# INSTITUT FÜR SCHULBUCHFORSCHUNG UND LERNFÖRDERUNG

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THE MOST IMPORTANT FINISHED WORKS (besides of the current works as counseling service, textbook reviews, library work, correspondence ...) BY THE INSTITUTE OF TEXTBOOK RESEARCH AND ADVANCEMENT OF LEARNING

Bamberger/Vanecek: Reading - Understanding - Learning - Writing
 This summary of an extensive research paper became the reason to found the "Institute".
 The issues are the estimation of difficulty of texts in German language with the help of readability formulas on the basis of language factors, an introduction to reading education (Literature for the Young) and textbook research.

2. Bamberger/Vanecek: About Readability and Learn-ability of Textbooks
Manifold manuscript of more than 600 pages. Because of the sceptic reception of the
readability formulas new methods to determine the difficulty of texts have been
developed. Further comparison of original and simplified texts. This project introduced
textbook research in Austria. Difficulties of textbooks and problems of excessive demand
have been thoroughly investigated.

3. "Investigation How Austrian Textbook Adjust to the Receptive Capacity, the Interests and the Needs of Young People"
Research project P 7163. Volume of 1000 pages. Shortened version of 35 pages. (will be published 1995)
This investigation of the Grade Consideration of 150 textbooks of 5 th and 8 th grade (Geography, History, Biology, Physics) was carried out with the help of computerized analysis, analysis forms, book reviews, and questionnaires (teachers, parents, students). On the basis of newly developed methods of analysis it could be proved that most textbooks are one to three grades above the needed level of difficulty.

These three extensive research papers where funded by the Austrian Foundation for the Advancement of Scientific Research.

4. Mayer/Bamberger: About the Language of Primers
Manuscript of 500 pages. Shortened version of 16 pages (available to the public).
Financed by the Ministry of Education and Art.
This project carried out for the first time an extensive computer based investigation of the language of primers (basis: 23 primers from Austria, Germany, Switzerland and Luxembourg). Three points of view guided the research: the level of words, the level of sentences and the relationship to children's language. Besides of research results this paper also offers ideas on how to construct primers.

. "The Image of Europe in the Textbook"

98 pages, financial funding by the "Bundeskammer der gewerblichen Wirtschaft".

(Should be prolonged.)

The research goal was the way how Europe is depicted in relation to the young recipient.

Therefore certain analysis forms were designed for Geography and History textbooks.

6. "What Remains from Textbook Knowledge and Lecturing?" 178 pages, funded by BMUK, Präs.20, Dr.Pelzelmayer. (Should be prolonged.) 30 classes with 650 students were involved in the project. The goal was to find out about the state of their knowledge of abstract terms: how many terms can be defined, explained and used? Which terms can be learned quickly and kept in mind? "Textbook Review in Different Countries" 30 pages, commissioned by the Minister of Education Dr. Scholten. This survey of reviews in Germany (12 countries), USA (22 states), Finland, Norway and Japan offers valuable ideas on the construction of textbooks.

"Comparative Investigation of Original Versions of Certain Chapters of Textbooks and Adaptions and New Versions with Special Regard to Cognitive and **Motivational Student Consideration"** 

137 pages, commissioned by the BMUK, Abt. V/2, related to the curriculum reform of the 5th grade.

The goal of this paper was to investigate the tendencies of the new curriculum with regard to content and structure of the textbook. Most important was the Student Consideration which got special significance in the new curriculum. A quantitative analysis was carried out with the help of the computer. Besides investigations were carried out with regard to learn psychology, (continuation on the basis of previous knowledge, development of an interrogative attitude...) and to the findings of "textprocessing" (advance organizers, scheme theory...). Most of the adaptations turned out to be "tightened" text versions. Thus, they could not make learning easier.

- "Curriculum Textbook Lesson. A Comparative Study about the Present Situation with Conclusions on Possibilities to Improve Conditions." 95 pages, commissioned by BMUK, Abt. I/11. (Will be prolonged.) This research project proves that the textbook functions as a "secret curriculum". Hence, this project added to curriculum and teaching research.
- 10. "Increase of Achievement and Motivation of Reading and Learning under the Motto Olympics of Reading and Learning" Carried out from October 1993 to May 1994 - 5th grade. 211 pages, incl.72 pages teacher manual. (will be continued on 4th grade) This report can be understood as the basis for a general reading movement in Austria. All the recent results show that with appropriate determination provided (reading amount: at least 2 books a month) the shrinking of the children's reading achievement can be stopped and substituted with fun.
- 11. "Review of International Research Results on Textbook Approbation and Structuring for Members of the Approbation Commissions" Shortened version, commissioned by Abt. V/2 of BMUK. 79 pages. The international results are listed according to Grade Consideration and function and structuring of the textbook. Besides there are described means of help and basics for textbook approbation. Further a selection of specialized topics on textbook structuring as well as exercises and pictures are included.
- 12. "Providing Official Approbations" for Abt. V/2 of BMUK. Until now 15 textbooks have been judged (at least 10 pages per statement). Grade Consideration and and the Suitability to the Young of the textbooks have first been analyzed by computer. Then a qualitative interpretation was carried out.
- 13. "Theory and Practice of Reading Education" with a special supplement (materials for the realization of reading projects for the promotion of motivation). The reason for the publication of this volume is based on practical experiences, derived from the research project "Increase of Achievement and Motivation of Reading and Learning under the Motto Olympics of Reading and Learning". We have unmistakable proofs that it is possible to overcome the miseries of reading and learning within a relatively short period of time. The results lead to the conclusion: The path to a successful reading education has been found - now we just have to use it!

# Das Institut für Schulbuchforschung und Lernförderung in Wien (The Institute for Textbook Research and Advancement of Learning in Vienna)

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The motive for the establishment of the "Institute" in 1989 as a form of a non-profitmaking association was the result of a research project on "Die Schwierigkeitsstufen von Texten in deutscher Sprache" 1):

Thirteen different kinds of texts were examined with regard to their difficulty and it became clear that their difficulty level was, in most cases, in accordance with their addressees. Textbooks were an exception, however, those which were meant for students of grade 5, for instance, were appropriate for students in grade 7, 8 or 9. In a certain sense this result was an explanation of the present school situation or the much discussed "school stress" characterized by depression, aggression, the indifference of students towards knowledge and education etc. As textbooks influence teaching to a great extent every experience of failure at school can in some way be traced back to the exorbitant demands of textbooks.

Thus the first of the newly founded "Institute" was to examine textbooks with regard to their appropriateness to the cognitive capacities, the interests and needs of the students. From this situation emerged a research project on "The appropriateness of textbooks to the students' intake capacities and their interests and needs".

The statutes of the "Institute" show that correspondence of textbooks to the prerequisites of students is not the only aim of the "Institute". It is open to all fields of textbook research.

The "Institutes" purpose is realized especially through:

- collection and scientific analysis of all Austrian textbooks, whereby foreign books are also drawn upon for comparison;
- organisation of activities and research projects to promote and propagate the scientific study of textbooks;
- co-operation with similar institutions in Austria and abroad, especially with universities, teacher training institutions and teacher in-service-training activities;
- studies on methods of textbook research;
- collaboration with publishers and authors of textbooks;
- investigation of possible methods of using textbooks, etc.

Most of these purposes may be regarded as long term aims. In the foreground of our present efforts are the following permanent tasks:

- The establishment of a textbook library
- The establishment of a professional library
- The development of an international bibliography on textbook research
- Detailed annotating of important publications from all over the world which can serve as basic references sources for research projects.

The last mentioned task led to the conviction that there exist thousands of publications on textbook research, the results of which are unknown and therefore not used for the creation, appreciation and use of textbooks.

This is why we decided to undertake - from now on - less original research but rather to sum up the results of international textbook research. At present we are finishing the project "Aufarbeitung der internationalen Forschungsergebnisse zur Gestaltung von Schulbüchern"<sup>2)</sup>.

The results of this survey will be communicated to the Ministry of Education and to the authors and publishers of textbooks. A special book will be prepared for teachers on the selection and use of textbooks. In spite of our good intentions to first of all consider the appropriateness of textbooks for the relevant students, up to now most of our time has been taken up with projects we were asked to undertake by various interest groups. We took them

up because we need the money we earn thereby. (The topics, by the way, are interesting and important too, and later on we would have turned to them anyway.)<sup>3)</sup>

We should explain why we changed the name of the "Institute" into "Institut für Schulbuchforschung und Lernförderung". We had to take cognizance of the fact that our efforts for the improvement of textbooks would be realized only slowly. Thus it would be reasonable to help students to be able to tackle - to some extent - the presently difficult textbooks by trying to improve their reading and learning ability. We startaed by publishing booklets for different age groups beginning with the following titles:

Erfolg im Lesen - Erfolg im Lernen<sup>4)</sup> - for parents of children between 6 and 10 (edition 50.000)

Besser lesen - besser lernen<sup>5)</sup> - Anregungen für Lehrer, Eltern und Schüler, from 10 - 14. (edition 30.000)

In autumm a publication will apear for students between 14 and 18: Perfekt im Lesen - perfekt im Lernen<sup>6</sup>) (Selbstunterricht im Schnellesen, Lese- und Lerntechniken für Jugendliche ab 15 und Erwachsene)

These publications also serve as a basis for the research project "Leistungs- und Motivationssteigerung im Lesen und Lernen unter dem Motto Lese- und Lernolympiade"7).

A decisive result of our efforts may be located in the current reform of the curriculum: The demands with regard to factual knowledge are much lower now, and again and again we find references to the developmental stages of the students. Because of the new curriculum, the textbooks have to be revised too.

The "Institute" is making use of this opportunity by contacting publishers in order to realize our newly gained insights into the possibilities of improving textbooks. We are hopeful that the general approval of our aims and efforts will finally secure their co-operation with regard to the improvement of textbooks too.

In connection with the curriculum reform and the improvement of textbooks the "Institute" is developing corresponding research projects as e.g.:

- Ecological problems in textbooks
- Peace education in textbooks
- Health education in textbooks
- Economic science in textbooks

In all of these projects, we attempt to analyze the present situation and to suggest possibilities for improving the weak points.

Levels of difficulty of German texts.
 The extensive research report (600 pages) was summarized in the book "Lesen - Verstehen - Lernen - Schreiben" by Richard Bamberger and Erich Vanecek, Vienna 1984 (200 p.)

<sup>2)</sup> Summarizing the international research results on the creation of textbooks.

<sup>3)</sup> Zur Sprache der Fibeln (The language of primers). Manuscript: 500 pages, short version 16 pages.

Das Europabild im Schulbuch (The image of Europe in textbooks) 98 pages. Was bleibt vom Schulbuchwissen bzw. vom Unterricht? (What remains of the knowledge presented in textbooks or in teaching?) 178 pages.

<sup>4)</sup> Success in reading - success in learning. How parents can help their children.

Better reading - better learning. Suggestions for teachers, parents and students from ten to fourteen.

<sup>6)</sup> Perfect in reading - perfect in learning. Self-traning in speed reading. Reading and study skills for students from fourteen on and adults.

<sup>7)</sup> Raising achievement and motivation in reading and learning with the Motto 'Reading and Learning Olympiad'.

# THE PATH TO SUCCESSFUL READING AND LEARNING HAS BEEN DISCOVERED! WE JUST HAVE TO USE IT!

This heading shall induce to read the extensive report on the results of the research project "Leistungs- und Motivationssteigerung im Lesen und Lernen unter dem Motto Lese- und Lernolympiade" - > "Increasing the Achievement and Motivation Level of Reading and Learning under the 'Motto' (key note) Reading and Learning Olympiad (Olympic games of reading and learning)" < The results were extremely positive - hence, the work has to continue.

Supported by these scientifically proved results a possibility has been opened to fight the shrinking achievement level of reading and instead bring forth a new interest in books.

"You learn reading by reading" (John Manning), especially by reading exciting books. The training of skills, text interpretation, work with texts should be restricted to a minimum. Enthusiastic and well trained readers will not only love books while in school but later too, they will use books for entertainment, learning and further education in their future life.

First of all: a continuation of the "Reading Olympiad" will be possible on the basis of the individual preconditions of the students of a certain class. The "Institute" will provide shortened and simplified materials which have been modified according to the wishes of the teachers involved in the research project. Further more, not only language teachers shall be addressed but also teachers of other subjects shall be motivated to make use of relevant books. Hence, articles for the use in different subjects and lists of books will supplement the manual for teachers.

# Short Review of the Research Project

This project dates back to a discussion between Dr. R. Bamberger and Minister Dr. R. Scholten in June 1992 about an alarming reduction of the reading achievement level. Test results show that students of grade 5 achieve the same reading level now as students of grade 4 during the seventies. Several meetings of all institutions involved in improving of the reading ability led to the above mentioned research project, which was supposed to precede a general campaign all over Austria.

#### Aims of Research

Opening a reading and learning movement focused on the student's motivation.

 An input and output analysis, i.e. comparison between the number of books read, and the motivation of teachers and students with the aim in reading improvement.

Working out directions for further reading education and advancement of learning.

The following measures should lead to reading at home:

a) Exciting literature (lure into reading)

b) Referring to the advantages of reading (induce students to reading)

c) Introduction of a Reader's Passport as an instrument for promoting the reading habits and pinning down the text results.

#### Realization

Out of 500 interested classes 60 achievement groups were selected from 29 different schools.

The teachers got a manual outlining the theoretical and practical guidelines of the project. Separate guidelines for reading in the content subjects were provided.

The parents got a brochure "Besser lesen - besser lemen" - >Better reading - better

learning< to intensify co-operation between parents, teachers and students.

The classes got 6 sets of pocket books (25 of the same title) for luring all the children at the same time into reading. Several evaluation forms were used to get hold of all the steps of working and the results of the reading tests. The reader's passport gained special significance because of its stimulating effect.

#### Statistical Evaluation

The most important results from a data base of 900 students show:

The average reading rate could be increased from 122 to 177 words per minute. Most students reached or even exceeded the value set down for "Buchreife" (the ability to read books).

**Multiple-Choice-Tests** showed a significant increase in comprehension. In spite of the problems arising from this kind of tests they were very successful in motivating students.

The computation of the Average Reading Achievement enables the teacher to build achievement groups.

The relation of the **reading achievement** and the **number of books read** is a proof again that the statement: "You learn reading by reading" holds true.

## Analysis of the Questionnaire of the "Reading Olympiad"

- 1. Students could be motivated for reading many books
- Parents were interested and co-operated
- 3. In school a positive reading climate developed
- In the following subjects additional reading was done: Geography, Biology, History, Physics, Chemistry
- 5. Positive attitude of the students towards reading rate evaluations
- 6. Only the Cloze-tests were rejected by a majority
- 7. If possible, public libraries were visited
- 9. Students exchanged books
- The reader's passport was welcomed. The majority of students read one book (mostly a
  pocket book) per week or two books per month.

The positive results mentioned above an application of these 10 points in the efforts in reading education.

Contrary to the assumed opposition to tests it was surprising that students liked the tests for evaluation of their reading rate. Apparently students appreciate the competitive character of tests provided they are not used for generating marks but only for showing the personal progress. All students managed to increase their reading achievement which, of course, has a strong impact on their self-esteem.

### The Path to Successful Reading and Learning is Opened

Now we want to indicate that the results of this research project can be utilized in every school. For primary schools we offer two versions:

- a) An "official Reading and Learning Olympiad" for fourth grades
- b) "Olympiads" organized by teachers themselves in all interested classes.

The "Institute" provides the following aids for participants:

- 1. Manual for teachers on methodics and theory of the project
- 2. 6 texts for testing reading rate
- 3. 6 Multiple-Choice-Tests
- 4. 6 open questions tests to evaluate reading comprehension
- 5. "Blitzübungen" >flash trainings< to broaden the fixation span
- 6. Exercises for training the art of text structuring ("Gliederungskunst")

If teachers organize the "Olympiad" on their own responsibility they get this material for duplicating free of charge.

Thus, in every school it is possible to create a favourable climate of reading interest which enables students to realize how important reading is as a base of all learning. Many hours of reading experiences will stimulate children to private reading. For according to the writer Gerhart Hauptmann nobody learns reading at school but by the fascination of books like Robinson and Cooper's "Leather Stocking Tales".