mentioned above, p. 644f).

4. A broader question: bilingualism or success in school

When it comes to the effectiveness of heritage language education, those publications are often referenced which generally question the connection between bilingualism and success in school, that is, without relating it directly to instruction. Since these questions are closely related, it seems appropriate to recognize this argumentation as well.

Esser's position to this effect has attracted some consideration (2006). He refers to a larger US-American study which had determined a positive influence of bilingualism on the reading performance in English. However, Esser doubts that the specific mother-tongue aspect was the determining factor, and can show through a corresponding recalculation that its effect is indeed negligibly small. He concludes that the knowledge of English alone is relevant for school achievement, and not the knowledge of the mother tongue (as mentioned above, p. 371–379).

The investigation by Dollmann/Kristen (2010) can be considered as a re-examination of Esser's position for the German-speaking area. Their investigation in Cologne during the years 2004 - 2006, measured with written tests (C-Tests) the knowledge of German and Turkish of 739 Turkish-German children in third grade and compared them with the results of a general intelligence test, a reading test, and a math test. It shows that children with good proficiency in German perform better in the test – regardless of whether they also had good proficiency in Turkish or not – whereas those with lesser proficiency in German (again regardless of their proficiency in Turkish) perform significantly more poorly on tests. The authors conclude from it that although bilingualism as such does not negatively impact test performance, proficiency in German is the deciding factor for success, and that the knowledge of the mother tongue represents no additional resource.

An unusual, but plausible connection, that normally had not been considered, was suggested by a nationwide representative study concerning the German and English competences of ninth-graders in Germany (DESI-consortium 2008). It demonstrates a superiority of the tested English competences of students who grew up speaking another language in addition to German, as opposed to those who grew up monolingually with German only. (as mentioned above, p. 215–219). This is a remarkable connection, which should be further pursued (2006, p. 379f).

5. Potentials and chances of HLT

The present wide-spread uncertainty in the research with regard to possible positive effects of heritage language education on the learning of a second language and school success shows that new methodologically sound investigations with more precise, differentiating questions are required.

As acknowledged by Esser himself who has been highly critical of heritage language education: "It therefore cannot be excluded [that is the current state of research, H.R.] that the result of even one, but indeed appropriate study, could be the proof of a meaningful effect, though it may only be under rather special, but defined conditions" (Esser 2006, p. 398). Many conditions are defined in research that could be considered: the organization and quality of instruction, different language prestige, structural distance of the languages, cultural climate at the school, linguistic self-image of the migrants, etc.

One of these conditions, the coordination of heritage language education with regular classroom instruction, was subject of an existing study in Cologne from the years 2006–2010 (Reich 2011; 2015). It traced the development of written-language skills of 66 Turkish-German elementary school students throughout their lower level classes; however, based on the sample circumstances, the results should not be readily generalized.

The goal of the investigation is a comparison of the efficacy of three concepts of language promotion: coordinated alphabetization, promotion of German with native language supplementary instruction, and German language promotion without native language elements. The concept of coordinated alphabetization comprises not only the learning of reading and writing, but an extensive alignment in terms of content and methodology between Turkish and German classroom instruction, including team teaching hours, with the simultaneous presence of both instructors in the classroom. There were noteworthy effects, particularly in the writing of texts: the group with coordinated promotion achieved higher performances in Turkish in the second year already than the other two groups. Such effects were notable in German to some extent in the third year, but emerged clearly in the fourth year. They lead to better performance by students in the better coordinated classes, most of all in terms of text length and variety of vocabulary.

6. Conclusion

The state of research is not satisfactory. There are two results that are no longer subject to disputes: (1) that heritage language education furthers the acquisition of the mother tongue; (2) that it does not negatively impact the learning of German. The result is a situation that is so open and uncertain, that it does not lend itself to an orientation for pedagogical action, namely (3) in that an unequivocally beneficial promotional effect of heritage langue education on the learning of German and other academic achievements cannot be proven.

The task at hand in the future would be to find a more differentiated consideration of possible effects and research approach of the conditions where they occur. Here, numerous linguistic and cultural competencies come into play, as well as societal, institutional and personal conditions.

The few existing studies suggest that the textual competencies across languages and the ability to learn other languages could be worthwhile research objects, and that the nearness, or rather, the distance of heritage language education to the "normal operation" of the school would have to be considered as a significant influencing factor.

Bibliography

- Caprez-Krompàk, Edina (2010): Entwicklung der Erst- und Zweitsprache im interkulturellen Kontext. Eine empirische Untersuchung über den Einfluss des Unterrichts in heimatlicher Sprache und Kultur (HSK) auf die Sprachentwicklung. Münster u. a.: Waxmann.
- DESI-Konsortium (eds.) (2008): Unterricht und Kompetenzerwerb in Deutsch und Englisch. Ergebnisse der DESI-Studie. Weinheim und Basel: Beltz.
- Dollmann, Jörg; Cornelia Kristen (2010): Herkunftssprache als Ressource für den Schulerfolg? Das Beispiel türkischer Grundschulkinder. Zeitschrift für Pädagogik, 56, 55. Beiheft, p. 123–146.
- Esser, Hartmut (2006): Sprache und Integration. Die sozialen Bedingungen und Folgen des Spracherwerbs von Migranten. Frankfurt/New York: Campus.
- Grooms, Andrea Morris (2011): Bilingual Education in the United States. An Analysis of the Convergence of Policy, Theory and Research, Diss., Pittsburgh: University of Pittsburgh.
- Hopf, Diether (2005): Zweisprachigkeit und Schulleistung bei Migrantenkindern: Zeitschrift für Pädagogik, 51 (2), p. 236–251.
- Hopf, Diether (2011): Schulleistungen mehrsprachiger Kinder: Zum Stand der Forschung. In: Sabine Hornberg; Renate Valtin (eds.): Mehrsprachigkeit. Chance oder Hürde beim Schriftspracherwerb? Empirische Befunde und Beispiele guter Praxis. Berlin: Deutsche Gesellschaft für Lesen und Schreiben, p. 12–31.
- Moser, Urs; Nicole Bayer; Verena Tunger (2010): Erstsprachförderung bei Migrantenkindern in Kindergärten. Wirkungen auf phonologische Bewusstheit, Wortschatz sowie Buchstabenkenntnis und erstes Lesen in der Erst- und Zweitsprache. Zeitschrift für Erziehungswissenschaft, 13, p. 631–648.
- Reich, Hans H. (2011): Schriftsprachliche F\u00e4higkeiten t\u00fcrkisch-deutscher Grundsch\u00fclerinnen und Grundsch\u00fcler in K\u00f6ln. Ein Untersuchungsbericht. K\u00f6ln: Bezirksregierung.
- Reich, Hans H. (2016): Deutschförderung, Muttersprachlicher Ergänzungsunterricht, Koordinierte Alphabetisierung – Auswirkungen unterschiedlicher Sprachförderkonzepte auf die Fähigkeiten des Schreibens in zwei Sprachen. Eine Untersuchung mit türkisch-deutschen Grundschülern und Grundschülerinnen in Köln. In: Peter Rosenberg; Christoph Schroeder (eds.): Mehrsprachigkeit als Ressource. Berlin: de Gruyter (erscheint voraussichtlich im Sommer 2016).
- Söhn, Janina (2005): Zweisprachiger Schulunterricht für Migrantenkinder. Ergebnisse der Evaluationsforschung zu seinen Auswirkungen auf Zweitspracherwerb und Schulerfolg (= AKI-Forschungsbilanz 2). Berlin: Wissenschaftszentrum für Sozialforschung.