

Targeted language support for students at risk in mainstream education

Perspectives for classroom development of non-language subjects¹

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In diesem Beitrag wird das besondere sprachliche Register von Schule und Unterricht in den Blick genommen. Mängel in der Beherrschung dieser idealen Norm in Regelklassen sind Ursache für z.T. gravierende Unterschiede im Schulerfolg zwischen den in der dominanten Schulsprache aufwachsenden Kindern und Jugendlichen und ihren Altersgenossen mit Migrationshintergrund. In dem Beitrag werden die Besonderheiten des schul-/ unterrichtssprachlichen Registers aufgeführt und erläutert. Es wird gezeigt wie im Regelunterricht nicht-sprachlicher Fächer eine Fossilisierung von Sprachkompetenzen auf einem Niveau informeller Verständigung in Alltagssituationen aufgebrochen werden kann. Schulische Erfolgchancen können durch gezielte sprachliche Unterstützung im Regelunterricht gefördert werden, wenn kognitive und sprachliche Aspekte des Lernens für SchülerInnen transparent und plausibel in einen funktionalen Zusammenhang gebracht und mit entsprechenden Kognitiverungen und sprachlichen Mitteln unterstützt werden. Dieser Perspektivwechsel von der sprachlichen Sonderförderung durch Spezialisten zum sprachsensiblen Regelunterricht erfordert systematische Unterrichtsentwicklung auf mehreren Ebenen des Schulsystems.

...educators have begun to realize that the mastery of academic subjects is the mastery of their specialized patterns of language use, and that language is the dominant medium through which these subjects are taught and students' mastery of them tested.

Jay L. Lemke (1989)

Introductory remarks

In many educational systems around Europe, opportunities for students from a migrant background have not significantly improved over the years despite serious efforts on the side of school authorities. Germany might serve as a pertinent example. Although the recently published 8th integration report by the German government² shows some encouraging results, the situation of immigrant students remains critical. In 2008 13.3 per cent of immigrants between the ages of 15 and 19 dropped out of school without formal certification – a dropout rate twice as high as that of students with an ethnic

German background. And the number of migrants dropping out of school has risen: In 2007, it was only 10 per cent.

In mathematics, for example, Germany scored the largest disparity among educational systems participating in PISA 2003 – with one and a half proficiency levels. Petra Stanat and Gayle Christensen (2006: 32) comment: “This is particularly disconcerting, as these students have spent their entire school career in Germany.” In other words, Germany is among the few OECD countries in which the second-generation students with a migrant background perform at a significantly lower level (in mathematics, science, reading) than their first-generation peers. The situation is extremely challenging at the lower end of the performance scale. Low-performing immigrant students often do substantially worse than low-performing native students, which makes the former extremely vulnerable to exclusion. 20% of second-generation students are found to be below level 1 on proficiency scales (= PISA) for mathematics and reading. Stanat & Christensen (2006: 54) rightly conclude: “They can be considered at serious risk of not having the reading and mathematics literacy skills necessary to help them tackle real-life situations, to continue learning and to enter successfully into the work force.” After several decades of extremely expensive remedial measures which allocated funds primarily on the organisational set-up of teaching vulnerable groups – e.g. ability grouping, grade retention, pull-out programmes – and on highly specialised courses for the systematic advancement of general L2 competences achievement gaps still exist to a greater or lesser extent. There is a danger inherent in these strategies that marginalized groups will be “being judged and found wanting based on negative stereotypes related to [their] social category

membership” and that this “can seriously undercut the achievement of immigrant and minority students” (Schofield/Bangs 2006: 93).

Probable causes of the limited efficiency of the above mentioned strategies, can be found in the fact that the support of students at risk has been the responsibility of specialists who mainly operate outside the mainstream curriculum. This goes along with a lack of sensitivity in mainstream non-language subject areas towards the specific patterns of language use prevailing in formal education. It is an established fact that migrant students’ acquisition of basic interactional/conversational communicative skills (Cummins 1979, 1991) tends to stagnate or fossilize and to become the exclusively available language register. As a rule this also holds true for native students from families with low cultural capital and a low SES. Müller/Dittmann-Domenichini (2007) confirm that after four/five years of schooling the migrant learners’ L2 interlanguage stagnates at a comparatively low level of informal language use which functions fairly well out of school. However, these language patterns do neither sufficiently support the cognitive processes required in non-language classrooms nor do they meet approval and reward by educators:

Hier zeigt sich eine Art Stagnation im Bereich der schulischen Sprache, die wir mit Vorsicht als eine “stagnierende schulische Lernersprache” bezeichnen. Eine aus vielen Beobachtungen hervorgehende Beurteilung von Schweizer LehrerInnen besagt, dass die schulsprachlichen Leistungen in Lesen und Schreiben bei vielen mehrsprachigen Kindern etwa auf dem Niveau der 4. bis 5. Klässlern stagnieren. (page 9/18)

The OECD’s advice for countries with a strong relationship between the language students speak at home and their performance in mathematics and/or other subject areas like science and reading, is to strengthen **targeted language support** in mainstream education since second/third generation students with a

migrant background have enough informal language skills at their command to be integrated into mainstream classes.

This urgent demand for targeted language support is confirmed by the Council of Europe’s (CoE) large international project “Languages in Education – Languages for Education” which is primarily concerned with the language dimension of social cohesion and the entitlement of children and adolescents from a migrant background to inclusive education.³ The CoE’s attention is focused on both, the individual learner’s language biography – e.g. the multilingual competences of students from a migrant background – and the mastery of the specific language register normally used in formal education as a precondition for educational success. There is strong evidence that targeting support across the curriculum at the specifics of the language in/for education (i.e. in all language subjects including L1 as home or heritage languages and also in non-language subjects) will lead to a considerable enhancement of academic achievement.

It seems that there are at least three new ways of looking at educational provisions and programmes which are supposed to close achievement gaps: They should

- aim at high expectations for all students and the fostering of resiliency, i.e. the ability to adapt and succeed despite risk and adversity
- encourage varied teaching/classroom strategies for nurturing learner autonomy and self-directed learning, and
- provide targeted language support, i.e. co-ordinated subject-based language scaffolding across the curriculum.

The language of schooling

“Schooling is primarily a linguistic process”, proposes Mary J. Schleppegrell in the introductory chapter to her book on the *Language of Schooling* (2004), in which she adopts a functional linguistics approach to teaching and learning across the curriculum. This might look like too narrow a view of the complex and multifaceted educational process. However,

Schleppegrell justifies her position as follows:

Developing the kind of knowledge that comes through schooling requires that students learn to use language in new ways. Even brief observation of any classroom shows the role that language plays in both managing activity and presenting academic content. It is through language that school subjects are taught and through language that students’ understanding of concepts is displayed and evaluated in school contexts. In addition, knowledge about language itself is part of the content of schooling, as children are asked to adopt the word-, sentence-, and rhetorical-level conventions of writing, to define words, and in other ways to focus on language as language. In other words, the content, as well as the medium, of schooling is, to a large extent, language. (2004: 1-2)

Language is indeed school’s hidden agenda since many teachers are not prepared to make the linguistic challenges of schooling explicit to learners. Although they themselves may be proficient users of the specific register of their subject, they may not be fully aware of its distinctive features and patterns of use which set it apart from informal communication. Since in many educational systems educators have turned a blind eye on the specific linguistic challenges of schooling – students from migrant backgrounds as well as low-achieving learners with a native background have not received adequate language support particularly in the non-language subjects.

language of schooling – language of (school) education – langue de scolarisation – Schulsprache – Bildungssprache – bildungssprachliches Register – language across the curriculum – fachunterrichtliche Diskursfähigkeit – fachunterrichtliche Literalität – cognitive academic language proficiency – Textkompetenz - konzeptuelle Schriftlichkeit – sprachliche Handlungsfähigkeit im Bildungsraum Schule – academic literacy – alltägliche Wissenschaftssprache ...

Consensus concerning a canonical definition of the “language of schooling” has not yet been reached. However, a superficial glance at the many labels presently in use for the specific register in formal education shows that language patterns and conventions of written discourse play a major role – no matter whether in writing or in speaking. The naïve conception of school language as a more or less colloquial register laced with the technical terms of a specific field of knowledge has to be abandoned. Learning the language of schooling involves much more than acquiring the technical terms of the different curriculum subjects. Rather, it is a matter of moving from utterance to “text” in the original sense of the word. It has been argued that schooling is a process of teaching children to “speak a written language” – and to construct oral as well as written texts of increasing explicitness, with language increasingly able to operate as an unambiguous representation of meaning.

For heuristic purposes Cummins’ distinction of BICS (basic interpersonal communicative skills, conversational language) und CALP (cognitive academic language proficiency, academic language) has been very helpful. Although transitions from BICS to CALP are far from being categorical and they rather label the extremes of a continuum, these concepts help to shed light on the necessity of students at risk to acquire an altogether new language code in school:⁴

Scaffolding strategies and targeted language support

It takes a whole-school language policy to make the academic register accessible for students at risk in mainstream classes, which means that also non-language subjects have to develop language-sensitive strategies and a dual focus – one on content and one on form, as it has been proposed for content and language integrated (CLIL) programmes. The following strategies for raising language sensitivity and targeting language support across the curriculum could help to close the achievement gap between those students who are already familiar with the more formal register of schooling because of parental support and those students who have to acquire a new code on the basis of their informal/conversational skills in a second language.

Establish close conceptual bonds between language form, content matter, cognitive activities and genres/text types

Basic language/discourse functions can serve as a manageable inventory of learners’ mental concepts forging strong bonds between language features, cognitive activities and text types/genres. Carlot

	Conceptually oral expression – BICS – conversational language	Conceptually written expression – CALP – academic language
Context and conditions of communication	<ul style="list-style-type: none"> - dialogic - face-to-face - spontaneous, unplanned - contextualised, embedded in a concrete situation - proximity - reference to a removed situation - high personal involvement - produced under real-time constraints - ambiguity, low explicitness 	<ul style="list-style-type: none"> - monologic - separated by space/time - reflected, planned - decontextualized - distance - little reference to a removed situation - dispassionate - produced under conditions permitting editing - unambiguous, high explicitness of lexical content
Encoding strategies	<ul style="list-style-type: none"> - concrete colloquial style - reported style (past, perfect tenses) - low accountability - paratactic constructions - active voice - self-repair while communicating 	<ul style="list-style-type: none"> - detached formal style - immediate style (present tense) - high accountability - hypotactic constructions - passive voice - editing preceding communication
Textuality, discourse	<ul style="list-style-type: none"> - low degree of complexity - additive - focus on reporting / narrative genres - rather licentious observation of genre conventions and language norms 	<ul style="list-style-type: none"> - high degree of complexity - logically structured - focus on expository and argumentative genres - rather strict compliance with genre conventions and language norms

Smith (2003), for instance, analysed “the local structure of texts”, i.e. she moved below the level of the text as a whole and identified – what she called – five discourse modes: Narrative, Description, Report, Information, and Argument. These modes are realized at the level of the passage and – as she puts it – cut across the boundaries of genres, which means that a genre can consist of several discourse modes and that a specific discourse mode can be found in different genres. Smith also claims that modes of discourse are intuitively recognizable as distinct from one another and are distinguished by linguistic correlates.

We know from curriculum analysis carried out for several subject areas in four European countries (England, Germany, Norway, Czech Republic; Vollmer 2007, Thürmann 2008) that these language functions (discourse modes) are relevant to all subject areas of formal education and seem to represent (or at least relate to) something like basic structures of content and procedural knowledge. These functions are shared by different domains of schooling as discourse communities and constitute a link between text types and genres and academic ways of thinking, writing and speaking. They reflect the logic of experience and knowledge construction and thus the basic patterns of cognition. At the same time they provide a framework for “translating” these cognitions into socio-semiotic reality, into language and discourse (cf. Halliday 1978; Halliday/Hasan 1989). In that sense discourse functions are both cognitive and linguistic in nature.

There are two main reasons for the undisputable advantage of organising language support around such macro functions:

a) the possibility of considering these functions as a closed set of manageable size, e.g.

NEGOTIATING – DEFINING – DESCRIBING – NARRATING/
REPORTING – EXPLAINING – ARGUING – EVALUATING

b) the potential for students to transfer (some degree of) mastery from one subject area to another whenever academic approaches to learning are concerned.

Below the macro level we can identify micro functions serving as so-called operators in task-setting such as

analyse – point out – summarise – compare – outline – comment on – present – assess – evaluate – report – recount – portray – give reasons – state – demonstrate ...

School as a discourse community associates with these verbs specific language activities as well as quality criteria for the assessment of students’ performance. However, practical experience shows that these verbs are elements of an open inventory with a considerable amount of semantic overlap. The analysis of curricular documents for primary education in Northrhine-Westfalia (Thürmann 2008) for example scored 194 different verbs serving as operators in task-setting with different frequencies of occurrence:

Frequency of occurrence	1/2	3/4	5/6	7/8	9/10	11-15	16-20	>20
Number of different operators	128	24	17	6	9	3	5	2

The table shows that curriculum authors have used 66% of the operators only once or twice. These finding will also hold true for schoolbook authors and classroom practice. Vulnerable students with a limited command of the language of schooling will definitely not be able to cope with such a large variety of operators in task setting and their (un-) intended nuances of expected linguistic/cognitive performance. Thus, the basis of targeted language support for the benefit of students at risk is to coordinate effort across all subject areas to

- define a common closed set of language/discourse functions at the macro level
- to associate prototypical text-types / genres with specific macro functions
- arrange for awareness-raising genre-based activities for students to discover distinctive language features of individual macro functions
- drastically reduce overabundance of operators in task setting to a closed inventory of manageable size.

These decisions can be taken at the level of the individual school and laid down in a whole-school language learning policy charter.

Make the dual focus of classroom demands transparent for students

It is an established fact that students at risk are less able to cope with ambiguity and need reliable information on what they are expected to do so that they can organize themselves: e.g. ask questions for clarification or help, activate previous knowledge. In non-language classrooms, teachers will normally inform students about subject-specific aims and objectives with reference to content issues only. However, there is no denying the fact that in content-focused school subjects like physics, geography, mathematics language is the medium of instruction, of learning and of assessment. Thus students ought to know from the very start which language activities come into play in order to achieve the envisaged content-focused objectives. Experiences from CLIL-classrooms prove the advantages of an explicit dual focus: one on content and one on (language)

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form. In order to support students at risk at least two basic classroom strategies should be developed into a daily ritual:

• **Conscientious task-setting**

Analyse the thematic map of California and explain why the Central Valley is very well suited for agriculture. Sum up your results in an oral presentation of no more than 5 minutes for a non-professional audience

“analyse”, “explain”, “sum up” = operators which refer to task-relevant language/discourse functions

“the thematic map of California” = identification of sources

“why the Central Valley is very well suited for agriculture” = problem to be solved, subject-specific content

“an oral presentation” = targeted productive genre

“of no more than 5 minutes for a non-professional audience” = specification of achievement

• **Advance organising at the beginning of a teaching unit**

By the end of the teaching unit we should be able to:

- *explain in coherent oral statements what “Citizenship” is all about*
- *conduct a web quest learn on one of the English speaking countries where different communities live together*
- *summarize the results by drawing up a poster with photographs, drawings, statistics and added captions*
- *briefly outline ideas on a panel how we can prepare to become active citizens*

If students are regularly confronted with such strategies and the use of a manageable closed set of language functions/operators, awareness of the language dimension in non-language subjects will certainly be raised and will lead to reflected language use on both sides – the side of the learners and the teachers as well.

Spend more time on writing activities

The teaching and learning in non-language classrooms – especially with a strong representation of vulnerable learners – relies almost exclusively on oral interaction of a more or less informal type. There seems to be a mutual tacit agreement between learners and teachers to avoid the written mode. From the teachers perspective written activities are felt to slow down content-related progress. And it leaves them uncomfortable when

confronted with students’ texts which more often than not do neither comply with the norms of correctness nor with the text formats and conventions which are expected to prevail in academic discourse. The students at risk, on the other hand, are well aware of their language deficiencies which materialise for everybody to notice on the surface of their own written products – and they credit their academic failures to the school’s obsession with writing especially when it comes to formal assessment.

However, despite these tendencies of avoidance writing activities are indispensable for students at risk to successfully overcome the fossilisation the interim stages of language development and to proceed from BICs to CALPs. There are three main reasons for stepping up writing activities in the non-language classroom: Writing

- is the sine qua non for reflected language use, editing and self-repair processes on the side of the students
- is a reliable basis for teachers to offer targeted language support
- necessitates extended language use and awareness of distinctive textual features (e.g. cohesion/coherence, avoidance of presuppositions and outside references, observation of genre conventions).

Adapt classroom interaction to the needs of language learners

The North-American experience in sheltered instruction according to SIOP- or CALLA programmes’ demonstrate the pedagogical value of language-sensitive strategies for classroom interaction. Students at risk will profit from the following approaches:

Expand IRF-cycles: The IRF sequence (= initiation, response, feedback, cf. Sinclair / Coulthard, 1975) has been central to the analysis of classroom discourse. In many cases of everyday classroom interaction, the “Teaching Exchange” can be described by three “moves”: Opening (initiation) – Answering

(response) and Follow-Up (feedback). Dalton-Puffer (2007) provides the following example from CLIL:

This triadic dialogue functions fairly well as a tool for teachers to structure interaction and to manage and control classrooms (Nikula 2007: 181). But there certainly are drawbacks as regards students' development of CALP competences since tightly structured IRF sequences usually (a) leave no room for students to initiate a sequence, (b) elicit minimal responses, (c) provide no opportunities for learners to develop and verbalise their ideas or engage in extended forms of talk, and (d) prevent students from coming to a coherent understanding. However,

Opening move (I)	Answering move (R)	Follow-Up move (F)
marker, starter, elicitation, directive, informative, check, prompt, clue, nomination	acknowledge, reply, react, comment	accept, evaluate, comment
T	... which, ah, religion did he have? Did, did you, did your article say? Spanish, the Spanish King, Philip the Second, was Catholic, Protestant, Puri...?	
S	Catholic.	
T	Catholic, exactly. Good ...	

Nikula (2007: 182) points out that the success of the IRF-pattern for language development mainly depends on its third part (R): "...if the third part is treated as an opportunity to further develop and expand on issues dealt with in the classroom, the IRF structure can well enhance the quality of classroom talk and also open up possibilities for active student participation."

Increase wait-time: Mary Budd Rowe (1972) came up with the concept of "wait-time" – periods of silence between teacher questions and student responses – as an instructional variable. She found that pauses between teacher initiation moves and students' reaction rarely lasted more than 1.5 seconds. She also discovered that when these periods of silence lasted at least 3 seconds, many positive things happened to students' and teachers' behaviours and attitudes. A number of research studies reviewed by Tobin (1987) have shown that extending wait-time affects students' behaviour in a number of ways:

- They give longer responses.
- There is an increase in student talk and fewer questions go unanswered.
- There is an increase in the complexity of learners' responses.

- There is more learner-initiated discourse and more learner-to-learner discourse.
- The increase in quality of discourse can lead to higher achievement.
- Increased wait-time appears to enhance learners' achievement, because they use the additional time to organise their thoughts, which leads to an improved quality of discourse.

Increased wait-time is also responsible for positive changes in teachers' behaviour. Their questioning strategies tend to be more varied and flexible; they reduce the quantity and increase the quality and variety of their questions; and they ask additional questions that require more complex information processing and higher-level thinking on the part of students. Met (1994: 174) highlights the value of wait-time for learners who may know the content of the answer but who need extra time to articulate their response.

Teacher as a language role model, thinking-aloud strategies: Especially learners for whom the language of schooling is not a home language have to rely on a language role model as well as on language feedback. Some teachers may think that by using informal, colloquial language, they can lower communication barriers and make content easier to comprehend. But if vulnerable students have no language role models and only few books at home, they depend on the teacher's language use in order to acquire classroom appropriate patterns – and this refers to all dimensions of language use (distinct diction, correct choice of words, coherent and extended speech, controlled pace etc.). Thinking-aloud strategies have proved to be efficient scaffolds since they provide students with a combination of cognitive and linguistic support. Expert teachers model how skilled thinkers verbalise and solve problems. By thinking out loud with their teachers and with one another, students gradually learn how to use verbalisation to direct their own problem-solving processes.

Language feedback and self-repair: Language feedback may be even more important for students' language development. Explicit correction and recasts do not seem to be very effective, since they normally do not lead to peer- or self-repair activities. The following strategies come close to cognition-based principles of language learning:

- elicitation = the teacher asks for reformulation
- metalinguistic clues = the teacher provides comments, questions, suggestions related to student output
- clarification = the teacher uses phrases such as "I don't understand" or "What do you mean?"
- repetition = the teacher repeats student output highlighting the error or part of the utterance which needs improvement.

Concluding Remarks

For the benefit of students at risk – especially those who are not acquainted with the particular language of schooling – there is a need for classroom development across all subject areas in mainstream education. This has to affect various levels

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Endnotes

¹ An extended version of this article can be downloaded from http://babylonia.ch/fileadmin/user_upload/documents/2011-1/baby2011_tuermann_extended

² Die Beauftragte der Bundesregierung für Migration, Flüchtlinge und Integration (Juni 2010).

³ Cf. www.coe.int/t/dg4/linguistic/langeduc/LE_PlatformIntro_en.asp

⁴ The following table is based on work by Corson 1995 and Müller/Domenichini 2007

⁵ SIOP = Sheltered Instruction Observation Protocol, Echevarria/Graves (2003), Echevarria/Vogt/Short (2004); e CALLA = Cognitive Academic Language Learning Approach, calla.ws/

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