BaCuLit

Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

Basic Curriculum for Teachers´ In-Service Training in Content Area Literacy in Secondary Schools

COMENIUS Action No 9: Multilateral Projects

Handbook for Trainers

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COMENIUS Multilateral Projects

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Foreword

The BaCuLit project was funded by the Comenius Programme of the European Union (January 2011 until December 2012) and has been built on the results of the international ADORE-study: "Teaching *Ado*lescent Struggling *Re*aders – A Comparative Study of Good Practices in European Countries", funded by the European Socrates Programme from 2006 to 2009 (summary of the project´s results can be downloaded from: www.adore-project.eu). The BaCuLit project has developed, implemented and evaluated a "*Ba*sic *Cu*rriculum for Teachers' In-service Training in Content Area *Lit*eracy in Secondary Schools" [BaCuLit]. For this purpose, 10 partners from universities and in-service teacher training institutions from 7 European countries cooperated in this project; they were supported and consulted by two American experts.

Who was participating in BaCuLit?

The BaCuLit project has been coordinated by a German team: Prof. Dr. Christine Garbe, M.A. Martin Gross (Albertus Magnus University of Cologne), Dr. Karl Holle, Stephanie Schmill (Leuphana University Lueneburg). The following partner institutions cooperated within the BaCuLit project:

1. **Germany:**

   The Albertus Magnus University of Cologne (Christine Garbe, Martin Gross)

   Leuphana University, Lueneburg (Karl Holle, Stephanie Schmill)

   LISUM - State Institute for School and Media Berlin-Brandenburg, Ludwigsfelde (Gisela Beste, Claudia Franke, Anett Pilz)
2. **Hungary:** Kecskemét College, Kecskemét (Ildiko Balazsne, János Steklács, Veronika Szinger)
3. **Netherlands:** National Center for Language Education, Nijmegen (Mienke Droop, Hedwig de Krosse, Heleen Strating)
4. **Norway:** University of Stavanger, National Centre for Reading Education and Research (Liv Engen, Ragnar Gees Solheim, Lise Helgevold)
5. **Portugal:** Institute of Education - University of Minho, Braga (José Brandão Carvalho, Maria Lourdes de Dionisìo, Maria Helena Martinho)
6. **Romania:**

   Filocalia Foundation, Iasi (Brandusa Chelariu, Liliana Romaniuc)

   Teachers' House "Alexandru Gavra" Arad (Camelia Avramescu, Cornelia Borza, Nicolae Pellegrini)

   Sweden: Umea University, Department for Language Studies (Helena Eckeskog, Ingalill Gustafsson, Berit Lundgren)
7. **American Experts:**

   William G. Brozo, George-Mason-University Fairfax, Virginia

   Carol M. Santa, Montana Academy, Kalispell, Montana, Co-Founder of CRISS.

The BaCuLit Curriculum consists of (1) PPT-presentations (in the national languages) with annotations for the trainers which provide the frame of each course unit, (2) a Teacher's Workbook, which contains all the materials for participants (in the national languages), and (3) this handbook for the trainers, which (so far) exists only in the English master version. The BaCuLit curriculum was designed cooperatively by many persons and thus the project materials are the result of a joint venture. After the end of the project, the product's ownership has been transferred to the "International BaCuLit Association" with Prof. Christine Garbe as chairwoman and the University of Cologne as place of residence (see below). The following persons were mainly responsible for designing the single modules in their different versions. Thus they shall be mentioned here with special thanks:

Module 1: Christine Garbe, Karl Holle, Stephanie Schmill (Germany)

Module 2: Marie Lourdes de Dionisìo, José Brandão Carvalho, Maria Helena Martinho (Portugal)

Module 3: Carol M. Santa (USA)

Module 4 (former Modules 2 and 3): Liv Engen, Ragnar Gees Solheim, Lise Helgevold (Norway); Ildiko Balazsne, János Steklács, Veronika Szinger (Hungary); Claudia Franke, Dorothee Gaile (Germany)

Module 5: William G. Brozo (USA), Karl Holle, Stephanie Schmill (Germany)

Module 6: Mienke Droop, Hedwig de Krosse, Heleen Strating (Netherlands).

The Conceptual Foundations related to the modules have been written by single persons; thus the authorship is reported separately. Finally we would particularly like to thank our project manager, *Martin Gross*, who excellently took care of all financial and organisational issues; our scientific assistant, *Stephanie Schmill*, who perfectly managed the documentation of team work and the communication with all partners; and our student assistant, *Charlotte Coch*, who carefully supervised the final layout of the Trainer´s Handbook, the Teachers´ Workbook and the PPT slides.

The BaCuLit project was located within the horizon of "learning skills", but focused on "reading skills": It wants to extend secondary school teachers´ expertise to improve their students´ reading habits and comprehension strategies for diverse texts in all school subjects and to help them building a stable self-concept as readers and learners. Most urgent in this respect is to foster the so-called "content area reading literacy" or "reading across the curriculum". The term "content area literacy" refers to teachers' competence to deal with reading/writing/learning instruction not only on the elementary level in the language arts classes, but in all subjects and all school levels.

The basic curriculum intends to define the minimal knowledge every secondary content area teacher in the EU should have about teaching literacy skills in all school subjects. In the pilot version it provided 6 modules of 6 hours professional development course units each, including teaching material, collaborative tasks for improving teachers' classroom practice and online support. In the implementation phase in all participating countries (except Norway) the drafted modules were taught to a pilot teachers´ cohort of 10 to 25 teachers in 7 teacher training institutions all over Europe. During this implementation phase the developing and implementing BaCuLit teams evaluated the practicability of the BaCuLit course in the diverse European countries which were part of the project. The results are now available in the final BaCuLit course: The 6 modules were slightly altered in their content and structure and their timing is now more flexible. Not every module is now

set to 6 hours, but some modules may be taught in 3 hours, while others require rather 8 or 9 hours. In addition, some contents that may be considered as optional can be omitted depending on national circumstances. By this, the developing teams aimed at considering the fact that the implementation conditions in the participating (and future) European countries vary widely, but can also vary within a country or even from school to school.

BaCuLit Principles for Professional Development

BaCuLit aims at enhancing teachers' expertise in content area literacy. In order to achieve this goal, the BaCuLit project builds on the following understanding of professional development for teachers:

Instead of relying on a concept of professional development that only presents information, the BaCuLit project relies on principles of professional development and learning that have a positive influence on *teachers' self-concept* as competent and reflective practitioners. Our goal is to support teachers in changing their vision of what it means to be an effective teacher of content. Teaching students *how to learn content* by reading and writing, talking and listening must go hand in hand with content instruction, so that students gain the tools for life-long learning. Content teachers should not only be content specialists but *learning specialists* who are aware of the impact of reading and writing, talking and listening for content learning. When students know how they can use reading and writing for learning content they become more successful learners which leads to feelings of success for both, teachers and students.

Following this understanding of effective professional development for in-service teachers of all subjects in order to change classroom practice, we designed the BaCuLit workshops according to the following principles:

- We give teachers the opportunity to interact with each other to exchange and reflect on their own classroom experiences in their disciplinary subjects and on their teaching beliefs
- We invite teachers to practice new literacy related teaching and learning strategies within the courses
- We offer teachers guided support and feedback in adapting literacy practices to their own content area classrooms.

These principles of professional development guide the following learning activities that will be used in the workshops:

- having pair and group discussions during the workshops
- providing peer and trainer support and individual feedback during the workshops and via communication platform (building "learning communities")
- introducing relevant knowledge as well as models of good practice and offering opportunities to link this knowledge and these models to the teachers´ own classroom practice
- introducing literacy related tools and teaching strategies
- offering demonstrations of specific teaching strategies

- offering exercises, practical experiences, and possibilities for inquiry into teachers´ own classroom practice.

How to use the Trainer´s Handbook

This handbook aims at training the future BaCuLit trainers. It includes all the materials and background information which BaCuLit trainers need to conduct the respective training courses for teachers of all subjects in secondary schools. The BaCuLit Trainer Handbook is structured as follows for each of the 6 modules:

1. Overview of the module and its content
2. Highlights of the module *(grey box)*
3. Suggested Workplan for the module *(to be handled flexibly – see below)*
4. List of materials needed to teach the module
5. Conceptual foundations (scientific background)
6. References and recommended readings for the trainers (and eventually the teachers)
7. PPT-slides guiding the teaching of the module.

These contents and materials have been developed to support future BaCuLit trainers to carry out this teacher training course on a high quality level. At the same time we also want the trainers to further develop the content and materials proposed here and to flexibly adapt those according to the specific conditions in their country, region or those of a particular school. This is why only approximate times are given in the workplan. Trainers are also explicitly encouraged to replace parts of the original BaCuLit versions by approved materials referring to their national context. We cordially invite all trainers to give us feedback on their experiences when using the materials we are providing in this handbook.

The members of the BaCuLit project have established an "*International BaCuLit Association*" in August 2012 which will continue to develop and ensure the quality of the materials. This association ultimately aims at contributing to increase the literacy competence of students in Europe, so that the „European Education Benchmarks“ for 2020 can be reached. It is also in charge of defining the quality criteria that have to be met by trainers and participating teachers in order to receive the *BaCuLit-Certificate* which shall serve as an important tool to build up a corporate identity of the future European BaCuLit community. You are very welcome to participate in the BaCuLit Association. Find more information on the BaCuLit-Website: www.baculit.eu.

We wish you a successful BaCuLit course!

Christine Garbe

&

The International BaCuLit Team

Module 1
BaCuLit Principles of Lesson Planning

Overview

Module 1 is the most extensive module of the whole curriculum, as it informs about all *content and teaching fundamentals for the entire course*. The module is divided into two blocks. Block 1 requires about 3 hours, block 2 between 6 and 8 hours. It could thus as well be split up into two units.

The first block provides a short introduction with some background information about the question: "Why reading matters in all content areas?" The curriculum especially addresses teachers from maths, science and social science subjects who normally consider themselves as not being responsible for fostering reading and writing skills of their students. As the PPT-presentation starts with a short self-experience on reading comprehension, we try to immediately engage all teachers into the discourse. The next part of the PPT provides an overview of the whole BaCuLit curriculum and the underlying questions and main concepts. Some of these concepts are introduced in block 2 of Module 1. Subsequently, the basic working methods of the course, the most important working tools (especially the Teacher's Workbook) and the requirements for the acquisition of the BaCuLit-certificate (to be determined by the national BaCuLit-Association) will be presented. Introductory, the participants reflect on the problems of traditional in-service teacher training and the resulting BaCuLit's didactic approach resulting from this. This approach provides a close integration of theory and practice ("BaCuLit Principles of Professional Development", see Conceptual Foundations).

Block 2 introduces the *BaCuLit-Framework for Lesson Planning*, and develops the three basic cross-curricular concepts (metacognition, interaction and engagement) that should be implemented in each unit of BaCuLit-training. In addition, the framework contains four components that will be subjects of the separate modules No. 2-5: texts (text structure, criteria for text selection), academic vocabulary instruction, reading strategies and formative assessment. While getting to know the individual elements of the Lesson Planning Framework, the participants should be encouraged wherever possible to connect new information with their own teaching practice. At the same time, the course follows the principle that teachers will only implement strategies in their own practice that they have been practicing before in the context of in-service teacher training.

Module Highlights

- ❑ Introduction: Reading matters in all school subjects
- ❑ Content of the BaCuLit-course:
  - Content and structure of the BaCuLit curriculum,
  - Principles of professional development
- ❑ Requirements of the BaCuLit-course:
  - Teachers' workbook,
  - Final assignment,
  - Requirements for certificate,
  - (optional: Moodle platform)

- ❑ Main focus of BaCuLit: A new framework for lesson planning
- ❑ The central cross-curricular concepts of the BaCuLit lesson-planning framework:
  - Metacognition
  - Interaction
  - Engagement

Workplan

Block	Topic	Activities	Resources (Materials)
1	*Estimated time 2,5 – 3,5 hrs* **Essential Content: Introduction of BaCuLit**		
	Welcoming / Getting to know each other *(~ 30 min.)*	**Participant Activity**: self-introduction of participants acc. to national habits (trainers´ choice)	**Material 1:** PPT M1_Block 1, slides 1-5
	Why reading matters in all content areas? *(~ 45-60 min.)*	**Trainer Input** including self-experience of participants and discussion in pairs and in plenary	**Material 1:** PPT M1_Block 1, slides 6-13
		COFFEE BREAK	Slide 14
	What will teachers learn in this course? (Content and structure of the BaCuLit curriculum) *(~ 20-30 min.)*	**Trainer Input** and time for questions.	**Material 1:** PPT M1_Block 1, slides 15-23
	Problems of traditional in-service training and BaCuLit principles of professional development *(~ 40-60 min.)*	**Participant Activity** in groups of 4, using **placemats**: 1. Which problems did you encounter in former PD courses: select a typical example and ask yourself, how did you work in this course? 2. Did this course effectively help you change your daily classroom practice? 3. How should a PD-course be organized in order to help you implement what you learned into your daily practice? Groups present their main aspects in plenary; discussion. **Trainer Input**: Problems of Professional Development for Teachers and BaCuLit principles of PD and working methods. Time for	**Material 1:** PPT M1_Block 1, slides 24-29 **Material 1a:** Worksheet about placemats **Material 1b:** prepared placemats for all groups, pencils

		questions and discussion.	
	Problems of traditional in-service training and BaCuLit principles of professional development *(~ 40-60 min.)*	**Participant Activity** in groups of 4, using **placemats**: 4. Which problems did you encounter in former PD courses: select a typical example and ask yourself, how did you work in this course? 5. Did this course effectively help you change your daily classroom practice? 6. How should a PD-course be organized in order to help you implement what you learned into your daily practice? Groups present their main aspects in plenary; discussion. **Trainer Input**: Problems of Professional Development for Teachers and BaCuLit principles of PD and working methods. Time for questions and discussion.	**Material 1:** PPT M1_Block 1, slides 24-29 **Material 1a:** Worksheet about placemats **Material 1b:** prepared placemats for all groups, pencils
	Problems of traditional in-service training and BaCuLit principles of professional development *(~ 40-60 min.)*	**Participant Activity** in groups of 4, using **placemats**: 7. Which problems did you encounter in former PD courses: select a typical example and ask yourself, how did you work in this course? 8. Did this course effectively help you change your daily classroom practice? 9. How should a PD-course be organized in order to help you implement what you learned into your daily practice? Groups present their main aspects in plenary; discussion. **Trainer Input**: Problems of	**Material 1:** PPT M1_Block 1, slides 24-29 **Material 1a:** Worksheet about placemats **Material 1b:** prepared placemats for all groups, pencils

		Professional Development for Teachers and BaCuLit principles of PD and working methods. Time for questions and discussion.	
	Introduction of Teacher´s Workbook and Working Requirements *(~ 30 without Moodle)*	**Trainer Input**: Requirements for working with the Workbook &BaCuLit Certificate (adapted to specific national conditions); Final Assignment for Module 6. Time for questions and comments.	**Material 1:** PPT M1_Block 1, slides 30-36 **Material 1c:** Teacher´s Workbook **Material 1d:** Final Assignment for Module 6 **Material 1 e:** BaCuLit certificate requirements
		COFFEE BREAK	
	Optional: Introduction of **Moodle platform** *(~ 90 min. including practical exercise)*	**See Optional Module 1**	PPT and practical exercise for using Moodle **Material 1f:** PPT & Worksheet on Moodle
	BREAK / Lunch Break in case of a whole day training		

Block	Topic	Activities	Resources (Materials)
2	**Essential Content: BaCuLit Lesson Planning Framework and its 3 cross-curricular key concepts: Metacognition– Interaction – Engagement**		
	Introduction of BaCuLit Lesson Planning Framework and cross-curricular concepts *(~ 15 - 20 min.)*	**Trainer Input**: Lesson Planning Framework, key concepts, research foundation by Hattie 2009	**Material 2:** PPT M1_Block 2, slides 3-9

	Model Lesson incorporating BaCuLit concepts *(~ 40 - 60 min.)*	**Participant Activity** in pairs: Designing lesson plan on a given text ("The Star-Spangled Banner") *(~ 15 - 30 min.)* Silent Reading of the Model Lesson, talking with partner: analyzing the teacher´s way of working *(~ 25 - 30 min.)*	**Material 2:** PPT M1_Block 2, slides 10-11 **Material 2a:** Worksheet with American Anthem and background-information **Material 2b:** Model Lesson on Metacognition, Interaction and Engagement (CRISS)
	BaCuLit Key Concept No. 1: **Metacognition** *(~40–50 min.)*	**Trainer Input and discussion:** What is metacognition? *(~ 10 - 20 min.)*	**Material 2:** PPT M1_Block 2, slides 12-14
		Participant Activity (pair or group work): Analyze and reflect on how to explain metacognition to your students, sharing results in plenary *(~30 - 40 min.)*	**Material 2:** PPT M1_Block 2, slides 15-16 **Material 2c:** CRISS Lesson "Helping Students Understand Metacognition"
	COFFEE BREAK		Slide 17
	BaCuLit Key Concept No. 2: **Interaction; a) supportive teacher-student-relationships** *(~ 60 - 80 min.)*	**Trainer Input:** What research says about supportive teacher-student-relationships *(~ 10 min.)*	**Material 2:** PPT M1_Block 2, slides 18-21

	Interaction; b) cognitive apprenticeship approach / effective teaching and learning: the teacher´s role	**Trainer Input and discussion:** Why is the apprenticeship approach (modelling, scaffolding, fading) the model of classroom discourse and interaction which we follow in the BaCuLit course? *(~ 30 -40 min.)*	**Material 2:** PPT M1_Block 2, slides 22 - 25
		Participant Activity: Single work: reflect on your role as a teacher (Free Write Entry in Teacher´s workbook) *(~ 10 -15 min.)*	**Material 2:** PPT M1_Block 2, slide 26
	COFFE BREAK		Slide 27
	BaCuLit Key Concept No. 3: **Engagement; a) teacher´s engagement and students´ learning** *(~ 90 - 100 min.)*	**Trainer Input** and discussion (in pairs): Why teacher´s engagement is crucial for students´ learning and achievement *(~ 20 - 30 min.)*	**Material 2:** PPT M1_Block 2, slides 28 - 32
	BaCuLit Key Concept No. 3: **Engagement; b) exploring students´ engagement**	**Participant Activity:** Think-pair-share-activity about students´ engagement *(~ 30 min.)*	**Material 2:** PPT M1_Block 2, slides 33 - 34 **Material 2d:** Worksheet on Cooperative Learning Method "Think-Pair-Share"
	BaCuLit Key Concept No. 3: **Engagement; c) PISA / Gender: reading engagement & performance**	B) **Trainer-input** about reading engagement; participants are asked to use the double-entry-chart *(~ 20 min.)* Participants complete their double entry charts, share their comments and questions in small groups and present main aspects in plenary (slide 43, including impulse on slide 42: Gender focus) *(~ 20 min.)*	**Material 2:** PPT M1_Block 2, slides 35-43 **Material 2e:** Worksheet Double Entry Chart about Reading Engagement

	Conclusions: Why the 3 cross-curricular concepts of BaCuLit are essential for changing classroom practice *(~ 20 min.)*	**Trainer Input and discussion:** Characteristics of good readers; five dimensions of Reading Apprenticeship; finish with short metacognitive reflection about learning experiences in this unit	**Material 2:** PPT M1_Block 2, slides 44-46
	COFFEE BREAK		Slide 47
3	**3) Essential Content: Guiding questions for lesson planning in BaCuLit**		
	Preliminary remark for trainers: the 3rd block of module 1 has been designed in two versions. Depending on the time you have on your disposal you may spend less time (deductive approach, version 1) or more time (inductive approach, version 2).		
	Version 1 The BaCuLit checklist for lesson planning *(~ 60 – 90 min.)*	**Trainer-input**: Introduction of the guiding questions for lesson planning, time for questions and discussion after each block. Sum up with metacognitive reflections	**Material 2:** PPT M1_Block 2, slides 48-59 **Material 2f:** Worksheet Guiding Questions for Lesson-Planning **(Optional) Material 2g:** Checklist for Lesson Planning

	Version 2: Inquiry into teachers´ own practice: Role of texts and literacy instruction in one´s own classroom practice *(~ 105– 150 min.)*	**Assignment**: "When preparing a lesson / the lesson you documented, which questions regarding selecting and working with texts do / did you consider?" **Two possibilities to work on this task:** 1. In case of preparatory homework teachers analyze in small groups their lesson planning forms and take notes about their questions. (They could use a placemat for this purpose) 2. In case of no preparation teachers may work with Think-Pair-Share. [Trainer introduces or shortly repeats the T-P-S-method] *(~ 45– 60 min.)*	**Material 2i:** Lesson Planning Form or **Material 2d:** Introduction of Think-Pair-Share (worksheet)
	(Version 2:) The BaCuLit checklist for lesson planning *(~ 60 – 90 min.)*	**Trainer-input**: Introduction of the guiding questions for lesson planning Participants shall individually fill in Material 2g and then discuss in their group. Presentation and discussion of group results in plenary. Sum up with a short metacognitive reflection	**Material 2:** PPT M1_Block 2, slides 48-59 **Material 2g:** Checklist for Lesson Planning
	Evaluation / Further Learning Opportunities *(~ 10 min.)*	**Participant Activity:** Filling in Evaluation sheet (alternatively: oral feedback in the whole group)	**Material 2k:** Evaluation sheet **Material 2:** PPT M1_Block 2, slide 60
	Homework for Module 2	**Participant Activity:** Filling in the reading logs	**Material 2l:** Reading logs

List of Materials

No.	Title / Topic
1	PPT Block 1: Introduction of BaCuLit
1a	Worksheet about Placemats
1b	*Prepared placemats for all groups*
1c	Teacher´s Workbook
1d	Final Assignment for Module 6
1e	BaCuLit Certificate Requirements
1f	PPT & worksheet on moodle (optional)
2	PPT Block 2: Principles of Lesson Planning & Cross-Curricular Concepts
2a	Worksheet American Anthem
2b	Worksheet CRISS Model Lesson on Metacognition, Interaction and Engagement
2c	Worksheet CRISS Model Lesson "Helping Students Understand Metacognition"
2d	Introduction of Think-Pair-Share (Worksheet)
2e	Worksheet Engagement / Double Entry Chart
2f	Worksheet Guiding Questions for Lesson-Planning
2g	Checklist for Lesson-Planning
2h	Additional Checklist "Make sure and check…"
2i	Lesson Planning Form
2k	Evaluation Sheet
2l	Students' Reading Logs

Conceptual Foundations for Module 1
[Christine Garbe][1]

Module 1 provides the conceptual foundations for the whole BaCuLit curriculum, consisting of the following three aspects:

1. A thematic introduction to the basic concept of "content area literacy": why reading matters for all school subjects.
2. An introduction to the content and working methods of the BaCuLit curriculum, together with a presentation of the research on effective in-service training for teachers ("BaCuLit principles of professional development").
3. An introduction to the three cross-curricular concepts of metacognition, interaction and engagement that, together with the four thematic elements (modules) "formative assessment", "text structure", "vocabulary instruction" und "reading strategies", form the Lesson Planning Framework of BaCuLit. The aim of these seven elements of lesson planning is "the empowerment of students": their subject learning should be supported by the improvement of subject-related reading and writing skills. Finally, the seven elements of BaCuLit lesson planning are turned into a check list "Guiding Questions for Lesson Planning", that forms a guideline through all the modules and that, in the concluding task in Module 6, can be used as a checklist for a content area lesson based on BaCuLit principles for the course participants' own lessons.

Ad 1: Why reading matters in all school subjects.

At the centre of this initial trainer input is the cognitive psychological model of reading competence that is at the basis of the PISA studies 2000 ff. It is above all thanks to the PISA studies that reading competence as the basis for learning in all study areas (and for lifelong learning in the world of work) has been brought to public attention.

Before this model is explained and illustrated with an example from mathematics teaching, a reading experiment is used to introduce the course participants to the central insights of modern reading research. Reading is not "*extracting the meaning*" (container model of reading), but "*constructing the meaning*". This can only succeed if readers can actively bring their knowledge of the world, of language and the subject to the process of understanding. There are detailed explanations of the individual steps in the notes on the relevant PPT-slides.

Background information on PISA

PISA (**P**rogramme for **I**nternational **S**tudent **A**ssessment) is an *international comparative study* of the OECD, conducted in triennial cycles (2000 – 2003 – 2006 – 2009 etc.). The OECD is the "Organisation for *Economic* Cooperation and Development" which indicates that knowledge / basic competences

[1] I am grateful to my colleague Dorothee Gaile for numerous suggestions and contributions to this text.

have become an essential factor for *economic* success, not only for education. Thus PISA measures and compares the effectiveness of the national educational systems. PISA assesses the following:

a) The performance of 15-year-old students *in basic competences/subject domains: reading literacy, mathematical literacy and science literacy* (narrow focus) and

b) *Further skills* such as learning attitude, self-concept and learning-strategies (wide focus)

PISA focuses on *how students apply knowledge in new situations* (no curriculum validity).

PISA conducts tests on the basic skills and collects *context data* (school, parents and students).

PISA assesses and questions *representative samples in all participating countries* (4.500 - 10.000 students per country). In 2009 nearly 90 % of the world economy was covered by the PISA study (65 countries and regions took part).

The PISA-model of reading consists of two components: using information from within the text and drawing upon outside (external) knowledge. This "outside knowledge" (or background knowledge) is what readers need to bring to the reading process in order to make it successful. Therefore reading is at every stage an interactional process. Thus, there can be a variety of reasons why students struggle with reading assignments. They may not know how to "retrieve information" from a text (i.e. how to decode or apply reading strategies) or they may lack the necessary background knowledge needed for understanding the concepts and vocabulary of content area texts.

Why Reading Matters in all content area lessons - example mathematics

This example demonstrates the importance of teaching reading in *all* content areas. It shows how many students of mathematics struggle to understand the *reading and comprehension tasks* before they can even begin to try to solve mathematical tasks. We can demonstrate this using *the Criterion system model*, which was developed in a recent study from Hungary.

The author, Rita Kelemen, conducted a large-scale study, which covered a cohort of 1.670 students from grades 3, 5 and 7 (9 to 13 years old). 730 of these students had learning difficulties; 940 were so-called majority students. For some analyses only the sample of majority students was used, which was also representative for Hungary. Also, smaller samples were used for three supplementary studies, the subjects of which were: "realistic mathematics", "thinking strategies" and "student beliefs" about mathematics. In our presentation we focus on a small part of this study and on only a selection of its results.

The outcome of all analyses of the data was processed into one model, the so-called "Criterion system model", "which indicates that the essential knowledge elements of solving mathematics word problems can be represented as criteria which might be described as a system. The *Criterion system model* was tested and justified empirically." (Kelemen 2010, 8) The author describes her approach as follows:

"(…) the Criterion system model (…) models the functioning of the essential cognitive prerequisites of mathematics word problem-solving ability. In the model, the skills and abilities that are needed for word problem-solving ability are called *filters*. Four filters were identified altogether: word reading, text comprehension, problem representation and counting skill. The characteristics of the model

were justified by the empirical investigation of three of the four filters, word reading, text comprehension and counting skill." (Kelemen 2010, 10)

The four ellipses of the model represent these "filters". This model shows how many students "get lost" on their way towards understanding the mathematical task and processing it. When 12 students "start to solve the task", one gets lost in "word reading", three get lost in "text comprehension", four get lost in "problem representation", one gets lost in "counting" and only three arrive at the goal of solving the task correctly. The first three "filters" all concern reading tasks: to understand the vocabulary, to develop an understanding of the text and to transform it into a cognitive model (a "problem representation"), which is the basis for the concrete mathematical task.

Ad 2: Contents and methods of the BaCuLit curriculum

Slide no. 3 in the PPT (Block 1) shows the structure of the BaCuLit curriculum in the form of a cycle – a reference to the ADORE-project and its main idea of the "ADORE reading instruction CYCLE". This cyclical teaching structure is used instead of the traditional sequentially organised lessons (cf. C. Garbe et al. 2010, chapter 6.2). The centre of the cycle is the main goal of the curriculum, which is to support teachers´ self-concept as teachers, not only of content learning, but also of literacy instruction within their content areas. This is part of the overarching goal of ADORE and BaCuLit: "Supporting students´ own efficiency as readers and learners" (ADORE) or "Supporting students' content area learning by improving their literacy skills" – see the BaCuLit-model for lesson-planning which we introduce in Block 2 of this module. It is therefore important to stress, when explaining the BacuLit-curriculum, that enhancing teachers´ expertise ultimately aims at empowering students for learning.

On the outside the individual modules are listed. Modules 1 and 6 deal with Lesson Planning, which is at the centre of the BaCuLit concept for putting instructional ideas into practice. Therefore, the curriculum cycle starts and ends with this topic. In Module 6, all participants are asked to present their own BaCuLit lesson plan which incorporates all the aspects they have encountered during the course. Modules 2 to 4 deal with central aspects of literacy-related instruction in all school subjects: knowledge about the structure and diversity of texts, about the teaching of academic vocabulary and the teaching of reading strategies. Module 5 delivers knowledge about and tools for diagnostic / formative assessment, which should be applied at the beginning of every instruction unit, but may best be taught after the modules 1 to 4.

Working Methods / BaCuLit principles of professional development

Teachers´ professional development treats teachers as learners. *The ultimate goal underlying teachers´ professional development is improved student learning.* In their role of learners, teachers exchange experiences in a professional community. Research shows that they feel motivated to learn only if their learning *takes effect* in the classrooms, so if it *makes a difference* to their students' learning. The question directing professional learning is „What works best and why?" (cf. Hattie 2009, Timperley 2008).

If students are to become self-regulated readers and learners, instructional conditions have to

promote this aim. It can be fostered by teachers who explain appropriate strategies, provide assistance during problem solving, and promote an atmosphere of collaboration – a safe learning environment – in their classrooms. Students' ideas about success and failure, their metacognition and motivation all develop as they progress through formal education. ADORE and BaCuLit both focus on developmental changes in students' theories about learning and how they are influenced by variables in school, such as task difficulty, as well as teacher and peer support.

The BaCuLit course was designed according to the following principles:

- We give teachers the opportunity to interact with each other to exchange and reflect on their own classroom experiences in their disciplinary subjects and their teaching beliefs.
- We allow teachers to practise new literacy-related teaching and learning strategies within the courses.
- We offer teachers guided support and feedback in adapting literacy practices to their own content area classrooms.

These principles of professional development will guide the following learning activities that will be used in the workshops:

- pair and group discussions during the workshops
- peer and trainer support as well as individual feedback during the workshops and via a communication platform (building "learning communities")
- the introduction of relevant knowledge as well as models of good practice, and the provision of opportunities to link this knowledge and these models to teachers´ own classroom practice
- the introduction of literacy-related tools and teaching strategies and the demonstration of specific teaching strategies
- the provision of exercises, practical experience, and opportunities for inquiry into teachers´ own classroom practice.

TEACHER'S WORKBOOK: In order to incorporate the principles for professional development in the BaCuLit course, the *Teacher´s Workbook* is an important tool. This workbook is a manual and a portfolio at the same time: it offers materials and methods which are designed to support the participants´ efforts to change their classroom practice. Therefore teachers will find tools which they can immediately use in their everyday teaching practice, as well as short texts providing background information. In addition, they will find assignments for homework, tools for applying inquiry methods to their classroom, assessment tools and evaluation sheets.

Ad 3: Introduction to the BaCuLit Lesson Planning Framework and the three cross-curricular concepts: metacognition, interaction and engagement

The *BaCuLit Lesson Planning Framework* is based on the ADORE Reading Instruction Cycle. The main goal of all lessons designed according to the BaCuLit framework, is to support students' content area

learning by improving their literacy skills, as is indicated in the dark orange circle. Although the focus of the model is on the teacher's perspective, the students' perspective is included in the centre circle as the BaCuLit goal. The inner circle shows the core concepts, which are dealt with in separate modules in the BaCuLit curriculum: texts (module 2: Text structure & text diversity), reading strategies (module 4: Teaching cognitive and metacognitive reading strategies), vocabulary (module 3: Academic vocabulary instruction) and assessment (module 5: Formative assessment for content literacy and learning). The outer circle includes the cross-curricular concepts which should be part of every module (and every BaCuLit lesson). These three concepts - metacognition, interaction and engagement – will therefore be introduced in module 1 in Block 2.

Research background of the Lesson Planning Framework

The New Zealand education researcher John Hattie's 2009 study "Visible Learning" is today seen as a milestone in international empirical education research. It comprehensively takes stock of the central influences on students' reading success. Hattie and his team evaluated the results of 800 meta-analyses of recent decades (over 50,000 single studies involving 83 million students) and identified 138 factors that influence students' performance. He classified these according to their significance. The study is therefore the largest database of education research that has ever been available.

Hattie's meta-analysis shows that the quality of the teacher and the teaching are the decisive factors in improving school education. For the future we can expect that Hattie's findings will contribute to a lasting change in the training and further training of teachers in Europe. An important recommendation is that reform is way more effective in teaching development and the qualification of teachers, than in the introduction of structural reforms.

The central principles of successful teaching that Hattie summarises as "teacher as activator" or "change agent" also underpin the BaCuLit cross-curricular concepts: metacognition, supportive teacher-student-relationships (interaction) and engagement (activating and challenging students with high expectations). They also form the basis for the BaCuLit modules: text structure, academic vocabulary instruction, cognitive and meta-cognitive reading strategies (reciprocal teaching) as well as formative assessment (providing feedback, providing formative evaluation). The model of "cognitive apprenticeship" that forms our general basis takes particular account of the tried and tested principles of direct instruction, mastery learning, meta-cognition strategies and reciprocal teaching. A number of slides in Block 2 introduce the central findings of the Hattie Study to the course participants (CP).

Then, using a sample lesson, the CP can inductively explore and understand the three overarching principles of BaCuLit – metacognition, interaction and engagement. The example is taken from the *CRISS Project* ("Creating Independence through Student-owned Strategies"). It was developed in the 1980s by Carol Santa, together with high school teachers in Montana (USA). It is basically a professional development programme for teachers of all content areas and is offered by many CRISS trainers all over the United States. In 2010 it was recognized by the U.S. Department of Education´s "What Works Clearinghouse" as a powerful professional development programme for the improved comprehension of content. The 4th edition of the Project CRISS training manual was produced in

2012 by Santa, Havens, Franciosi and Valdes. Carol Santa, Past President of the International Reading Association, worked as a co-developer and external expert within the BaCuLit project.

As preparation the participants will be provided with a worksheet with the topic of the lesson (verses 1 and 4 of the American National Anthem) and some background information. They are asked to use this as the basis for a lesson plan. The teachers' own plans are used to show as clearly as possible the contrast between the usual lessons and the CRISS sample lesson. The teachers will probably consider how the *content/the meaning* of the text can be conveyed to the students, while the sample lesson focuses on encouraging the students to work out their own ideas and questions. Next, the teacher focuses with the students on the steps they have taken during the learning process with the aim of helping them to become *meta-cognitive learners***.** All three cross-curricular BaCuLit concepts (engagement, interaction, metacognition) can be worked out using this lesson, although we have to note that a traditional interpretation of the *text (with regard to its semantic content and its historical meaning)* cannot happen in this lesson, although it could do so in a subsequent lesson. The trainer should clarify this in the discussion with the participants, as the central focus of BaCuLit is, of course, to understand text content.

In the analysis of the individual steps in this "model lesson", the participants should understand where the lesson departs from a traditional lesson plan. The first task (free-write-entries) focuses on the "engagement" or "involvement" of the students, thus on "connecting" the students with the text. Next, attention focuses on the specific mode of "interaction". Here, we will use the cooperative learning technique "think – pair – share": first, each student thinks (writes) individually, then he or she discusses with a partner (pair), then with the whole class (share). Thus the students can experience how engagement and interaction belong together. Engaging the students, or, more exactly, *cognitively activating* them, cannot be seen as separate from the modes of interaction, or the performing of tasks chosen for class. Here we should probably add that these modes of co-operative learning need to be practised with students, as they do not work at the first attempt. The third decisive course of action in this lesson is the task of writing a "process entry": "What did you do to make meaning from the song?" This and the next task "What did I do as a teacher to help you read and interpret this song?" divert attention from the text (the "what") towards the learning process itself (the "how"). In this way, there is a change in focus towards the *meta-cognitive reflection on the learning process***.** The discussion must make clear that this is the aim of THIS lesson, i.e. to help students understand the meaning of "metacognition", and why it is so important to take an active part in learning. WHAT the textual meaning of "The Star-Spangled Banner" is and what its historical meaning is, are questions that are not at the forefront of this lesson. On the other hand, it goes without saying that they should not be neglected in every lesson.

The three cross-curricular concepts of BaCuLit:

1. Metacognition

Metacognition is a term used to refer "to the *knowledge* and *control* we have of our own cognitive strategies" (Baker, 2002). Santa et al. 2012 comment on this definition as follows: "*Knowledge* refers to one´s understanding of oneself as a learner, including knowledge of learning expectations and the

strategies needed to accomplish learning tasks. *Control* refers to the construction of a plan for learning and monitoring whether or not one is successful with that plan. Being metacognitive involves evaluating and remediating comprehension and learning difficulties that arise. Since understanding is essential to success in subject area learning, students must learn to recognize when they understand content and when they need more information. They also need to know how to repair gaps in their comprehension and *how to use strategies* to extend their understanding beyond the information presented." (Santa et al 2012, 3)

In two of the most powerful American professional development programmes focusing on content area literacy – Project CRISS and Reading Apprenticeship [= RA] (background information below) - metacognition is the central principle for learning.

In RA, the focus of metacognition is considered as "thinking about thinking": "In metacognitive conversation, participants become consciously aware of their mental activity and are able to describe it and discuss it with others. Such conversation enables teachers to make their invisible cognitive activity visible and enables teachers and students to reflectively analyse and assess the impact of their thinking processes. A great deal of research (…) has identified metacognition as key to deep learning and flexible use of knowledge and skills." (Schoenbach et al 1999, 23)

Project CRISS has a broader concept of metacognition, as it consists of the following elements: Background Knowledge; Purpose Setting; Author's Craft; Active Persistence and Transformation (through Writing, Discussing, Visualizing and Organizing); Reflection. (Santa et al 2012, 3-6) Here, we include some explanations of these elements from the CRISS Manual:

Background knowledge: Research tells us that the more knowledge a learner brings to a learning situation, the more that learner can take away and understand (cf. Kintsch 2009; Pearson & Fielding 1991; Pressley 2000). Integrating new information with prior knowledge lies at the heart of metacognition and comprehension. Activating background knowledge is crucial for any learning and reading process: We are far more likely to attend to information when we have previous knowledge about the topic; we have trouble paying attention to something we do not know anything about.

Purpose setting: Having a clear purpose allows learners to focus their attention and disregard secondary information. A key facet to being a metacognitive learner is to understand the power of purpose setting. (Pichert & Anderson 1977; Narvaez 2002)

Author´s Craft: Metacognitive learners have an awareness of the „author´s craft", i.e. features of text structure and text organization according to different content areas and text genres. Strong research supports the idea that knowledge of expository and narrative text structures plays an important role in comprehension. (Kintsch 2009; Goldman & Rakestraw 2000)

Active Persistence and Transformation: Metacognitive learners actively and persistently engage in their learning. When they face difficulties they don´t give up but apply strategies to foster comprehension. Research in cognitive psychology documents this activity principle: Learning happens when students build representations of meaning by transforming information through discussion, writing, visualizing, and organizing. (Duke & Pearson 2002; Keen & Zimmermann 2007; Kintsch 2009; Wilkinson & Son 2011)

Reflection: For students to become effective metacognitive learners, they must have time during and

after a learning experience to evaluate their learning (Baker 2008). They need to recognize both what they did to be successful, and how to modify their learning approaches to become more effective. Helping students use the elements of metacognition as the basis of this self-examination fosters understanding of what it takes to be a successful, independent learner.

The participants use the text *"Helping Students Understand Metacognition"* to develop the essential elements of metacognition. This text also comes from the CRISS manual 2012. The following issues should be identified:

A) The two elements of metacognition are (1) monitoring, "self-awareness about learning" and (2) specific application of reading and learning strategies so that recognized difficulties in understanding can be worked on. With regard to "the device in our heads", the picture on slide 14 (Block 2) can be used: a poster of the little man in our ear might also hang in the classroom so that the concept of metacognitive monitoring is always present.

B) The teacher should realize that she uses two different procedures: instruction (i.e. explaining what metacognition is) and modelling (i.e. demonstrating what metacognition looks like in practice). At this point it can probably be established that modelling is the *new* element– which is why the next BaCuLit concept will deal with supporting action.

C) The ensuing discussion could focus on the teaching sequence, which differs from the lesson on "The Star-Spangled Banner" in that it is very teacher-centred and for that reason the participants will probably see it as very traditional. Here, a link can be made to the next topic that deals with the role of the teacher in the cognitive apprenticeship approach.

D) In any event, the participants should discuss where the difference lies between "cognitive" (content oriented) teaching and "meta-cognitive" (competence-oriented) teaching. The latter basically aims at helping the students to become *independent learners*, that is, to prepare them for "lifelong learning". They can also be reminded here that in Reading Apprenticeship as in CRISS, "meta-cognitive discourse" is at the centre of all learning and teaching processes.

2. Interaction

Supportive Teacher-Student-Relationships

"Supportive teacher-student interaction" has, according to the Hattie Study, great influence on the learning process of students. Respect and non-directivity, empathy, warmth and care, encouragement and acceptance of, for instance, cultural differences are powerful factors that create a positive climate for learning in the classroom. That is a basic requirement for successful teaching. These factors are summarized in the "social dimension" of the RA approach (see below). According to Schoenbach et al. 2009, these include: "community building in the classroom, including recognizing the resources brought by each member, and developing a safe environment for students to be open about their reading difficulties."

Supportive teacher-student-relationships should address *all* students by combining high expectations

and high caring: "The power of positive teacher-student relationships is critical for learning to occur. The relationship involves showing students that *the teacher cares for their learning* as a student, can see their perspective, communicate it back to them so that they have valuable feedback to self-assess, *feel safe*, and learn to understand others and the content with the same interest and concern"(Cornelius-White 2007, 123). "Then the powers of developing a warmer socio-emotional climate in the classroom and fostering effort and thus engagement for *all* students are invoked. (…) It requires teachers to believe that their role is that of a *change agent* – that all students *can* learn and progress, that achievement for all is changeable and not fixed, and that demonstrating to all students that they care about their learning is both powerful and effective." (Hattie 2009, 128)

Effective Teaching and Learning: The Cognitive Apprenticeship Approach

Effective teaching means, above all, knowing how to push students' learning forward. Research has given convincing answers to the question how real learning can be supported. According to the Russian psychologist *Vygotsky* and the later psychologists who further developed his idea, real learning takes place in the so- called *zone of proximal development (= ZPD).* This *ZPD* is the area of growth which is just beyond the current ability of the learner but not so far as to be impossible or frustrating. If the level is set so low that the child can master the task without making an effort, or so high that the student cannot achieve it without a great deal of assistance, effective learning will not take place. The ZPD is the zone where the student, supported by a teacher or "competent other", can stretch just beyond their current abilities. This, according to Vygotsky, is where learning happens and where previous skills can be expanded. Vygotsky viewed teaching as *leading* development instead of responding to it, if teaching is in the ZPD.

A child's new capacities can only be developed in the ZPD through collaboration in actual, concrete, situated activities with an adult or more capable peer. With enough assisted practice, the child internalises the strategies and language for completing this task, which then becomes part of the child's psychology and personal problem-solving repertoire. When this is achieved, the strategy then enters the student's zone of actual development, the current ability level, because he or she is now able to successfully complete the task alone, and to apply this knowledge to new situations he or she may come across.

What does this mean for the teaching of reading content-area texts? In the module on text structure (Module 2) teachers will learn that texts hold different levels of difficulty for their readers. Texts that are far too difficult lie on students' *frustrating reading level***.** Texts at the *independent reading level* are those that are in the ZAD (= zone of actual development), therefore the student can read them on his or her own. Texts at the *instructional level* are those that students can read with assistance, and through which students can learn new content and new reading procedures: the demands of reading those texts lie in the ZPD. These are the kinds of texts students need to be reading. They must be matched to students, and they must be accompanied with instructional assistance for developing reading strategies.

It is important to remember that the *difficulty of a particular text* depends on many factors: the student's motivation and purpose for reading, background knowledge, the vocabulary, the amount

and kind of inferences required for understanding, student´s familiarity with the text genre etc.

How exactly can teachers facilitate student growth towards independent reading and learning? The answer lies in the concept of „*scaffolded instruction*“, which has grown out of research on how individuals learn (Collins, Brown, & Newman 1986; Vygotsky 1978). This concept is based on the idea that at the beginning of learning, students need a great deal of support; gradually, this support is taken away to allow students to try their independence. This is what Pearson (1985) called the *gradual release of responsibility*. The concept of support in scaffolded instruction is much broader than the modelling and teaching of strategies and skills; this is only one part of the scaffolding process. Providing support takes place in a number of ways: the way in which text selections are organized in a thematic context, the amount of prior knowledge activation that is provided, and the types of responses students are encouraged to make.

In *Module 4 (Reading Strategies)* we will learn more about *strategy instruction*; but in introducing the *cognitive apprenticeship approach* as the core concept of supportive *and* challenging interaction, we will briefly introduce the main concepts:

a) Modelling (here you may refer back to the example showing how the teacher explains and models metacognition to students): Modelling has been shown to be a vital part of helping students learn the process of constructing meaning and of helping them learn the various strategies and skills involved in this process (Bandura 1986). The modelling of specific strategies and skills is provided by the teacher. It can be done through reading aloud and through demonstrating response activities and discussions: ‘sharing of the cognitive secrets a teacher as an expert reader has’.

In this step the teacher takes the stage. "We (the teachers) show, tell, model, demonstrate, and explain how to use the strategy effectively with our content (reading materials - paper or online, videos, labs etc.)." (Santa et al 2012, 15) Usually in this step, teachers emphasize what the skill or strategy is and how to apply the skill/strategy to a given text. To do this, teachers begin by modelling for students the application of the skill/strategy. Think-aloud protocols will help learners to keep track of their thinking processes and to acquire language for describing strategies when approaching texts. (Schoenbach & Greenleaf 1999)

b) Scaffolding: After students watch and listen to their teacher (and follow him or her through think-aloud protocols), other students demonstrate the strategy. They have opportunities to practice the strategy on their own or in a small group situation with guidance and feedback from the teacher and their peers. The teacher encourages students to talk about the strategy and its applications. In this step, teachers and students work together to figure out HOW they went about applying the skill. The teacher’s role in this step is to work with students to discuss why they settled on certain information and what they found difficult or confusing and why. Teachers also provide feedback and encouragement for students as they give an insight into their “cognitive secrets”. Teachers intervene when students feel uneasy or “get stuck”. Teachers then assume some of the responsibility for completing the task.

c) Fading: Here teachers consolidate, helping students see WHAT the skill or strategy is

and HOW to apply it. They may also, at this stage, ask students WHY they should use the skill or strategy, as well as WHEN (for what kinds of texts or assignments) they might use it.

d) Independent practice: Here, students get close to full responsibility for determining what the skill/strategy is and how to apply it. Following the first few independent practices, especially for students who experience difficulty completing the tasks on their own, it is useful to discuss both students' appropriate and inappropriate responses, as well as their reasons for choosing or creating them. Such reconsolidating discussions can prevent failure. Application is a critical step. In this step, teachers ask students to apply the skill/strategy to unknown texts. In the application step, teachers emphasize the WHEN and the WHY of the skills or strategies. The last step is *meta-cognitive reflection*. If our goal is for students to own the strategy, they need to talk (in process conferences) or write (e.g. in journal entries) about how the strategy worked and how they adapted it or were able to adapt it for different content-specific purposes (refer to part about metacognition).

What role should the teacher take?

In this second part, dealing with the core concept "supportive interaction", we also deal with the role of the teacher. The aim of this section is for the participants to reflect upon their own understanding of the role of the teacher or of the interaction between teacher and students, so that they are enabled to widen or modify it if necessary. We know from research on the successful professional development of teachers that the subjective beliefs, theories and self-concepts of teachers also have to be included in the reflection if teachers are to succeed in changing their teaching methods on a long-term basis. "The promotion of professional learning requires different approaches depending on whether or not new ideas are consistent with the assumptions that currently underpin practice. Professional learning approaches that focus primarily on building new knowledge and skills are suitable when teachers' existing understandings are congruent with the new information and therefore can be integrated readily into their existing practice. But when teachers' personal theories about students, valued curricula, and effective teaching practices differ from those being promoted in the professional learning, a different approach is needed. (…) This kind of change involves more than learning new knowledge and skills. It requires that teachers understand both the limitations of the current emphasis and the new ways of deciding what knowledge is valued. (…) It is particularly important to engage existing theories when challenging teachers' beliefs about, and expectations of, those students who have traditionally underachieved." (Timperley 2008, 17f)

On the two slides that deal with this topic (slides 24 and 25, Block 2) you see the classic teacher-centred teaching method on the left, and on the right the "modern" student-oriented method. Both are shown to be fairly ineffective in all empirical studies. In the centre – as the "third way" – you see the model of "cognitive apprenticeship". This, according to Hattie and others, is the most effective, model and is the one forming the basis of the BaCuLit curriculum. On slide 25, the three models are examined more closely on the basis of the teacher-student relationships. The discussion of these three models should also focus on the problem of an all-too-static comparison. In certain situations, or for the communication of particular contents, the "sage on the stage" (direct instruction) may well be the best model, and the "guide on the side" is what we wish for as the final stage in the learning

process. The advantage of the Apprenticeship Model lies, above all, in the fact that this shift from more teacher-centred activities to more student-centred ones becomes the subject of a reflected teacher-student interaction.

3. Engagement

Teacher's Engagement is crucial for Students' Learning

The only and most compelling reason for teacher professional development is improved student learning (Timperley). Effective teachers´ PD should be based on the following questions:

1. What educational outcomes are of value for our *students* and how are our students progressing in relation to those outcomes?
2. What knowledge and skills do we, as *teachers***,** need to enable our students to bridge the gap between current understanding and valued outcomes?
3. How can we as *leaders (e.g. as school principals)* promote the learning of our teachers to bridge the gap for our students?
4. What has been the impact of our changed actions on our students?

The conditions for success are:

1. *Engagement of teachers* in further learning to deepen their professional knowledge and refine their skills
2. *Engagement of students* in new learning experiences.

(Source: Helen Timperley 2008, 28)

There is a difference between classes whose teachers believe that achievement is difficult to change because it is fixed and innate, and those whose teachers believe achievement is changeable (Dweck 2006). "Having low expectations of the students´ success is a self-fulfilling prophecy (…). How to invoke high expectations seems critical." (Hattie 2009, 127). "Quality teachers, as rated by students, are those who challenge, who have high expectations, who encourage the study of their subject, and who value surface and deep aspects of their subject." (Hattie 2009, 116)

"This requires teachers to enter the classroom with certain conceptions about progress, relationships, and students. It requires them to believe that their role is that of a change agent – that *all* students *can* learn and progress, that achievement *for all* is changeable and not fixed, and that demonstrating to *all students* that they care about their learning is both powerful and effective." (Hattie 2009, 128)

- Students´ achievement is strongly related to factors like self-efficacy, self-concept, motivation and persistence: "The willingness to invest in learning, to gain a reputation as a learner, and to show openness to experiences are the key dispositional factors that relate to achievement." (Hattie 2009, 47) Teachers may be more successful with poor learners if they try to change negative attitudes in these areas before attempting to enhance achievement directly.

- "There are many opportunities throughout school to influence some of the key attributes, such as the willingness to engage in learning, the attributions of success to factors such as effort rather than ability, and the raising of positive attitudes towards learning." (Hattie, 60)

Some of the most important influences – openness to experience, willingness to invest in learning, and intellectual engagement – can be fostered in schools by ensuring that tasks are appropriately challenging to students, and that success is attributed to their investment in the tasks.

Exploring students' Engagement

The FLOW concept of the Chicago psychologist Mihaly Csikszentmihalyi (pronounced approx. "chick sent mihayi") can be introduced as a working definition for a *concept of engagement***.** In his book "Flow – the Psychology of Happiness", he describes the findings of 25 years of empirical research as follows: FLOW is an "autotelic experience": "The concept autotelic is based on two Greek words: autos, meaning self, and télos, meaning goal. It describes an activity that is enough in itself, that is done without expectation of future advantage but simply because it is intrinsically worthwhile." Ideally, the following factors must be present for a FLOW experience to occur:

1. A demanding activity that corresponds to ability
2. A defined goal with concrete feedback
3. Full concentration and commitment
4. A change in sense of time
5. Playful autonomy
6. Overcoming of ego limits

Examples given by Mihaly Csikszentmihalyi are: rock climbing, open-sea racing, involvement in work, reading a book.

Here the question for the participants would be: How can we engage our students in their school learning to nearly the same extent as in their hobbies? From the PISA studies and other reading studies, we know that reading engagement is closely linked to performance.

Reading Engagement is closely connected to Reading Achievement

PISA 2009 has shown that reading engagement is closely linked to reading performance; and (in contrast to other factors like low SES, gender, race…) that this is a factor that can be most readily changed.

The PISA study in 2009 concentrated on reading literacy (PISA 2000: Reading, PISA 2003: Mathematics, PISA 2006: Natural Sciences) again, but this time closely examined "reading engagement and the use of reading and learning strategies". In this context, the definition of reading competence was widened to include the aspect of engagement. "Reading literacy is understanding, using, reflecting on and *engaging* with written texts, in order to achieve one's goals, to develop one's knowledge and potential, and to participate in society" (OECD 2009, 23). The purpose of the change

to the definition from 2000 was to underline – more so than before – that a literate person not only has the ability to read but also values reading and frequently reads diverse materials for a variety of purposes. In Volume III of the PISA 2009 results "Learning to Learn: Student Engagement, Strategies, and Practices" the results are given in detail. Some of these results are of great importance: “In all countries – except Kazakhstan – students who enjoy reading the most perform significantly better than students who enjoy reading the least.” (OECD 2010b, 24)

“In most countries, proficient readers are not only the students who enjoy reading and who read for enjoyment regularly, but they are also the students who are versatile readers. Students who are familiar with several written codes and practise reading a variety of styles appear to master reading better than students who are more restricted in their reading habits.” (OECD 2010b, 39)

The student questionnaire that accompanied the actual reading literacy tasks of PISA 2009, gathered data on *three aspects of reading engagement*. The first aspect is *enjoyment of reading,* which is based on students’ levels of agreement with statements such as 'reading is one of my favourite hobbies' or 'I find it hard to finish books'.

The second aspect is *time spent on reading for enjoyment*. Students were asked how much time on a daily basis they spent reading for enjoyment. The third aspect of reading engagement measured is the *diversity of texts students read*, with separate scales for *print and online reading*. Diversity of print reading includes the frequency with which students reported about reading magazines, comic books, fiction, non-fiction books, and newspapers. In measuring the diversity of online reading activities, students reported how often they read e-mails, chatted, read online news, used online dictionaries or wikis, searched for information for learning purposes, took part in discussion forums, and searched for practical information.

An important finding is, as the diagram from PISA 2000 on slide 38 (Block 2) shows: reading engagement can more than compensate for socio-economic disadvantage. While students with a high SES but with low reading engagement had an average level of 491 points on the PISA scale of reading competence, students with a low SES but high reading engagement had 540 points, which means they were ahead by more than one school year (40 points on the PISA scale approximately correspond to the learning progress in one school year). “Engagement in reading may substantially compensate for low family income and poor educational background.” (Brozo, Shiel, Topping 2007)

For in-depth-information about PISA and Engagement see the presentation of the PISA-PIRLS-Taskforce of IRA at the 17th European Conference on Reading 2011 in Mons (Belgium), "Key Findings on PISA 2009: Implications for Literacy Policy and Practice", which can be downloaded from the IRA website: http://www.reading.org/general/CurrentResearch/Reports/PISAReport.aspx

The American researchers Guthrie & Wigfield (2000) give an even wider interpretation of reading engagement: “Engaged readers [...] coordinate their strategies and knowledge (cognition) within a community of literacy (social) in order to fulfil their personal goals, desires, and intentions (motivation)” (p. 404). Motivation plays a central role in this, “because motivation is what activates behaviour. A less motivated reader spends less time reading, makes less cognitive effort, and is less dedicated to full comprehension than a more highly motivated reader” (Guthrie & Wigfield 2000, 406).

Gender Differences in Reading Engagement

Since PISA 2000, we know that boys are *less competent readers* than girls – and this applies to *all* countries tested in every PISA survey since 2000. The predominance of girls can most clearly be seen in relation to continuous texts (in contrast to so-called discontinuous texts that combine written information, figures, diagrams, tables, etc.) as well as to the more demanding areas of text comprehension (for instance developing an interpretation, reflecting on and evaluating the content and form of a text). Consistent with earlier PISA cycles, there were significant gender differences in favour of girls on overall print reading in all 65 countries in PISA 2009, with the smallest differences in Columbia (9 points) and Chile (22), the UK (27) and the US (27), and largest in Finland (55) and Slovenia (55) (OECD, 2010a). Moreover, gender differences have increased over PISA cycles. The average difference across OECD countries increased from 29 points in 2000 to 39 in 2009.

"Most boys and girls in the countries that took part in PISA 2009 sit side by side in the same classrooms and work with similar teachers. Yet PISA reveals that in OECD countries, boys are on average 39 points behind girls in reading, the equivalent of one year of schooling. PISA suggests that differences in how boys and girls approach learning and how engaged they are in reading account for most of the gap in reading performance between boys and girls, so much so that this gap could be predicted to shrink by 14 points if boys approached learning as positively as girls, and by over 20 points if they were as engaged in reading as girls. This does not mean that if boys' engagement and awareness of learning strategies rose by this amount the increase would automatically translate into performance gains, since PISA does not measure causation. But since most of the gender gap can be explained by boys being less engaged, and less engaged students show lower performance, then policy makers should look for more effective ways of increasing boys' interest in reading at school or at home." (OECD 2010a, 12)

For more background information on the Gender Issue in PISA 2009, see the presentation of the PISA-PIRLS-Taskforce of IRA at the 17th European Conference on Reading 2011 in Mons (Belgium), "Key Findings on PISA 2009: Implications for Literacy Policy and Practice", particularly the contribution from Christine Garbe: "Patterns of Gendered Literacy in PISA 2009"

http://www.reading.org/general/CurrentResearch/Reports/PISAReport.aspx

The results from virtually every country participating in PISA 2009 show that the more students enjoy reading and the more engaged they become in reading for enjoyment (both off- and online) the higher is their reading proficiency. Of all the various media, reading fiction showed the strongest association with reading performance. There was also a positive association between reading online and reading traditional print media.

The Eurydice-Study "Teaching Reading in Europe", published in 2011, states: "The individual-level factor most susceptible to change is student engagement in reading activities. (…) Differences in the level of engagement in reading and the use of reading comprehension strategies largely explain gender and socio-economic differences in reading performance. Therefore, when boys enjoy reading, read diverse material and adopt reading comprehension strategies, they can attain a higher level of performance in reading than girls. (…) However, 15 year-olds read for enjoyment less in 2009 than

they did in 2000, and as this decline was more pronounced amongst boys, it threatens to widen the gender gap even further." (Eurydice 2011, 27)

Key Elements of Student Engagement

To engage students in (content-area) learning, we need to combine several factors: student confidence, teacher involvement, relevant texts, and choice among texts and assignments.

Student Confidence: Students with high self-efficacy — the belief that they can influence their own behaviour — are more likely to engage in school-related reading than those with low self-efficacy (Alvermann 2003). While this is true for many kinds of learners, it is especially important at the adolescent developmental stage, characterized as it is by a strong desire to be seen as competent and to avoid public failure.

Teacher involvement: High school teachers contribute to adolescent self-confidence when they care about them as individuals and encourage them to learn (Dillon 1989; Dillon & Moje 1998; Lee 2001). The caring teacher, who believes that his students can succeed, can have a positive Pygmalion Effect on adolescents — where *believing* in potential *creates* potential.

Relevant and Interesting Texts: Relevance of curricular materials and topics is essential for students' success, requiring teachers to know about their students' interests. While adolescents are developing the adult capacity to be motivated by extrinsic interests such as keeping a job, most require significant intrinsic interest in materials in order to persist in difficult tasks. In addition, developing literacy strategies and skills that are typically not interesting in themselves is made easier when students have a meaningful goal that requires those skills (Greenleaf, Jimenez, & Roller, 2002). For example, students may be highly motivated to learn about the characteristics of persuasive writing when engaged in an attempt to persuade school officials to relax a dress code. This type of connecting information is often not provided in classroom instruction but can make a tremendous difference in student engagement.

Choices of Literacy Activities: Adolescent learners sometimes experience a world of rules and regulations imposed on them by adults who do not seem to understand their world. The physical and emotional changes they experience further contribute to the thought that they have no control over their lives. Teachers who create opportunities for students to choose among assignments and texts will find students less resistant to completing their work (Wigfield 2004). Students who also understand the aim of their chosen assignments and have a sense of control over how they achieve that aim are more likely to work hard, even in the face of difficulties. Teachers need to be skilled at developing a choice of assignments that balance interests with effective research-based strategies for developing reading and writing skills.

Conclusions: Why the three BaCuLit cross-curricular concepts are essential for successful learning

As a conclusion to this unit, the participants should reflect upon the meaning of all three core concepts for successful learning. This can (not necessarily) be combined with a look at the model of Reading Apprenticeship (RA). The RA model is based on the research findings on the characteristics

of “good readers” (and learners) and also form the basis of the BaCuLit model.

"Proficient readers share some key characteristics. Good readers are:

- Mentally *engaged*,
- *Motivated* to read and to learn
- *Socially active* around reading tasks,
- *Strategic* in monitoring the interactive processes that assist comprehension:
  - able to set goals that shape their reading processes,
  - able to monitor their emerging understanding of a text, and
  - able to co-ordinate a variety of comprehension strategies to control the reading process"

(Schoenbach, Greenleaf et al. 1999, 20)

This summary contains the three cross-curricular concepts of BaCuLit that were developed in Module 1, Block 2: metacognition, interaction and engagement. The last part of Block 2 (“Guiding questions for lesson planning”), will make clear how these concepts can be systematically incorporated in lesson and curriculum planning.

Background Information on Reading Apprenticeship (RA)

“Reading Apprenticeship” is a tried and tested American concept for the facilitation of subject-specific reading competence at secondary level. It was developed by WestEd, the institute for school research and development in Oakland, California. It was comprehensively presented for the first time in the publication of Ruth Schoenbach, Cynthia Greenleaf, Christine Cziko and Lori Hurwitz “Reading for Understanding” (1999). (In 2006, Cornelsen published a German translation “Lesen macht schlau”, edited by Dorothee Gaile). Today, Reading Apprenticeship, along with CRISS (see above), is one of the best and best-known concepts in professional development for teachers in the area of reading instruction in the US. The integrated model for reading competence is appropriate for the location of the three cross-curricular basic concepts of BaCuLit, which is why it is included as an optional slide at the end of the presentation in Block 2 (slide 45). Findings of reading research on the characteristics of “good readers” form the basis of this model. They are presented on a slide as the “conclusion” to the three cross-curricular concepts.

Among the cognitive apprenticeship models, the RA model has gained a wide reputation over the last two decades. It is an optimistic approach to the problem of reading deficits in secondary schools. Instead of complaining about goals not reached, it offers a second chance to struggling adolescent readers, with comments like: "*If Johnny still can‘t read in class 9, it‘s not too late*.“ (Reading Apprenticeship © WestEd) These struggling learners take on the role of reading apprentices who, as in an apprenticeship for a trade or for a craft, are introduced to good practice by experts. The teachers in all subject areas are reading specialists in their domain and therefore assume the role of "master readers". Students can also serve as competent readers for their classmates. This team-based approach transforms the classroom into an enquiring community of learners.

This approach was developed by literacy researchers and teachers as an answer to the urgent

reading problems impeding learning in secondary schools. It has shown a high success rate both for reading and for content learning in high schools and colleges of the US and Canada, as a series of rigorous large-scale evaluation has proved. The WestEd-Team around Cynthia Greenleaf and Ruth Schoenbach developed this model in order to describe what they believe are the four key dimensions of classroom practice that are necessary to support adolescent reading development (cf. Schoenbach et al 1999, 22 ff.):

"Personal dimension: developing students´ identities and self-awareness as readers, as well as their purposes for reading and goals for reading improvement" – we interpret this as "*engagement".*

"Social dimension: community building in the classroom, including recognizing the resources brought by each member and developing a safe environment for students to be open about their reading difficulties" – we interpret this as "supportive *interaction*".

"Cognitive dimension: developing readers´ mental processes, including their problem-solving strategies" – this will be of central relevance in modules 4 and 5

"Knowledge-building dimension: identifying and expanding the kinds of knowledge readers bring to a text and further develop through interaction with that text" – this will be of central relevance in modules 2 and 3.

At the centre of this model is the *"metacognitive conversation"* – the first cross-curricular concept of BaCuLit, called "metacognition" – which ties the four dimensions together. It "is an ongoing conversation in which teacher and students think about and discuss their personal relationships to reading, the social environment and resources of the classroom, their cognitive activity, and the kinds of knowledge required to make sense of text. This *metacognitive* conversation is carried on both internally, as teacher and students individually read and consider their own mental processes, and externally, as they talk about their reading processes, strategies, knowledge resources, and motivations and their interactions with and affective responses to texts." (Schoenbach et al. 1999, 22f.)

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Take into consideration some texts from the ADORE-book, e.g. the articles about Key Element 4 (Choosing Engaging Reading Materials) by Sari Sulkunen / Inga Arffman and Key Element 7 (Creating an Inspiring Reading Environment) by Gerd Kruse / Thomas Sommer (see pdf-copy of the ADORE-book in the Dropbox)!

PPT-Slides M1_Mat 1

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

Module 1 – Block 1 (material 1)

Principles of BaCuLit Lesson Planning

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

- "This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein."

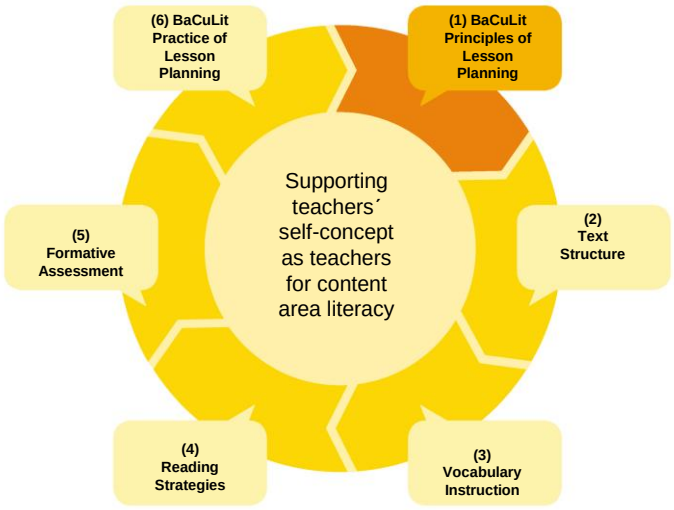
BaCuLit
BaCuLit Association e.V.

Lifelong Learning Programme

Universität zu Köln

Module 1 Block 1 2

The BaCuLit Curriculum



Module 1 Block 1 3

This slide shows the **structure of the BaCuLit curriculum in form of a cycle**.

Note: You may only show this slide shortly here at the beginning of the course for a general orientation. Inform the participants that later (slide 15 ff.) you will give more detailed information on the curriculum.

(see also Conceptual Foundations M1, Ad. 2 (p. 22-23))

Content of Module 1 – BaCuLit Principles of Lesson Planning

BLOCK 1

- **Introduction: Why reading matters in all school subjects?**
- **What will participants learn during the BaCuLit-course?**
  (Content and structure of the BaCuLit curriculum, underlying principles of professional development)
- **How are participants required to work during the BaCuLit-course?**
  (Teacher´s workbook, final assignment, requirements for BaCuLit teacher certificate; optional: Moodle platform)

BLOCK 2

- BaCuLit framework for lesson planning: Why are the following cross-curricular concepts central for lesson-planning in the BaCuLit framework:
  - Metacognition
  - Interaction
  - Engagement
- What are the main questions when you plan a content lesson or unit?

Module 1 Block 1 4

PARTICIPANT ACTIVITY

Getting to know each other

1. Welcoming course participants by the trainer(s)
2. Activity to introduce oneself and getting to know each other

(Material provided by trainers, if needed)

Module 1 Block 1 5

- You (the trainers) will shortly introduce yourselves and give some information on your professional background (and other practical information), eventually „modeling" what you afterwards expect the participants to do themselves.
- You may design a creative or entertaining approach for getting to know each other and learning names. One suggestion: Everybody exchanges some basic personal information with his / her neighbor for 2-3 minutes. Then everybody introduces his / her neighbor to the plenary.

Why Reading Matters in all Content Areas

- Optional Introduction: The Power of Reading
- What happens when we read? Self-experience: Comprehending a short narrative text
- The PISA definition of reading literacy
- One example: How reading matters in solving mathematical tasks
- Questions for pair discussion

Module 1 Block 1 6

General remark: This PPT will be the first input that is given to the participants during Module 1. Its main purpose is to create a common starting point in reflecting on the "nature" of reading and in demonstrating that reading is involved in every kind of learning (from texts). You should calculate 15 (max. 20) minutes for the presentation; therefore we reduced it to only a few slides.

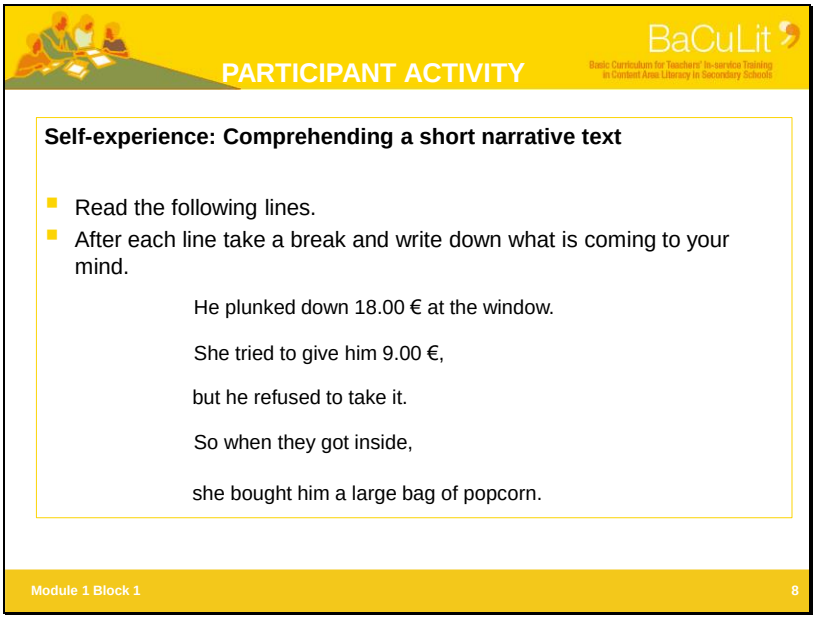
The Power of Reading

Module 1 Block 1 7

This slide can be used as introduction to a general reflection of why reading has actually become indispensable in most life situations and is closely related with „empowerment", i.e. the „power" over one's own life. Below you find the source of this picture and the corresponding text:

"Reading means power. It tells me how to get from A to B. It tells me what the politicians really mean and why my phone bills are so expensive. It tells me about the contents of my pot noodle. Don't just moan - get the information you need by reading. *Tony Robinson , English actor and author*

http://www.literacytrust.org.uk/assets/0000/6669/Tony_Robinson1.pdf



Source: Thierney (1994), cf. Conceptual Foundations: Sources
In this experience you show the teachers a short text of five lines in a step-by-step presentation. After each line the teachers are asked to write down their ideas about the "plot". Thus they should become aware that a reader is constantly constructing meaning (i.e. a suitable context, a text concretization) – and revising meaning, if the subsequent information does not fit in the schema built up so far. In this example, after reading the first two lines, many readers have a precise idea about the situation where the actions are performed: May be in a store, in a football stadium, a concert hall etc. They have comparable precise ideas about the two persons: A client gives money to a cashier, and she gives him the change.
But when they go on reading line 3, most readers encounter a conflict with their developed scenarios. So, new questions arise. When they go on reading lines 4 and 5 they realize that not two but three persons must be involved, and they change their ideas about the situation. As "popcorn" in our socio-cultural context is closely linked to visiting a cinema, many readers will guess that the situation is the following: The man wants to invite his female companion to cinema; so he refuses when she wants to return the money for one ticket. So far, 3 persons are involved: two clients and one cashier (at the cinema). Then the couple enters the cinema and approaches the bar / the desk where popcorn is being sold. This could be the scenario, but as this text contains many gaps (blank spaces) we cannot absolutely be sure that our "concretization" is correct.
Nevertheless, this experience makes us awareof the fact that we are always constructing meaning when reading. We need not only vocabulary knowledge but also background knowledge – in this case about cultural habits (eating popcorn while watching a film in a cinema) and gender roles: e.g. he wants to be a gentleman, she wants to be an "emancipated woman", etc.
You should spend 5 minutes to discuss about this slide / this experiment, before you show the concluding slide no. 4. Also, you could skip slide No. 4 and explain this conclusion.in your own words

What is Reading?

Conclusion

- In former times people considered reading to be an act of „taking some content out of the text“: transferring the content from one container (the text) to another one (the reader´s brain). This is the so called **container model of reading**.
- Today we know due to research in reader-response theory, psycholinguistics, cognitive psychology and brain research: Reading is an active (re-)construction of meaning. If we want to understand a word, a sentence, a text – we always need to link our background knowledge (about language, the world, action schemata etc.) to the written words in the text. Reading is thus an **interactive process** between the text and the reader.

Module 1 Block 1 9

The conclusion of the self-experience directly leads to the PISA definition of reading literacy on the next slide. In countries where teachers might not be familiar with the PISA-studies you might need to give some background information on PISA:

The PISA definition of reading literacy

- "Reading literacy **is understanding, using, and reflecting on written texts**, in order to achieve one's goals, to develop one's knowledge and potential, and to participate in society.“

  (OECD 2002: 25)

- PISA defines reading literacy as „active engagement with written texts. [...] In the psychological literature about text comprehension, there is a general consensus that the reader has to construct meaning in written texts. Reading is not a passive reception of what is in the text, but it is an active (re-)construction of text meaning. The written information are connected to the knowledge of the reader. Thus, dealing with written texts can be seen as an act of generating meaning by which the previous knowledge of the reader and the text itself interact.“

  (Artelt/ Stanat/ Schneider/ Schiefele 2001: 70f.)

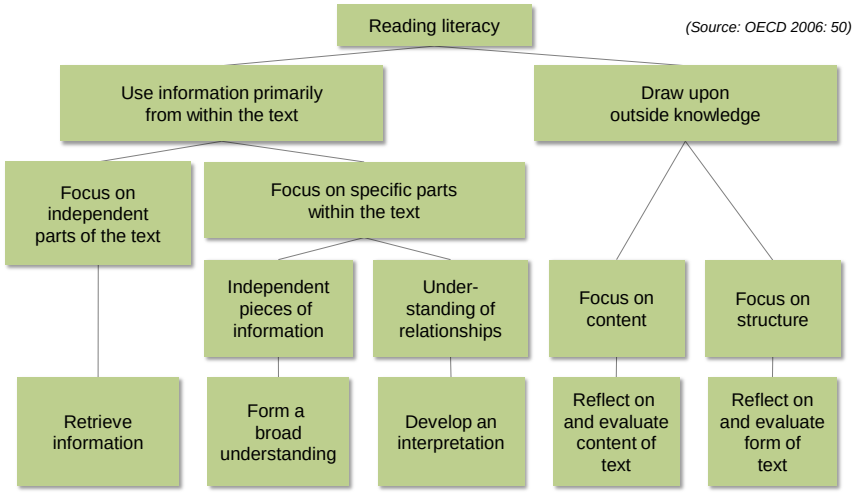
Module 1 Block 1 10

PISA: an **international comparative study** of the OECD conducted in triennial cycles (2000 – 2003 – 2006 – 2009 etc.)
OECD: “Organisation for **Economic** Cooperation and Development”

PISA assesses:
a) the performance of 15-year-old students in **basic competences/subject domains: reading literacy, mathematical literacy and science literacy** (narrow focus) and
b) **further skills** such as learning attitude, self-concept and learning-strategies (large focus).

(See also Conceptual Foundations M1, p. 21)

Theoretical structure of reading literacy according to PISA



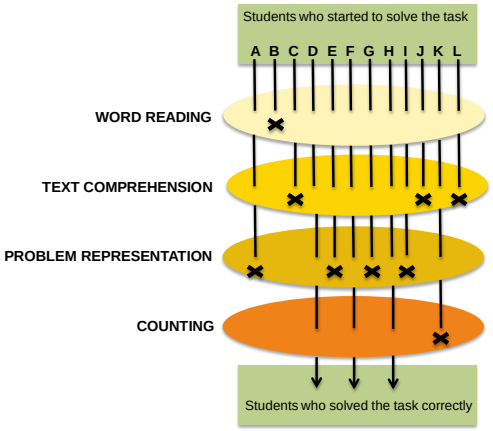
Module 1 Block 1 11

Important here is to show that the PISA-model of reading is composed out of two components: using information **from within the text** and drawing upon **outside (external) knowledge**..
Reading is at every stage an interactional process. And therefore when students struggle with reading assignments this can have different causes:

- they are not familiar with how to "retrieve information" from a text (i.e. with decoding or applying reading strategies) or
- they lack the necessary background knowledge which is requested for understanding the concepts and vocabulary of content area texts.

(See also Conceptual Foundations, M1, p.21).
You could spend 5 minutes on discussing and explaining the PISA model of reading literacy.

One example: How reading matters in solving mathematical tasks



Module 1 Block 1 12

Source: Kelemen 2010 (cf. Conceptual Foundations: Sources)

This slide shall serve as an example of the importance to teach reading in *all* content areas. It shows how many students struggle in mathematics with solving *reading and comprehension tasks* before they come to the point to calculate, i.e. to solve mathematical tasks. Therefore we show the **Criterion system model** which has been developed in a recent study from Hungary:
Kelemen conducted a large-scale study (1.670 students, 9 to 13 years old). 730 of these students struggled with learning difficulties, 940 were so-called majority students.
The outcome of all analyses of the data was processed into one model, the so-called "Criterion system model".
(cf. Conceptual Foundations, M1, p. 21)
Without being able to go into the details, when dealing with this slide within 5 minutes, you should use it as an example why working on reading and comprehension tasks is crucial for teachers in all subject areas (even in maths!).

PARTICIPANT ACTIVITY

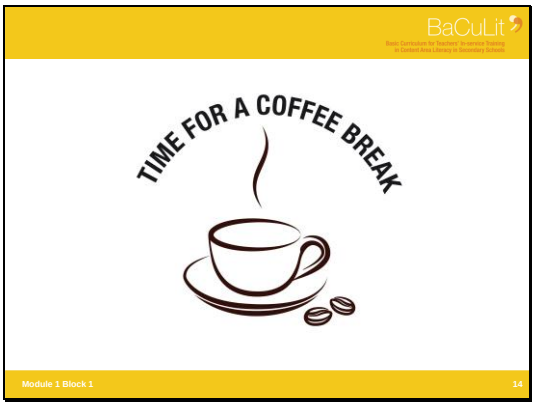
Assignments: Please talk to your neighbour (in pairs) about the following questions (10 – 15 Minutes):

What do you know about the reading problems of your students in your content area?

- Which of them struggle with word reading/vocabulary?
- Which of them struggle with text comprehension?
- Which of them struggle with building up an appropriate cognitive model (or problem representation) of what they read?
- Which of them struggle with subject-specific dimensions of learning (like „counting“ in the math example)?

Module 1 Block 1 13

Give participants 5 - 10 minutes time to „digest“ and apply the new information. After some time of pair discussion they might share their ideas and results with the whole group.



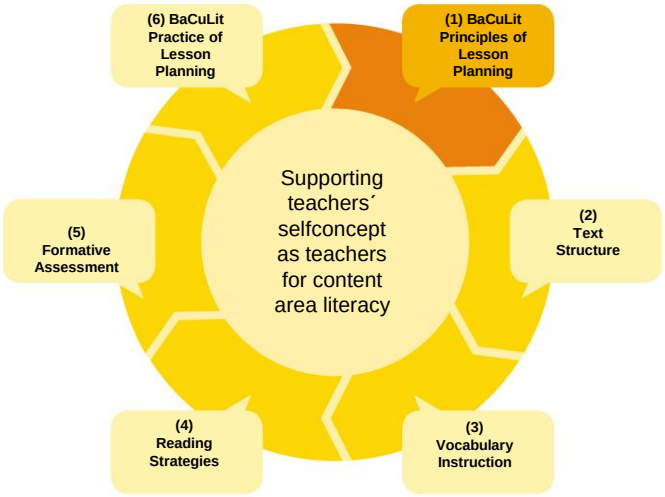
Module 1 Block 1 14

What will Participants learn during the BaCuLit-course?

- The BaCuLit curriculum: What are the central topics of each module?
- Problems of traditional approaches to professional development of teachers: “knowledge-action-gap”
- Working methods in the BaCuLit course - closely linking knowledge and practice

Module 1 Block 1 15

The BaCuLit Curriculum



Module 1 Block 1 16

This slide shows the **structure of the BaCuLit curriculum in form of a cycle**. The next sildes entail further information on the single elements of the currriculum (one slide for each module).
The centre of the cycle is the main goal of the curriculum: Supporting teachers´ self-concept as teachers not only for content learning, but for literacy instruction within their content areas.
So make sure when explaining the BacuLit-curriculum, that enhancing teachers´ expertise ultimately aims at empowering students for learning.
On the outside the single modules are listed.
Module 1 and 6: Lesson planning
Module 6 : presentation of own BaCuLit lesson plan
Modules 2 to 4: central aspects of literacy-related instruction in all school subjects
Module 5: knowledge and tools about diagnostic / formative assessment (should be applied at the beginning of every instruction unit, but may best be taught after the modules 1 to 4.)
(see also Conceptual Foundations, M1, Ad. 2, p. 22-23).

Content of Module 1: BaCuLit Lesson Planning

- Introduction: Why reading matters in all school subjects?
- What will participants learn during the BaCuLit-course?
  (Content and structure of the BaCuLit curriculum, underlying principles of professional development)
- How are participants required to work during the BaCuLit-course?
  (Teacher´s workbook, final assignment, requirements for BaCuLit teacher certificate; optional: Moodle platform)
- BaCuLit framework for lesson planning: Why are the following cross-curricular concepts central for lesson-planning in the BaCuLit framework:
  - Metacognition
  - Interaction
  - Engagement
- What are the main questions when you plan a content lesson or unit?

Module 1 Block 1 17

Content of Module 2: Text Structure and Text Diversity

- Why and how can teachers connect students' textworlds to the diversity of texts?
- What are the advantages and disadvantages of using authentic texts in the classroom?
- How can teachers use content area text structure and organization for meaning making?
- How are texts crafted to help students learn new content knowledge?
- How can teachers own text materials guide their students' learning?

Module 1 Block 1 18

Content of Module 3: Teaching Academic Vocabulary

- Why is vocabulary development crucial for content area literacy?
- How can principles from vocabulary research guide classroom practice?
- What are some guidelines for selecting words in the content areas that are worthy of rich instruction?
- How can students develop their own student friendly definitions?
- How can teachers help students expand their understanding of essential word meanings?

Module 1 Block 1 19

Content of Module 4: Teaching Cognitive and Metacognitive Reading Strategies

- What are reading strategies and why are they important?
- Which kinds of strategies can support readers' growth?
- How can strategies be taught? (a cognitive instruction model)
- Putting it into practice: the Reading Apprenticeship model
- **Strategy programs**, option
  a) Reciprocal teaching
  b) LISUM Reading navigator [not yet completed]

Module 1 Block 1 20

Content of Module 5: Formative Assessment for Content Literacy and Learning

- Why is formative assessment an assessment **for** instruction?
- What should be formatively assessed in the content area classroom?
- How can Vocabulary Self-Assessment be used by teachers in order to inform instruction?
- What is the Content Area Reading Inventory (CARI) and how can it be designed by teachers to give clear instructional directions?

Module 1 Block 1 21

Content of Module 6: BaCuLit Practice of Lesson Planning – Teachers´ own Lesson Plans

- How did I embed the BaCuLit cross-curricular concepts and the framework for lesson planning in my own lesson planning? How did it work out for my students?
- How can I embed concepts and elements of the BaCuLit course in my own personal action plan to sustain BaCuLit concepts in my future teaching?
- What did I like about the whole course? Which improvements would I suggest?

Module 1 Block 1 22

The BaCuLit Curriculum – optional content

Additional blocks:

- Learning & communication platform „Moodle“
- School-related reading activities & implementation perspectives
- Evaluation tools of the BaCuLit course

Module 1 Block 1 23

PARTICIPANT ACTIVITY

Assignments:

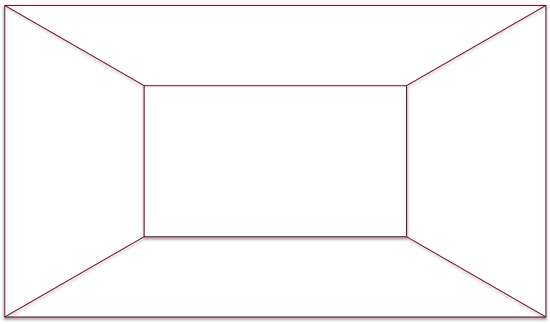
- When teachers attend a PD **course** they should be enabled to improve their every-day classroom practice. **Please reflect on the following questions** in using the placemat-method:
  - Which problems did you encounter in former PD courses: select a typical example and ask yourself, how did you work in this course?
  - Did this course effectively help you change your daily classroom practice?
  - How should a PD course be organised in order to help you implement what you learned into your daily practice?

Module 1 Block 1 24

Announce these assignments to the teachers first before explaining the placemat method. Give the teachers 10 minutes to think on their own and 10 or 15 minutes to share their results within their group. Then you might collect some important points on the wall or a poster and eventually present one slide with results of prof development research. This activity aims at preparing the introduction of BaCuLit working methods.

Working method: Placemat – A Cooperative Learning Method

- Placemat for a group of four



Material: M1_Mat. 1a and M1_Mat. 1b

Module 1 Block 1 25

How to use "Placemat"? – Steps

- Form groups of up to four members.
- Assign a topic.
- Give each group a piece of chart paper (in A1 format or table size) and each student a pen or pencil.
- Divide the paper into parts based on the number of members in the group, and leave a central square or circle.
- Have the students put the chart paper in the middle of their table.
- Have students write their ideas / results about the assigned topic in their designated spaces on the chart paper – e.g. with different-coloured pens.
- The group examines their different statements by rotating the "placemat".
- After sharing and discussing their ideas / results, they come to final group consent and write their common ideas in the centre of the paper.

Problems of traditional PD for teachers

Problems

- **Declarative knowledge** does not improve daily practice
- **"one-shot"-trainings**: teachers don´t get the opportunity to link new knowledge to their daily classroom-practice.

➔ **‚kowlegde-action-gap'**

What is needed

- continual support over a longer time period.
- Possibility to apply what has been learned to actual school context
- professional learning communities

Module 1 Block 1 26

Background

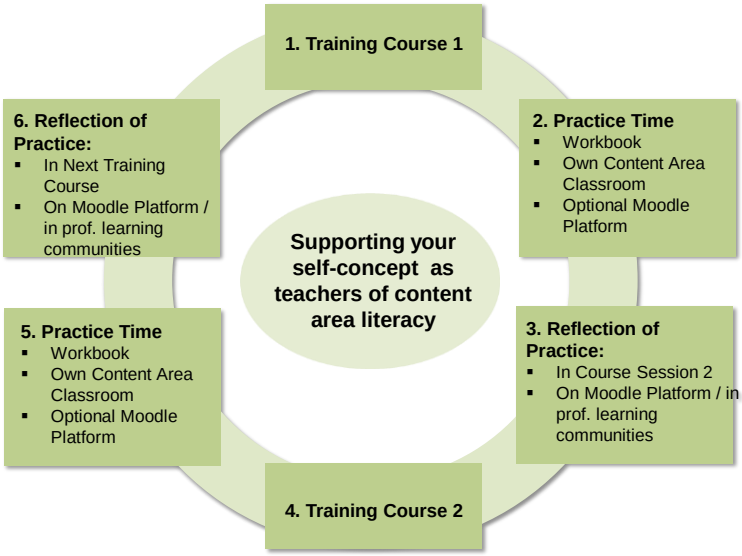
Getting presented only new information about subjects or methods builds up **declarative knowledge**, but does not help to put this into daily practice.
In the prevailing **"one-shot"-trainings** teachers don´t get the opportunity to link the new knowledge to their everyday-classroom-practice.
Overcoming the **‚kowlegde-action-gap'** requires approaches which continually support teachers over a longer time period.
Teachers need to try out in actual school contexts what they learned in the training and form professional learning communities which offer support and foster commitment and accountability for change.

The BaCuLit course was designed according to the following principles:

- opportunity to interact with each other. Practice new teaching and learning strategies
- guided support and feedback in adapting literacy practices to their own content area classrooms.

(cf. Conceptual Foundations, M1, p. 22-23)

Working Methods in the BaCuLit Workshops



Module 1 Block 1 27

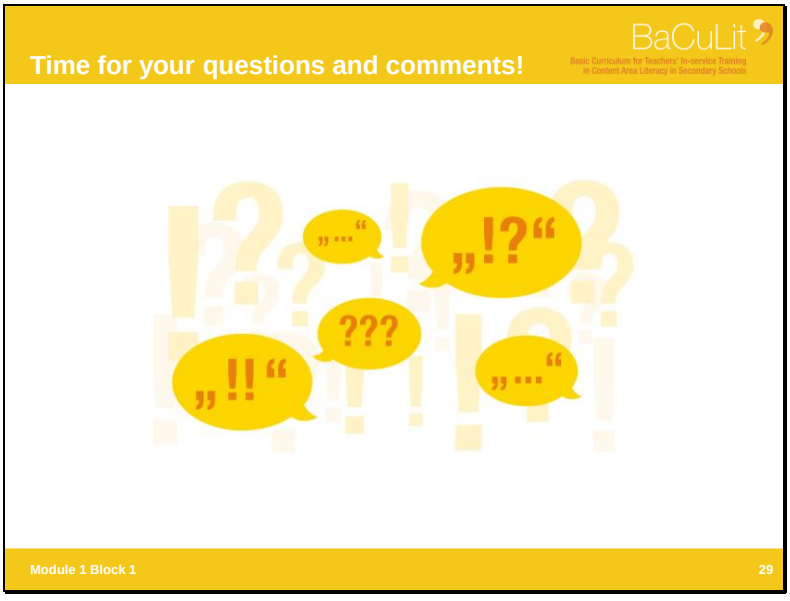
Here you should underline the close connection of input (new information / knowledge) during the workshops and the practice time between the training course sessions – with the workbook and optionally the moodle platform as main tools. The workbook will be given to the particpants in part 4 of module 1, so here you just mention it.

Principles underlying the BaCuLit course

- opportunity to interact with each other, to exchange and reflect classroom experiences and teaching beliefs.
- practice new literacy related teaching and learning strategies
- guided support and feedback in adapting literacy practices.

Following learning activities that will be used in the workshops:

- pair and group discussions during the workshops
- peer and trainer support and individual feedback during the workshops
- models of good practice
- introducing literacy related tools and teaching strategies
- offering exercises, practical experiences, and possibilities for inquiry into teachers´ own classroom practice.
- (cf. Conceptual Foundations, p. 23)



How Participants are going to work during the BaCuLit-course

1. **Teacher´s Workbook**

   M1_Mat. 1c

2. **Learning opportunities / final assignment for Module 6**
3. **Requirements for getting a BaCuLit-certificate**
4. **(optional:) Moodle Platform (separate module)**

Module 1 Block 1 30

1. Teacher´s Workbook

Offers:

- worksheets
- background information
- practical learning opportunities and assignments
- tools for inquiring your classroom practice
- assessment tools
- evaluation sheets.

How to use it for your learning processes:

- documentation of results
- documentation of students´ work
- reflections on implementing innovations in your classroom practice
- assessment results
- feedback, evaluations and final reflection on the BaCuLit course

Module 1 Block 1 31

Notes on the Teacher's Workbook

In order to incorporate the principles for professional development in the BaCuLit course the **Teacher´s Workbook** is an important tool. This workbook offers teachers:

- materials and methods
- tools for immediate use in everyday teaching practice
- short pieces of texts containing background information
- assignments for homework
- tools for applying inquiry methods to the classroom
- assessment tools and evaluation sheets

(See also Conceptual Foundations, M1, p. 23).

2. Final Assignment for Module No. 6 for longterm preparation

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

Plan a BaCuLit-Lesson in your content area and prepare a Poster-presentation about this lesson in Module 6:

- Prepare, and preferably carry out, your own lesson plan for a unit of your content area subject in which you take into account the BaCuLit-principles of content area reading instruction.

Portfolio assignment

- Write a substantial final reflection for your portfolio on how you designed and carried out your lesson plans.

Find more details in Material M1_Mat. 1d in your workbook!

Module 1 Block 1 32

In this final assignment you will bring together all aspects of the BaCuLit program in your own lesson plan. You are asked to carry out this lesson plan and to reflect upon the processes of designing and teaching the lesson, as well as on your students' (altered) learning processes.

Construction of Lesson Plan – Portfolio assignment
Prepare, and preferably carry out, your own lesson plan for a unit of your content area subject in which you take into account the COME-model of content area reading instruction. Pay attention to incorporating the topics of all the previous modules and make use of the strategies and instructional tools offered in the modules with respect to supportive interaction, metacognitive strategies, engaging texts and formative assessment.
In planning your unit you can use the document 'Guiding questions for lesson planning with the COME model for content area reading instruction'.

Presentation of Lesson Plan in final session
In this session each participant will present his or her final assignment lesson plan and teaching experiences to the group. This will be done in an interactive poster-session: "The Making Of…". Prepare a poster of your lesson plan and a 5-minutes introduction to it, in which you present some of your considerations and experiences.

*** The purpose of a poster is to convey your lesson plan and experiences to your colleagues and to create interaction. A poster should be as self-explanatory as possible so that your main job is to *supplement* the information it contains. To reach this aim, make your poster clear, structured, concise and attractive. ***

Both your colleagues and your instructor will be giving you their feedback on your poster.

3. Requirements for the BaCuLit Teacher Certificate (optional)

- The portfolio-part of the Teacher´s Workbook is regarded as teacher´s documentation of active participation in BaCuLit. Completing the defined assignments will be the prerequisite of attaining the BaCuLit certificate at the end of the course.

(M1_Mat. 1e: BaCuLit Certificate & certification requirements)

Module 1 Block 1 33

The national trainer teams have to define the concrete assignments being the standard for getting certified as BaCuLit teacher. The BaCuLit association will have to agree on these standards at the annual meetings.

4. Cooperative Learning Platform Moodle (optional)

Introduction of Moodle Platform as optional offer (see separate optional module)

Module 1 Block 1 34

Time for your questions and comments!

Module 1 Block 1 35

PPT Slides M1_Mat 2

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

Module 1 – Block 2 (material 2)

Lesson Planning Framework – Basic Questions and Central Concepts

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

"This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein."

BaCuLit
BaCuLit Association e.V.

Lifelong Learning Programme

Universität zu Köln

Module 1 Block 2 2

Content of Module 1 – BaCuLit Lesson Planning

BLOCK 1

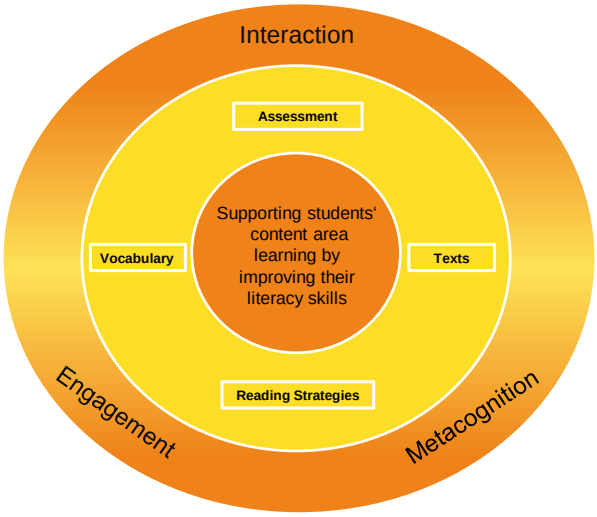
- Introduction: Why reading matters in all school subjects?
- What will participants learn during the BaCuLit-course?
  (Content and structure of the BaCuLit curriculum, underlying principles of professional development)
- How are participants required to work during the BaCuLit-course?
  (Teacher´s workbook, final assignment, requirements for BaCuLit teacher certificate; optional: Moodle platform)

BLOCK 2

- BaCuLit framework for lesson planning: **Why are the following cross-curricular concepts central for lesson-planning in BaCuLit?**:
  - Metacognition
  - Interaction
  - Engagement
- **What are the main questions when you plan a content lesson or unit?**

Module 1 Block 2 3

Lesson Planning Framework of BaCuLit



Module 1 Block 2 4

The **BaCuLit Framework for Lesson Planning** is based on the ADORE Reading Instruction Cycle. The main goal though is to support students' content area learning by improving their literacy skills, as is indicated in the orange circle.
The inner circle shows the core concepts:
texts (Module 2)
reading strategies (Module 4)
vocabulary (Module 3)
assessment (Module 5)
The outer circle includes the cross-curricular concepts. These three concepts – engagement, interaction and metacognition – will therefore be introduced in module 1 in the following block.

(see also Conceptual Foundations, M1, p. 23-24)

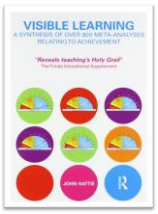
Cross-curricular concepts of the BaCuLit lesson planning framework

Why are metacognition, interaction and engagement central cross-curricular concepts for all learning activities in the content areas?

Module 1 Block 2 5

What research tells us about the crucial factors for student learning

- **The BaCuLit-Framework for Lesson Planning is based on empirical evidence. The most important study of the recent years is the meta-analysis by John Hattie, Visible Learning (2009)**



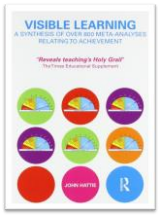
- Hattie and his fellows evaluated 50.000 studies dealing with successful learning, where 83 million students have been analysed

Module 1 Block 2 6

John Hattie's study „Visible Learning" from 2008 is designed as meta-study, accounting for the crucial influences on achievement with school-aged students. The study provides the largest evidence-based data base on teaching research that has ever existed.
The Hattie study leads to extensive consequences for good teaching at school: on the one hand it shows that teachers and their teaching are crucial for successful learning. On the other hand, it shows that reforms are more useful within lesson development than on the structural basis.
Cf. Conceptual Foundations, M1, p. 24.

What research tells us about the crucial factors for student learning

The main question was:

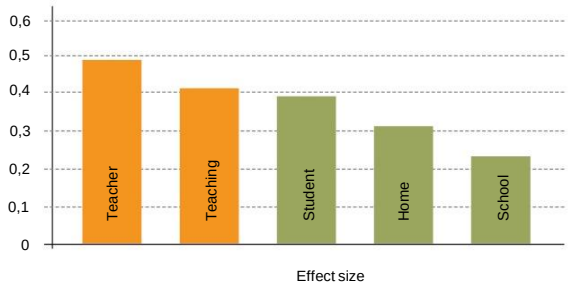


- Which factors have the largest influence on students' achievement?
- The following index has been used (d = effect size):
  - **d < 0: Measure reduces learning success**
  - **0 < d < .20: no or no remarkable effect**
  - **.20 < d < .40: moderate effect**
  - **.40 < d < .60: large effect**
  - **d >. 60: very large effect**

Module 1 Block 2 7

What research tells us about the crucial factors for student learning

- **The most important results of the Hattie study are: Teachers and teaching quality have the largest influence on students' learning success!** *It is important that teachers act as „activators", not as „facilitators", thus „as deliberate change agents, and as directors of learning".*



Module 1 Block 2 8

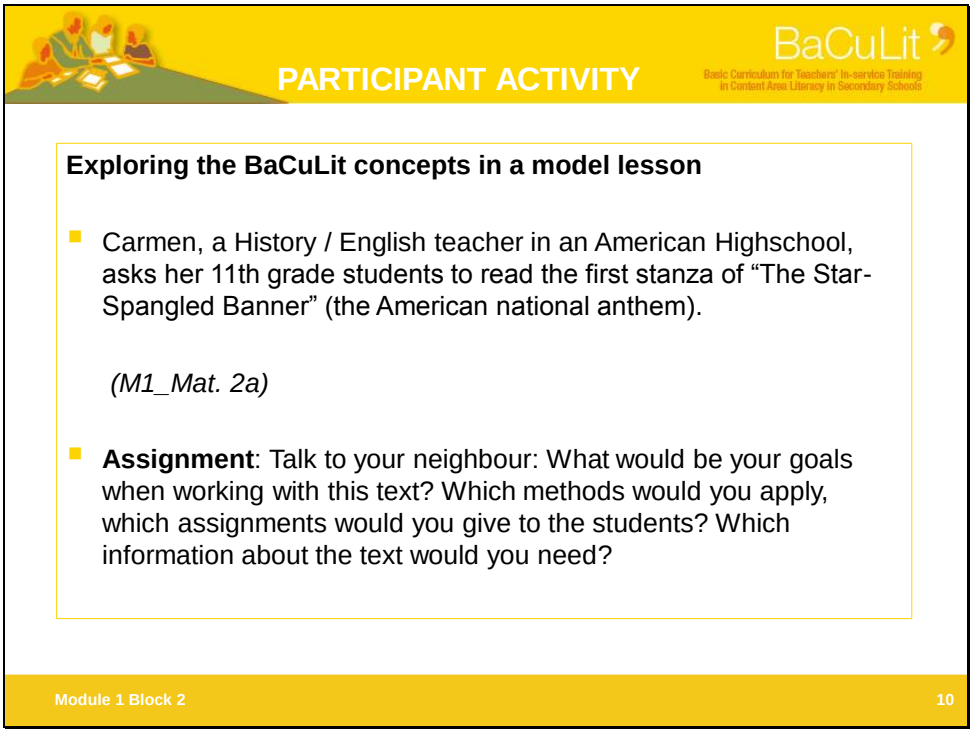
What research tells us about the crucial factors for student learning

Effect sizes for teacher as activator and teacher as facilitator/working conditions [selection of items]:

Teacher as activator	d	Teacher as facilitator	d
Quality of teaching	0.77	Reducing class size	0.23
Reciprocal teaching	0.74	Simulations and gaming	0.32
Providing Feedback	0.72	Inquiry-based teaching	0.31
Teacher-student-relationships	0.72	Individualized instruction	0.20
Meta-cognition strategies	0.67	Problem-based learning	0.15
Direct instruction	0.59	Ability grouping	0.11
Challenging goals	0.56	Inductive teaching	0.06

Module 1 Block 2 9

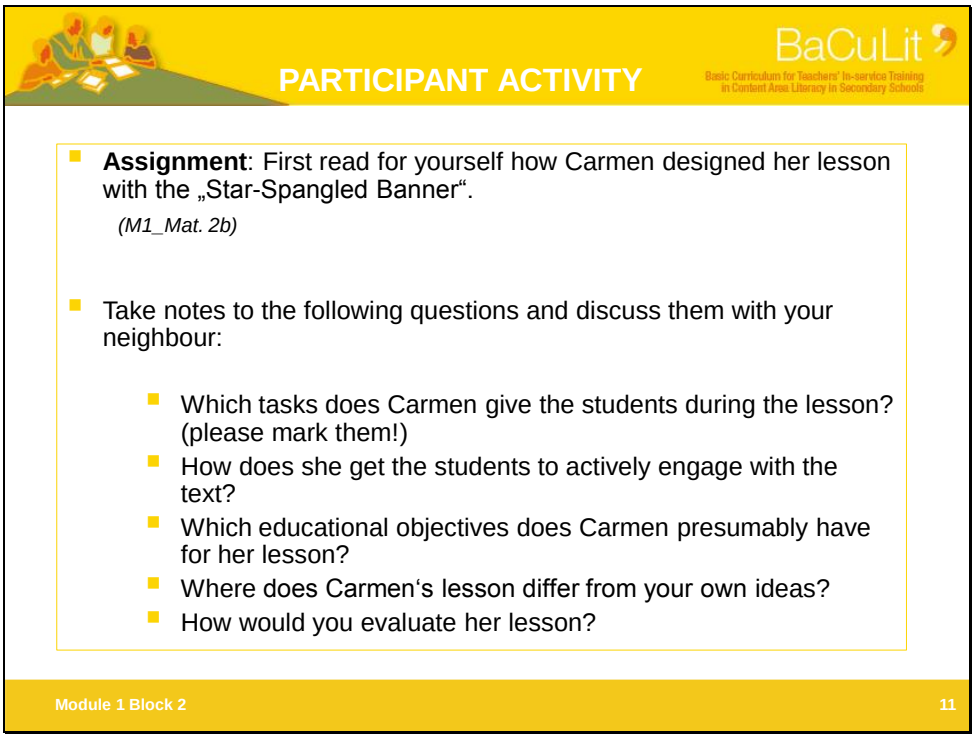
The concept of a teacher as 'activator' is tightly linked with the concept of Visible Learning. Teaching and Learning has to be visible for both sides; the teacher in a way has to become student, the student has to become teacher. The teacher as 'activator' activates, guides and actively accompanies students' learning. The teacher as 'facilitator', on the other hand, is a teacher working with a constructivist concept. He only provides the material, he does not provide activation or guiding of the students. The central principles of successful teaching, which Hattie summarizes with the terms „Teacher as activator" or „change agent" are also fundamental for the Lesson Planning Framework of BaCuLit and the single modules (cf. Conceptual Foundations, M1, p. 24).



The following example is taken out of the project CRISS (2012).
After this assignment, the participants get the complete example, which is introduced as „Model of Metacognitive Teaching" in the CRISS-Manual. The teachers' own drafts serve as a contrast here to specifically mark the „divergences" of the model lesson in contrast to a normal lesson.
Important focus here:

- How to convey **content/ meaning**
- How to make students **metacognitive learners**.

(Cf. Conceptual Foundations, M1, p. 24-25)
If participants request further information about the text in order to work on the task, you can pass around a work sheet with the text (stanza 1 and 4; normally only the first stanza is sung at official events) and some information on the American national anthem; these can be found on a separate worksheet.



The model lesson refers to a CRISS-strategy, called "Free-Write-Entries". This strategy is explained in the CRISS-manual in Chapter 7: Informal Writing to Learn: „Whenever students read, view, or listen and then write without a teacher´s specific direction about what and how to do it, they are making a Free-Write-Entry. By design, Free-Writes help students to connect with the material and to think more deeply about their reading. Readers learn to trust their own instincts while they speculate, question, and find meaning as they write. Free-Writes help students connect with the piece and untangle challenging ideas." (p. 170)
The participants should realize in this work step, where the lesson (M1_Mat 2b) differs from traditional teaching (cf. Conceptual Foundations, M1, p. 25):
Educational objective of THIS lesson: Developing together with the students what „metacognition" means and why it is so important to be actively engaged in learning.
From here you should proceed to the crucial importance of metacognition, interaction and engagement for effective learning. Here you can hark back to the principles of „effective" teaching or teaching attitude according to Hattie 2009 (see slide 8): Which of the mentioned features of „teacher as activator" are realized in Carmen's lesson? (Reciprocal Teaching, Feedback, Metacognition, supportive teacher-student interaction…)

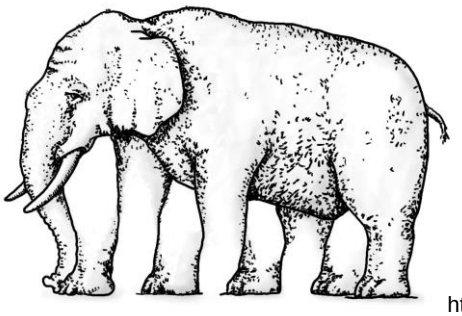
Cross-curricular concepts of the BaCuLit lesson planning framework

1. Metacognition
2. Interaction
3. Engagement

Module 1 Block 2 12

What is the difference between cognition and metacognition?

Cognition: how many legs does the elephant have?



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Metacognition: why is it so difficult to count these legs?

M.C.Escher: The elephant,
http://www.sehtestbilder.de/optische-taeuschungen-illusionen/images/elefant-fuenf-beine.jpg

Module 1 Block 2 13

You may discuss this illustration with the participants and expand this example to their own experience: Do teachers work on the cognitive or on the metacognitive level in their classrooms? Do they work on the „What" or on the „How" – refer back to the model lesson about metacognition(M1_Mat 2a-b). What would it mean to have metacognitive conversations in the classroom?

Background Information about the artist:

Maurits Cornelius Escher (1898-1972) was a Dutch artist and graphic desinger. He is especially well-known for his depiction of impossible figures, e.g. the elephant depicted here. Escher was an expert in the techniques of woodcuts, lithographs, and mezzotints. When he was young he created many studies of landscape and architecture, especially in the Mediterranean region.

His most popular and well-known works deal with the depiction of perspectival impossibilities and optical illusions, e.g. the picture of a stair that seems to ascend endlessly. Mathematicians also love his works as they put abstract geometrical ideas in a graphic way.

Metacognition is essential to become a mature, independent and life-long-learner

When students are metacognitive, they…

- are in charge of their own learning (…)
- set learning goals, know how to use a variety of strategies to meet these goals, and can revise their plans to reach their goals effectively
- know how to reread, to self-question, and to organize information
- constantly assess their own learning progress: Do I understand this point? Should I write this idea down? Is the author making this clear; or do I need additional information?

(CRISS 2012, p. 6)

Module 1 Block 2 14

You can hang up a poster with this picture of the „little man in the ear" in the classroom, together with principles of metacognition, i.e. the surveillance and supervision of one's own learning process: It requires persistent efforts to make students familiar with these principles.

PARTICIPANT ACITVITY

- **Assignment**: Please read Material M1_Mat. 2c ("Helping Students Understand Metacognition") and talk about the following questions with your neighbor/your group:

1. According to this text, what are the two components of metacognition?
2. How does the teacher proceed in conveying the concept? Which methods does she use?
3. How do you evaluate her proceeding? Could you implement this "model lesson" in your own classroom?

(M1_Mat. 2b)

Module 1 Block 2 15

You can decide here if the participants work on the text with a partner or in small groups. In the following evaluation within the whole group, the following should be worked out:
A) Components of Metacognition: **Monitoring** and targeted use of **reading and writing strategies. Y**ou can work with the picture on slide 13 for the „device in our heads" (e.g. as poster in the classroom in order to always bring metacognitive monitoring to mind).
B) Proceeding of the teacher: Work out that she uses two different strategies: **Instruction** and **Modelling**
C) Discussion: Here you could reflect on the fact that this lesson sequence – in contrast to the lesson on „The Star-Spangled Banner" – is very focused on the teacher and will thus seem very traditional to the participants. From here you could lead over to the following topic, which will be about the role of the teacher in the cognitive apprenticeship approach.
D) Discussion: Difference between "cognitive" (content oriented) and "metacognitive" (competence oriented) teaching. According to the concept of „Reading Apprenticeship" (which will be introduced in the end of this module, see below) the „metacognitive discourse" is at the heart of all teaching and learning processes.
(Cf. Conceptual Foundations, M1, p. 25-27)

[Optional slide] Questions to foster metacognitive reflection of your students:

- How did you evaluate your comprehension?
- How did the strategies you used (….) work for you?
- What could you do better next time – use the same strategy more effectively, modify or adapt the strategy, or use a different one?
- What did you do in order to think about what you already knew?
- Did you have a clear purpose for your work? If so, how did you use it to help you learn?
- What internal and external text structures were present, and how did you use them to help you learn?
- …. (add more questions)

(Project Criss, 4th Edition 2012, p.5)

Module 1 Block 2 16

With this slide, you and the participants can think about which questions on supporting metacognitive reflection might be worked out with the students and implemented in the classroom. The formulating of these questions is most effective if students are involved and do not get fixed "rules". In this sense, the questions on this (optional) slide only serve as suggestions.

Cross-curricular concepts of the BaCuLit lesson planning framework

1. **Metacognition**
2. **Interaction:**
   a. **Supportive teacher-student-relationships**
   b. **Effective teaching and learning: The cognitive apprenticeship approach**
3. **Engagement**

Module 1 Block 2 18

The second cross-curricular concept of BaCuLit „Interaction" involves two aspects: Firstly, the features of a learning friendly teacher-student-relationship, that is according to many studies an important basis for a productive learning environment; secondly the features of a learning friendly style of teaching that follows the model of „cognitive apprenticeship" respectively the derived „reading apprenticeship" (see below).

a) What research tells us about teacher-student interaction fostering student learning

Supportive Teacher-Student-Relationships have a high impact (d = 0.72) on students´ learning process and achievement:

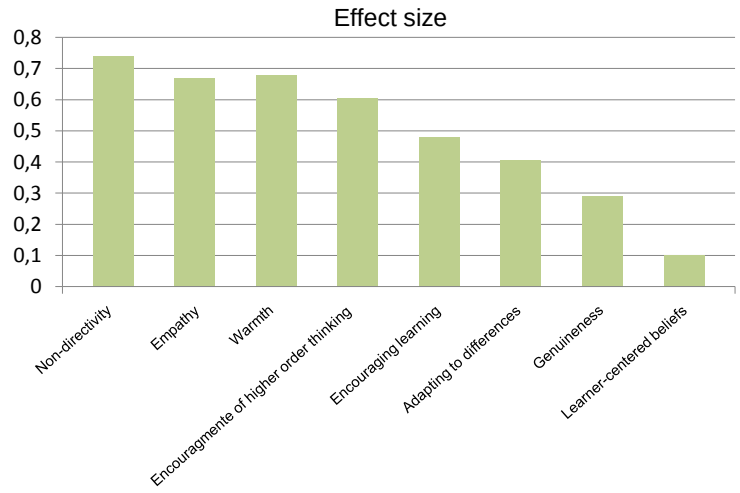
- „Building relations with students implies agency, efficacy, respect by the teacher for what the child brings to the class (from home, culture, peers), and allowing the experiences of the child to be recognized in the classroom. Further, developing relationships requires skills by the teacher – such as the skills of listening, empathy, caring, and having positive regard for others."

(Hattie 2009, p. 118)

Module 1 Block 2 19

A „supportive teacher-student interaction" has, according to the Hattie study, a large influence on students' learning process. Respect and non-directivity, empathy, warmth and attention, encouragement and acceptance of cultural and other differences are strong influence factors which add to a positive learning environment in the classroom. This is the basic prerequisite for successful teaching. In the Reading Apprenticeship-approach (see below and CF) these factors are summarized within the „social dimension". According to Schoenbach et al. (2009) this includes: „community building in the classroom, including recognizing the resources brought by each member and developing a safe environment for students to be open about their reading difficulties".

a) Aspects of supportive teacher-student-interaction (Hattie 2009)



Module 1 Block 2 20

Source: Hattie 2009, p. 119. (See Conceptual Foundations: References)
This chart from the Hattie study shows the effect sizes of different constituents within the teacher-student-relationship. These are measured with the effect size d. See also slide 5 and 6 and the Conceptual Foundations,M1, p. 24.

a) Aspects of supportive teacher-student-interaction (Hattie 2009)

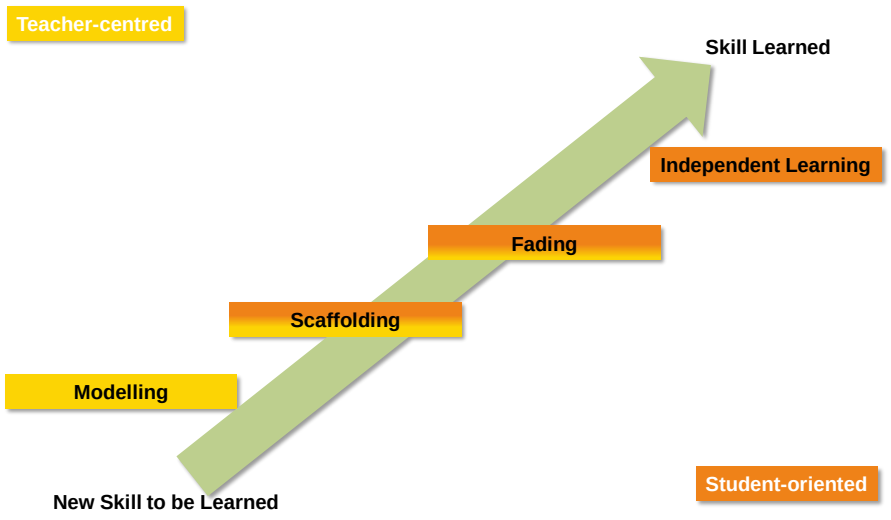
Supportive Teacher-Student-Relationships have to address all students combining high expectations and high caring:

- showing students that **the teacher cares for their learning**, can see their perspective
- feedback to self-assess, **feel safe**
- warmer socio-emotional climate in the classroom: fostering effort and thus **engagement for *all* students**
- Being a **change agent**: all students can learn and progress

Module 1 Block 2 21

Power of positive teacher-student relationships: showing students that **the teacher cares for their learning** Respect and non-directivity, empathy, warmth and attention, encouragement and acceptance of cultural and other differences are strong influence factors which make up for a positive learning environment in the classroom. This is the basic prerequisite for successful teaching, for **fostering effort and thus engagement for *all* students**. In the Reading Apprenticsehip-approach (see above and below and CF) these factors are summarized within the „social dimension".
(Cf. Conceptual Foundations, M1, p. 28-29)

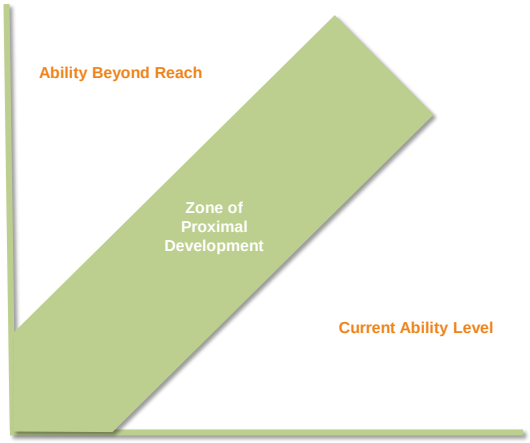
b) Effective Teaching and Learning: The Cognitive Apprenticeship Approach



Module 1 Block 2 22

How exactly can teachers facilitate student growth towards independent reading and learning? We want to take a closer look at the steps of a process which is called „scaffolded instruction".
Scaffolded instruction is based on the idea that at the beginning of learning, students need a great deal of support; gradually, this support is taken away to allow students to try their independence.
First step: Introduction and Modelling: Second step: scaffolding: Third step: Fading
Fourth step: Independent Learning.
See also Conceptual Foundations, M1, p. 29-30.

b) Effective Teaching and Learning: The „Zone of Proximal Development“ (ZPD)



The Zone of Proximal Development

As teachers know, teaching means above all knowing how to push students´ learning forward.
Vygotsky: **zone of proximal development (= ZPD) ->** area of growth which is **just beyond the current ability of the learner** but not so far as to be impossible or frustrating
What does this mean for the teaching of reading? In the module on text readability and text structure (Module 2) you will learn that they may hold different levels of difficulty for their readers.
Books or other texts that are far too difficult lie on students' **frustrational reading level.**
Texts at **the independent reading level**: in ZAD; the student can read them on his or her own.
Texts at **the instructional level**: students can read with assistance, will learn new content and new procedures of reading: the demands of reading that text lie in the ZPD. (See Conceptual Foundations, p. 27-28)

b) Effective Teaching and Learning: Which role should the teacher take?

„Sage on the stage“ controls the teacher-centred class-room, is keeper of knowledge in conventional sequential settings.

„Teacher as activator“ and „change agent“ (Hattie 2009) builds positive relationships with students, communicates high expectations to each and every student, provides students with challenging tasks, supports them with modelling, direct instruction and scaffolding.

„Guide on the side“ facilitates learning experiences and conceptual change as a coach in student-centred cooperative learning scenarios.

You can shortly explain these three models and after that have the participants discuss in pairs or small groups which of these models most likely match their style of teaching and which one they would prefer (see next slide). On the left side you find classical teacher-centred teaching, on the right side “modern” student-oriented teaching that has been shown to be least effective by all empirical studies. In the middle – as the „third way“ – you find the model of cognitive apprenticeship, which after Hattie and others is most effective and after which also the BaCuLit curriculum is designed. These three models will be further explained on the next slide, with regard to the underlying teacher-student relationship.

b) Learner role and teaching approach

Transmitter model:
teacher takes role as direct transmitter of knowledge, has explicit control over selection of materials, sequencing and pacing of learning

Apprenticeship model:
Adaptive teaching approach addressing all dimensions of complex learning processes: providing modelling and direct instruction, support and guidance through scaffolding and fading with the aim of learner autonomy.

Constructivist model:
learner-centred classroom scenario, students gain knowledge by processes of meaning-making, vital importance of co-construction of meaning with peers in cooperative learning environment.

Module 1 Block 2 25

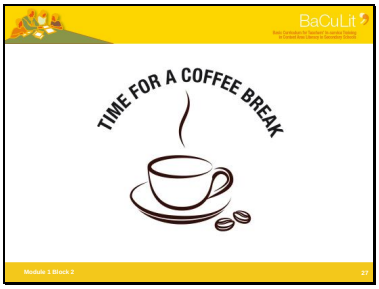
PARTYICIPANT ACTIVITY

- **Assignment:** Write down in a Free Write Entry to your Workbook all ideas and questions about this topic!
- What do you think about the three models of the teacher role and teacher-student interaction? What is your understanding of your role as a teacher? What would you possibly like to change?
- Optional: Exchange your ideas with your partner or with your group.

Module 1 Block 2 26

It is important in this assignment that the participants get the chance to articulate their own thoughts and questions without having to make them public in the group. Not every teacher might want to disclose himself or herself with his or her doubts and problems to a still unknown group. Therefore the „Free Write Entries“ is a good method here: The CRISS-strategy called Free-Write-Entries is explained in the CRISS-Manual (2012) in chapter 7: (Cf. Slide 11)

Background: We know from studies on successful professional development for teachers that their subjective beliefs, theories and self-concepts have to be worked on as well, if one wants to sustainably change teachers‘ practice of teaching. Cf. Timplerley 2008 (see Conceptual Foundations, p. 31).



Cross-curricular concepts of the BaCuLit lesson planning framework

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

1. **Metacognition**
2. **Interaction**
3. **Engagement:**
   a. **Teacher's engagement is crucial for students´ learning**
   b. **Exploring students´ engagement**
   c. **Reading engagement and performance: PISA; gender differences**

Module 1 Block 2 28

Engagement has been found to be a critical variable in reading achievement. (Cf. Brozo, Shiel, Topping 2007)
For example, Stanovich (1986) described a circular association between reading practices and achievement. Engagement is essential to successful reading. Children who are beginning to read must be engaged in the material they are trying to read and in the process of learning. Excellent readers learning advanced comprehension skills read more effectively if they are interested and confident of their ability to succeed (Cf. Conceptual Foundations, M1, 31-34)

a) Empowering students for learning requires engaged teachers!

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

- **The only and compelling reason for teachers´ professional development is improved student learning!**
- **Those are the conditions for success:**
  - **Engagement of teachers** in their further learning to deepen professional knowledge and refine skills
  - **Engagement of students** in new learning experiences.

(Source: Helen Timperley 2008, p. 28)

Module 1 Block 2 29

The New Zealand scientist Helen Timperley has found that PD has to answer the following four questions: (Cf. Conceptional Foundations, M1, p. 31)
Principle 1: valued student outcomes; **What is important is that the teacher always maintains a focus on the students.**
Principle 2: teachers learning worthwhile knowledge and skills. "What knowledge and skills do we as teachers need to help students bridge the gap between current understandings and valued student outcomes?"
Principle 3: importance of integrating theory and practice. Teaching is a complex activity in which moment-by-moment decisions are shaped by teachers' beliefs and theories about what it means to be effective. Theoretical understandings give coherence to these decisions.
Principle 4: use assessment as the basis for professional inquiry.

a) Teachers´ expectations have a great impact on learners achievement

- Believing that achievement is changeable already makes a difference
- Having low expectations of the students´ success is a self-fulfilling prophecy
- Students like teachers who challenge, who have high expectations, who encourage the study of their subject
- Teachers should see themselves as change agents – they should believe that all students can learn and progress and demonstrate to all students that they care about their learning

(Source: Hattie 2009)

Module 1 Block 2 30

Quotations:
"There are differences in classes where teachers believe that achievement is difficult to change because it is fixed and innate compared to teachers who believe achievement is changeable (Dweck, 2006)
„Having low expectations of the students´ success is a self-fulfilling prophecy (…). How to invoke high expectations seems critical…" (Hattie 2009, 127)
See also Quotations in Conceptual Foundations, M1, p. 31).

b) Students´ engagement is crucial for successful learning and high achievement!

- Students´ achievement is strongly related to factors like **self-efficacy, self-concept, motivation and persistence**
- Teachers may be more successful with poor learners if they address these dispositions first
- Key attributes of successful learners: the willingness to engage in learning, the attributions of success to factors such as effort rather than ability or luck
- the raising of positive attitudes towards learning can be influenced in school!

(Hattie 2009)

Module 1 Block 2 31

Quotations:
"Students´ achievement is strongly related to factors like self-efficacy, self-concept, motivation and persistence: „The willingness to invest in learning, to gain a reputation as a learner, and to show openness to experiences are the key dispositional factors that relate to achievement." (Hattie 2009, 47)
Cf. Conceptual Foundations, M1, p. 32.

PARTYICIPANT ACTIVITY

„If the teacher's lens can be changed to seeing learning through the eyes of students, this would be an excellent beginning."

(Hattie 2009, p. 252)

Talk to your neighbour about some aspects of your teaching beliefs, e.g.:

- Is it part of your professional beliefs, that all students can learn and progress - or have you resigned on some of them?
- Think about your most „challenging" student(s) in this respect and ask yourself: What would it mean to see my learning offers through the eyes of this student / these students?
- „Quality teachers are those who challenge, who have high expectations, who encourage the study of their subject, and who value deep aspects of their subject." What do you think about this statement?

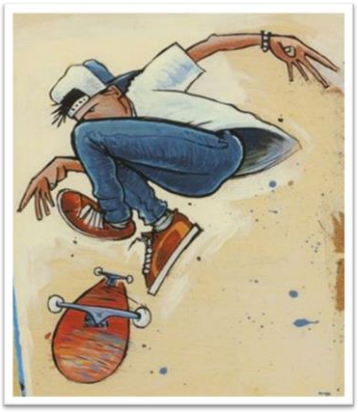
Module 1 Block 2 32

Give teachers 10 minutes to discuss in pairs or in small groups about these statements and questions!

To change the perspective of teachers – away from an (exclusive) content-orientation and towards a student-orientation – is one of the largest challenges, which is also adressed by the BaCuLit-course. A significant implication of the competence orientation instead of a content-orientation is the following: To ask: What are my students already able to do? What should they be able to do in order to meet the challenges of a satisfying way of living? How can I support them in getting from a) to b)? (See also the explanations on slide 29)

PARTICIPANT ACTIVITY

- What do you know about activities your students are really engaged in?



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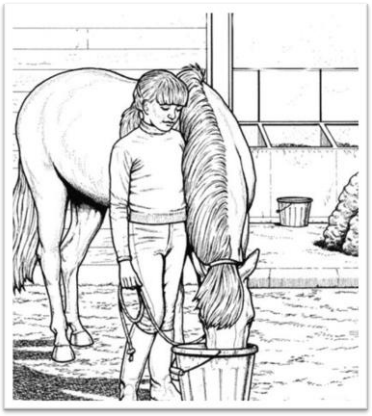

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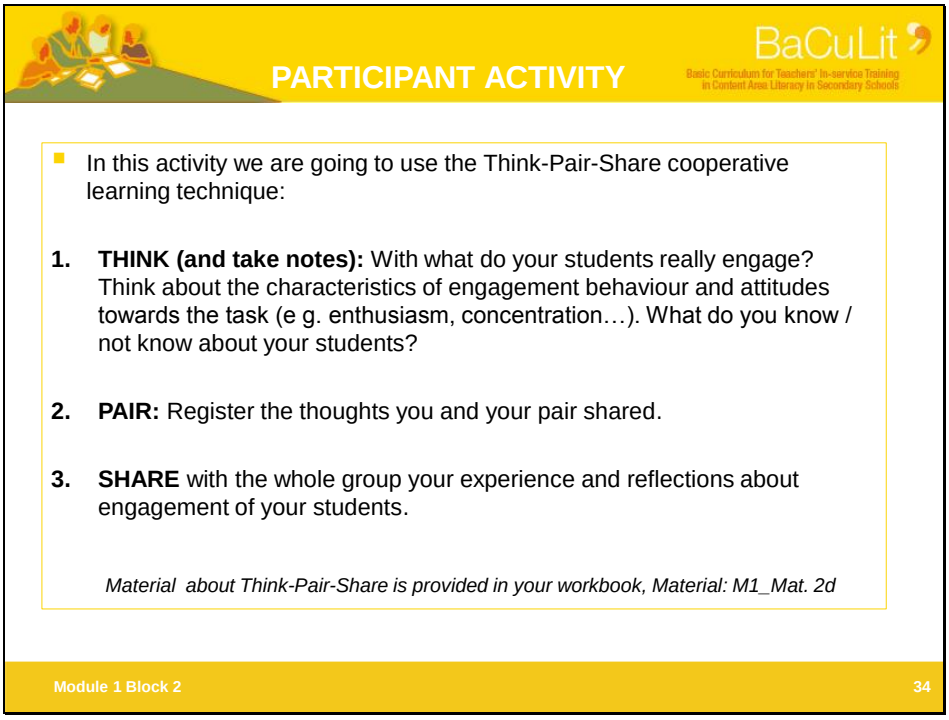
Module 1 Block 2 33

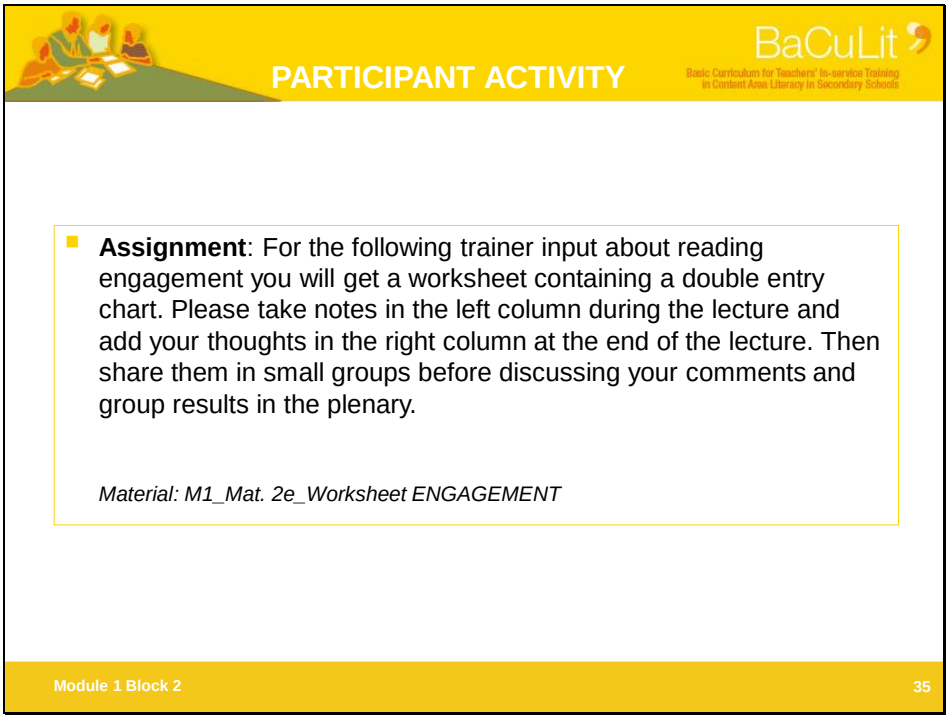
The following Think-Pair-Share activity tries to get teachers to think about what engagement means and when or where there students engage with full enthusiasm (within or outside of school). This can serve as a starting point for the following homework assignment, which is to explore with an „interest inventory" or „interest bag" where students really engage.

Working definition for Engagement: term „FLOW", Chicago psychologist Mihaly Csikszentmihalyi (pronounce: Tschick Sent Mihaji)

FLOW: „autotelic experience", an intrinsically rewarding activity; something, that one does without expectation of further advantages, just it is rewarding in itself."
See Conceptual Foundations, p. 32.



In the explanations of TPS in the Teachers Workbook you find background information about the benefits of this learning method.



The worksheet containing a double-entry-chart for active listening needs to be printed out for all participants and be given to them before the trainer input. You might have participants sit in groups (of 3-4 persons) around a table at this point already. Take care / remind them / give them enough time to take notes during your subsequent lecture.

c) Reading engagement and reading performance

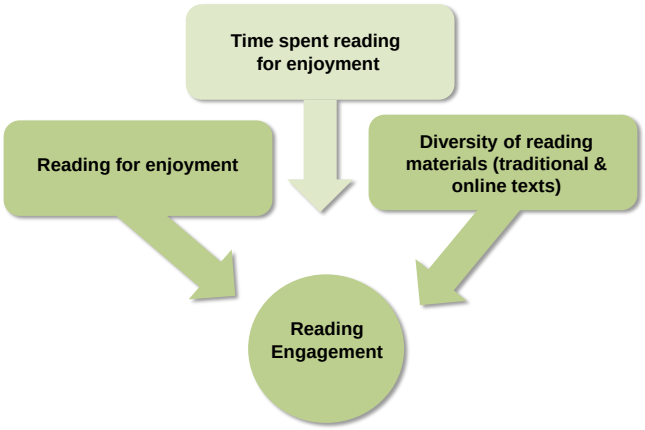
- **PISA 2009:** reading engagement is closely linked to reading performance, and best accessible for change.
- **What research tells us about engagement in reading:**
  - When students become engaged readers they provide themselves with self-generated learning opportunities (Guthrie & Wigfield)
  - Better readers read more because they are more motivated to read

  ➔ improved vocabulary and comprehension skills; poor readers avoid reading, skill level is declining more and more (Stanovich)
- **Achievement gap** between those who read frequently and those who are reading averse **increases over time.**

Module 1 Block 2 36

PISA study 2009, extended definition of reading literacy. **PISA 2009 claims that** reading engagement is closely linked to reading performance, and (in contrast to other factors like low SES, gender, race…) best accessible for change.
This new PISA-focus goes back to the research of Guthrie & Wigfield (2000) : "As students become engaged readers, they provide themselves with self-generated learning opportunities that are equivalent to several years of education" (Guthrie and Wigfield, 2000).
Cf. Conceptual Foundations,M1, p. 33-34 cf. also Slides above.

c) How PISA 2009 defined and measured Reading Engagement



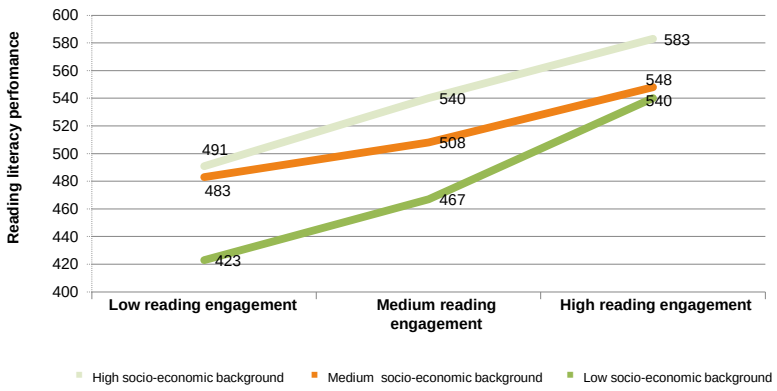
Module 1 Block 2 37

Student questionnaire PISA 2009 gathered data on **three aspects of reading engagement**.

- **enjoyment of reading**
- **time spent reading for enjoyment**. (Students were asked how much time on a daily basis they spent reading for enjoyment. Apart from the response category 'I do not read for enjoyment' the response categories indicate the time spent reading for enjoyment every day. Thus, students responding 'I do not read for enjoyment' may in fact read for enjoyment but less frequently than every day. Again, the type of reading was not specified)
- **diversity of texts students read**, with separate scales for **print and online reading**

See also Conceptual Foundations, M1, p. 33-34.

c) PISA found more influence of engagement on achievement than of socio-economic status



Module 1 Block 2 38

Diagram from PISA 2000 shows: reading engagement can more than compensate socio-economic disadvantages!
See also Conceptual Foundations, M1, p. 34.

c) Gender and Reading: Gaps in engagement and achievement (PISA 2000 – 2009)

- **PISA 2009 showed big gender achievement gaps in reading literacy in ALL 65 participating countries! In the OECD-countries: 39 PISA score points = roughly one year of schooling!**
- **„The individual-level factor most susceptible to change is student engagement in reading activities. (…)** Therefore**, when boys enjoy reading, read diverse material and adopt reading comprehension strategies,** they can attain a higher level of performance in reading than girls."

(Eurydice: Teaching Reading in Europe, 2011, p. 27)

Module 1 Block 2 39

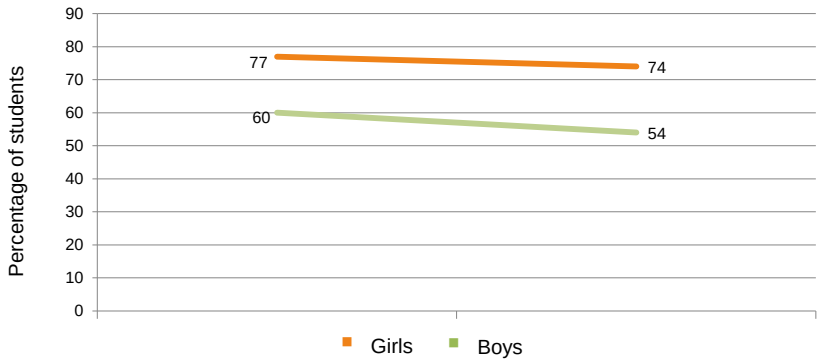
PISA 2000: Boys are *less competent readers* than girls – and this applies to *all* countries tested in the every PISA survey since 2000.
The predominance of girls especially relates to

- purely written information (in contrast to so-called discontinuous texts, combining written information, figures, diagrams, tables, etc.)
- the more demanding areas of text comprehension (for instance developing an interpretation, reflecting on and evaluating the content and form of a text).

(The Eurydice Study is available for free: http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/130EN.pdf)

See Conceptual Foundations, M1, p. 34.

c) PISA 2000 - 2009: Change in the percentage of boys and girls who read for enjoyment



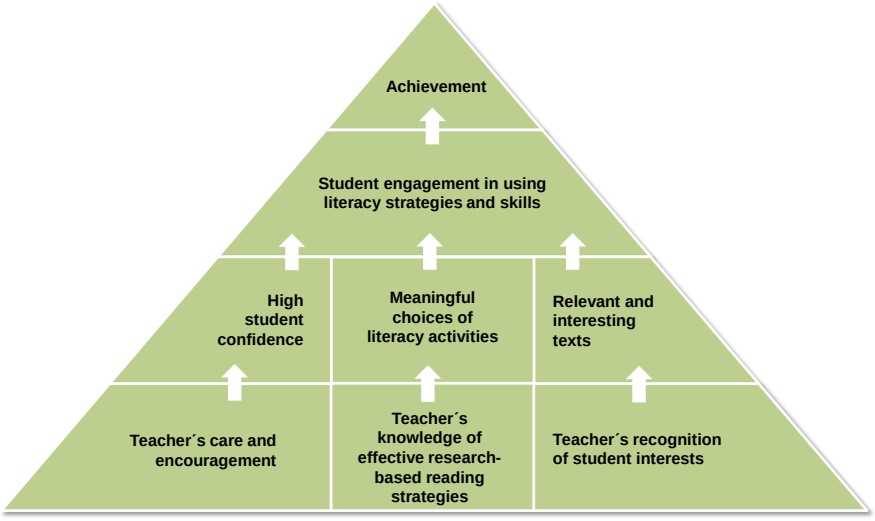
OECD average for 26 countries: Australia, Belgium, Canada, Chile, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Mexico, New Zealand, Norway, Poland, Portugal, Spain, Sweden, Switzerland, United States

Module 1 Block 2 40

Findings of PISA 2009:
Boys and socio-economically disadvantaged students tend to be less engaged in reading than girls and socio-economically advantaged students.
In virtually every country participating in PISA 2009, the more students enjoy reading and the more engaged they become in reading for enjoyment – both off- and online – the higher their reading proficiency.
Among different reading media, reading fiction showed the strongest association with reading performance.
There was also a positive association between reading online and reading proficiency with traditional print media.

See also Conceptual Foundations,M1, p. 34.

c) Implications for practice: How can teachers/ educators engage students in literacy?



Module 1 Block 2 41

Source: Learning Point Associates (2005). What Are the Key Elements of Student Engagement? http://www.adlit.org/article/21567/

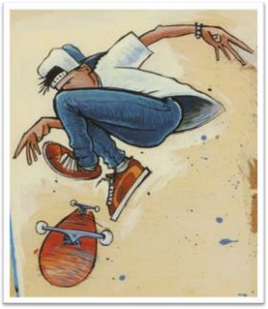
Key Elements of Student Engagement

- Student Confidence
- Teacher involvement
- Relevant and Interesting Texts
- Choices of Literacy Activities

(See Conceptual Foundations, M1, p. 35-36)

PARTICIPANT ACTIVITY

- How could you engage your (male) students in reading and writing activities?



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Module 1 Block 2 42

If slide 41 has been thoroughly discussed, you can optionally (as an alternative to slide 42) insert a short pair or group work here. For further information you can point to the article of Christine Garbe: „Tough guys don´t read!?“ (2010, will be uploaded to the website www.boysandbooks.de) and the book by Bill Brozo: „To be a boy, to be a reader“. Alternatively this activity can be conducted with slide 43.

PARTICIPANT ACTIVITY

- **Assignment:** Please add your thoughts in the right column of the double entry chart now. Then share them in your group before discussing your comments and group results in the plenary.

Material: M1_Mat. 2e_Worksheet ENGAGEMENT

Module 1 Block 2 43

- Optional activity (either slide no. 43 or this one)
- You should give participants 5-10 minutes for individual work and have them share their comments with their groups afterwards. Then collect questions and comments and discuss them in plenary.

Conclusions about the 3 cross-curricular concepts: Characteristics of good readers and learners

„Proficient readers share some key characteristics. Good readers are:

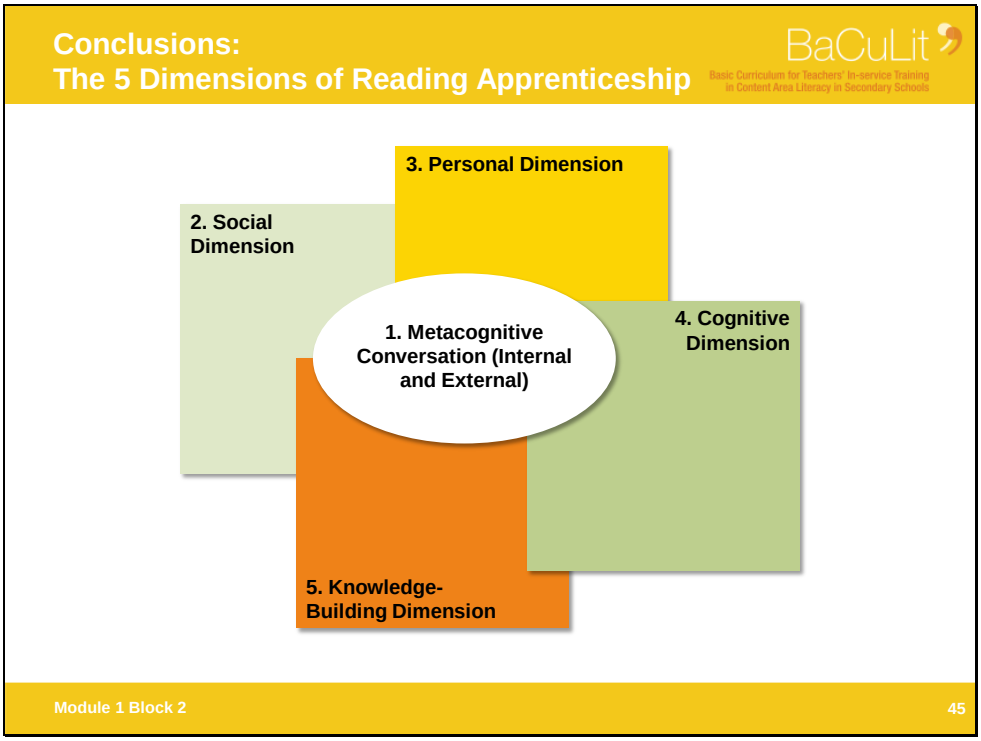
- **Mentally engaged,**
- **Motivated to read and to learn**
- **Socially active around reading tasks,**
- **Strategic in monitoring the interactive processes that assist comprehension:**
  - **Setting goals that shape their reading processes,**
  - **Monitoring their emerging understanding of a text, and**
  - **Coordinating a variety of comprehension strategies to control the reading process.“**

(Schoenbach, Greenleaf et al. 1999, p. 20)

Module 1 Block 2 44

„Reading Apprenticeship“: Fostering content-area literacy

(See Conceptual Foundations, p. 37)



Four key dimensions of classroom life that are necessary to support adolescent reading development:

- *„Personal dimension → „engagement“*
- *„Social dimension:* →supportive *interaction“*
- *„Cognitive dimension* → central relevance in modules no. 4 and 5
- *„Knowledge-building dimension* → central relevance in modules no. 2 and 3.

At the center of this model you find *„metacognitive conversation“* – the first cross-curricular concept of BaCuLit, called „metacognition“ – which ties the four dimensions together.

(Cf. Conceptual Foundations, p. 38)

Outlook and overview

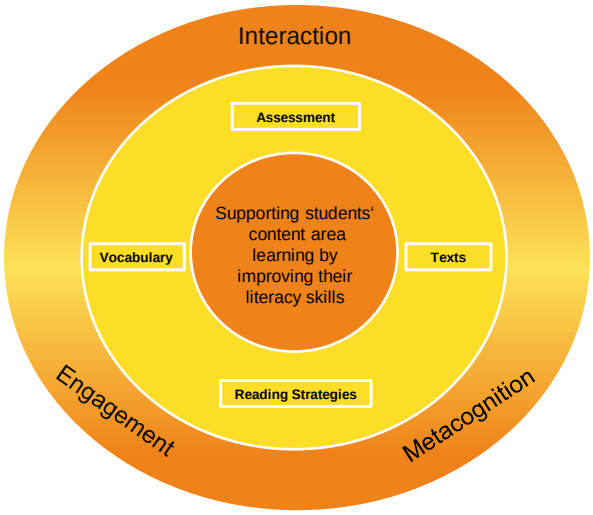
- Guiding Questions for Lesson Planning regarding the BaCuLit Framework

Material: M1_Mat. 2f_Guiding Questions for Lesson Planning

Module 1 Block 2 48

This part is offered in two versions in the Trainer Handbook: With the short version, input is provided by the trainer, with the longer version, it is worked out inductively by the participants with reference to their own practice of teaching. The second version might only be considered if Module 1 is separated into several units (course dates). For version 1 it is suggested to present and explain the single question complexes with the PPT; it is however also possible to pass out all questions on the work sheet (M1_Mat 2f) and leave the reading and discussion to pair and group work – according to the group circumstances.

Lesson Planning Framework of BaCuLit



Module 1 Block 2 49

The **BaCuLit Framework for Lesson Planning (WH)** is based on the ADORE Reading Instruction Cycle. The main goal though is to support students' content area learning by improving their literacy skills, as is indicated in the orange circle.

The inner circle shows the core concepts:
texts (Module 2)
reading strategies (Module 4)
vocabulary (Module 3)
assessment (Module 5)

The outer circle includes the cross-curricular concepts . These three concepts - engagement, interaction and metacognition – will therefore be introduced in module 1 in the following block.

(See also Conceptual Foundations, M1, p. 23-24)

Guiding questions for lesson planning (BaCuLit framework)

FORMATIVE ASSESSMENT I

- What do my ongoing assessment routines say about the strengths and weaknesses of my students (with respect to content, literacy learning, motivation)?
- How can I use this assessment information to provide responsive content literacy instruction? How can I support my students (whole class, single groups, and/or individual students) in using their strengths to overcome their weaknesses?

Module 1 Block 2 50

Guiding questions for lesson planning (BaCuLit framework)

SUPERIOR TOPICS and LEARNING GOALS of my LESSON / UNIT

- What are my goals for this lesson with respect to students' needs in content and literacy learning?
- What content is central to this unit? What do I expect students to know and do as a result of this unit?
- What instructional materials will I select to meet these learning expectations? If a fixed unit is used: how does text play a role in this unit?

Module 1 Block 2 51

Guiding questions for lesson planning (BaCuLit framework)

ENGAGEMENT

- How can I find out what students want to know about the topic in order to engage them in learning?
- How can I have them participate in choosing learning materials for this unit and setting up learning goals for their individual learning?
- How can I actively involve every student in the learning process?

Module 1 Block 2 52

Please provide all participants with either the questions (Material 2f) or the checklist (Material 2g) before presenting the questions. Then present the questions of each section and add comments or examples, after each section give participants time for questions and comments or time to fill in their checklist answers.

Guiding questions for lesson planning (BaCuLit framework)

INTERACTION

- How much modeling from my part will be necessary for students to use the strategies I want to include in this lesson?
- Which kind of support and scaffolding activities do I have to provide for students´ learning of this content?
- How can I arrange a maximum of participation and interaction among students?

Module 1 Block 2 53

Guiding questions for lesson planning (BaCuLit framework)

METACOGNITION

- How can I help students understand the importance of activating their own background knowledge?
- How can I help them focus on the learning tasks and setting own learning goals?
- How can I help students continually monitoring their own comprehension?
- What opportunities will students have to fix up areas of misunderstanding in order to perform well on the tasks and the final assessment?
- How will I provide students with opportunities to evaluate and reflect about their learning?

Module 1 Block 2 54

Guiding questions for lesson planning (BaCuLit framework)

TEXTS

- What are the characteristics of the specific text (I chose / we chose) and of this text genre in general?
- Which challenges (in structure, content and vocabulary) does this text contain for my students and how can I make it accessible to them? Is this text in their “zone of proximal development”?
- What are the big ideas in this text? How are they conceptually related? How are they related to the content of previous lessons?

Module 1 Block 2 55

Guiding questions for lesson planning (BaCuLit framework)

VOCABULARY

- How do I build understanding of essential vocabulary?
- How do I select words that are essential for students to learn in my content area?
- What strategies will I use to create students´ ownership of important vocabulary?

Module 1 Block 2 56

Guiding questions for lesson planning (BaCuLit framework)

READING STRATEGIES

- How can I model and scaffold the use of strategies before – during – after reading in order to better understand this particular text?
- What tools shall students use for structuring the content of this text during and after reading (e.g., selective underlining, summarizing, concept maps, Venn diagrams, tables, time relations, two column notes…)?
- What strategies will I offer my students to become actively persistent while reading?

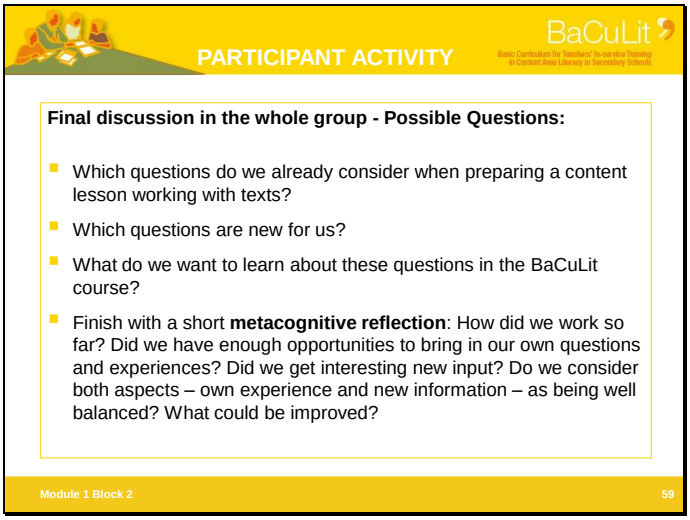
Module 1 Block 2 57

Guiding questions for lesson planning (BaCuLit framework)

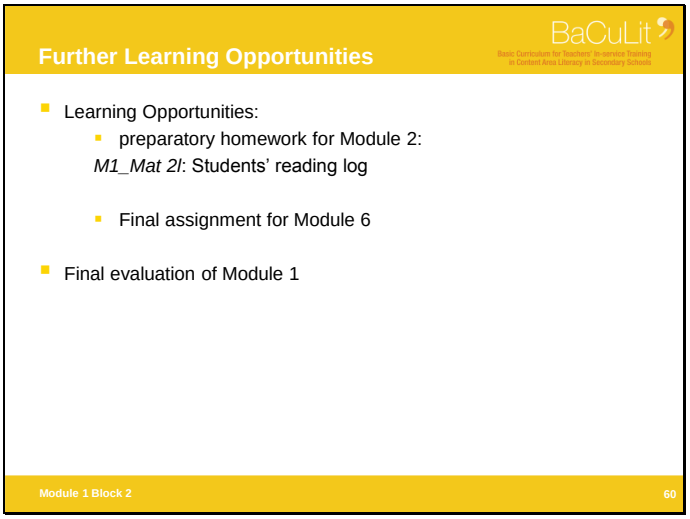
FORMATIVE ASSESSMENT II

- How can I assess my students' literacy abilities and strategies with my content texts?
- How can I assess my students' knowledge of key concepts and vocabulary from my content texts?
- How can I use this assessment information to provide responsive content literacy instruction?
- How can I help my students monitor their progress as readers and thinkers of my content texts?
- Which kind(s) of self-assessments should my students use?
- Which assessment information will I provide to students so they know what is expected of them?

Module 1 Block 2 58

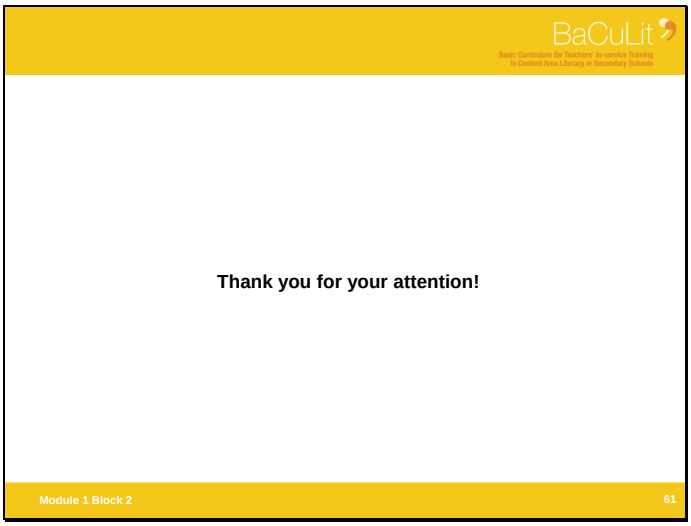


Here you might go back to your notes about teachers´ lesson planning questions which you put on a wallpaper before your input (see slide 4).



You could think of developing an assignment connected to the content of Module 1, i.e. practising aspects of metacognitive conversation with their students.

You could replace the evaluation sheet by other forms of evaluation more common in your country / your institution.



Module 2
Text Structure & Text Diversity

Overview

In this module, participants are given an important overview of the role of the diversity and authenticity of texts to develop communities of readers. Subject matter classrooms should participate in the construction of these communities, guiding students' learning through the features of the texts of their disciplines.

We start with an overview of the text worlds of the pupils, using the reading logs they have filled in (assignment from Module 1).

Next, we connect students' text worlds to the diversity of texts that can be used in classroom practice. We put the emphasis on authentic texts and we discuss advantages and disadvantages of their use in the classroom. The last part of this discussion around authentic texts is devoted to the discussion of the criteria for their selection.

The third section of this workshop focuses on content area structures and organization.

The five basic text type structures are introduced through examples and exercises, including graphic organizers.

The final section deals with texts' "learnability" focusing on how texts are crafted to help students acquire new content knowledge.

The module concludes with participants examining the ways in which their own text materials guide their students' learning.

Module Highlights

- ❑ Student's text worlds; gender differences
- ❑ The text diversity framework
- ❑ Authentic texts and their use in the classroom
- ❑ Organization of content area texts: text structures and graphic organizers
- ❑ Text 'learnability'

Workplan

Block	Topic	Activities	Resources (Materials)
1	*Estimated time 1h* **[Essential Content]**		
	Students' text worlds *(~ 30 min.)*	ACTIVITY 1 - Group work Assessing students' reading habits: Teachers analyse 10 to 14 reading logs according to instructions INPUT 1: short clarification of the list about the diversity of reading materials if requested by the teachers	**Material 1a:** Worksheet with instructions to analyse Students logs (**previously distributed M1_Mat 2l M2_Mat 1a)** **Material 1b**: Filled students' reading logs **Material 1c:** List of the diversity of reading materials
	Context and purposes differences Gender differences *(~ 30 min.)*	ACTIVITY 2 – Comparing & discussing in whole group main findings of the previous analysis	
	Estimated time 2hrs **[Essential Content]**		
	The relevance of texts and reading materials for learning *(~ 10 min.)*	Short reflective ACTIVITY 3 Why are texts relevant for the classroom?	**Material 1:** M2_PPT Block 1, Slide 5

	Self concepts about texts *(~ 20 min.)*	INPUT 2 - What is a text? What kind of texts are there in the world? A possible classification of texts based on different criteria and by reference to PISA framework of situations for reading: • form • content • purposes	**Material 1:** M2_PPT Block 1, Slides 6- 7
	COFFEE BREAK		
	Types and structures of texts *(~ 15 min.)*	INPUT 3 - Types and structures of texts • Authentic texts • Continuous and non-continuous texts • Multimodal texts	**Material 1:** PPT Block 1, Slides 8-13 **Material 1d:** Graphic organizer for note taking during input
	• The texts of the disciplines • The texts in the textbooks *(~ 25 min.)*	**REFLECTIVE ACTIVITY 4:** • *What connections are there with your students' text worlds?* • *What types of texts are more frequent in your disciplines?* • *How does your textbook page look like?*	**Material 1:** PPT Block 1, Slide 14 **Material 1g:** pages from national textbooks

	Introducing authentic texts in the classroom • Advantages and disadvantages *(~ 15 min.)*	ACTIVITY 5: Brainstorming exercise • What would be the main advantages and disadvantages of using authentic texts in classrooms?	**Material 1** – PPT Block 1, Slides 15-17 **Material 1e** – Tree Chart graphic organizer
	• Criteria for selecting and using authentic texts *(~ 20 min.)*	INPUT 4: Criteria for selecting texts suggested by research, especially: • Suitability of content • Compatibility with course objectives • Exploitability • Readability (understandability)	**Material 1** – PPT Block 1, Slide 18
		ACTIVITY 5 Pair work • teachers work in pairs to give their opinions regarding the criteria to select authentic texts	**Material 1f** – Worksheet for pairs to comment criteria for selecting authentic texts
	Authentic texts and texts of disciplines Similarities and differences *(~ 15 min.)*	Short reflective **ACTIVITY 6**: • In what ways do these features relate to the texts of the different disciplines? • Will be there any differences among them?	**Material 1** – PPT Block 1, Slides 19-20
LUNCH BREAK			
Block	**Topic**	**Activities**	**Resources (Materials)**
	Estimated time 1,5 hrs **[Essential Content]**		

2	**Organisation of content area texts: text structures and Graphic organizers**		
	The importance of text structure for understanding *(~ 30 min.)*	**ACTIVITY 7** Teachers organize a text according given instructions Short reflective **ACTIVITY 8:** Discussion about relationship between structure and meaning. Implications for learning	**Material 2** – PPT Block 2 - Slides 5-6 **Material 2a** – Worksheet with a text to organize
	Concepts of • Signal words • Signal questions *(~ 60 min.)*	**ACTIVITY 9** 1.a) Teachers identify the kind of rhetorical relationship in the text • Cause – effect 1.b) Teachers identify words that confirm causation **INPUT 5** Concept of text structure; signal words **ACTIVITY 10** Teachers identify the signal words of the text and conclude about the structure • Description **ACTIVITY 11** - The trainer introduces the concept of **signal questions** and **paragraph frames** asking teachers what kind of questions can be put to the text	**Material 2** – PPT Block 2 – slide 7 **Material 2** – PPT Block 2 – slide 8

	Examples of • Paragraph frames • Graphic organizers	**INPUT 6** • Signal questions (= key questions) Definition and examples • Paragraph frames Definition and examples • Graphic organizers Definition and examples **ACTIVITY 12** – Teachers explain formats of some Graphic organizers	**Material 2** – PPT Block 2 – slides 8-10 **Material 2** – PPT Block 2 – slide 11-12
	Text structures: • sequence • compare and contrast • problem and solution	**INPUT 7** - The trainer describes other text structures • Sequence • Compare and contrast • Problem and Solution **ACTIVITY 13** Pair work	**Material 2b _** Handout for Mat_2- Slides 7-13 **Material 2c** – Worksheet for pair work
Coffee break			
Block	**Topic**	**Activities**	**Resources (Materials)**
2	*Estimated time 1,5 hrs* **[Essential Content]**		
	'Learnability': what makes a text understandable?	**INPUT 8** What makes a text understandable? What is "text **learnability'**" and why is it important for the content areas?	**Material 2 -** PPT Block 2 – slides 15 - 19

	Assessing learnability of textbooks	**ACTIVITY 14** The trainer distributes a checklist for a GROUP EXERCISE: Teachers apply (and adapt, if necessary) the checklist to one of their own texts (Mat_2d). Teachers share and compare their results and discuss in how far the checklist meets the special needs of their content area. IN PLENARY: Discussion of usability, problems in using the checklist and ways to adapt the checklist to one's own content area texts.	**Material 2d -** Learnability checklist **Material 2e -** Textbooks brought by teachers

Attention: Preparatory work for TRAINERS

1. Incorporate your own examples, photos into the power point slides
2. Choose your own texts and pages of content area textbooks and substitute the examples in PPTs and worksheets / handouts.

Attention: Preparatory materials for TEACHERS

Participants need to bring their ***own content area text books.***

List of Materials

No.	Description
1	PPT for Block 1 about the diversity of texts and the use of authentic texts
1a	Worksheet with instructions for analysing a random selection of student responses (5 boys, 5 girls).
1b	Filled reading logs brought by teachers (distributed at the end of Module 1)
1c	List of the diversity of reading materials
1d	Graphic organizer worksheet for note taking and reflecting during input
1g	Pages from textbooks brought by trainers
1e	Network tree chart for brainstorming
1f	Worksheet for pairs to discuss criteria for selecting authentic texts
2	PPT for Block 2 about text organization and graphic organizers; “readability” and “learnability”
2a	Worksheet with a text to organize
2b	Handout on text structures, signal words and signal/summary questions
2c	Worksheet for pair work
2d	Readability checklist
2e	Textbooks brought by teachers

Conceptual Foundations for Module 2
[Marie Lourdes de Dionísio]

This Module deals with one of the four thematic elements of BaCuLit: Texts. Special attention is given to their diversity and to their structure and organisation.

Following the ADORE key-element "Reading Materials", their selection of texts for the classroom, together with methodological decisions for learning is also considered in BaCuLit to be of great importance, mainly because of the impact that texts teachers bring to the classroom may have upon students' engagement and development of reading strategies. Indeed, research has shown that texts used in the classroom expand or limit students' opportunities to learn.

Wade and Moje (2001), Alvermann & Moore (1991), among many others, found that students hardly ever engage in content area reading of any kind, either in class or as homework. According to these authors, students probably do not do any reading because classroom texts are not meaningful for young people, are difficult to understand, and therefore not engaging. "Another reason why students do not read is that teachers often do not assign textbook or primary source material, except occasionally in advanced courses, in a way that suggests to students that such reading is important to their learning" (Wade & Moje, 2001). Why does this happen? A possible explanation could be that teachers do not assign texts of their disciplines for reading because they think students will not be able to understand them or that the content or textual quality are not adequate. Teachers' view of what a text is may also influence the kind of reading materials they judge as appropriate for their students.

Today, the concept of text is very broad. From a social semiotics perspective (Halliday 1978; Hodge & Kress 1988; van Leeuwen 2005), texts may be defined as any instances of communication that are used to convey meaning (Kress 2003): words; sentences; maps; graphs; pictures; drawings; tables… For the purpose of the BaCuLit training texts will be considered only to the extent they involve written language.

The Module is divided into two blocks. The first one is dedicated to the diversity of texts that surrounds us and that should enter all classrooms in order to allow connections between students' worlds and text worlds. That is why the Module starts with the analysis of students' reading logs and develops around concepts of reading purposes and authenticity.

In this first block, texts are viewed in the situations they usually occur and within the context of purposes for which one has to read them. The framework of situation variables that sustain this moment of the module stems from the OECD, which is taken from the Council of Europe's work on language. This framework posits the existence of three types of reading purposes and the texts that usually go together:

"*Reading for private use (personal):* this type of reading is carried out to satisfy an individual's own interests, both practical and intellectual. It also includes reading to maintain, or develop, personal connections to other people. Contents typically include personal letters, fiction, biography, and informational texts read for curiosity, as a part of leisure or recreational activities; *Reading for public*

use: this type of reading is carried out to participate in the activities of the larger society. This includes the use of official documents as well as information about public events. In general, these tasks are associated with more or less anonymous contact with others; *Reading for work (occupational):* […] tasks that are typical of reading for work … closely tied to the accomplishment of some immediate task. …Typical tasks are often referred to as "reading to do" (OECD 1999, 23).

If we accept that literacy is the flexible and sustainable mastery of a repertoire of practices with the varied texts we have to use for different purposes, to prepare students to "take part fluently, effectively, critically in the various text and discourse-based events of contemporary societies" (Freebody & Luke 2003) should be one of the major educational goals to be pursued by teachers.

To achieve this goal the materials for reading and learning in the classroom should be those that students are surrounded by every day, texts of real life, i.e. authentic texts.

Although strongly associated in educational settings with foreign languages learning, authentic texts and materials - "any material which has not been specifically produced for the purpose of language teaching" (Nunan, as cited in Macdonald, Badger & White 2000) – are also very adequate and recommended for learning in any discipline because they have the potential to involve students in real literacy events. In the classroom, other aspects have been proving the positive effect of using such authentic materials: for instance, they are highly motivating, giving a sense of achievement when understood and encourage further reading.

Anything can be used as authentic reading material but for developing reading skills one of the most useful resources is the Internet, with large amounts of varied material being easily accessible.

Teachers usually ask Why to use authentic texts and not only the textbook?

Research has answered that one of the main reasons for using authentic materials in the classroom is the access it allows for the learner to deal with the real world and language how it is used outside the "safe", controlled language learning environment, and outside the artificial language and content of the classroom.

Literature has identified several arguments for and against the use of authentic texts/materials for learning. According to Berardo (2006), among the arguments in favour, one may find: authentic materials have a positive effect on learner motivation; they provide updated and situated information; they provide exposure to real world; they relate more closely to learners' needs and interests; they support a more creative approach to teaching; they provide a wide variety of text types, language styles not easily found in conventional teaching materials; they have a positive effect on comprehension and learner satisfaction. Teachers sometimes share arguments against such as: authentic materials often contain difficult language, unneeded vocabulary items and complex language structures, which causes a burden for the teacher and demotivate low level students. Time consumption is the con-argument which has most often been pointed out by teachers. Part of this time is spent in selecting these materials.

In fact, for classroom and learning purposes, teachers have to make several decisions about content and form when they want to use authentic texts either as supplementary text or nuclear one. Important factors in selecting authentic materials are, not only the textual authenticity, but also:

- The suitability of content and compatibility of course objectives require that the text should

interest the students as well as be relevant to their needs and the discipline goals and standards. The texts should motivate as well as;

- The exploitability, which refers to how the text can be used to develop the students' competence as readers. A text that cannot be exploited for teaching purposes has no use in the classroom; can good questions be asked about it or tasks based on it created? These are questions one has to put to the text to fulfil this criterion.
- Readability (or understandability) is used to describe the combination of structural, lexical, semantic and pragmatic difficulty of a text, as well as referring to the amount of new vocabulary present. It is important to assess the right level for the right students.

Finally, variety and presentation also influence the choice of authentic materials. As it was said before, learning can be made more engaging if the teacher uses a *variety* of texts and not only the textbook. Whether the text looks authentic or not, is also very important when *presenting* it to the student. Berardo (2006, 62-63) says that "the authentic" presentation, through the use of pictures, diagrams, photographs, helps to put the text into a context. This helps the reader not only to better understand the meaning of the text but also how it can be used. A more *"attractive"* text will appeal to the students and motivate them to read. It may seem to be a very superficial aspect but the appearance of any article is the first thing that the student notices. An *"attractive"* looking article is more likely to grab the reader's attention than a page filled with letters. Very often it is so easy to just download an article from the Internet and present the student a page full of impersonal print, without taking any of these factors into consideration" (62-63).

It is also important to consider if the text is challenging enough but without making "unreasonable linguistic demands". But above all we have to ensure that "the text makes the student want to read for himself, tell himself something he doesn't know as well as introduce new and relevant ideas." (Berardo 2006)

A more important classification of texts, and one at the heart of the organisation of the OECD/PISA assessment, is the distinction between *continuous and non-continuous texts*.

Continuous texts are typically composed of sentences that are, in turn, arranged in paragraphs. These may fit into even larger structures such as sections, chapters, and books. *Non-continuous texts* are most frequently organised in matrix format, based on combinations of lists.

Conventionally, *continuous* texts are formed of sentences arranged in paragraphs. In these texts organisation is evident in paragraphing, indentation, and the breakdown of text into a hierarchy signalled by headings that help readers recognise the structure of the text. These markers also provide clues to text boundaries (marking section completion, for example). The finding of information is often facilitated by the use of different font sizes, font types such as italic or bold, and borders or shading. The use of format clues is an essential sub-skill of effective reading. Organisational information is also signalled by discourse markers. Sequence markers (first, second, third, etc.), for example, signal the relationships between the units, which they introduce and indicate how the units relate to the larger surrounding text.

The primary classification of *continuous* texts is by rhetorical purpose, or text type. These include expository, descriptive, argumentative and injunctive:

 Description is the type of text where the information refers to properties of objects *in space*. Descriptive texts typically provide an answer to *what* questions.

 Narration is the type of text where the information refers to properties of objects *in time*. Narration texts typically provide answers to *when*, or *in what sequence,* questions.

 Exposition is the type of text in which the information is presented as composite concepts or mental constructs, or those elements into which concepts or mental constructs can be analysed. The text provides an explanation of how the component elements interrelate in a meaningful whole and often answers *how* questions.

 Argumentation is the type of text that presents propositions as to the relationship among concepts or other propositions. Argument texts often answer *why* questions. Another important sub-classification of argument texts are persuasive texts.

 Instruction (sometimes called *injunction*) is the type of text that provides directions on what to do.

Non-continuous texts are organized differently, and allow the reader to employ different strategies for entering the text and extracting information. On the surface, these texts appear to have many different organizational patterns or formats, ranging from tables and schedules, to charts and graphs, and from maps to forms.

The organizational patterns for these types of texts have one of four basic structures:

- simple list
- combined list
- intersected list
- nested list

Besides these texts whose informational content is organized into rows and columns, nowadays knowledge is delivered in much more complex ways, requiring from the reader much more sophisticated skills.

Texts that convey information through the combination of various semiotic systems are called *Multimodal texts.*

A text may be defined as multimodal when it combines two or more of the five semiotic systems.

- *Linguistic*: comprising aspects such as vocabulary, generic structure and the grammar of oral and written language
- *Visual*: comprising aspects such as colour, vectors and viewpoint in still and moving images
- *Audio*: comprising aspects such as volume, pitch and rhythm of music and sound effects
- *Gestural*: comprising aspects such as movement, speed and stillness in facial expression and body language
- *Spatial*: comprising aspects such as proximity, direction, position of layout and organisation of objects in space (Cope & Kalantzis 2000)

Picture books, in which the textual and visual elements are arranged on individual pages that

contribute to an overall set of bound pages; Webpages, in which elements such as sound effects, oral language, written language, music and still or moving images are combined… are all examples of multimodal texts delivered via different media or technologies.

Because the concept of literacy has expanded exponentially teachers need to support students' ability with these new texts to foster the flexible mastery of texts in all formats and supports,.

Michèle Anstey and Geoff Bull (2010) identified several areas of professional learning which need attention if one wants to integrate multimodal texts into classroom practice. Among those areas one deserves to be highlighted "an understanding that texts perform a particular function over time or within a specific context, and they are designed to achieve particular communicative purposes. An understanding of a text's purpose, audience and method of communication is key, as is an understanding of not only what is included in a text, but how different elements relate to each other, and the effect they are designed to achieve"; and making transparent the processes *of reading and writing multimodal texts: "*Explicit pedagogy is functional and goal directed and ensures that teachers and students have a common understanding about the expectations and responsibilities of learning. In an explicit pedagogical approach, classroom interaction has particular characteristics and it is recognised that every literate practice in the classroom builds students' understandings about what counts as literacy or literate practices."

Besides the notion of text, content area teachers also must develop knowledge about the specialized texts of their disciplines. This means that teachers may be more efficient in the support of their students' learning if they are aware of the codes and conventions of how meaning is conveyed in the different content areas.

Research has identified how "disciplines remain distinguishable from one another because of the types of texts and approaches to texts that are oftentimes found therein" (Wilson 2011, 436). Together with different features of each discipline go different ways of reading and writing them. For instance "In English, just as individual authorship is often permitted and acknowledged—even celebrated and considered an important object of study—in the texts that students read, so, too, is individual authorship rewarded in the texts that students write. A primary purpose of this discipline has been to teach each student "to give expression to thoughts of his [*sic*] own […] This emphasis on *individual* thoughts, rather than on shared historical contexts and group affiliations as in disciplines of history" (Wineburg 1991), and this emphasis on individual *thoughts*, rather than on observable outcomes related to objective physical phenomena as in disciplines of science (Bazerman 1988), are two characteristics that distinguish English as seeming "more personal than [other subjects]" (Siskin 1994, 154; cf. Elbow 1990), "a characteristic that is instantiated in and through the texts that students read and write." (Wilson 2011, 437)

This perspective towards the specificity of the texts of the various disciplines sustains a similar vision regarding the uniqueness of reading and writing demands in the different content areas, leading to specific classroom ways for dealing with texts. To a certain extent this view opposes "content area literacy", which is seen as giving origin to too generic reading strategies. However, several authors have been advocating that beyond these dichotomies, the "good of the students" requires "a blend

of practices from both approaches" (Brozo, Moorman, Meyer, Stewart 2013, 354).

BLOCK 2

It is this belief that constitutes the foundation of the second Block of the Module: Text organization. In this block, the focus will be on the reasons and ways of using text structure and organization for meaning making. It is our belief that the knowledge of how texts are crafted helps students in learning new content knowledge.

The research literature in this field reveals that students' reading comprehension skills improve when they acquire knowledge of texts' structural development and use them properly. Students' recall protocols are one area where instructions on text structure have an impact. Meyer (1985) stated that knowledge of the rhetorical relationship of the ideas – main idea, major ideas, and supporting details – helps readers with their comprehension of the content texts. If students know what to look for in terms of text structure, they will grasp the meaning more easily.

The structures of the text are not a closed list, although text grammar has identified five main text structures: description, sequence, compare and contrast; cause and effect and problem solution. Writers use signal words and phrases (also called *transition words* or *connectors*) to link ideas and help the reader follow the flow of the information. These words and phrases give clues to the reader about the purpose of the author: describe; narrate; compare and so on. This intention will correspond to the pattern of the text.

To learn from a text requires from the reader to ask clarifying questions about the text and note the textual features that might be useful for building new knowledge. Teachers have to familiarize students with the main textual features and one way of doing this is questioning the text and writing a plan of it according to a visual aid.

These visual aids have many similar names: graphic organizers, knowledge maps, concept maps, story maps, cognitive organizers, advance organizers, or concept diagrams, and are communication tools that use visual symbols to express ideas and concepts, to convey meaning. Most graphic organizers allow the mind 'to see' undiscovered patterns and relationships.

Many researchers argue that "without specific training in the art of expository reading, students will find expository texts alienating and difficult to read" (Fang 2008, 478).

According to Tompkins (1998) teachers should use three steps to teach text structures:

1) Introduce an organizational pattern - The teacher introduces the signal words and phrases that identify each text structure and gives students a graphic organizer for each pattern.

2) Give students opportunities to work on the text - The teacher provides the students with chances to analyse the text structures in informational books, not stories. At this stage, students learn the signal words and phrases in the text that identify each text pattern. They may also use graphic organizers to illustrate these patterns.

3) Invite students to write paragraphs using each text structure pattern - The students' first writing activity should be a whole-class activity, followed by small-group, partner, and independent writing activities. This involves selecting a topic and using a graphic organizer to

plan the paragraphs. Finally, the students write a rough draft using signal words and phrases for the text structure, revise, and edit the paragraph to produce the final product. The teacher can then repeat these steps for each of the five text structures to ensure comprehensive text structure coverage.

Awareness of author's craft is an essential element for learning. Complexity of texts may be analysed in several ways. One of them is using checklists. Project CRISS developed a content textbook assessment rubric divided into five parts: Overall Content and Correlation with Standards; Supporting features for preparing students, such as background knowledge and purpose setting; Text Organizational Features; and Supporting features after reading. For the purpose of this Module, the focus is on features of the text organisation such as: Author's writing style, Organization of information, Main ideas; Support for main ideas; Vocabulary development.

This checklist can best be used if you have a specific group or class in mind while you rate the text. The purpose of a checklist is to find out if the text is suitable for the students and if they can learn through its reading.

As Santa, Havens, Franciosi, Valdes (2012) say, "taking a qualitative approach to examining text makes the most sense for selecting appropriate reading materials. Our students deserve to read well-written text. Becoming aware of qualitative features, such as explicit main idea presentation, the clarity and elaboration of content, and the prevalent writing patterns within a selection, guides us in planning instruction".

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PPT Slides M2_Mat 1

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

Module 2 – Block 1 (material 1)

Text Structure & Text Diversity

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

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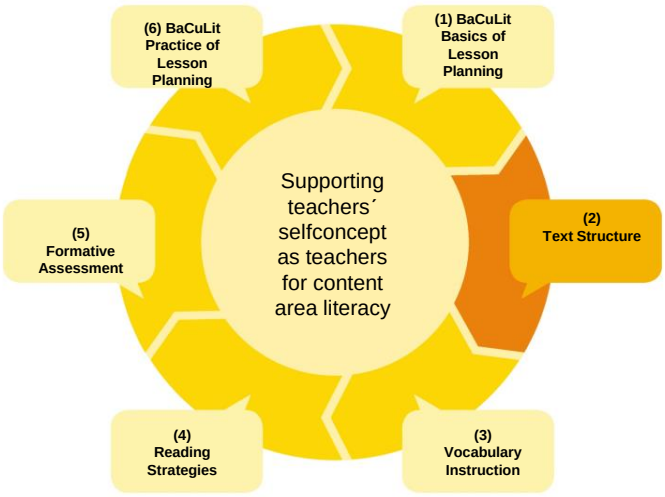
BaCuLit
BaCuLit Association e.V.

Lifelong Learning Programme

Universität zu Köln

Modul 2 Block1 2

The BaCuLit Curriculum



Modul 2 Block1 3

Module 1 and 6 deal with Lesson planning as the central instrument of BaCuLit for bringing lesson planning elements and concepts into practice. Therefore the curriculum cycle starts and ends with this topic. In this Module 6 all participants are requested to present their own BaCuLit lesson plan which incorporates all elements and cross-curricular concepts they encountered during the course.
You can use this slide with the curiculum and the next slide with the lesson planning framework to briefly go over the key elements and the ways in which they are connected.

Content of Module 2: Text Diversity

Block 1

- **How can teachers connect students‘ textworlds to the diversity of texts?**
- **What are the advantages and disadvantages of using authentic texts in the classroom?**

Block 2

- How can teachers use textual structure and organization for meaning making in content areas?
- How are texts crafted to help students learn new content knowledge?
- How can teachers own text materials guide their students’ learning?

Modul 2 Block1 4

This Module deals with one of the four thematic elements of BaCuLit: Texts. Special attention is given to their diversity, which will be the focus of this first Block, and to their structure and organisation that will occupy us in Block 2.
To be aware of text diversity, in this first moment of Block 1, you will travel through student’s text worlds that teachers researched at the end of Module 1.
We connect students’ text worlds to the diversity of texts that can be used in classroom practice. We put the emphasis on authentic texts and we discuss advantages and disadvantages of their use in the classroom. The last part of this discussion around authentic texts is devoted to the discussion of the criteria for their selection.

In Block 2 the focus will be on the reasons and ways of using text structure and organisation for meaning making. It is aour belief that the knowledge of how texts are crafted helps students learn new content knowledge.

Students' text worlds
Instructions for group work

- From your collection of reading logs select from 10 to 14 students. We recommend a numerically equal selection of girls and boys / students / pupils. Number the documents (G-girl, boy-B).

➢ Analyze the logs for the following criteria: a) according to the context, and b) the reading purpose.

- **What text materials / texts are read?**
- **Write down some conclusions.**
  - Are there differences in reading habits in terms of weekdays and Sundays?
  - **Are there any differences regarding gender? Which ones? How can you use this information in your teaching?**

Modul 2 Block1 5

Ask teachers to gather in groups of 4-5 to analyse 10 to 14 reading logs according to instructions

Distribute the worksheet (Material 1a) with instructions
Use for the analysis the list of the diversity of reading materials (Material 1.c). You should clarify the list of reading materials if requested by the teachers

The reading materials that enter the classroom are paramount

Literacy: the flexible and sustainable mastery of a repertoire of practices with varied texts we have to use for different purposes

Education goal: To prepare students to "take part fluently, effectively, critically in the various text and discourse-based events of contemporary societies".

(Freebody & Luke, 2003)

Modul 2 Block1 6

Following the ADORE key-element "Reading Materials", their selection of texts for the classroom, together with methodological decisions for learning is also considered in BaCuLit to be of great importance, mainly because of the impact that texts teachers bring to the classroom may have upon students' engagement and development of reading strategies.
In this first Block, texts are viewed in the situations they usually occur and within the purposes one has to read them.
With this slide you will conduct a short reflective activity about: Why are texts relevant for the classroom?
You can also discuss teachers self concepts about texts
You can also use this slide to wrap up the Activity 2 of the previous slide and bridge with the next point. You can clarify the education goal by saying that the three ways with texts: *fluently*, *effectively* and *critically* correspond to capacities people need for dealing with texts, as it is said in OECD (2009, p. 14): "*understanding, use and reflect on and engage with written texts*"

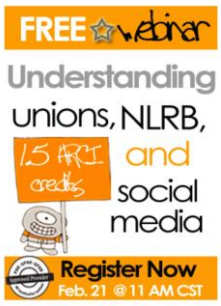
What is a text?

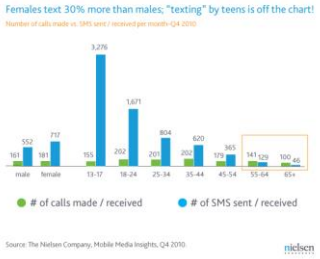
- Any instance of **written** communication that is used to convey meaning

Tannhäuser/Così fan tutte, Lisbon

Performances of Wagner and Mozart illustrate the contrasting fortunes of state- and privately funded opera at a time of austerity

The Financial Times / 16 Jan 2012





Modul 2 Block1 7

EXAMPLES OF TEXTS to be chosen by each partner.
The idea with this slide is to illustrate that the concept of text is very broad. From a social semiotics perspective (Halliday, 1978; Hodge & Kress, 1988; van Leeuwen, 2005), texts may be defined as any instances of communication that are used to convey meaning (Kress, 2003): words; sentences; maps; graphs; pictures; drawings; tables…

You can connect also with students' text worlds.

Situations for reading and texts

	Reading for private use	Reading for public use	Reading for work	Reading for education
Others	Self Relatives Friends	Anonymous	Objects Co-workers Managers	Instructors
Use	Curiosity Contact	Information	To do	To learn
Contents	Letters Fiction Biography „How to…" books and magazines Maps	Notices Regulations Programmes Pamphlets Forms	Iustructions Manuals Schedules Reports Tables/Graphs	Texts Maps Schematics Tables Graphs

Source: OECD, 1999

Modul 2 Block1 8

You can introduce now the PISA framework that considers the existence of three types of situations, connecting them with reading purposes and to the texts that usually go together in similar situations.
According to OECD/PISA, **situation** can be understood as a categorisation of tasks based on their intended use, on the relations to **others** implicit or explicit in the task, and on the general **contents**. Thus, reading a textbook would be an example of an educational situation because its primary use is to acquire information as part of an educational task (**use**), it is associated with assignments from teachers or other instructors (**others**), and its content is typically oriented to instruction and learning (**content**).
Situation in this framework "refers more to the uses for which an author composes a text than to location or setting -- For example, textbooks are read both in schools and in homes, and the process and purpose probably differ little from one setting to another." (OECD, 1999, p. 23)
You can differentiate between ***Reading for private use (personal***; ***Reading for public use*** **and** ***Reading for work (occupational)*** *(cf. Conceptual Foundations, p.95-96)*

Texts we encounter every day around us

… in print, in images, in video, in combinations of forms in digital contexts

Authentic texts

"…real-life texts, not written for pedagogic purposes" (Wallace 1992: 145)

"…materials that have been produced to fulfill some social purpose in the community." (Peacock, 1997)

Modul 2 Block1 9

Make sure you distribute Material 1e_Note-taking graphic organizer – for teachers to take notes during your input.

PISA framework for Text types/genres

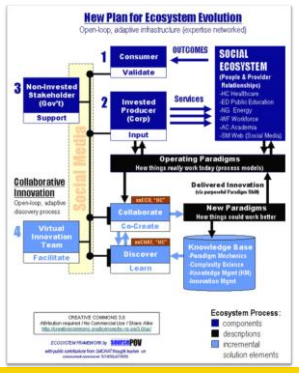
Continuous	vs	Non-continuous
Prose		**Examples**
Organization by:		tables and schedules,
paragraph setting,		charts and graphs,
Indentation		maps and forms
headings		**Organizational patterns for these types of texts**
Classification by rhetorical purpose:		simple list
expository		combined list
Descriptive		intersected list
Argumentative		nested list
Injunctive (or instructions)		

Modul 2 Block1 10

You can develop your knowledge about this PISA framework by looking into http://dx.doi.org/10.1787/9789264190511-en, which is an online publication of OECD (2013).
Since 1999, for PISA, texts have been organized around to two main types: continuous and non-continuous (cf. Conceptual Foundations, p. 97-98.)

To be replaced by national examples

Example: Non-continuous texts



http://sourcepov.com/2009/09/

To be replaced by national examples

Example: Non-continuous texts

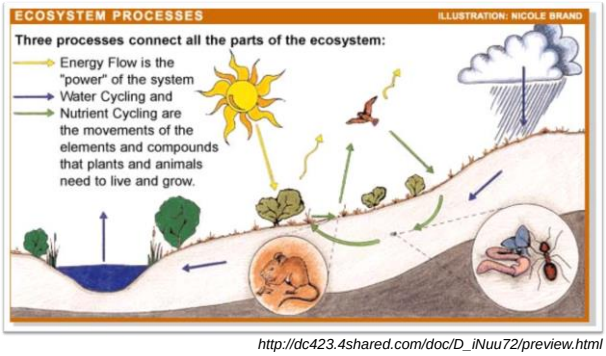
Advantages and Limitations of Item Formats

Item format	Advantages	Limitations
Multiple choice	• Many items in one test can address a wide range of outcomes. • Items can make fine distinctions in students' knowledge and understanding. • Hand-scoring is not required, so testing is relatively inexpensive.	• Expertise is required to develop high-quality items. • Students do not generate understanding. • Students may guess.
Closed constructed response (one- or two-word answer)	• Students locate or recall information themselves. • Hand-scoring is relatively straightforward.	• Items usually address a limited range of outcomes (mainly retrieval and recall).
Open-ended short response (one- or two-sentence answer)	• Students can be required to generate high levels of understanding. • Items can address a range of outcomes. • Partial understandings can sometimes be measured.	• Expertise is required to write clearly focused items. • Trained raters and quality control measures are required, thus contributing to costs. • Items that take time for students to answer reduce the range of outcomes that can be addressed.
Essay or extended response	• Students can demonstrate a depth of understanding. • A range of partial understandings can be measured.	• A limited range of outcomes can be addressed. • Trained raters and quality control measures are required, resulting in higher costs.

Anderson & Morgan (2008)

To be replaced by national examples

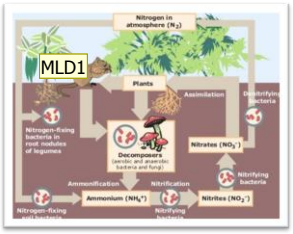
Example: Non-continuous texts



http://dc423.4shared.com/doc/D_iNuu72/preview.html

Multimodal texts

- Examples of a sort of a multimodal text: **Nutrient cycling**



http://sites.psu.edu/yix5048/files/2012/04/123.png

- **Combines two or more semiotic systems:**
  - Linguistic
  - Audio
  - Gestural
  - Spatial
- Multimodal texts can be delivered via different media or technologies. They may be live, paper, or digital electronic

Modul 2 Block1 14

To give an idea of a real multimodal text, you should use an example of the internet, which will clarify the several semiotic systems interacting. You can find at the internet texts where sound, movies, drawings, words go together to convey meaning.

Reflection Time

- What connections are there with your students' textworlds?
- What type of texts are more frequent in your disciplines?
- How do your textbook page look like?

Module 2 Block 1 15

For around 25m you discuss with teachers the connections that can be found between the text types that have been presented and students textworls.

You also should connect to the texts of the different disciplines.

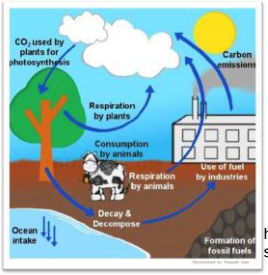
Ask teachers to analyse the textbook pages they brought (or you brought) trying to find out the types of texts that can be found there.

MLD1

Introducing authentic texts in your classroom

Steps of the Carbon Cycle

Carbon is regularly being exchanged among the atmosphere, land, water, and the living beings. In fact, it is constantly on the move! Let us unterstand how the carbon cycle works.



http://www.buzzle.com/articles/the-carbon-cycle-steps.html

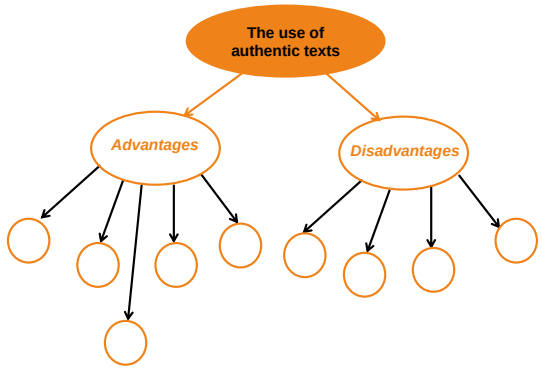
Modul 2 Block1 16

Partners should introduce here an authentic text from their own contexts.

Make sure that teachers have the Tree chart graphic organiser – Material 1f – in front of them.

Remember that an authentic text is one which has not been produced for school purposes.

The use of authentic texts



Modul 2 Block1 17

Teachers will have a similar organizer ina worksheet

Introducing authentic texts in the classroom: Advantages and disadvantages

For around 15 min. teachers will perform a brainstorm - ACTIVITY 5:

What would be the main advantages and disadvantages of using authentic texts in classrooms?

The use of authentic texts/reading materials

The main advantages:

- having a positive effect on student motivation;
- giving authentic information;
- exposing students to real language;
- relating more closely to students' needs;
- supporting a more creative approach to teaching.

Arguments against:

- Language and content difficulty
- unneeded vocabulary items
- complex language structures

} burden for the teacher, demotivation for the students

- *Time consuming for the teachers*

Modul 2 Block1 18

This slide can be used to sum up teachers opinions or to compare and compliment their opinions.

Criteria for Selecting and Using Authentic Materials

- Textual authenticity
- Suitability of content
- Compatibility with course objectives
- Exploitability
- Readability and understandability

Modul 2 Block1 19

During this Input, you will explain important factors for selecting authentic materials, which are not only the textual authenticity.
The following factors are also relevant:
The suitability of content and compatibility of course objectives (text should interest and motivate the students)
The exploitability (text can be used to develop the students' competence as readers)
Readability and understandability (Cf. Conceptual Foundations, p. 97)
After the input, you ask teachers to work in pairs to give their opinions regarding the criteria for electing texts.
During the presentation of the opinions, you may ask if the texts they bring to their classrooms share these characteristics.

PARTICIPANT ACTIVITY

- What do you think are the main characteristics of the texts you have to use in your disciplines?

Module 2 Block 1 20

After the input about the criteria for selecting texts, you will orient your talk to the texts teachers bring to their classrooms.
In this Activity 6 you will ask teachers to think about the texts they use in their disciplines and to think about some of their features.

After a short discussion you introduce the next slide

The texts of the disciplines
Some features

Language	emphasis on **individual thoughts**
Mathematics	Numeric and symbolic Explanations; proofs; Graphs and other visual displays Orders Precise and objective world
Science	Observable referents. Emphasizes tangible objects. invisible processes iconic representations
Social Sciences	photographs, maps, videos, music, monuments, and other man-made cultural artifacts Cause-effect; continuity; time Observable events/phenomena

According to Wilson, 2011

Modul 2 Block1 21

This slide illustrates some of the features that teachers may have identified in the texts of their disciplines. Their views can be confronted and complemented with the information of this slide.

Thank you for your attention!

Modul 2 Block1 22

PPT Slides M2_Mat 2

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

Module 2 – Block 2 (material 2)

Text Structure & Text Diversity

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

- "This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein."

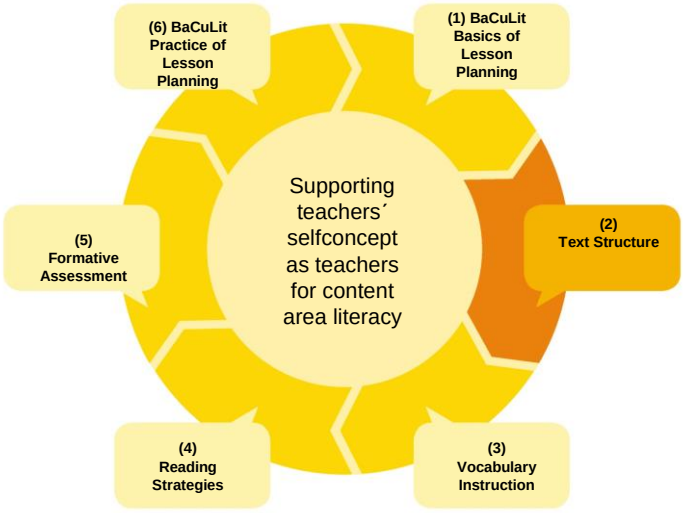
BaCuLit
BaCuLit Association e.V.

Lifelong Learning Programme

Universität zu Köln

Modul 2 Block 2 2

The BaCuLit Curriculum



Modul 2 Block 2 3

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Content of Module 2: text structure

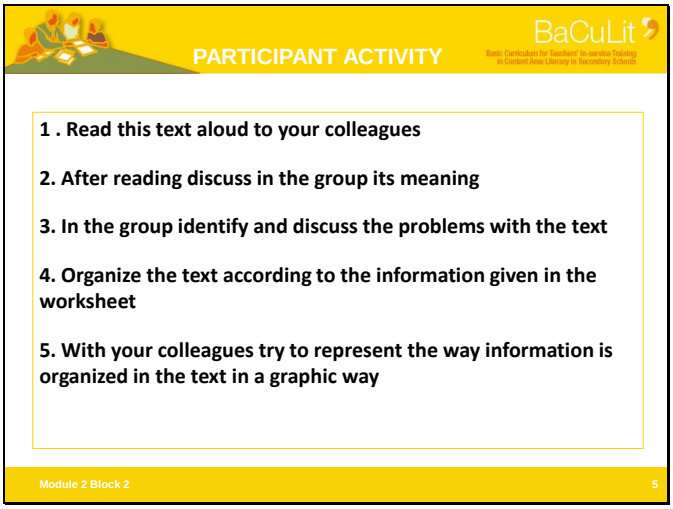
Block 1

- Why and how to connect students‘ textworlds to the diversity of texts?
- What are the advantages and disadvantages of using authentic texts in the classroom?

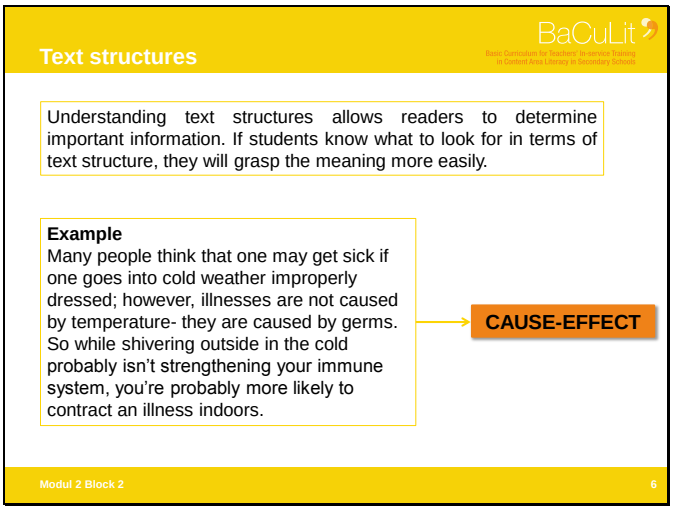
Block 2

- **How can teachers use textual structure and organization for meaning making in content areas?**
- How are texts crafted to help students learn new content knowledge?
- How can teachers own text materials guide their students’ learning?

Modul 2 Block 2 4



Make sure the teachers have the workbook in front of them. Make sure everybody understands what is expected of them! This is an engaging activity for analyzing problem/solutions structures in an authenic text.
You explain material 2a: In groups of 4-5, one teacher reads the text aloud; after reading, teachers in the group discuss the text.
For your preparation, check the organised version before.
Ask teachers to organise the texts according to the information that is given in the worksheet
After the exercise, promote a short reflective activity about the relationship between structure and meaning and its implications for learning content.

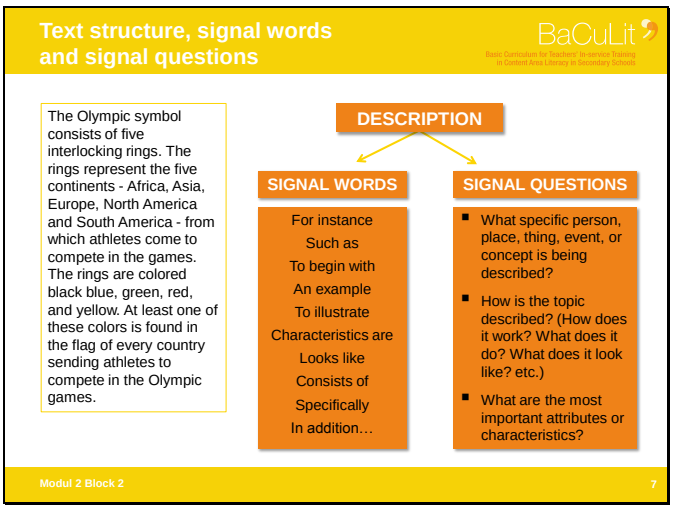


You should refer teachers to Material 2b – Handout for slides 6-12

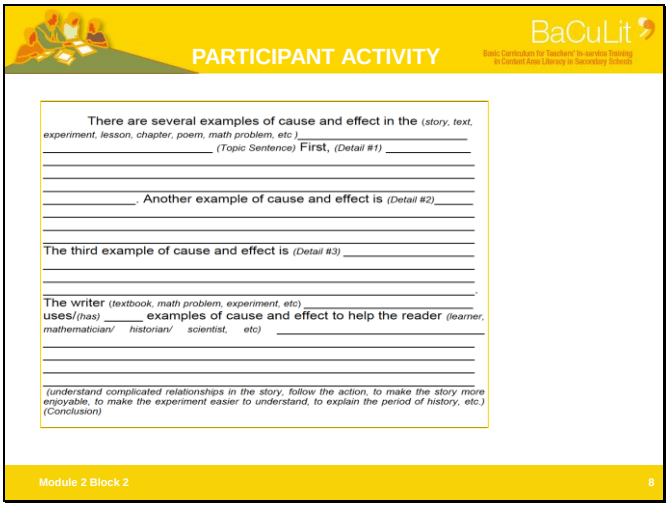
Activity 9: 1a) Teachers Analyze and conclude together on this specific relationship in the text.

For trainers – The box with Cause-Effect must appear after teachers analysis and conclusion

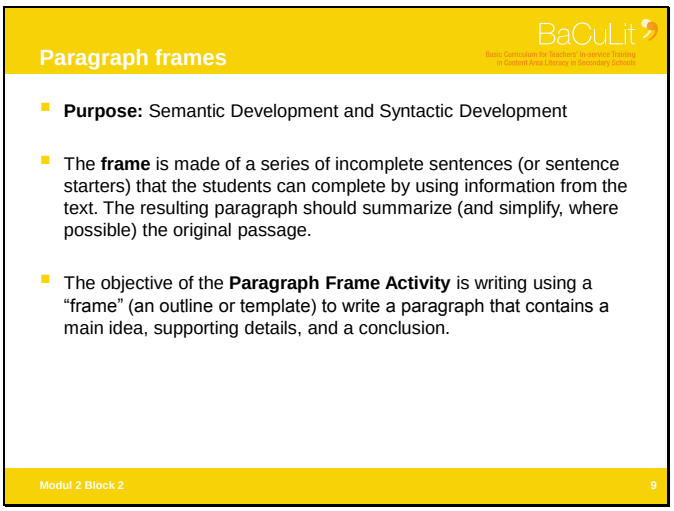
Activity 9: 1b) trainers ask about words in the text that confirm causation



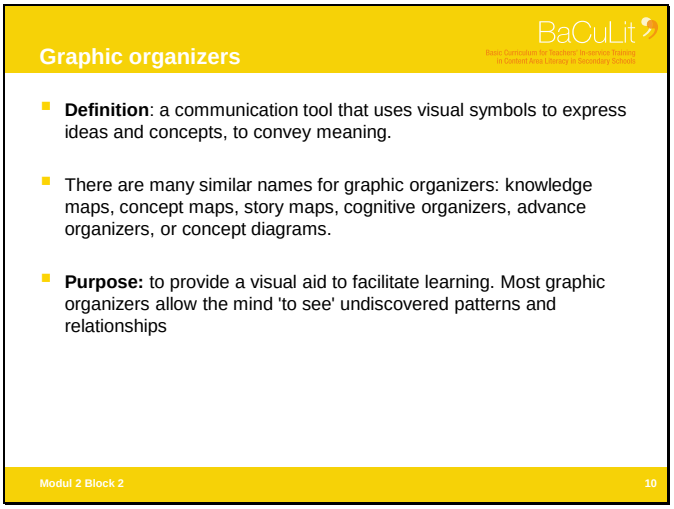
Before showing Signal Question, you must ask: what kind of questions can be put to the text?



Invite teachers to fill in the gaps with possible solutions stemming from their reading experiences



After introducing the concept of signal questions and after doing activity 11, in the previous slide, you define - Input 6 in the workplan - what a Paragraph frame is and what is its objective.
You also can discuss with teachers what kind of pedagogical potential there is with the use of Paragraph Frames, showing other examples.

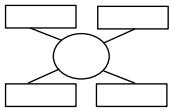


You may recall activities 7 and 8 about the best way to organise in a graphic way the text teachers have organised.

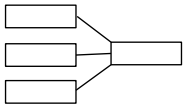
Here you introduce the definition and discuss with the teachers what the purposes of using graphic organisers might be.

Graphic organizers

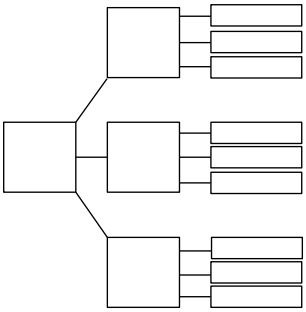
Concept Map



2. Graphic



3. Graphic



Modul 2 Block 2 11

Teachers explain these examples of graphic organizers and call for other examples teachers may know

You connect this graphic organizers with the text structures they represent

Other structures

Sequence	The author lists items or events in numerical or chronological order; Describes the order of events or how to do or make something
Compare and contrast	The author explains how two or more things are alike and/or how they are different
Problem and Solution	The author tells about a problem (and sometimes says why there is a problem) then gives one or more possible solutions

Modul 2 Block 2 12

The Graphic version of these structures are in Material 2c – Worksheet for pair work.
In that Activity 13, teachers are supposed to look for and discover for themselves the adequate graphics for specific structures.

PARTICIPANT ACTIVITY

Pair work 1

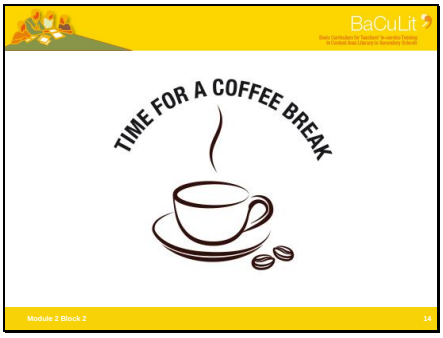
- Read the 3 texts in your worksheet
- After reading, discuss with your colleagues:
  - What signal words can be identified in the texts;
  - What summary questions can we make about their information
  - What graphic organizer would you use for each of these texts

(Mat. 2c)

Module 2 Block 2 13

Make sure teachers have their workbooks

If you have time you can ask teachers to do pair work 2



Content of Module 2: Text Structure

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

Block 1

- Why and how to connect students' textworlds to the diversity of texts?
- What are the advantages and disadvantages of using authentic texts in the classroom?

Block 2

- How can teachers use textual structure and organization for meaning making in content areas?
- **How are texts crafted to help students learn new content knowledge?**
- **How can teachers' own text materials guide their students' learning?**

Modul 2 Block 2 15

NOTE FOR TRAINERS: **Please insert a picture of a sample text from a subject area textbook, like the given example**

Learnability

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

- What makes a text learnable?

http://www.sas.upenn.edu/~richarm2/BiologyEU5.htm

Modul 2 Block 2 16

NOTE FOR TRAINNERS: **Please insert a picture of a sample text from a subject area textbook, like the given example**

Readability and learnability

Meanings of ‚readability'

Reading ease

This aspect focusses on the **processing of overt linguistic text features** like the length of words and sentences.

For estimating the 'reading ease' of a given text, there are some **'reading ease formulas'** like LIX.

In most cases, a text which is harder to process is also harder to comprehend.

But: Using only short words and sentences does not make a text easier to comprehend in general.

Comprehensibility

This aspect focusses the problem, if a given text is **'well written' and encourages students' learning**.

For estimating the 'comprehensibility' of a given text, there are some **general checklists**.

In most cases, such checklists ask for all relevant text features which support reading for learning.

But: Such general checklists can and should be adapted to the special needs of a given content area.

Modul 2 Block 2 17

Checklists to assess learnability

- Overall content and correlation with standards
- Supporting features for preparing students
  - Background knowledge
  - Purpose setting
- Text organizational features
  - Author's writing style
  - Organization of information
  - Main ideas
  - Support for main ideas
  - Vocabulary development
- Supporting Features after reading

Modul 2 Block 2 18

Checklist on text features

- **Text features**
  - Author's writing style
  - Organization of information
  - Main ideas
  - Support for main ideas
  - Vocabulary development

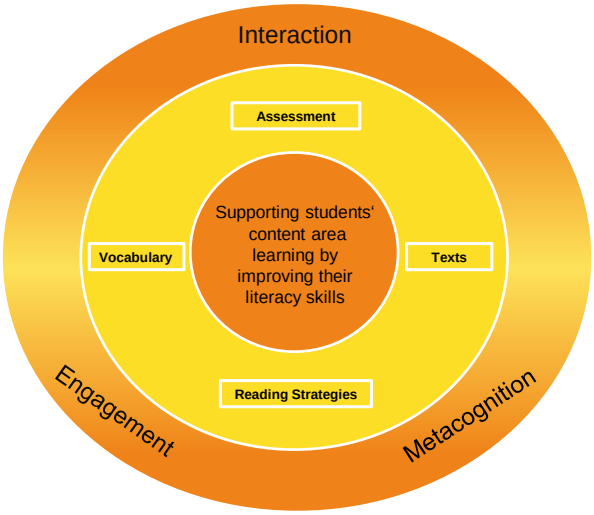
Modul 2 Block 2 19

PARTICIPANT ACTIVITY

- In a group of four *(if possible, group with colleagues from your content area)*, choose one of the texts you brought into class. Use the general checklist to assess the readability of this content area text and discuss:
  - Which text features support students' text comprehension? Which text features are missing or make comprehension more difficult?
  - Did you always give the same points? Or are there different ratings in your group?
  - In how far does this general checklist meet the special needs of your content area?
    - Are any important features that are typical for your content area missing in the checklist?
    - Which of the text features included in the checklist are not appropriate or applicable for your content area?

Module 2 Block 2 20

Lesson Planning Framework of BaCuLit



Modul 2 Block 2 21

The **BaCuLit Framework for Lesson Planning** (WH) is based on the ADORE Reading Instruction Cycle. The main goal though is to support students' content area learning by improving their literacy skills, as is indicated in the yellow circle.

The inner (dark orange) circle shows the core concepts:
texts (Module 2)
reading strategies (Module 4)
vocabulary (Module 3)
assessment (Module 5)

The outer circle includes the cross-curricular concepts . These three concepts - engagement, interaction and metacognition – will therefore be introduced in module 1 in the following block.

(See also Conceptual Foundations M1, Ad. 2 (p. 22-23))

Guiding questions for lesson planning (BaCuLit framework)

SUPER TOPICS und LEARNING GOALS of my LESSON/UNIT

- What are my goals for this lesson with respect to students' needs in content and literacy learning?
- What content is central to this unit? What do I expect students to know and do as a result of this unit?
- What instructional materials will I select to meet these learning expectations? If a fixed unit is used: how does text play a role in this unit?

Modul 2 Block 2 22

Guiding questions for lesson planning (BaCuLit framework)

ENGAGEMENT

- How can I find out what students want to know about the topic in order to engage them in learning?
- How can I have them participate in choosing learning materials for this unit and setting up learning goals for their individual learning?
- How can I actively involve every student in the learning process?

Modul 2 Block 2 23

Guiding questions for lesson planning (BaCuLit framework)

TEXTS

- What are the characteristics of the specific text (I chose / we chose) and of this text genre in general?
- Which challenges (in structure, content and vocabulary) does this text contain for my students and how can I make it accessible to them? Is this text in their "zone of proximal development"?
- What are the big ideas in this text? How are they conceptually related? How are they related to the content of previous lessons?

Modul 2 Block 2 24

Module 3
Vocabulary Instruction

Overview

Adapted from Project CRISS (Santa, Havens, Franciosi, Valdes 2012)

This module provides an overview of key principles and practices concerning academic vocabulary essential for helping students succeed with course content. Considerations about content vocabulary are essential to every component of lesson planning. During the last twenty years, review chapters, research articles and books summarizing scientific evidence pertaining to vocabulary teaching and learning have enriched our theoretical and practical understanding of the field.

We begin this module with a brief discussion about how vocabulary develops gradually from labelling to the building of rich interconnections. This discussion leads into an overview of research principles that serve as a foundation for instruction. After reviewing these principles, we progress to one of the most challenging questions in the content subjects. How do we decide what words to teach our students? Content areas such as history, mathematics and science are basically studies in vocabulary. A major challenge for teachers is to figure out what words are worthy of rich instruction. One cannot teach all of the unfamiliar words in a content area. Our job is to preview reading assignments and figure out which words are essential to the content goals of our lesson. What words are worthy of rich multifaceted instruction? What words will students get on their own and which words need only superficial attention? In this module, we provide teachers with a useful framework for word selection as part of lesson planning.

The remainder of this module focuses on practical strategies for helping students attain a deep understanding of essential vocabulary. Too many students have a narrow definition of what it means to know a word. They erroneously think that vocabulary learning is simply reciting a dictionary definition of a word. The strategies included in the remainder of the module are designed to help students understand that “to know a word” requires using it comfortably both in written and oral contexts.

Module Highlights

- ❑ Vocabulary knowledge grows incrementally from simple to more complex understandings.
- ❑ Key principles from vocabulary research provide a foundation for educational practice.
- ❑ A challenge for content teaching is selecting words worthy of rich instruction.
- ❑ Students need guidance to develop their own student friendly definitions.
- ❑ Understanding a new concept requires expanding word meanings.

Workplan

Topic	Activities	Resources (Materials)
Estimated time: 3 hrs		
Introduction Research Principles What are central conclusions from research on vocabulary? *(~ 30 min.)*	1) INPUT: Vocabulary development and key principles from research 2) ACTIVITY: Participant reflection and discussion about implications of research for practice	**Material 1:** PPT, Slides 1-10 **Material 1:** Handout of PPT Slides *(Delete photos, examples not needed for notes)* **Material 1a:** Journal Entry I
Selecting words worthy of rich instruction	1) Brief INPUT: Selecting words to teach	**Material 1:** PPT, Slides 11-12
	2) ACTIVITY: Participants examine sample text from own content areas. Select vocabulary critical to content-categorize according to importance using the four level framework.	**Material 1b:** Word Selection for Instruction **Material 1f:** Sample selection from teachers own content texts *(see preparatory work)*

Academic Word Walls *(60 min.)*	3) INPUT: Brief comments about keeping essential words in play with academic word walls; Brief comment about helping students develop their own strategies for figuring out words while reading.	**Material 1:** PPT, Slides 13, 14
COFFEE BREAK		
Developing student friendly definitions *(30 min.)*	1) INPUT 2) ACTIVITY: Participants work in pairs; select one or two essential words from own content subjects and develop student friendly definitions 3) INPUT: 3 examples of student friendly definitions	**Material 1:** PPT, Slides 16-22 **Material 1c:** Student Friendly Definitions **Material 1:** PPT, Slides 23-25
Concept of Definition: What does it mean to define a word? *(~ 30 min.)*	1) INPUT: Trainer modelling Concept of Definition Map using a familiar concept 2) ACTIVITY: Participants develop a Concept of Definition Map using the word, *metacognition* 3) ACTIVITY: Participants develop a Concept of Definition map on a key concept from their own content area	**Material 1:** PPT, Slides 26-28 *(see preparatory work)* **Material 1d:** Concept of Definition Map
	4) INPUT: Show variations of Word maps using a variety of student examples	**Material 1:** PPT, Slides 29-36
Word Combining *(~ 15 min.)*	INPUT & ACTIVITY: Participants use word combining for key BaCuLit vocabulary	**Material 1:** PPT, Slides 37-38

Which of the Guiding questions for lesson planning can you answer now, after M3?	ACTIVITY: Participants reflect on Guiding Questions for Lesson Planning that bear on vocabulary aspects.	**Material 1:** PPT, Slides 39-40
Conclusion: recap of research along with a discussion about practical applications	INPUT: Brief Lecture	**Material 1:** PPT, Slides 41
Journal Entry & Homework Assignment: Implications for own practice *(~ 15 min.)*	ACTIVITY: Participants discuss and write about how they can incorporate some of these vocabulary ideas into their own lesson plans; trying out vocabulary assignments as homework	**Material 1:** PPT, Slide 42 **Material 1e:** Journal Entry II

Attention: Preparatory work for TRAINERS

3. Prepare examples of your own student friendly definitions and practice using the Concept of definition map with a concept familiar to participants
4. Incorporate your own examples, photos into the power point slides
5. Explore using the selection framework for choosing words to teach on sample content text so that you can better assist teachers in applying the framework to their own assignments.

Attention: Preparatory materials for TEACHERS

Participants need to bring their *own content area text books.*

List of Materials

No.	Title / Topic
1	PPT: Teaching Academic Vocabulary
1a	Journal Entry I: Implications of Research for Instruction
1b	Word Selection for Instruction
1c	Student Friendly Definitions
1d	Concept of Definition Map
1e	Journal Entry II: Implications for Practice
1f	*Teacher's own content texts*

Conceptual Foundations for Module 3
[Carol M. Santa] (Adapted from Project CRISS)

One of the most investigated areas of literacy research is vocabulary acquisition. During the last twenty years, review chapters, research articles, and books summarizing the scientific evidence pertaining to vocabulary teaching and learning have enriched our theoretical and practical understanding of the field. Rather than providing a detailed review of vocabulary research, this work is consolidated into eight principles that seem most important for informing practice.

Research Principles:

(1) Vocabulary Development. Word learning involves building richer and richer interconnections following stages of development. When we first encounter a new word we typically have a vague meaning of what the words represents. Gradually as we encounter the word in multiple contexts we build mental networks of meaning. We can think of this process as progressing from understanding the word as a label for an object or event, to understanding the word as part of a conceptual cluster that continues to spread into rich network of multiple relationships. Therefore, we move from a surface recognition to an ever-deepening understanding of a concept.

(2) Vocabulary and academic success. Our first and most fundamental conclusion coming from research on vocabulary acquisition is that rich vocabulary is related to academic success. Researchers have documented that academically successful high school students know about four times as many words as poor achieving high school students. There is even some evidence that the vocabulary size of five year olds is an effective predictor of school success in later school years (Beck, McKeown & Kucan 2002).

(3) Vocabulary development and wide reading. Vocabulary development is related to the literacy experiences of the reader. As expected, the more one reads, the richer one's vocabulary. Learning an unfamiliar word requires repeated encounters in multiple contexts. Struggling readers typically do not read widely enough to have sufficient encounters with unfamiliar words. Individuals, who read extensively, have far more opportunities to construct meanings of words compared to students who read infrequently. Learning the nuances of words takes multiple exposures within rich contexts.

Even though wide reading is essential to vocabulary development, researchers point out that wide reading coupled with explicit vocabulary instruction provides the best combination. Students learn even more words when wide reading is augmented by lessons and activities connected with subject matter being studied (Baumann, Ware & Edwards 2007).

(4) Vocabulary knowledge and reading comprehension. Researchers have documented a significant relationship between reading comprehension and vocabulary knowledge. *Students with a larger vocabulary do better in reading comprehension tasks than do students with poor vocabularies.* Over the years this relationship remains steadily consistent across a variety of methodologies including factor analysis, correlation, and readability research (Stahl & Fairbanks 2006).

(5) Pre-teaching vocabulary and comprehension. Students do better comprehending a selection

when pre-taught important vocabulary in the assignment.

(6) Selecting words to teach. We can't teach all the words students meet in their reading, especially in the content areas. In fact, many content classes, such as science and mathematics, are in effect, studies in vocabulary. Some high school chemistry texts contain 3,000 technical words unfamiliar to high school students. This staggering number of words exceeds the vocabulary taught in most foreign language classes. It is impossible for students to learn them all. Therefore, we must think critically about the words our students *really* need to understand. Beck and McKeown (2002) suggest the in-depth teaching of about ten words per week.

Therefore, as educators we not only make decisions about what words to teach, but those worthy of most instructional attention. For less essential words, we might note them briefly before a lesson but, for those warranting deep understanding we should use a more multifaceted, rich approach.

(7) Rich vocabulary instruction. In a meta-analysis of research on vocabulary instruction, Stahl and Fairbanks (2006) conclude that effective vocabulary instruction requires multiple exposures in varying contexts along with activities requiring deep processing. Repetition and elaboration are essential. Most studies with positive effects involve methodologies where students do multiple "things" with vocabulary. (1) Just looking up words in a dictionary, (2) just substituting a synonym, or (3) just using the word in a sentence are in themselves insufficient for a deep understanding of a word. Used alone, these "dubious practices" don't lead to a deep understanding of a concept. Instead, students need multifaceted, rich instruction where they use new vocabulary in a variety of written and oral activities. Owning a concept involves making many connections.

(8) Metacognition. To be successful students must know how to learn new vocabulary. In other words, they need to be aware of what it takes to learn a new concept. What does being metacognitive about vocabulary learning involve? Most students have misconceptions about what it takes to know a word. From years of past schooling, they think copying down synonyms or recording definitions from a glossary is sufficient. Our job is to help students change these misconceptions and demonstrate more effective strategies for learning words.

These research principles provide background for the practical strategies described in this module. We must think hard about the vocabulary our students need to know in our content areas. We need to help students know what it takes for deep learning of concepts – a rich multifaceted approach going far beyond rote memorization. It also requires showing students how to learn important vocabulary through teacher modelling of systematic but varied instruction.

Probably the most astute advice transcending the vast literature on vocabulary acquisition is to facilitate ENGAGEMENT. Learning vocabulary can actually be fun. After all, we are innately wired as linguistic wizards. As teachers we must showcase our own enthusiasm. Enjoy learning new words along with your students. It's catching. Use sophisticated words in your own speech. Challenge students to do the same. The practical ideas offered in this module should make vocabulary learning more inviting for students and their teachers.

Identifying Words to Teach

The first step in teaching academic vocabulary is word selection. What words are worthy of rich, multifaceted instruction? What words will students probably get on their own and which words need only superficial attention? We can't teach all of the words in our content subject. How does one choose?

One way to help in the selection process is to think about choosing words based on their usefulness. Some teachers have found it helpful to select words according to a classification system. Flanagan and Greenwood (2009) offer a selection procedure useful for content teachers. Their procedure focuses on content specific words and also considers word selection as part of lesson planning. They offer a "four-level-framework" for selecting words to teach in the content subjects.

Level 1 Words (*critical before words)*: These core content words require deep and thorough exploration for students to succeed in reading the selection. These are the big concepts which need explicit pre-teaching in order for students to learn further information about them during and after reading.

Level 2 Words (*important before words*): These "foot in the door" words are important for students to know at a surface level before reading an assignment. Students need some familiarity with them for comprehending the "gist" of the selection, but they don't warrant the same amount of before reading instructional time as Level 1 words. One doesn't need a deep level of understanding in order to understand the text.

Level 3 Words (*critical after words)*: Level 3 words represent concepts defined clearly in the text and can be dealt with during and after reading once students have a better idea of the content.

Level 4 words (*words not to teach*): Words classified as Level 4 words may or may not be familiar to students, but they aren't essential to the lesson objectives. These may also be words which the authors explain clearly within their text. If students read their assignment, they should be able to understand them.

Flanagan and Greenwood recommend reading the assignment and determining the essential understandings students are to take away from the lesson. A word's importance depends on the goals of the lesson. Determine a vocabulary list. Then narrow it down to a manageable number and organize the words into levels. Select words needing thorough or superficial attention before students read and identify those that can wait for post-reading discussions. Discard those not linked to the goals of your lesson. Remember, less is more!

Academic Word Walls

Once you have made your list, consider writing words on note cards for placement on an Academic Word Wall. Include essential words from a unit or lesson and put them on the wall of your classroom. Keeping them in full view reminds students about their importance and makes them readily accessible for use in oral and written work. Placing important words on the wall also provides students opportunities for multiple exposures to the words they need to master and having them in full view helps in reviewing for tests. Display words currently in play. Keep them up for the duration of the unit but don't leave words up indefinitely. The point is to use them in a variety of contexts.

Keep them active.

Don't make word walls complicated. Reserve a place in your room–a magnetic board, the space above the windows, a bulletin board –for creating the wall. Organize them using any arrangement that makes sense–alphabetically, conceptually, thematically, etc. Throughout the term, add new vocabulary to the wall as needed for understanding essential ideas. Invite students to create ways to make the word on the wall memorable. They can write the words on a large index cards and embellish them with pictures, symbols and definitions as a way to create deeper levels of meaning.

Vocabulary Development within text

Even though examining text isn't officially part of this module, the author's presentation of vocabulary is a critical text variable. Text complexity is practically always driven by vocabulary complexity. What makes a text easier or more difficult to read is not only related to the density of new vocabulary but how the author explains content vocabulary within the text. Does the author present important vocabulary clearly with explanations and examples that students can grasp? Or has the author done an inadequate job of explaining new words. Our hope is that the authors of our reading assignments have been "kind" to our students by providing adequate explanations with synonyms, bold print, clear examples, and direct definitions. Therefore, as part of examining text, pay particular attention to the how the author uses context to help students grasp key vocabulary. If the author has done an inadequate job of explaining new words within the text, our job as teachers takes on a more directive instructional role.

Developing Student-friendly explanations/definitions

Our goal is for students to" own" academic vocabulary. We want them to use a word comfortably in both written and oral contexts. They need to personalize new words, to make them their own.

There are potential problems using a dictionary as the primary tool for learning new words. Note that most dictionary and glossary definitions are terse statements comprised of vague language. The vocabulary used in definitions is frequently more difficult than the word being defined. Only looking up words in the dictionary and copying definitions is considered by experts as "dubious practices" especially when used alone without expanding upon the definition through writing and conversation.

Yet, definitions can be extremely effective especially when students know how to create their own student developed definitions.

The best way to help students expand their understanding of what goes into a rich definition is through teacher modelling. Select a somewhat familiar word. Model an explanation of a word using multiple contexts. Explain the word with familiar events using the words *I, you, something* or *someone*.

Let's say for example, that you want your students to learn the word, *obstreperous*. Your modelling might go something like this:

> If someone is *obstreperous*, they are being cranky and unpleasant. When <u>you</u> are *obstreperous,* you aren't going along with someone else's plan. <u>I</u> have a two year old

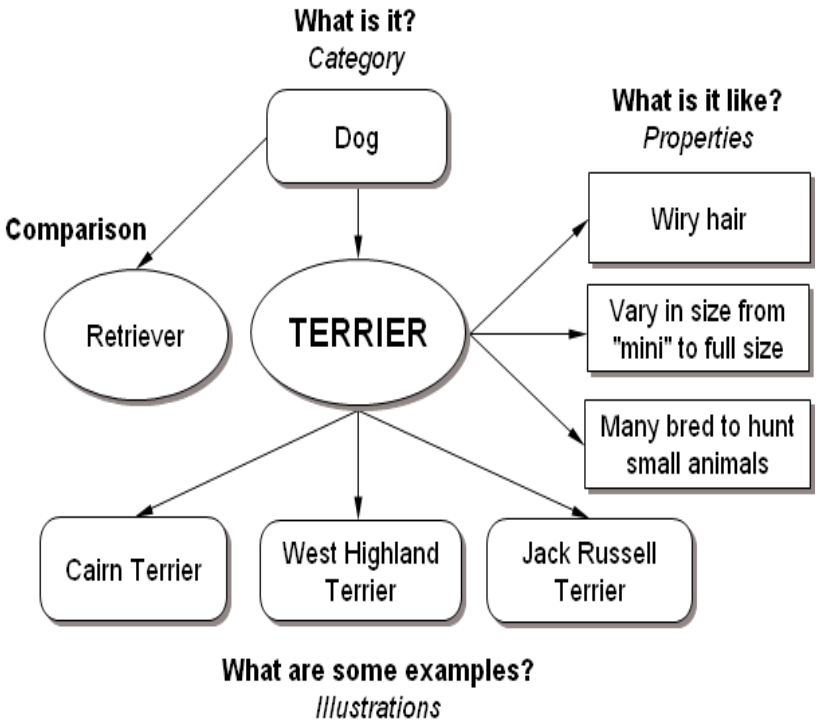
daughter who is quite o*bstreperous* when she refuses to go to bed. You are acting stubborn, not wanting to be controlled. Someone being *obstreperous* with you is not doing what you asked and tends to be rather loud and obnoxious. Something I have learned about *obstreperous* people is that they are difficult to be around.

Find the word in the dictionary or glossary and compare definitions. Talk about why explaining a word within multiple contexts is more helpful than the simplistic dictionary-like definition. In the power points for this module, we have illustrated the differences between dictionary definitions and student friendly definitions with several examples from science and mathematics.

Concept of Definition Map

Another way to help students understand what goes into rich definitions is to expand them through a "Concept of Definition Map." As we explained earlier, many students have a narrow conception of what a word's meaning includes. Most conceive definitions as simplistic, imprecise statements lacking elaboration and personal comment. Schwartz and Raphael (l985, 1988) designed an instructional approach for teaching students the ingredients comprising a rich definition. Once students understand the qualities of a definition, they apply this general knowledge in order to expand their own vocabularies and master unfamiliar concepts. They can also use Concept of Definition Maps as input for developing their own student friendly definitions.

As with all of the strategies presented in BaCuLit it is critical to model how to use a Concept of Definition map as a tool for developing a rich understanding of a concept. Begin modelling by explaining that in order for students to understand new vocabulary, they need to know what makes up a word's definition. Go over the three questions comprising a definition—(1) What is it? (Category) (2) What is like? (Properties) (3) What are some examples? (Illustrations). Use a familiar concept; for example, a type of dog—a *terrier*. Write the word *terrier* in the centre box. Above terrier (in the top box) write a word that describes the category of animal under which *terrier* fits—*dog*. On the right side, list the properties of the terrier, answering, "what is it like?" In these boxes, you might write: *wiry hair, vary in size, bred to hunt small animals.* The bottom boxes are for examples of terriers. In these boxes, you could put: *Cairn Terrier, West Highland Terrier,* and *Jack Russell*



Terrier. After completing the Concept of Definition Map, model how to write a student friendly definition using the information from the map.

> *One of my favourite types of dogs is the terrier. The terrier breed is different from the popular retriever breed in several ways. First, terriers have coarse, wiry hair quite different from the smooth or silky retriever coat. Unlike the larger retriever breed, terriers come in all sizes, from a five pound Yorkshire terrier to an eighty pound Pit Bull Terrier. They were bred to be tireless while chasing small animals such as rats, rabbits, and badgers. Three of the smaller types of terriers are the Cairn Terrier, the West Highland Terrier and the Jack Russell Terrier*.

In the power point presentation we have included several different versions of word maps in different content areas. We also want to point out that word maps can be used as a tool for formative assessment. If students can "map" a concept and then talk about it they probably know it.

Active Processing through writing and discussion: Word Combining

Effective vocabulary instruction encourages students to discuss and demonstrate meanings. With Word Combining, students combine new words into original sentences and short paragraphs and then use this approach to reinforce vocabulary previously introduced. Students must have some familiarity with the words in order to use them successfully in their writing. Typically this strategy works best with conceptual related words so there is some coherency.

This strategy works best in pairs. The teacher or students determine six or seven essential vocabulary a lesson. The first student in the pair uses all of the words in a brief conversation. The partner just listens and does a mental check to see if the words have been used correctly. Once the first student has completed his or her discussion, the second partner repeats the process. The challenge is to incorporate sufficient explanation in the discussions for elaborating upon the words. After each pair has "talked," they next work together to draft a brief but coherent paragraph containing all of the words. The following is an example from a mathematics classroom:

> Vocabulary words: *circle, centre, diameter, radius, circumference*
>
> The *diameter* of a *circle,* which is twice the length of the circle's *radius*, is the distance across the *circle* and through its *centre*. The *circumference,* or distance around a *circle* is about three times the length of the *diameter* and about six times the length of the *radius.*

Word-combining works well in combination with a lecture. After lecturing from five to ten minutes, list key ideas from your lecture on the board. Using their journals, students quickly combine the words into a sentence or two. Take time to share. Integrating student talk and writing within lectures encourages active listening and student engagement in learning.

Word-combining is also an effective assessment and metacognitive procedure. If students can talk and write about key concepts, they undoubtedly know the material. Word Combining helps them become aware of their own level of understanding. If they can't talk and write about the vocabulary,

they immediately understand the need to go back and review the material. As teachers it is also essential to include process discussions as part of teaching. Having “metacognitive” conversations as part of teaching helps students begin to understand how to learn.

References and Recommended Readings

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PPT Slides M3

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

Module 3 (material 1)

Teaching Academic Vocabulary

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

- "This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein."

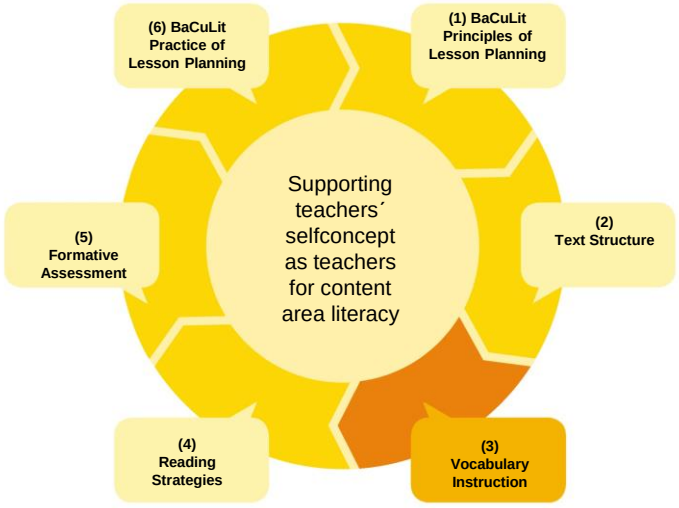
BaCuLit
BaCuLit Association e.V.

Lifelong Learning Programme

Universität zu Köln

Modul 3 2

The BaCuLit Curriculum



Modul 3 3

This slide shows the **structure of the BaCuLit curriculum in form of a cycle**. The next sildes entail further information to single elements of the currriculum (one slide for each module).
The centre of the cycle is the main goal of the curriculum: Supporting teachers´ self concept as teachers not only for content learning, but for literacy instruction within their content areas.
So make sure when explaining the BacuLit-curriculum, that enhancing teachers´ expertise ultimately aims at empowering students for learning.
On the outside the single modules are listed.
Module 1 and 6: Lesson planning
Module 6 : presentation of own BaCuLit lesson plan
Modules 2 to 4: central aspects of literacy-related instruction in all school subjects
Module 5: knowledge and tools about diagnostic / formative assessment (should be applied at the beginning of every instruction unit, but may best be taught after the modules 1 to 4.)
(see also Conceptual Foundations,M1, p. 22-23)

Content of Module 3: Teaching Academic Vocabulary

- Why is vocabulary development crucial for content area literacy?
- How can principles from vocabulary research guide classroom practice?
- What are some guidelines for selecting words in the content areas that are worthy of rich instruction?
- How can students develop their own student friendly definitions?
- How can teachers help students expand their understanding of essential word meanings?

Modul 3 4

Vocabulary acquisition: watch it grow!

This visual depicts what vocabulary networking might look like in the brain: a vast network of interconnected nodes. A multitude of nodes and strong connections between them is what we're after.

Three basic principles

- Labeling

- Categorizing

- Building a network

Vocabulary acquisition is based on these three principles. Young children learn their first words by hearing items and actions labeled by the same words over and over again. In the next stage, they start making clusters or categories of words that keep occurring together. Learning a word involves the building of rich interconnections. For example, when you think of the word, "freedom" what rich interconnections have you built?

Vocabulary: Research Principles

- Rich vocabulary and academic success
- Vocabulary knowledge and wide reading
- People with larger vocabularies tend to be good readers

Modul 3 7

- Rich Vocabulary = academic success. Research indicates a high correlation between one's vocabulary and academic success. For example, academically successful high school students know about four times as many words as poor achieving students. There is some evidence that vocabulary size of five year olds is an effective predictor of school success in later years.
- Vocabulary knowledge and wide reading--The more one reads—the richer is one's vocabulary; Therefore, poor readers typically have vocabulary deficits—one needs many encounters of a word before they know it—wide reading is essential to vocabulary development.
- There is a strong and consistent relationship between reading achievement and vocabulary knowledge—Those who achieve well in reading have a large vocabulary.

Vocabulary: Research Principles

- Pre-teaching vocabulary and comprehension lead to better result on specific reading assignment
- Selectivity - Teach a few words well

Modul 3 8

- Students do better on difficult reading assignments when the teacher pre-teaches important vocabulary before giving the assignment
- We can't teach students all of the words students meet in the content areas. There are too many—particularly in the areas of science. It is important for teachers to select which words are essential for student to learn. Teach a few words well.

Vocabulary: Research Principles

- Rich vocabulary instruction - multi-faceted, rich approach - requires repetition and elaboration through writing and discussion. Dubious Practices when used alone:
  - Look It Up in the dictionary
  - Synonym Substitution
  - Use It in a Sentence
- Metacognition - to be successful students must know how to learn new vocabulary
  - Misconceptions about what it takes to learn a word
  - Need strategies for learning words

Engagement: Make vocabulary learning fun!

Modul 3 9

- Effective vocabulary instruction requires multiple exposures to build interconnections for students to know a word. For important words—having students just look up words in the dictionary, glossary or using words in a sentence is not enough. Need to help students build rich, expanded definitions. Owning a concept involves making many connections.
- Metacognition—Student must understand that learning vocabulary is more than just repeating or memorizing definitions and looking words up in the dictionary. They need to know effective strategies for learning words.

Reflection time

- How might research principles about vocabulary acquisition inform your own instructional practice?
- Take a moment and write down your thoughts. Share your insights with your small group

Modul 3 10

Refer participants to the workbook.

Choosing Words for Content Instruction (Flanagan & Greenwood, 2009)

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Level 1: Big ideas, Critical Before Reading Words
Don't be swayed by bold print words

Level 2: Foot in the door words - need to know at a surface level before reading

Level 3: Critical after words - can be dealt with during and after reading

Level 4: Words may or may not be essential to lesson objectives, or clearly explained in text

Modul 3 11

The first step in teaching content vocabulary is word selection. What words are worthy of rich, multifaceted instruction? Flanagan & Greenwood offer a selection process useful for content teachers.
Level 1 Words: Big concepts that students need to understand before they read—pre-teach these words before students read
Level 2 Words: Students need some familiarity with these words before reading—can be pre-taught lightly—one doesn't need a deep understanding in order to understand text
Level 3 Words: Important words to content, but are explained fairly well in the text. Once students have read the information, these words can be elaborated upon after reading.
Level 4 Words: content specific words, but are not essential—to the lesson objectives.

PARTICIPANT ACTIVITY

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- Examine a text you plan or are currently using in your classroom
- Circle the content words that your students might not know
- **Make a list:**
  - **Level 1**: Critical Before words
  - **Level 2:** Important before words
  - **Level 3.** Critical after words
  - **Level 4:** Words not to teach

Modul 3 12

Refer participants to the workbook

PARTICIPANT ACTIVITY

- Level 1 and 3 words
- Essential words in full view (currently in play)
- Provides multiple exposures

Modul 3 13

Keep the critical level 1 and 3 words visible so students can go back to them during a unit of study. This provides students with opportunities for multiple exposures; Students can use them in their writing and in discussion. Invite students to make word wall memorable—embellish with pictures, symbols, definitions

Using vocabulary strategies while reading

When you're reading a text from a textbook , and you come upon a word you don't know, you can follow these steps:

- Don't panic;
- Go back a few sentences, maybe the meaning is explained there already;
- Read on: maybe the meaning is explained in what follows;
- Look at pictures or diagrams in your text, maybe the word is used or illustrated there;
- Ask your classmates or teacher;
- Look the word up in your dictionary.

Modul 3 14

In addition to keeping important vocabulary strategies in play, it is essential to help students begin to understand strategies they can use themselves while reading. Hold a brief discussion with participants about what these guidelines might look like. Here is an example.

Back to building knowledge

- Back once more to the idea of building knowledge: new concepts need to be incorporated in existing mental networks
- Help students develop their own meaningful definitions!

Modul 3 16

Transition slide to student friendly definitions

Advantages of teaching students how to develop their own definitions

- Shows students how to integrate understandings of new words into their background knowledge
- Students learn many facets of new word instead of fixating on a single definition
- Students associate vocabulary learning with practicing new words in their speaking and writing rather than memorizing definitions

Modul 3 17

We want students to "own" academic vocabulary. Most students have a misunderstanding of what it means to define a word. They need to know what it means to build a rich definition as opposed to simply copying definitions or using new words in a simple sentence. The answer is to learn how to develop their own "friendly" definitions.

Student Friendly Explanations (Beck, McKeown, Kucan, 2002)

- Describe word in every day language; Explain it using multiple contexts!
- Extend beyond definitions and synonyms; explain in connected language, not isolated single word or phrase definitions
- Explain word using language such as I, You, Something and someone
- Provide practice that engages students in verbalizing understandings

Modul 3 18

These steps explain how to guide students in developing their own definitions

Student Friendly Explanations: Instructional Steps

1. **Model an explanation using *I, you*, something or someone**
   "If **you** are belligerent with someone, you are showing a lot of hostility to that person. **Someone** who is belligerent with you is threatening you, and you feel like you are being attacked."

2. **Solicit students to provide own examples**
   "My cat is belligerent to other cats; it always snarls and hisses."

3. **Who would use this word? Imagine the kinds of people who might be regular users of this word?**

Modul 3 19

Change this example to fit your own context. What is important here are the three steps so that students can begin to understand how to expand definitions.

Student Friendly Explanations

- Glossary definition: Homeostasis: The steady-state physiological condition of the body. Biology (Campbell & Reece, 2002, Pearson Education)

- You want your body to be in homeostasis, or in a state of balance. Someone who gets too hot because they have the heat set too high will start sweating to bring his or her body temperature to homeostasis. Something that upsets homeostasis is a high fever.

Modul 3 20

Example from science—Notice how rich the student friendly definition compares with the first—a typical glossary definition.

Student Friendly Explanations

- Glossary definition: "Equation: A mathematical sentence that contains an equals sing, =." Glencoe, Algebra 1
- Mathematics (equation)
- Someone can create an equation by determining two mathematical expressions that are equal in value and then placing an equals sign between them
- An equation is like a balance scale because you can add the same thing to both sides or subtract the same thing from both sides and the equation or scale stays in balance
- You can usually solve a linear equation by first simplifying both sides of the equals sign or subtracting the same thing to both sides, and finally by multiplying or dividing both sides by the same number

Modul 3 21

In this example, the glossary definition is not very meaningful. Having students develop their own friendly definitions using the words, *you, someone*, and *I* can help bring a concept alive.

PARTICIPANT ACTIVITY

- Select one of your Level 1 or Level 3 words. Bring the word to life by developing a student friendly definition.
- Explain what it means by using everyday language in a variety of situations. Anchor your explanation with familiar events using the words *I*, *you*, *someone* or *something*.

Modul 3 22

Have participants turn to the page in their workbook with this activity.

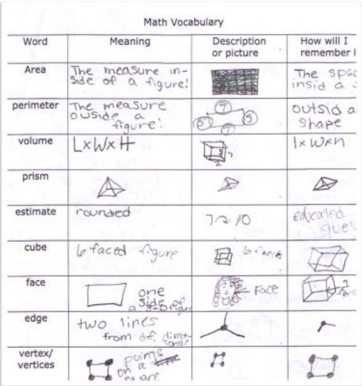
Class Notebook Word Study Guide – Expanding Definitions

Word	Explanation	Examples	Visual Image
Dilute Sentence (and page #) in which you found the word: "Dilute the solution with an equal amount of water." (pg 132)	When <u>you</u> dilute something, you make it less in some way.	If your coffee is too strong you could add milk to dilute it.	

Modul 3 23

Example 1 for student friendly definitions:

In this example from a science class, students kept track of essential vocabulary in their notebooks by expanding definitions. Vocabulary notebooks are an effective tool.



Math Vocabulary

Word	Meaning	Description or picture	How will I remember i
Area	The measure in-side of a figure!		The spac insid a
perimeter	The measure ouside a figure!	7 5 5 7	outsid a shape
volume	LxWxH		lxWxh
prism			
estimate	rounded	7→10	educated gues
cube	6 faced figure	6 faces	
face	one side of a 3-D figure	Face	
edge	two lines from dif. directions		
vertex/ vertices	points on a square		

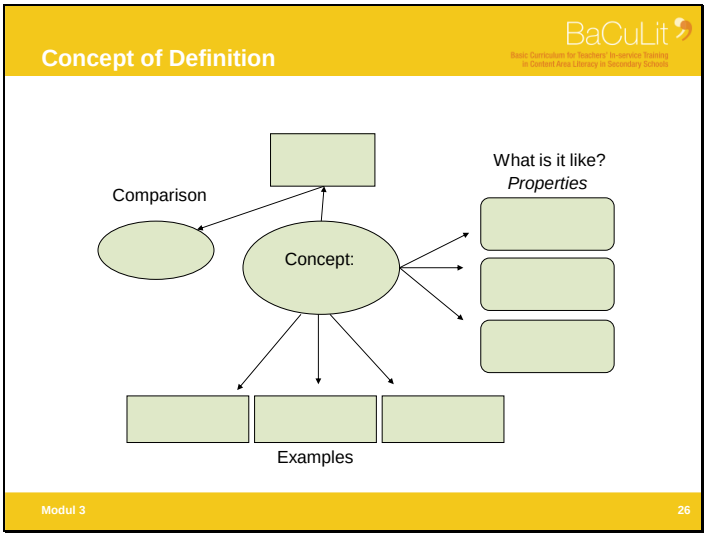
Modul 3 24

Example 2 for student friendly definitions:

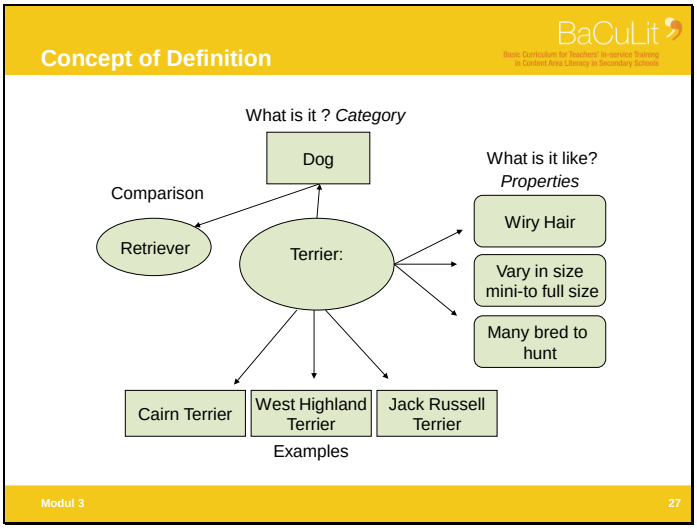
Student notes from a mathematics class—In the last column notice that the student is asked to come up with a personal way of remembering the concept. These notes are an excellent example of helping students understand how to expand definitions.

Example 3 for student friendly definitions:

This example comes from a high school biology class—The teacher asked students to explain essential vocabulary through pictures—in this case, the concept *photosynthesis.* They used multiple resources for their visual explanation. Each student then explained their "visual" notes to the class—which provided them another opportunity to own the "word" through discussion. These notes were then put up on the walls of the classroom.

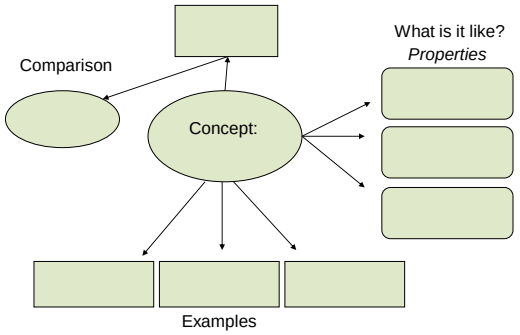


Too many students have a narrow conception of what a word's meaning includes. Schwartz and Raphael (1985,1988) designed an instructional approach for teaching students the ingredients comprising a rich definition. Model using a familiar concept, using the next slide.



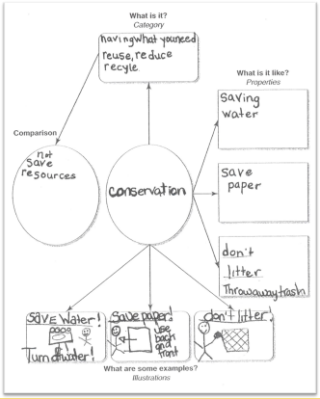
Model using a familiar concept. For example a type of dog—a terrier. Write the word Terrier in the middle. Sometimes thinking about a comparison can be helpful. In this example, a terrier is a different type of dog than a retriever. Then brainstorm properties that make a terrier unique along with examples of different kinds of terriers. Another idea is to model this concept using political parties.

Participant Activity: Use concept of Definition map to explain '*Metacognition*'



Modul 3 28

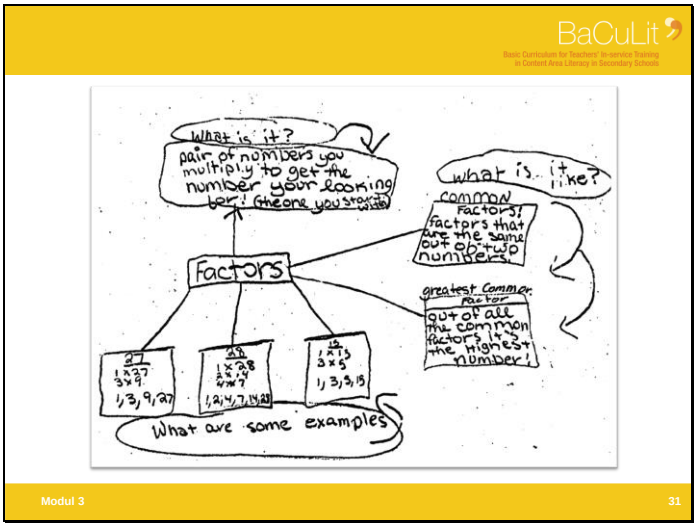
Examples-from science



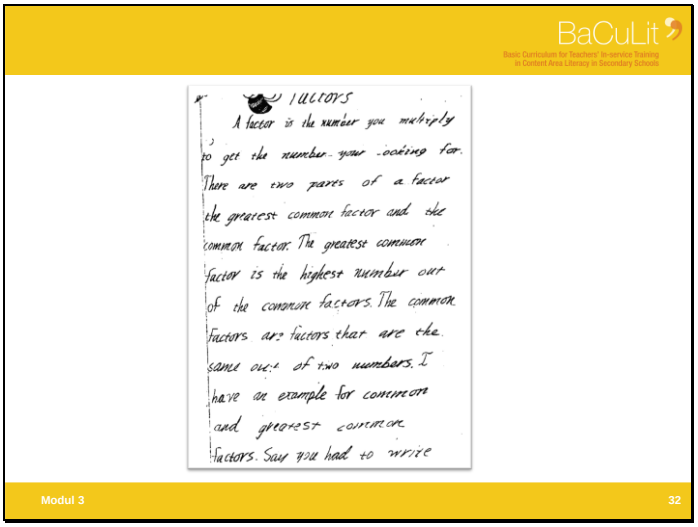
Modul 3 29

Students in a high school geometry class kept a special place in their notebooks for essential vocabulary. Math teachers have found vocabulary maps particularly helpful in mathematics

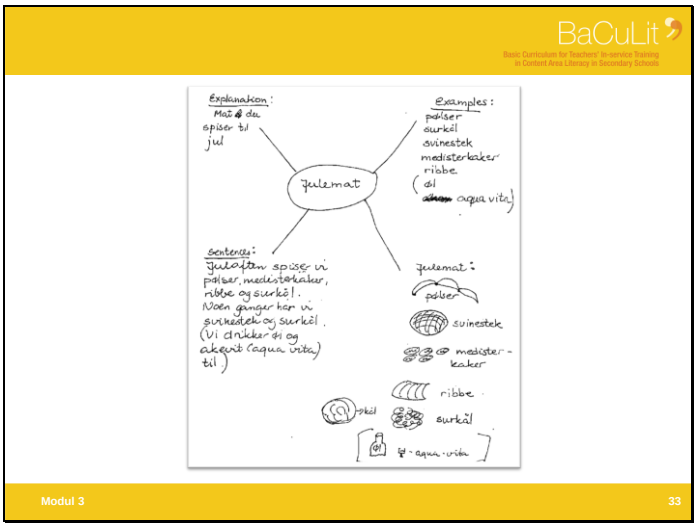
Modul 3 30



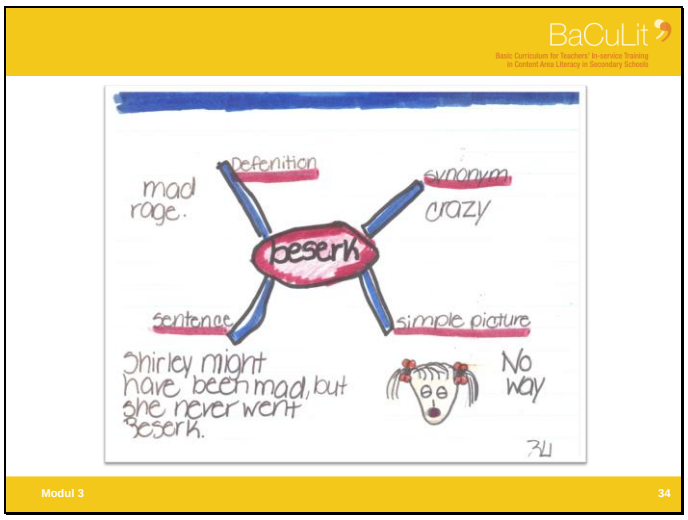
In this example, six grade students were asked to expand the definition of factors and then use their vocabulary "maps" to write a student friendly definition.



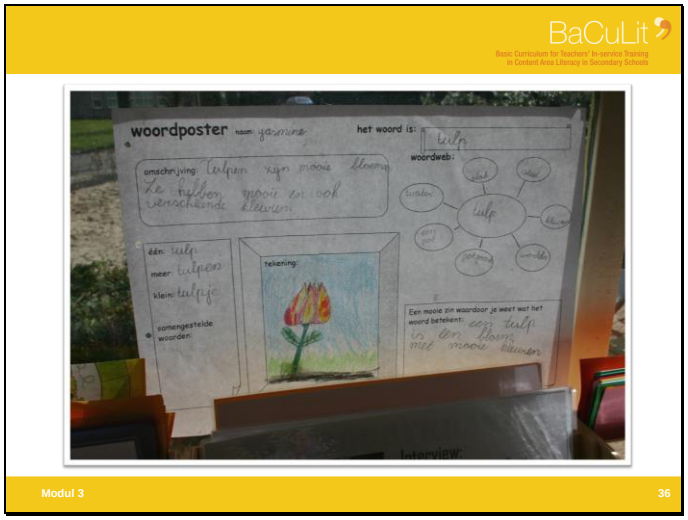
Students then used their maps to write a definition (explanation).



Here is another version of a vocabulary map to help students expand their vocabulary in a second language— In this case, Christmas food in Norwegian.



This example comes from an elementary student. Teachers asked students to expand key vocabulary from a short story into pictures and words.



Word Combining

- Select 8-10 words on a topic or concept
- Model using them in a discussion
- Divide students into pairs
- Hold conversation
- Write summary or brief paper using words

Modul 3 37

Effective vocabulary instruction encourages students to discuss and demonstrate meanings. With word combining, students combine new words into original sentences and short paragraphs. Word combining works well to reinforce vocabulary previously introduced. Use key vocabulary from BaCuLit.

PARTICIPANT ACTIVITY

- Work in pairs
- Use the following words in a conversation:
  - engagement
  - metacognition
  - teacher modeling
  - vocabulary
  - interaction

Modul 3 38

Word combining turns out to be an excellent way to review key concepts before an examination. It can also be useful as a pre-and-post reading activity. Ask participants to think about situations in their own classrooms where word combining would be an effective approach for internalizing essential vocabulary.

Guiding questions for lesson planning (BaCuLit framework)

TEXTS

- What are the characteristics of the specific text (I chose/we chose) and of this text genre in general?
- Which challenges (in structure, content and **vocabulary**) does this text contain for my students and how can I make it accessible to them? Is this text in their "zone of proximal development"?
- What are the big ideas in this text? How are they conceptually related? How are they related to the content of previous lessons?

Modul 3 39

Guiding questions for lesson planning (BaCuLit framework)

VOCABULARY

- How do I build understanding of essential vocabulary?
- How do I select words that are essential for students to learn in my content area?
- What strategies will I use to create students´ ownership of important vocabulary?

Modul 3 40

Conclusion

- Rich Vocabulary and Academic Success
- Wide Reading essential to Vocabulary Development
- Pre-teaching key vocabulary ➔ comprehension
- Selectivity - Teach a few words well
- Rich vocabulary instruction
- Vocabulary learning - continuum of deepening understanding - multiple repetition, contexts
- Metacognition - to be successful students must know how to learn new vocabulary

Modul 3 41

Refer participants to their Workbook

Assignment

- Try several new vocabulary strategies with your students
- For our next session, collect several student examples to share with the group
- Be prepared to talk about how you adapted some of the vocabulary to fit your own context

Modul 3 42

Module 4
Teaching Cognitive and Metacognitive Reading Strategies

Central Questions

Block 1	Block 2
➢ What are reading strategies and how should they be taught? ➢ How can teachers become aware of their own strategy use and gain an insight into their students´? ➢ How does a "Cognitive Apprenticeship" bring about a shift of responsibility for strategy use from teacher to student? ➢ How does strategy acquisition work in teacher training and in the classroom?	➢ How can strategies be taught to develop students' growth as independent readers? ➢ What exactly is understood by "Reciprocal teaching (=RT)?" ➢ What is the research base saying about this strategy set? ➢ How to implement RT in the classroom ➢ How to implement RT in teacher training

Overview

The BaCuLit course addresses professional development in literacy for teachers of all content areas, especially teachers of mathematics, science, and social sciences. The primary focus of the BaCuLit course is to enable content area teachers to be successful content area literacy teachers. The main tool for this is a specific framework for lesson planning and reflection.

In addition, BaCuLit aims at students' growth as readers and learners, given the fact that the "primary purpose of professional learning for teachers is to improve the educational outcomes that we value for students…" (New Zealand Ministry of Education 2009, 1). Module 4 deals with *an especially powerful tool* for fostering this growth: *reading strategies* in all content areas.

In Blocks 1 and 2 of this module, teachers are made aware of the importance and effectiveness of strategic approaches to subject area texts, which they routinely use, as they are experienced readers in their domain. They do this by "capturing" their own reading processes, that is, they reflect on the

strategies or "mental tools" needed for the cognitive and metacognitive processes they employ when dealing with texts. Participants are also shown the necessity of teaching reading strategies directly instead of simply giving them to be worked on in assignments. In this way, participants have the opportunity to practise their role as "master readers" in a cognitive apprenticeship that involves them as models and as master readers. They can thus make their own normally invisible reading and thinking routines visible to their students. That is, they challenge their "apprentices" to gradually adopt and internalize the mental procedures employed by "good readers" when they make meaning from demanding texts.

To summarise: the aims of module 4 are as follows

1. Teachers discover how to get a diagnostic insight into their students' learning needs for using strategies.
2. They learn that students' capacity for strategy use does not develop automatically but can be built through cognitive instruction.
3. They experience how students can be apprenticed to meaning-making from texts through think aloud protocols which make the invisible reading processes visible.
4. They also learn that strategy instruction can only be effective when a sustained effort is made over time in all subject areas.
5. They learn that strategy use is not an aim per se, but that it serves to support student growth in understanding texts and growth in reading comprehension in all content areas.

Module 4 introduces teachers to a required Block 1 and an optional Block 2. It requires a total of at least 6 hours' teaching.

When preparing for this module, teachers are invited to capture their students' processes when reading subject-specific texts. Through looking at their students' strategy use, they gain a diagnostic insight into young readers' learning needs.

Block 1: **Student growth through reading strategies or "mental tools"**

This Block consists of 3 parts

Part 1 (a choice of options)

Option 1: An activity to make teachers aware of their own strategic approaches to texts. For this, teachers read unknown texts and reflect upon the strategies they use. In the plenary discussion, a flexible list of strategies can be made. This can then be modified and added to as the module progresses.

Option 2: Trainers start by asking the following question: "What strategies have you already encountered in this course so far?" This can serve as a reference for the ensuing work on strategic text approaches.

Step 2 (compulsory): The trainer presents a short introduction with some background information on the following topic: "What are reading strategies (as opposed to skills and methods) and why do they

matter for student growth in reading?"

Taking the "good reader model" as a reference point, teachers learn that strategic reading does not develop automatically. They also learn that strategic meaning-making from texts can be broken down into its constituent parts and be taught to students.

Part 2

Participants are given an overview of different categories of *cognitive* and *metacognitive* strategies and their function in the reading process. In a second interactive activity (*Hidden Words*), participants discover how goal-setting as a metacognitive strategy can influence their learning outcomes.

Part 3

Participants are familiarised with the procedures of a *cognitive apprenticeship model* as an example of cognitive instructional practice (cf. Collins et al. 1989, Schoenbach & Greenleaf 1999) that brings about a shift of responsibility for learning from teacher to student. A *think aloud* activity offers insightful practice for teachers in the role of learners.

Finally, participants reflect upon the use of reading strategies in their classrooms.

Block 2 (in 3 parts)

Part 1: The trainer presents "reciprocal teaching" as an effective set of reading strategies that have been tried and tested and are highly recommended by researchers.

The trainer also describes the positive impact of the "fabulous four" (as the integrated strategies were named by Oczkus) on reading comprehension

Part 2: In this part, the topics "How to implement RT in teacher training" and "How to implement RT in the classroom" are considered. As in Block 1, the trainer assumes the role of an expert modelling the use of the basic strategies. In their role of learners, teachers experience and practise the co-construction of meaning from texts through Reciprocal Teaching.

Teachers are made aware that the materials presented in this module should be expanded or supplemented, according to the needs of the students, in their own classrooms.

Module Highlights

- ❑ What are reading strategies and how should they be taught?
- ❑ How can teachers become aware of their own strategy use and gain an insight into their students' strategies?
- ❑ How does *a Cognitive Apprenticeship* bring about a *shift of responsibility* for strategy use from teacher to student?
- ❑ What is *Reciprocal Teaching* and how does it work in teacher training and in the classroom?

Workplan

Block	Topic	Activities	Resources (Materials)
1	*Estimated time 3 hours* [Essential Content]		
	Before Module 4: *Teachers prepare Module 4*	Preparation of session on reading strategies: keeping an inventory of students' strategy use Teachers observe their students' strategy use in the weeks before Module 4, Block 1. This provides a diagnostic insight into learners' text approaches and learning needs.	**Material 1a:** Capturing your students' reading process
	At the beginning of Block 1*:* What are reading / learning strategies and how should they be taught? *(30')*	(**1a) Introductory activity**, option 1: Discussion on results of students' strategy use What strategies were found? How do teachers assess these findings? Teachers' self-awareness on strategy use – think-pair-share procedure **(1b) Introductory activity**, option 2: Inventory of reading strategies dealt with in the course so far Whole group activity: What strategies have we used so far in the course?	**Material 1b:** Becoming aware of your reading process **Material 1c:** Three short texts to choose from for self-awareness on strategy use (1b)
		(2) Activity: Living strategy list Results to be collected in "Living strategy list" to be supplemented and modified in the course of the session. On a flipchart, trainers collect and cluster strategies mentioned by participants (categories for clustering: before, during and after reading).	**Flipchart** for "**living" strategy list** with the categories: Before, during and after reading
	What are reading strategies and why are they so important for	**(3.1) Trainer input about strategies / skills,** including 3 interactive parts (= metacognitive exercises)	**Material 1:** Interactive PPT, slides 6- 22

	reading to learn? *(45'- 60')*	**Participant activity 1:** goal- setting for learning	**Material 1d:** Goal setting with hidden words
	Cognitive Apprenticeship: a cognitive instruction model (Modelling, Scaffolding, Fading) *(45')*	**(3.2) Trainer input** *continued* How can we teach students to use strategies? – assigning tasks versus modelling strategy use	**Material 1:** Interactive PPT, slides 23 -26
		Participant Activity 2: Think Aloud	**Material 1:** Interactive PPT, slide 32 **Material 1e:** How to do a Think Aloud **Material 1f:** Think Aloud Checklist **Material 1g:** Text for Modelling A Think Aloud ("Beaufort Scale")
		Activity: Hypothesizing about text content (Reading begins before the text is read)	**Material 1h:** KWL for enigmatic headlines (with PPT slide 17)
	Debriefing and developing perspectives *(30')*	Reflection on learning processes and possible implementation in teacher's own classroom	**Material 1:** Interactive PPT, slides 26-36 **Material 1i:** Reflection on Reading Strategies & Implementation in Teacher's Own Classroom

Block	Topic	Activities	Resources (Materials)
	Estimated time ~3 hour [Optional Content]		

2 Option a	**Example Set of Strategies:** Reciprocal Teaching as a model for cognitive strategy instruction *100'*	**Input:** Trainer presents Reciprocal Teaching (rationale behind the development of this set by Palincsar & Brown)**(slides 4 -10)** Then the trainer explains its implementation in the classroom **(slides 11 – 24)** Trainer (and teamers) model all four strategies with a text on *women's roles in the fifties, starting* with before-reading strategies (modelling: background knowledge, essential vocabulary, predicting, developing questions) *(= 60 ')*	**Material 2:** PPT Block 2, slides 2-19 **Material 2a:** Text for Modelling RT **Material 2b:** How to do RT **Material 2d:** Set of role cards, laminated
	15'	Coffee break	
	30'	**ACTIVITY:** Participants in the role of learners practice RT. **ACTIVITY:** Living strategy list from Module 4, Block 1 can be complemented and/ or modified	**Material 2c:** Text for Practising RT (e. g. Palincsar & Brown 1986) **Flipchart with living list**
	30'	Reflection on use of RT and subsequent practice in the classroom	**Material 2:** PPT Block 2, slide 25 **Material 2e:** Reflecting on RT for Classroom Use

Note: Preparatory work for TRAINERS

For Block 1, you as trainer need to prepare some materials BEFORE the workshop: Practice *think-alouds* and think of alternative text choice.

For Block 2a, you as trainer need training in the preparation of texts for RT and in how to model RT in a teacher training setting and in the classroom.

Note: Preparatory work for TEACHERS

See M4_Material 1a (Capturing your students' reading process)

For this module, teachers are invited to bring a documentation of their students' use of strategic approaches to texts and corresponding learning needs (see Block 1).

List of Materials

No.	Title / Topic
1	PPT Block 1: Supporting students' growth through reading strategies – contents and methodology
1a	Preparatory work: Capturing your students' reading processes
1b	Becoming aware of your reading process (teachers' reading processes)
1c	3 Text options for Mat. 1b: Texts for teachers' reading processes (3 texts to choose from)
1d	Goal setting with hidden words
1e	How to do a Think Aloud
1f	Think Aloud checklist
1g	Text for modelling a Think Aloud ("Beaufort Scale")
1h	KWL with ambiguous titles
1i	Reflection on reading strategies & implementation in own classroom
2	PPT Block 2: Reciprocal Teaching (RT) as a model for before-during-after-reading
2a	Text for modelling RT
2b	How to do RT
2c	Text for practising RT (Palincsar & Brown theoretical text)
2d	Set of role cards
2e	Reflecting on RT for classroom use

Conceptual Foundations for Module 4
[Dorothee Gaile]

Module 4.1 provides information on the following questions in the context of the BaCuLit curriculum:

1. Why reading strategies count among the prerequisites for successful learning (in the light of cognitive psychology)
2. How to distinguish between "strategies", "skills" and "methods" (as intersecting, but by no means identical concepts)
3. How to categorize reading strategies following various parameters (cognition and metacognition, goal and mode of reading, time sequence etc.)
4. What research says about effective and less effective approaches to strategy instruction (why some strategy instruction is not instructive at all, how studies on "good strategy users" could inform strategy instruction, how teachers can facilitate students' independent learning through direct cognitive instruction)
5. Conclusion: how to adapt the instruction of reading strategies to teachers' and learners' individual needs

Module 4.1 gives teachers an insight into the nature and relevance of reading strategies. Comprehensive research since the late 1970s has found this to be a powerful tool for fostering the development of students' reading comprehension.

As the "only reason for teacher professional development is improved student learning" (Timperley et al. 2009), reading strategies as promoters of independent learning hold a significant place in teacher training on literacy development.

With regard to improved student learning as the ultimate goal of teacher development, strategies may serve as mental tools for "supporting students' content area learning by improving their literacy skills", thus "supporting a positive self-concept as a reader" (Garbe et al 2010, 67 ff). In US research, they have been evaluated as contributing to students' "ownership", "agency" or "empowerment" in independently making meaning from texts (cf. Schoenbach & Greenleaf 1999).

Ad 1: Prerequisites for successful learning

When further analysing the significance of reading strategies, these mental tools have to be placed in a wider context. This is because they are only one element in a complex set of prerequisites for successful learning that mesh like cogwheels. (cf. Hasselhorn & Gold 2013, 68)

As cognition psychologists like Gold & Hasselhorn point out, the mind has to be set on "attention" in order to reach a goal in learning. *Skill* (= automatically used cognitive strategies) *and will* (= volitional processes) have to be combined because successful learning comes from a mixture of volition and skill, and motivation and tools for learning, such as cognitive and metacognitive strategies. Motivational processes and self-concept, combined with emotional processes, greatly influence the will to *pursue* or to *drop* a challenging task. But how can students be motivated to go through

demanding mental procedures, such as the use of reading strategies?

Research on motivation for achievement demonstrates the features essential to a motivating task and shows how individual goal setting may contribute to success with a given task. When learners set themselves realistic goals that they can reach if they make an effort, they can then credit themselves for their success. Setting goals that are too demanding, on the other hand, leads to frustration, whereas goals that present no challenge at all demand little effort and therefore hinder learning. If learners monitor their own goal-setting critically, they have to adjust their goals flexibly and realistically in order to be successful. (cf. Gaile, Gold, Souvignier 2007, 12 ff)

What impact do these research findings have on instructional patterns for reading strategies? From the perspective of motivation psychology, it is decisive for learners to have the experience of successfully coping with a reading task. We know that reading strategies can help them cope with this challenge, particularly when these strategies are combined with metacognition. Evidence for the positive effect that the use of such informed strategy has on learning was provided by Paris et al. (1984). They used the metaphor of ”reading detectives“ for a sequenced instruction that aimed at an awareness of reading goals, plans, and specific strategies for constructing meaning from text or monitoring and revising comprehension.

Taking up Paris‘ metaphor of ”Text Detectives“, Gold et al. developed an informed reading strategy programme. It starts with a learning module on realistic goal setting that focuses on the use of appropriate strategies for reaching this goal. Students thus become aware of the fact that progress in meaning making from texts is a result of their own efforts, i.e. their strategy use. In this way, they perceive self-efficacy in relation to designated levels of performance. Evaluations of this programme have shown that the teaching of reading strategies, combined with the discovery that these tools really do help with text challenges, has resulted in improved reading comprehension and enhanced reading motivation. (Gold. et al. 2004; Gaile, Gold, Souvignier 2007).

These results are mirrored in Scott & Winograd’s 1990 studies in what they term the “twin concepts of metacognition and motivation”. As a cognitive consequence of “self-regulated learning”, students are able to select and attack problems strategically. The motivational consequence is that students feel empowered to be successful and therefore invest the amount of effort required. (43)

Ad 2: What is the distinction between strategies, skills and methods?

Following Afflerbach, Paris and Pearson (2008) there has been a lot of confusion about the difference between ”reading strategies“ and ”reading skills“, and – it should be noted – between strategies and methods, when it comes to reading. Clear distinctions are needed to get to the heart of reading strategies.

The term “strategy” is originally a military term: it denotes tactics for defence or attack (from Greek στρατηγία (strategia) = art of troop leader).

A *cognitive strategy* can be seen as a mental routine or procedure for reaching a goal, e.g. solving a sudoku puzzle, preparing for an examination etc. Van Dijk and Kintsch (1983) provide an excellent description of cognitive strategies, using the metaphor of “mental tools in a mental tool belt”, or “instruments”. “*Thinking and problem solving are well-known examples: We have an explicit goal to*

be reached, the solution of a problem, and there may be specific operations, mental steps, to be performed to reach that goal. These steps are under our conscious control and we may be at least partly able to verbalize them, so that we can analyse the strategies followed in solving the problem."(68)

Cognitive strategies in reading serve to process information received. The use of a *reading strategy* is a deliberate and conscious, or metacognitive, act to build meaning from text.

"Metacognition" literally means "big thinking", i.e. thinking about thinking. *Metacognitive strategies in reading are used* for monitoring and evaluating the understanding of information.

Special attention should be paid to the *distinction between a reading strategy and a reading skill*: beginning readers must learn the *strategy* of making predictions using the title, illustrations etc. as clues. As they discover that this strategy works, students will deliberately keep on using it. When readers have been doing this for a while, they will gradually use it more and more automatically and effortlessly. The strategy will require less and less deliberate thought and finally, predicting will become a fluent (automatic) reading skill.

To summarise: skill and strategy differ in relation to their degree of intentionality and their automatic and non-automatic approaches to tasks. "At the heart of accomplished reading is a balance of both

- automatic application and use of reading skills, and intentional, effortful use of reading strategies
- accompanied by the ability to shift seamlessly between the two when the situation calls for it

The difficulty (level) of the reading - influenced by text, task, reader, and contextual variables - will determine this shifting balance." (Afflerbach, Pearson & Scott 2008, 371)

In comparison to a skill and a strategy, a *reading method* is more comprehensive. It is a set of teaching and learning materials and/or activities often labeled, e.g. language experience method, phonics method, literature-based method. As the International Reading Association stated in 1998," no one teaching method or approach is likely to be the most effective for all children … Rather, good teachers bring into play a variety of teaching strategies that can encompass the great diversity of children in schools. " (IRA 1998, 3). Although this IRA statement refers to younger students, it could also be applied to secondary learning, as learning is per se an individual process.

Ad 3: How can strategies be categorized?

Strategies can be categorized in different ways. An overall distinction has to be made between cognitive and metacognitive strategy use (cf. Slide 12)

A cognitive strategy is a mental routine or procedure for accomplishing a cognitive goal. Van Dijk and Kintsch (1983) provided an excellent metaphor of cognitive strategies as "mental tools in a mental tool belt", "instruments".

These researchers described strategies as "*specific operations, mental steps, to be performed to reach "…a specific goal. "These steps are under our conscious control and we may be at least partly able to verbalize them, so that we can analyze the strategies followed in solving the problem. (p. 68)*

Cognitive strategies in reading help to process incoming information.

- Readers may *elaborate or expand* the actual text, using their own prior knowledge, predictions etc.
- They may *reduce* the text to its essentials (summarizing) or *make its concepts* visible through a *graphic organizer***.** This is a communication tool that uses visual symbols to express knowledge, concepts, and the relationship between these concepts, such as cause and effect or time sequences.
- Readers may perhaps just *repeat* the text in different ways in order to memorize it better.

Metacognitive strategies form a kind of superstructure in the reading process allowing readers to think about their reading and their thinking. In reading, metacognitive strategies are used for monitoring and evaluating the understanding of information, for troubleshooting, i.e. cognitive monitoring. They are also used to repair comprehension (difficulties) and to monitor and adapt the effort invested in a task, depending on the goal to be achieved. Metacognitive strategies regulate will and motivation.

Strategies can be seen in various ways:

a) They may be distinguished according to their *function* for the development of text understanding by the reader (functional), i.e. expanding text by connecting it with their own prior knowledge, experiences, associations etc.; reducing text e.g. using graphic organizers; repeating text e.g. learning by heart.

b) They may be distinguished according to their position in *a temporal sequence (before, during, after reading). Here strategies are represented as sequence of procedures, a temporal model* – "Proficient learners build on and activate their background knowledge before reading, writing, speaking, or listening; poor learners begin without thinking." (Irvin et al. 1996, 5)

"… readers are in a better position to comprehend what they are reading whenever they use prior knowledge (schemata) to construct meaning" (Vacca 2002, 191).

Good readers hypothesize during the whole reading process about the next passage or page, using textual clues or their own experience*. "As they read, good readers frequently make predictions about what is to come."* (Duke & Pearson 2002)

This is helpful as a didactic plan; in reality expert readers will often apply this strategy *throughout* the whole reading process, i.e. they will ask questions not only during, but also before and after reading, in order to check comprehension, clarify ideas, activate prior knowledge, make predictions.

As good readers interact with text, they evaluate before, during, and after reading. They intuitively consider whether the title is something that interests them, whether the author is accurately representing the world as they know it, whether the author is exaggerating or distorting ideas, whether they would recommend the text to another reader, and if so, who that reader would be. In this way, they are monitoring their understanding and making connections with the text.

As we can see, strategies overlap and intermingle when competent readers interact with texts.

c) These strategies can be distinguished according to the *mode of reading* that depends on the *reading purpose or intention.*

Skimming and scanning are two processes that aid speed-reading. Skimming aims at getting the gist

of a passage or a general idea of the contents. When skimming, you would be reading vertically rather than horizontally, e.g. for an internet search you will quickly survey hyperlinks that appear on your screen to see whether or not they suit your purpose.

*Scanning***,** on the other hand, involves looking for a specific bit of information in a long document. It helps you to find a quick answer to a specific question from a long passage or even from a book, e.g. finding a person's name in a telephone directory.

Ad 4: What instructional approaches to teaching strategies has research identified and how have they been evaluated?

To answer this question, we have to look back into the history of reading instruction. Up to the late 1970s, there was an assumption among teachers that through repeated practice, students would learn skills, internalize them and apply them to new texts they read. Comprehension was supposed to naturally evolve from there. Teachers had students practise answering questions on texts and do a sequence of *separate skills* that had been identified in basal reading programmes. Teachers "tested" whether students knew how to use them. "In some classrooms we observed a great deal of testing of comprehension but very little teaching of it". (cf. Durkin 1998, 198) For instance, students had to complete workbook pages by finding "the main idea" of a paragraph from one of four choices, or they were asked to reorganize content. When teachers directed students to "find the main idea", there was no assistance from the teacher for students who were unable to perform this task. There was no systematic student reading either, and practice alone did not make perfect, as research revealed.

A classic study by Durkin (1978-79), demonstrated convincingly that *mentioning or assigning the use of comprehension skills was not the same as actually teaching these skills*. Durkin pointed out that what was called "reading instruction" was far from being instructive. She suggested that it did not help students to learn *what* these comprehension skills were, *how* learners should actually apply them, or *when* these strategies should be used. Durkin revealed that even if students could correctly find out the main idea or summarize a passage, this often did not happen through conscious strategic text approach. The desideratum identified in Durkin's research was the *"how"* of literacy instruction. Immediately after Durkin's description of the lack of instruction on reading comprehension, broad instructional research on reading began.

Since then, research on reading instruction has come a long way, and yet many teachers did not, and still *do not know how to go about the task of teaching strategy use. Looking at classrooms,* it is often those students who need strategy instruction the most who get it the least. This is still true of many classrooms, not only in Germany. Teachers apparently do not know how to go about the task of teaching strategy use. (cf. Pressley 2002, Artelt et al. 2005, Garbe et al. 2010)

We are, in fact, looking at a demanding instructional task that corresponds to a demanding problem-solving task on the part of the student. Making sense of demanding texts resembles *a complex kind of mental gymnastics***,** mental problem-solving, as the US poet Walt Whitman states:

The process of reading is not a half sleep; but, in highest sense, an exercise, a gymnast's struggle; that the reader is to do something for himself, must be on the alert, must […] construct indeed the poem,

argument, history […] the text furnishing the hints, the clue, the start or frame-work.

Just as students need a variety of tools to fix a flat tyre on their bike, they will need a set of appropriate *mental tools* to solve the variety of problems they have with texts. (*cf. BaCuLit module 2 on texts*) The task of all subject area teachers must therefore be to equip students with a repertoire of problem-solving tools (a "*mental tool belt*") (Schoenbach & Greenleaf) that makes them able to deal with challenging academic texts. These mental tools are not "add-ons" to content area learning. (Santa et al 202, 17) They promote deeper learning only if integrated into meaningful content.

But how can teachers know which "tools" will support their students' growth as readers? How can teachers know which instruments they will have to assemble in their **mental tool belt** (Schoenbach& Greenleaf)?

Research found answers by looking at the reading processes of successful and less successful readers.

These "good" readers differ from struggling readers as they interact with text *actively and strategically*, before, while and after reading it. Learning to use strategies effectively must therefore be considered essential to constructing meaning. Expert readers are strategic readers, and based on their strategic approaches to texts, they are "good information processors"(cf. Pressley, Borkowski & Schneider 1987, 1989). In the research on the topic of the "good reader" the main focus lay on the identification of what in detail makes good reading proficiency. *Good readers are, in short, strategic readers.*

Pearson, Roehler, Dole & Duffy (1992) developed a synopsis of strategic reader research organized around seven comprehension strategies that consistently appear in research on strategic readers. Among them there was activating prior knowledge and monitoring comprehension by adjusting speed and strategies to the kind of text that has to be read. These strategies are described as a *comprehension curriculum* and form the basis for a model of the reading comprehension process.

Good readers are active readers. They set themselves clear goals for their reading.

Good readers look over the text before they read, noting text structure.

Before and while reading, they frequently make predictions about what is to come. Good readers construct, revise, and question the meaning of the text as they read. They draw upon their prior knowledge and integrate it into the text. They think about the authors of the text, their style, intentions etc.

They monitor their understanding of the text, using fix-up strategies where needed. Good readers check the meaning of unfamiliar words and concepts. They evaluate the quality and validity of the text; they react to the text both intellectually and emotionally.

They understand that comprehension is a continuous and complex activity, but one that is productive for their meaning making from text**.** *(Cf. Block & Pressley 2001 for reviews of much of the research on good readers' comprehension).*

Set against this background, readers who are not strategic in the above sense often encounter difficulties in their reading (Paris, Wasik, & Turner 1991). Struggling readers seem to be unaware of when and how to apply the knowledge they do possess.

These early reading difficulties may influence the way readers learn throughout the rest of their lives.

Studies have repeatedly revealed a marked correlation between levels of literacy and employment rates. For example, data from British longitudinal datasets show that men and women with the lowest levels of literacy are also the least likely to be employed (e.g. Parsons and Bynner 2006).

Seen against this background, reading strategies gain even greater importance, as it is the *weak readers who gain the most from strategies*, as Hansen & Pearson (1983) revealed in an instructional study on "Improving the inferential comprehension of fourth grade good and poor readers" (821-829). Hansen and Pearson found that explicit strategy training was most effective for precisely those students who had difficulty in performing higher-level comprehension tasks.

They also found a lack of reliable differences among good readers that they suggested might be because good readers discover the reading strategies on their own. Poor readers, however, cannot cope without a clear teacher explanation of how to go about reading for learning. Paris, Cross & Lipson 1984 concluded that if teachers drew on what had been identified in strong readers, all students could be taught about the existence and use of reading strategies through *informed direct instruction.*

Studies on the direct or explicit explanation model identified five critical components. Instruction must help students

- understand the strategies in a meaningful way
- understand why they are learning the strategies and how the strategies can help them
- learn how to use the strategies step-by-step,
- understand when and where the strategies can be used,
- evaluate their use of the strategies so they can monitor and improve their comprehension. (cf. Duffy & Roehler 1987, Duffy 2002).

How can teachers facilitate students' development towards such independent strategy use? Research suggests that a model of comprehension instruction should include explicit descriptions, modelling, collaborative use, guided practice, and independent use of the strategy in question (cf. Duke & Pearson 2002). In the Duffy et al. studies (1986, 1987), teachers provided students with detailed explanations of reading strategies that included *declarative, procedural and conditional knowledge* (Paris et al., 1983) (= knowing about something, i.e. different strategies; knowing how to use them; knowing when and why to use them). Knowing and understanding these strategies could be identified an essential influence on reading comprehension.

Another instructional delivery model for cognitive strategies is the cognitive apprenticeship model (Collins, Brown, & Newman, 1989) that was elaborated in the Reading Apprenticeship programme by Schoenbach & Greenfleaf (1999) *"Reading Apprenticeship"* (Reading Apprenticeship© WestEd). Among the cognitive apprenticeship models the Reading Apprenticeship model has gained a wide reputation over the last two decades. It is an optimistic approach to the problem of reading deficits in secondary schools. Instead of lamenting about achievements not made, it offers a second chance to struggling adolescent readers: "*If Johnny still can't read in class 9, it's not too late*." These struggling learners take on the role of reading apprentices who, as in an apprenticeship for a trade or

for a craft, are introduced to good practice by experts. The teachers in all subject areas are reading specialists in their domain and therefore assume the role of ”master readers“. Students can also serve as competent readers for their classmates. This team-based approach transforms the classroom into an enquiring community of learners.

This approach was developed by literacy researchers and teachers as an answer to the urgent reading problems that impede learning in secondary schools. As a series of rigorous large-scale evaluation has shown, it has had a high success rate both for reading and for content learning in high schools and colleges in the USA and Canada. The WestEd Team around Cynthia Greenleaf and Ruth Schoenbach developed this model of Reading Apprenticeship to demonstrate what they believe to be the four key dimensions of classroom life that are necessary to support adolescent reading development (cf. Schoenbach et al. 1999, 22 ff.):

“Personal dimension: developing students´ identities and self-awareness as readers, as well as their purposes for reading and goals for reading improvement“. The BaCuLit term is *“engagement“.*

“Social dimension: community building in the classroom, including recognizing the resources brought by each member and developing a safe environment for students to be open about their reading difficulties”. The BaCuLit term is “supportive *interaction*”

“Cognitive dimension: developing readers´ mental processes, including their problem-solving strategies”. This dimension is of central relevance in this module as well as in module 5.

“Knowledge-building dimension: identifying and expanding the kinds of knowledge readers bring to a text and further develop through interaction with that text”. This will be of central relevance in modules 2 and 3.

At the centre of this model you will find the *“metacognitive conversation“* – the first cross-curricular concept of BaCuLit, called “metacognition“ – which ties the four dimensions together: It “is an ongoing conversation in which teacher and students think about and discuss their personal relationships to reading, the social environment and resources of the classroom, their cognitive activity, and the kinds of knowledge required to make sense of text. This *metacognitive* conversation is carried on both internally, as teacher and students individually read and consider their own mental processes, and externally, as they talk about their reading processes, strategies, knowledge resources, and motivations and their interactions with and affective responses to texts.“ (Schoenbach et al. 1999, p. 22f.)

Reading Apprenticeship shares a great number of common features with the direct instruction models presented so far, one of them being “*scaffolded instruction*“ for “apprentices” in reading by a model reader, be it the teacher or a knowledgeable peer. This procedure has grown out of research on how individuals learn (Collins, Brown, & Newman 1986; Vygotsky 1978). The concept is based on the idea that at the beginning of learning, students need a great deal of support; gradually, this support is reduced to allow students to try their independence. This is what Pearson (1985) called the *gradual release of responsibility*.

A convincing example from an educational project called *“Rhythm is it”* may demonstrate how novices’ or apprentices’ learning can be promoted considerably by a competent other (the teacher or a knowledgeable peer). It was run by the choreographer Royston Maldoom in cooperation with the

Berlin philharmonic orchestra during three months in 2003.

250 Berlin students from 25 nations, many of them from culturally deprived families with poor school prospects, mostly without any knowledge of classical music, practised and successfully performed Stravinsky's Le Sacré du Printemps. Royston Maldoom and his team introduced them to an apprenticeship process with clear rules for success. The adults set models of endurance and provided *scaffolded instruction* by teaching their novices the techniques and strategies that it takes to dance like a professional.

The dancing apprentices went through all the highs and lows of learning, and achieved growth with the help of the adult team's stimulating and demanding models of behaviour and of art. As the students became more and more self-assured and competent, the adults who had served as models were eventually able to fade. Their apprentices could literally take centre stage. They did not only perform successfully during their big performance on stage, but they were also able to change their attitude towards school learning and develop new perspectives for the future.

"You Can Change Your Life In A Dance Class" (Royston Maldoom) and we suggest that, similarly, you can change your life in a reading class.

Here we can remind ourselves of the principles of scaffolded instruction, detailed in module 1 in the context of supportive interaction in the classroom (cf. *Module 1*, Conceptual Foundations, p. 28-30).

> *a) Introduction and Modelling*: this has been shown to be a vital part of helping students to learn the process of constructing meaning and of helping them to learn the various strategies and skills involved in this process (Bandura, 1986). The teacher provides modelling of specific strategies and skills. This can be done through reading aloud and through demonstrating response activities and discussions, i.e. through sharing the cognitive secrets a teacher as an expert reader has. The teachers can "apprentice their students to the reading craft by making their own normally invisible comprehension processes visible to those students. As apprentices, students in turn become empowered as readers…"(Schoenbach, Greenleaf & al. 1999, 13)

In this step the teacher takes the stage. "We (the teachers) show, tell, model, demonstrate, and explain how to use the strategy effectively with our content (reading materials - paper or online, videos, labs etc.)." (Santa et al 2012, 15)

> *b) Scaffolding:* in this step, the teacher gives students the opportunity to practise the strategy and provides intensive guidance and feedback, possibly also with the support of more advanced students. Teachers and students work together to discover HOW they went about applying the skill.
>
> *c) Fading*: teachers consolidate the learning processes of their students and gradually "fade out" as students increasingly take over responsibility for their learning.
>
> *d) Independent Learning*: students take almost full responsibility for determining what the skill/strategy is and how to apply it. Application is a critical step, where teachers ask students to apply the skill/strategy to unknown texts and to reflect independently and metacognitively about their learning processes.

Among the procedures that are used to model comprehension is the Think Aloud strategy. This

allows an insight into thinking processes that are normally invisible. By verbalizing their thought processes, teachers demonstrate practical ways of approaching difficult problems. They bring to the surface the complex thought processes that underlie problem-solving, such as understanding demanding texts, solving mathematical problems and so on. By making the normally invisible visible for their students they teach them the "secrets of their trade"(Schoenbach & Greenleaf 1999, 77 ff.) For instance, a chemistry teacher might demonstrate how best to set up an experiment, or a social science teacher might demonstrate techniques for evaluating the reliability of an internet source.

Students become aware of the fact that even for teachers as master readers demanding texts are a real challenge. This is an invaluable step in enabling students to understand that learning requires effort and is often demanding (Tinzmann et al. 1990).

When students are apprenticed to the procedure of thinking out loud with teachers and peers, they gradually internalize this dialogue and eventually become able to "own and improve" their own reading and problem-solving processes. (Schoenbach and Greenleaf 1999, 13 ff.)

Thinking out loud helps students to learn how to learn and enriches classroom discourse. This procedure supports students' development into reflective, metacognitive, independent learners in a "reading inquiry partnership" (Schoenbach & Greenleaf, 13) As students develop the habit of thinking out loud teachers gain valuable insight into learners' mental processes which they can use for assessment and as a diagnostic tool.

With growing practice readers can do without *think aloud*. Then the *thinking processes made visible* become invisible again. (Schoenbach & Greenleaf, 21)

Ad 5: Conclusion and preview of module 4 block 2

The conceptual foundations for reading strategies demonstrate how *closely interwoven these comprehension strategies are with all key concepts for successful learning from texts* that find themselves at the core of the BaCuLit programme**.** They are based on what we know about metacognition, interaction und engagement (module 1), they are applied in relation to the challenges of text worlds (module 2) and vocabulary demands (module 3).

If strategies are to take effect in the classroom, they are not effective if used in the form of "add-ons" (Santa et al 2012, 17) but only when they are integrated into meaningful subject area content. Above all, they are not effective if they are independent of *students' prior knowledge* about strategies and their own *learning needs*. Therefore preparation for module 4 is teachers' *becoming aware* of their students' use of reading strategies and it actually begins *with teachers becoming aware of their own and their colleagues' methods for dealing with* challenging texts. Teachers who usually perform as experts in their domain and who use long-established routines, can "see learning through the eyes of the learners" (Hattie), one of the prerequisites of successful teaching. Decisions about the strategies to be taught also incorporate decisions about text choice. The texts presented in this module are intended to serve as models. They should be complemented or replaced by more specific texts appropriate for the specific context of the learning group and the content area.

Block 2 delivers an opportunity for teachers and their students to experience how strategies integrated into sets can facilitate meaning-making from texts,

This block informs about *a research-based and provenly effective strategy set* under the name of **"Reciprocal Teaching" (= RT).**

It suggests answers to the following questions:

a) How can strategies be taught to develop students' growth as readers?

b) What exactly is meant by RT?

c) What is the research base for this set of strategies?

d) How can it be implemented in the classroom?

e) How can it be implemented in teachers' professional development? (Model for a teacher training session in the following text, not part of the PPT)

When we look at the strategy set "Reciprocal Teaching", we might ask more generally:

Ad a) How do we teach strategies that develop students' growth as independent learners? (cf. Module 4, block 1, Ad 4)

During the 1980s much research was conducted on cognitive strategies. Dolores Durkin showed in her studies on the teaching of reading comprehension that teachers did no real teaching. Instead, students practised the skills and teachers "tested" whether the students could use them.

Among the many research findings that followed Durkin was a cognitive strategy instruction developed by Palincsar & Brown, termed **"Reciprocal Teaching"**. This might provide answers to the above question. It demonstrates that the four strategies described: questioning, summarizing, clarifying and predicting, can enable students to take the lead in their own learning.

Ad b) What exactly is meant by RT?

Reciprocal teaching was developed in 1986 by the US researchers Ann Palincsar and Ann Brown. This training programme was designed specifically to help struggling readers to improve their learning from texts. It served as a means to an end, giving students the opportunity to practise comprehension strategies and finally to internalize them.

It was innovative, in that students did not learn isolated strategies, but rather a set of strategies that they could apply flexibly and interactively. These strategies are applied in a clearly structured dialogue/discourse between teacher and peers or among peers, to actively deal with text.

Their dialogue/ discourse is a process of interaction, cooperation and co-construction of meaning.

Student role and teacher role continuously change in this process:

In the role of the teacher (or discussion leader), students invite their peers to apply the strategies. In the role of the student, learners interact with their teacher and with their peers supporting each other's comprehension.

The name of the procedure "reciprocal" is based on this specific interaction**.**

Palincsar & Brown (1986) defined it as "…. an instructional activity that takes place in the form of a dialogue between teachers and students regarding segments of text. The dialogue is structured by the use of four strategies: summarizing, question generating, clarifying, and predicting.

The teacher and students take turns assuming the role of teacher in leading this dialogue."

Ad c) What is the research base for RT? Why did Palincsar & Brown choose four strategies for RT? (cf. Palincsar and Brown 1984, 120 f) In their research on reading education, Palincsar & Brown found six functions that were common to all approaches:

(1) Understanding the purposes of reading

(2) Activating relevant background knowledge

(3) Focusing attention on main content

(4) Evaluating content critically for consistency, and compatibility with prior knowledge and common sense;

(5) Ongoing monitoring of comprehension

(6) Drawing upon and testing of various kinds of inference, including interpretations, predictions, and conclusions.

Palincsar & Brown selected four concrete activities that were suitable for novice learners and that could cover the overlapping functions of points 1 through 6.

These were *summarizing* (self-review), *questioning, clarifying,* and *predicting.* By asking students to summarize a section of text, the teacher is simultaneously asking them to focus their attention on the main content (3) and to check to self-test their understanding (5). Asking students to generate questions on the content means that they are also asked to concentrate on the main ideas (3) and to check their current state of understanding (5). Asking students to clarify means that they have to evaluate the text critically while reading (4), and asking them to make predictions on the content of the following text or text passage requires them to draw conclusions and test inferences (6).

All four activities involve the activation of relevant background knowledge. "In summary, these four activities were selected because they provide a dual function, that of enhancing comprehension and at the same time affording an opportunity for the student to check whether it is occurring. That is, they can be both *comprehension-fostering* and *comprehension-monitoring* activities if properly used." (Palincsar & Brown 1986, 121)

In addition to the four strategies, points 1 and 2 above were addressed by embedding the instruction in the context of reading for the clear purpose of answering questions on the text, and by discussing relevant background knowledge at the start of each instructional period.

Reciprocal teaching is based on Vygotsky's theory of the fundamental role of social interaction (dialogue) in the development of cognition. Thinking aloud and discussing thinking processes aid clarification and revision of thinking and learning; therefore they develop students' cognition. *Vygotsky's theory of ZPD* (Zone of Proximal Development) is critical to identifying appropriate text and scaffolding activities to support student success. Texts must be at a level that can be effectively shared, not too easy and not too difficult. (cf. module 2) Appropriate support and feedback must be

given to facilitate learning during reciprocal teaching activities (Oczkus 2003).

"RT was deliberately designed to evoke zones of proximal development within which novices could take on increasing responsibility for more expert roles." (Brown & al 1993, 196)

All readers in the classroom learn from one another, drawing on the *"distributed expertise in the classroom"***.** Teacher as well as all learners "seed the classroom" with their ideas and knowledge. To describe the process of individual strategy acquisition, Brown replaced the term of "internalization" with *"mutual appropriation"* because of the bi-directional nature of RT. In a "mutual apprenticeship", novices as well as experts take on joint responsibility in a co-construction of meaning from text. This philosophy highly enhances the *climate of the classroom, generating mutual respect* in a process of close cooperation. This builds a "community of discourse" in which construction of meaning, discussion, questions and criticism are the rule and not the exception." (cf. Brown et al 1993, 188 ff)

This social quality of an RT procedure explains, according to Palincsar, its high degree of success.

"Fostering a Community of Learners … had an amazing synthetic quality, both in substance and form … a diverse array of participant structures in which students — engaged as collaborative researchers — pursued deep understanding of content knowledge and domain-specific reasoning in the biological sciences." (Palincsar 1999, 33)

Reciprocal teaching as a "Multiple Strategy Instruction" has found broad scientific support for its effectiveness as a treatment. It represents an evolution in the field from the acquisition of individual strategies to their flexible use in classrooms where teachers and readers interact making meaning from texts. (cf. NRP 2000, 46.):

A convincing body of research was delivered by Rosenshine et al. who reviewed 16 reciprocal teaching studies on readers in grades 3 through 7**.** "The data suggests that students at all skill levels would benefit from being taught these strategies" (Rosenshine, Meister, & Chapman 1996, 201).

The NRP reviewed 11 studies not covered by the meta-analysis of Rosenshine and Meister and found data consistent with those of Rosenshine et al. (2000, 79)

Evidence of meaningful gain through the use of RT as a powerful practice has also been provided in Hattie's 2008 meta-analysis "Visible Learning":

On a "barometer of success that helps teachers to understand which attributes of schooling assist students in attaining their goalposts" (Hattie 2009, 19) Reciprocal Teaching ranks high. As one of the practices with an effect size greater than .40 RT ranges in the "zone of desired effects"—as one of the influences that had the greatest impact on student achievement outcomes (Hattie 2009, 201).

Ad d) How can RT be implemented in the classroom?

Preparing students to take the lead in their own learning, the *how to* has to be the focus of instruction. (cf. Module 1 Block 2 and Module 4 Block 1)

The following look at the implementation of RT in the classroom and in teacher training programmes:

To teach a whole set of strategies like RT, teachers have to separately model the 4 tools involved. How exactly can teachers facilitate student growth towards independent reading and learning?

Before RT can be implemented, students need thorough practice with each of the 4 strategies of the

procedure and be able to put the 4 strategies together. The teacher chooses a suitable clearly structured subject-area text and determines the stopping points for the use of strategies. Here "scaffolded instruction" that leads to independent practice must be delivered, involving the steps: Introduction, Modelling, Scaffolding and Fading (cf. Module 1, Conceptual Foundations, p. 28-30, cf. module 4, block 1).

Teacher Modelling RT with the whole class

The teacher begins by explaining the whole RT procedure to the students. Students write the procedure down. He or she then models the implementation of the 4 strategies, either with the whole class or with small heterogeneous groups.

By modelling the strategies that an expert reader uses more or less automatically, the reader "demystifies reading, 'making the invisible visible' to the students". (Schoenbach & Greenleaf 1999, 21)

- First, the teacher tells students which part of the text to read silently.
- The teacher models questioning and invites students to ask questions themselves.
- The teacher models summarizing and invites students to add to the summary.
- The teacher models clarifying and invites students to clarify.
- The teacher models prediction and invites students to predict. (Palincsar & Brown 1986)

Over recent decades, more flexible approaches towards using this concept have emerged. Since Palincsar & Brown's first studies on Reciprocal Teaching, their strategy set has been field-tested in many different settings and expanded in its use. These modifications concern a) the sequence of strategies, b) the texts chosen for the training, c) the age and ability level of learners and d) the instructional settings.

According to Brown and Campione (1996, p. 289–325) "lethal mutations" are abundant because of teachers' focus on how to do the procedures of Reciprocal Teaching and lack of understanding of the learning principles upon which the method is based.

Far from being the "lethal mutations" of the programme that worried Brown, the following modifications have been reliably tested:

a) sequence of strategies

Predicting is first in the sequence of strategies. This change in the sequence of elements in Palincsar & Brown's original training design results from the greater importance attributed in more recent instructional designs to pre-reading previewing and predicting activities, which draw on prior knowledge. Second, the challenge of summarizing before being able to clarify confusing words or passages has often led to unsatisfactory results.

b) text types for RT

In the original studies by Palincsar & Brown, the passages to be read were expository and represented a range of topics, including poisonous snakes, solar energy, Inca civilization, lightning,

and carnivorous plants. These texts were about 1500 words and were selected after checking that they conformed to the seventh-grade level in the Fry Readability Formula. (cf. Palincsar & Brown, 127 ff)

Expository and informational texts from the initial studies have since been supplemented by literary texts that have proved equally suitable. RT has been implemented across the curriculum, but most often in sciences and in literature classes.

c) students to support with RT

- The age range of students to be supported with RT has expanded from the original 7th grade to include elementary school classes (cf. Oczkus 2003) and college level (cf. Hart & Speece 1998).
- Not only students with lower reading skills, but also the more advanced ones, can profit from RT: stronger students can gain motivation from cooperation and co-construction of meaning.

A precondition for the use of RT is, however, that students are able to decode and that they have been well acquainted with its elements before using the whole set.

d) instructional setting

Although it was originally designed by its creators as a one-to-one intervention or as small group instructional training with parallel teaching of the strategies, RT has been applied in varying settings since then, including small groups and whole classes.

Schoenbach & Greenleaf propose modelling RT with small groups in a fishbowl (1999, 96f).

This works as follows:

The teacher places students in mixed ability groups of four. S/he asks students to make a *fishbowl* in the middle of the room.

In the *first round*, the teacher invites one group after the other to come into the fishbowl. For each group, the teacher acts as the discussion leader. Group members see the teacher modelling the role and experience how the process works. Students outside the fishbowl observe what goes on.

In the *second round*, each group comes into the fishbowl with a different piece of text, this time the teacher assigns one of the students the role of discussion leader.

After each group has been in the fishbowl twice, teacher prompts students to ask questions about the procedure.

In the *third round*, the teacher has each group work individually with a third part of the text. This time group members take turns to be the "teacher" in the role of discussion leader.

In phases 2 and 3 *role cards* have proved highly efficient to support students in their roles as experts (see role cards).

Here we take a closer look at the 4 strategies that account for the highy ritualized, repetitive nature of RT:

Role of expert: Generating questions: Questioning increases students' awareness of the main ideas of the text.

At first students ask "teacher-like" questions that can be answered from the text itself. When students generate questions, they first identify the kind of information that is significant enough to

provide the substance for a question. Then they pose this information as a question and self-test to make sure that they can answer their own question.

Advanced students can be taught to *use deeper questioning*. To teach students how to use a whole range of questions, teachers can use so-called QUARs, developed by Taffy Raffael.

Raffael contended that students should vary their comprehension strategies depending on two factors:

1. The task demands of the question (Do I have to go to the text or to my head for an answer?) and
2. The information available (What does the text say about this? And what do I already know about this?).

Thus they would learn to see what Rafael termed *question-answer relationships.*

Based upon Pearson and Johnson's (1978) trichotomy for classifying question-answer relations, Rafael taught fourth-, sixth-, and eighth-grade students to discriminate among three situations depending on:

(a) Whether both the question and the answer come from the same sentence in the text (= right there);

(b) Whether the question and the answer come from different parts of the text (= think and search);

(c) Whether the question is motivated by the text but the answer comes from the reader's prior knowledge. (= author and me)

adding

(d) Whether the answer can only be found in the reader's experience and prior knowledge (= on my own)

Role of the expert: Summarizing

Summarizing requires the recall and arrangement of the most important ideas in a text.

"Research suggests that instruction and practice in summarizing not only improves students' ability to summarize text, but also their overall comprehension of text content." *(*Duke & Pearson 2002, 221)

Summarizing is a difficult task. Students must skip through text, distinguish important from unimportant ideas and then synthesize the important ideas to create a new text that represents the original. As Palincsar & Brown put it, students must progress from "imitation" to "invention". (Palincsar & Brown 1984)

Role of expert : Clarifying

Clarifying helps readers to monitor their comprehension and to identify "roadblocks" that impede understanding.

This strategy helps them to identify unfamiliar words, sentences or passages that are unclear.

When teaching students to clarify, the teacher calls their attention to the many reasons why text is difficult to understand, for example new vocabulary, unclear words, and unfamiliar or difficult concepts. Recognizing these blocks in order to understand signals the reader to re-read, read ahead or ask for help.

To struggling readers, this is especially beneficial as they do not recognize where their understanding breaks down and often answer the question "What was difficult for you to understand?" by replying "Everything!".

Ad e) How can RT be implemented in teacher training?

The crucial role of teacher beliefs and expertise for the success of Reciprocal Teaching:

A significant challenge to reciprocal teaching is that this method of instruction relies to a great extent on the teacher's belief in constructive learning and his or her proficiency with the reciprocal teaching process. The basis of this method is that the students will construct their own meaning from what they read, based on their understanding of the text, combined with their prior knowledge and experience. As the quality of the discourse is essential for comprehension, and as students may produce misconceptions, teachers have to find a middle ground of "guided discovery" for their students, where they encourage discovery and give guidance at the same time. (Brown et. al. 1993, 20) This is not an easy task. Such teachers need to be trained and prepared for situations that require modification because they must be able to demonstrate the strategies, gradually hand over leadership of the lessons to the students, and then become an activator for the student groups. (Hacker, et al 2002).

Knowing the procedures of RT is not enough. **Teachers need to scaffold their students' learning in flexible ways and monitor the quality of student dialogue by using:**

1. Prompting — ''What question did you think a teacher might ask?''

2. Instruction — ''Remember, a summary is a shortened version, it doesn't include all the detail''.

3. Modifying activity — ''If you are having a hard time thinking of a question, why don't you summarize first?''

4. Praise and feedback — ''You asked that question well; it was very clear what information you wanted''.

5. Modelling activity that needs improvement — ''A question I would have asked would be …''.

6. Explicitly telling students that the strategies are ways people use to help themselves understand what they are reading, that the strategies will help them whenever they are reading and that they should practise them whenever they read books of any kind (Palincsar & Brown 1984).

Teachers' professional development in RT can facilitate the understanding of the learning principles that form the basis of this instructional method.

Here is an example from teacher training units on RT from the Department for Teacher Training in the Federal State of Hessen (Germany):

*Before the training session***,** the teacher/leader introduces three members of his/ her team to RT. The leader first models all four strategies for these team members. Then, in the role of the discussion leader, the teacher/leader practices the use of the four strategies together with the team.

Text: "Women's roles in the fifties", support: role cards.

1. At the beginning of the training session, the teacher/leader gives a brief introduction to the theory behind RT and its benefits for improved comprehension.

2. For the first segment of text, the teacher/leader acts as the discussion leader modelling strategies and prompting his/her team members to also question, summarize, clarify and predict.

The role cards are used to support strategy use.

3. Teachers observe the process, take notes on procedure and on questions that may arise.

4. The teacher/leader then invites participating colleagues to continue practicing RT with the following segment, using role cards for their support.

5. The procedure continues with varying groups of teachers until the whole text has been worked through.

6. To debrief, colleagues ask questions about the procedure, describe how they felt in the role of strategy user and discuss procedure.

7. Colleagues collaboratively plan the use of RT for the classrooms in their own disciplines.

What is true for literacy development in general, also applies to RT. Students cannot gain ownership of these strategies in a single instructional approach. RT, like learning and reading strategies in general, needs to be reviewed and practised as students encounter increasingly challenging texts, over time and in all content areas. Therefore teachers' professional development and cooperation are vital for the success of this set of strategies.

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PPT Slides M4_Mat 1

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

Module 4 Block 1 (material 1)

Supporting Student Growth Through Reading Strategies

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

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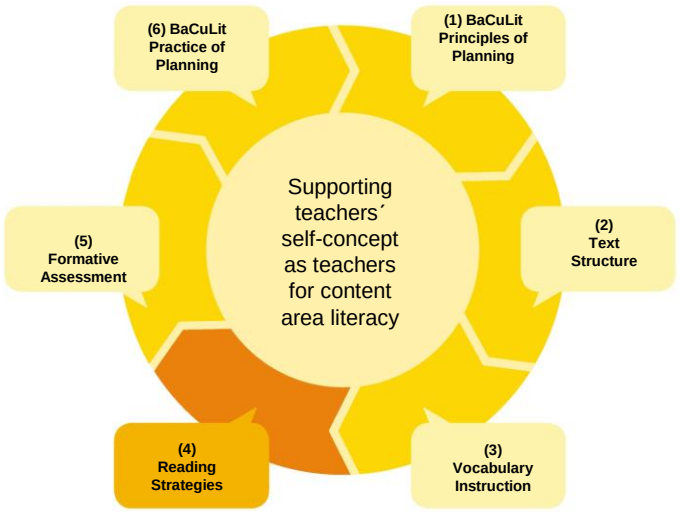
BaCuLit
BaCuLit Association e.V.

Lifelong Learning Programme

Universität zu Köln

Modul 4 Block 1 2

The BaCuLit Curriculum



Modul 4 Block 1 3

This PPT contains basics concerning reading strategies which research has found to be powerful tools for fostering the development of reading comprehension.
As the "only reason for teacher professional development is improved student learning " (cf. Helen Timperley) reading strategies hold a significant place in a teacher training on literacy development.

Content of Module 4: Teaching Cognitive and Metacognitive Reading Strategies

Block 1: Strategies as an element of the BaCulit curriculum

- **What are reading strategies and how should they be taught?**
- **How can teachers become aware of their own strategy use and gain an insight into their students´?**
- **How does a Cognitive Apprenticeship bring about a shift of responsibility for strategy use from teacher to student?**

Block 2 (Option A): **Reciprocal teaching**

- What is Reciprocal Teaching and how does it work in teacher training and in the classroom?

Modul 4 Block 1 4

Module 4 is organized into two blocks of about 3 – 4 hours each.
To prepare Block 1, teachers should „capture" their students' strategy use. (available as worksheet for participants as Mat. 1 a)
As an **opening activity** teachers should exchange and assess their findings on their students' strategy use and , as a self-experience, they should then become aware of their own strategy use.(Mat. 1 b and 1 c)
Part 1: basic information on the nature and relevance of strategies
Part 2: categories of strategies and their use for fostering comprehension
Part 3: ways of teaching strategies and highlights a cognitive instruction model
Part 4: teaching and learning practices in cognitive instruction (cf. Module 1, Block 2)
The PPT contains several **participant activities, e.g. on teachers' own strategy use,** on the **regulative function of metacognitive strategies** and on **think alouds**.
(Cf. Conceptual Foundations, M4, p. 162-166)

PARTICIPANT ACTIVITY

- **Introductory activity**, option 1:
  - Reflection round on results of students' strategy use
  - Which strategies were retrieved? How do teachers assess these findings?

  Material: M4_Mat. 1a
- Teachers' self-awareness on strategy use: Think-pair-share procedure

  Material: M4_Mat. 1b and M4_Mat. 1c
- **Introductory activity**, option 2: Inventory of reading strategies dealt with in the course so far
- Whole group activity: Which strategies have we used in the course so far ?

Module 4 Block 1 5

You as a trainer will choose option 1 or 2 alternatively.
Introductory activity option 1:If teachers could prepare this module by capturing their students' reading processes and strategy use (Mat. 1a) they should be given the opportunity of exchanging and assessing their findings and, as a self-experience, capture their own reading processes. (Mat. 1 b and 1c)
Introductory activity option 2: Alternatively you as a trainer will invite participants to make an inventory of reading strategies dealt with in the BaCuLit course so far.

What are strategies and why are they so important for reading to learn?

- **Strategy:** Originally military use: tactics for defense or attack (from Greek στρατηγία (strategia) = art of troop leader).
- **Cognitive strategy:** A mental routine or procedure to accomplish a goal., e.g. solving a sudoku puzzle, getting organized for taking an exam etc.,
- **Cognitive strategies in reading serve** for processing incoming information.
  - Using them requires deliberate and conscious or metacognitive acts to build meaning from texts, strategies forming "mental toolbelt" for problem-solving. Strategies practiced long enough are finally used automatically as reading **skills**.
  - "At the heart of accomplished reading is a balance of both – automatic application and use of reading skills, and intentional, effortful employment of reading strategies…"

    Afflerbach, Pearson, Paris 2008
- **Reading method**: a whole set of teaching and learning materials and/or activities often given a label, e.g. phonics method.

Modul 4 Block 1 6

2 options for trainer:
Depending on prior knowledge of the group and on the amount of time available, the definition of „strategy" could be developed inductively together with the participants (= option a: Activity : „What would you understand by a „strategy"?) or presented by the trainer (= option b).
„Skill" and „method" could be elaborated the same way.
Therefore this slide is an „animated" one- only the top appears at first, rest must be added by mouseclick.

Input by trainer for option a)
You as teachers may have come across differing usages of the term „strategy".
What would you understand by a „strategy"?
Could you present an example of somebody acting strategically?
Trainer: Collects examples and clusters. Induces transfer on „reading strategy".

Input by trainer for option b)
To clarify what we understand by reading strategies, we have to take a short look at the distinctions between „strategy", „skill" and „method" to be found on the slide.

Our focus: the importance of strategies for learning

- The goal of all reading instruction: to help students become expert and independent readers who can use literacy for lifelong learning and enjoyment.

(ADORE)

- Learning to use strategies effectively is essential to constructing meaning. Expert readers are strategic readers, and: what is more: they are "good information processors".

(Pressley, Borkowski & Schneider 1989)

Modul 4 Block 1 7

Research over the past decades has found strategies to be extremely helpful for making meaning from subject area texts. These tools do , however, not work as "**add-ons"** (Santa et al 2012, 17) to content area learning. They promote deeper learning only if integrated into meaningful content. **Any reading strategy is only a means to an end, not an end in itself.**
Rather the **goal of all reading instruction** is to help students become more and more expert and independent readers who can use literacy for lifelong learning and enjoyment.
Reading with understanding does, however, **not grow automatically**. Making sense of demanding texts resembles a **complex kind of mental gymnastics** that has to be learned. It means mental problem-solving.
The task of all subject area teachers is therefore to equip students with a repertoire of problem-solving tools (a "**mental toolbelt**") (van Dijk & Kintsch) which makes them able to deal with demanding academic texts.
But how can you as teachers know which instruments will support your students' growth as readers?
Easy to say. The answer can be found through looking at the reading processes of successful readers.

Our focus: the importance of strategies for learning

Good readers are active readers

- They set themselves **clear goals** for their reading.
- Good readers **look over** the text before they read, noting text structure.
- While reading, they frequently make **predictions** about what is to come.
- Good readers **construct, revise, and question** the meaning of the text as they read.
- They draw upon and **integrate their prior knowledge** with material in the text.

Modul 4 Block 1 8

Good readers differ from struggling readers as they interact with text **actively and strategically**, before, while and after reading it.
Good readers are, in short, strategic readers.

Our focus: the importance of strategies for learning

- They think about the **authors** of the text, their style, intentions etc.
- They **monitor their understanding** of the text, using fix-up strategies where needed.
- Good readers try to determine the meaning of unfamiliar **words and concepts**.
- They **evaluate quality** and **validity** of the text, react to the text, emotionally as well as intellectually.
- They understand that comprehension is a **continuous and complex activity,**
- They understand that comprehension requires **an effort** which is **rewarding.**

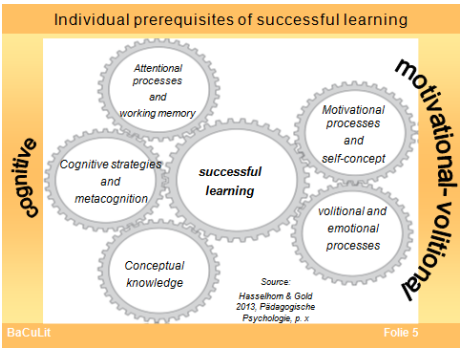
Researchers concluded that struggling students can be taught good readers' strategies through **informed direct instruction** offering explicit description, modeling, collaborative use, guided practice, and independent use of the strategy in question.

Modul 4 Block 1 9

Research has focused on identification and instruction of strategies good readers apply because poor readers seem to lack them and to be unaware of when and how to apply the knowledge they do possess.
Researchers concluded that struggling students can be taught good readers' strategies through **informed direct instruction.**
Researchers suggested that a **model of comprehension instruction** should include explicit description, modeling, collaborative use, guided practice, and independent use of the strategy in question.

During both blocks of this module you will study and practice these procedures yourself.

Our focus: the importance of strategies for learning



Modul 4 Block 1 10

Strategies are just one element in a **complex set of prerequisites** of successful learning that mesh with one another like clockwork gear wheels.

To reach a goal in learning or reading , the mind has to be set on attention. **Skill** (= automatically used cognitive strategies) and **will** (= volitional processes) have to be combined in an effort.
Through an activity on hidden words (slide 13) participants will make the experience that they have to attribute success or failure to the goals they have pursued and that they have to adapt their goals flexibly in case they did not succeed. (Cf. Conceptual Foundations, M4, Ad. 1 , p. 157)

Which strategies can support readers' comprehension?

- **Cognitive** and **metacognitive** (meta: Greek= beyond) strategies are other categories for describing strategies as
  - **functional** (= elaborating, reductive, repetitive)
  - **sequential** (= before, while, after reading),
  - **holistic** (all levels of the reading process "at a glance", e.g. Reading Apprenticeship model)
  - **modes of reading** (following the reading intention and goal)

Modul 4 Block 1 11

Strategies can be **categorized in different ways**:
An overall distinction has to be made between cognitive and metacognitive strategy use (cf. Slide 6)
Apart from this, strategies can be seen under various perspectives:
They may be distinguished according to their **function** for the development of text understanding by the reader (functional) (expanding text through connection with own prior knowledge, experiences, associations etc.; reducing text e.g. through graphic organizers; repeating text e.g. through learning by heart)
They may be distinguished according to their position in a **temporal sequence.**
They may be seen as an element in a holistic set of overlapping and interacting strategies involved in reading comprehension (RA as an example).
They may be distinguished according to the **mode of reading** which depends on the reader's goal.

Types of learning and reading strategies

- **Cognitive strategies:** "**mental tools in a mental toolbel**" (van Dijk and Kintsch) for understanding and remembering texts through
  - **elaborative** strategies (e.g. predicting),
  - **reductive** strategies (e.g. summarizing, e.g. using graphic organizers)
  - **repetitive** strategies (e.g. memorizing text through learning by heart)
- **Metacognitive strategies**
  - for monitoring and evaluating comprehension (e.g.checking understanding, e.g. fix-up = dealing with text difficulties)
  - for regulating will and motivation (adaptive goal setting: motivational or goal orientation)

Modul 4 Block 1 12

Just to remind you (cf. Slide 6): A cognitive strategy is a mental routine or procedure for accomplishing a cognitive goal. Van Dijk and Kintsch(1983) provided an excellent metaphor of cognitive strategies as "mental tools in a mental toolbelt".
Cognitive strategies in reading serve for processing incoming information.
The reader may ***elaborate*** the actual text through his/her own prior knowledge, through his/her predictions etc.
He/she may **reduce** the text to its essentials (summarizing) or **make its concepts** visible through a **graphic organizer,** a communication tool that uses visual symbols to express knowledge, concepts,and the relationship between them, such as cause and effect.
He or she may only **repeat** the text in different ways to memorize it better.
The following metacognitive exercise: Hidden words in a word puzzle will show this. *Material: M4_Mat. 1d (Cf. Conceptual Foundations, M4, p. 158-159)*

PARTICIPANT ACTIVITY

- **Task:** This puzzle contains 17 hidden space words. They are arranged horizontally as well as vertically.
- How many of them are you going to discover within 3 minutes?
- Set yourself a realistic goal. If you hit the number of words envisaged you score the maximum number of points. If your goal was not realistic, you will score 0 points.
- **Reflexion** after completion of task: Why did you succeed? Why did you fail? How would you change your goal in a second round, with another puzzle?

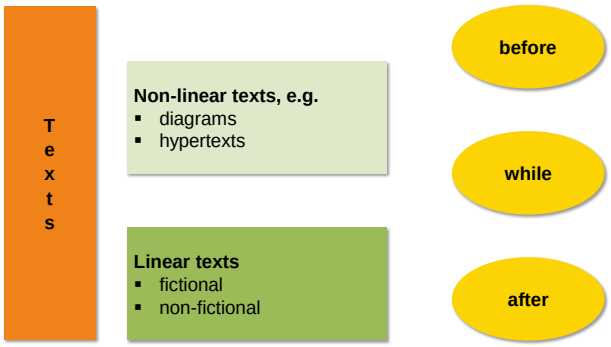
Material: M4_Mat. 1d

Module 4 Block 1 13

Invite participants to practice using metacognitive strategies for goal-setting:
Hand out worksheets (M4 1d) and set the task for a metacognitive exercise on adaptive goal-setting combining will and skill, afterwards share solutions and prompt reflexion.

Solution:
ASTEROID; COMET; EARTH; JUPITER; MARS; MERCURY; MOON; NEPTUNE; ORBIT; PLANET; PLUTO; METEOR; SATURN; STAR; SUN; URANUS; VENUS

Categories of reading strategies



Modul 4 Block 1 14

Dealing with strategies has to refer back to **our BaCuLit module on text**, as strategies are never a purpose in themselves but do service to facilitate constructing meaning from **all possible types of text.**
As explained before, strategies can be categorized in different ways.
Here strategies are represented as sequence of procedures, a temporal model –
This is helpful as a didactic plan, in reality expert readers will often apply one and the same strategy **throughout** the whole reading process, e.g.they will ask questions not only while , but equally before and after reading to check comprehension, clarify ideas, activate prior knowledge , make predictions.
In reality all strategies overlap and intermingle when competent readers interact with texts.

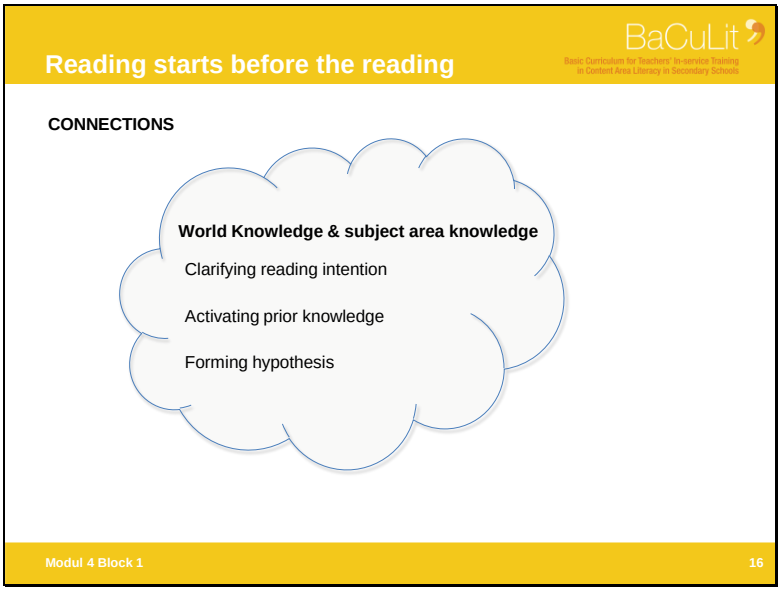
Key Tasks for Students

To **learn** from content area texts, students must integrate new information in what they already know. They can do that with strategic activities before, while, and after reading.

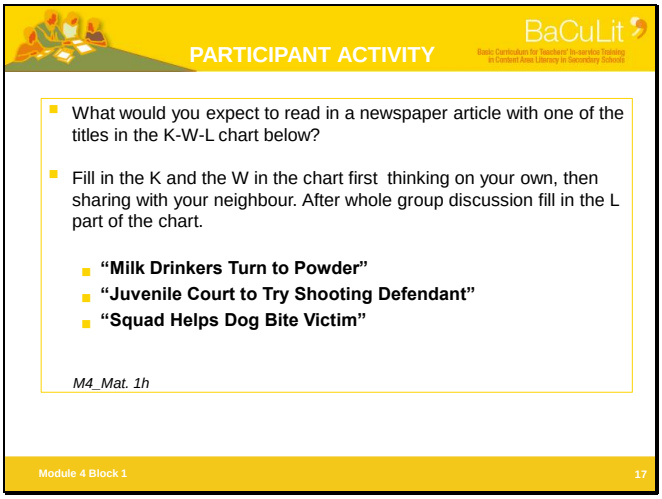
- **Before Reading**
  - Activating and expanding background knowledge.
- **Before and during reading**
  - Generating questions and expectations
- **While and after reading**
  - Analyzing text information (i.e. identifying big ideas)
  - Summarizing
- **After reading**
  - Presenting and discussing ideas and perspectives
  - Applying knowledge and organizing information

Modul 4 Block 1 15

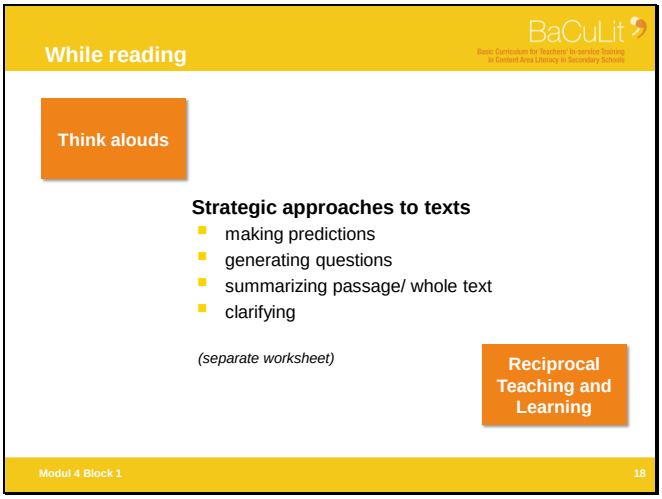
This slide gives an overview of the roles students assume using strategies in various stages of meaning-making from text.
These roles are detailed in the so-called COME model which delivers a framework for **C**onnecting students with texts – **O**rganizing monitoring and controlling text comprehension – **M**eaning negotiation and **M**etacognitive Reflection – **E**xpanding knowledge.



Reading starts before the reading. Think of a book you read lately. You certainly began to think about possible content of a book before you actually started reading, just looking at its cover, its colours , its title. All these details evoke associations and emotions, remind you of other information on the same topic. You learn new information by **connecting** it to what you already know (world knowledge and subject area knowledge) to construct meaning in your subject areas and in everyday life. This prior knowledge is the result of your attitudes, experiences, skills and conceptual understanding that you as a reader can master to understand a text. All these reading dimensions help readers set a goal for reading and focus their attention on the text.
"Proficient learners build on and activate their background knowledge before reading, writing, speaking, or listening; poor learners begin without thinking." *(*Irvin et al. *1996)*



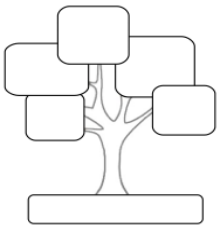
Reading starts before the reading. Interactive phase: **Choose 3 ambiguous headlines and let the teachers hypothesize** about the content of the 3 newspaper articles. Trainers please choose alternative headlines in your language.
Task to be found on worksheet M4_Mat. 1h.
Theory behind it: "Proficient learners build on and activate their background knowledge before reading, writing, speaking, or listening; poor learners begin without thinking." *(*Irvin et al. *1996)*
"…readers are in a better position to comprehend what they are reading whenever they use prior knowledge (schemata) to construct meaning" (Vacca 2002).



"Strategic learning during reading is all about monitoring reading and making sense. Skilled readers know how to monitor and keep track of whether the author is making sense by asking questions…"(Vacca 2002)
From the many strategies in use **Think alouds and Reciprocal Teaching** have proven to be of greatest effect.
As students use these strategies, they are continuously connecting with the text and checking their understanding—essential strategies for successful readers.
Both the procedure of Think aloud and the strategy set Reciprocal Teaching (in block 2) will exemplify how these strategies work.

After reading

- **Securing text comprehension**
- e.g. through graphic organizers: visual tools for representing relationships between concepts
- example: tree of cause and effects



- **Metacognitive dialogue about reading and learning** meaning negotiation and metacognitive expansion (COME) (e.g.reading journal, classroom conversation, diagnostic interviews)

Modul 4 Block 1 19

Input by trainer: **For a good reader reading is not over when the last letter has been read**.
As good readers interact with text, they evaluate before, during, and **after reading**. They do not only reproduce and reorganize texts, they also think critically about their reading.
To prompt these after reading activities, teachers can use the following items from the **checklist for lesson planning** Module 1 M. 2 g
How to organize text comprehension and metacognitive reflection after reading
1) What tools shall students use for structuring the content? (e.g., selective underlining, summarizing, concept maps, Venn diagrams, tables, time relations, two column notes…) (cf. module 2, text structure)
2) What opportunities will students have to assess their learning and to fix up areas of misunderstanding so they can perform well on the assessment?
Provide students with evaluation and reflection opportunities
How will I provide students with opportunities to evaluate and reflect about their learning?

Modes of reading: fast track – slow track

- **Skimming:** the technique you use reading ´on the fast track´ to get a general overview, the main points, the gist.
- Reading is performed mainly vertically, moving your eyes quickly across the page.
- Example1: You will skim a publication on reading instruction to find out whether or not it contains information on Reciprocal Teaching.
- Example2: You will quickly survey hyperlinks on reading instruction to see whether they may contain information on Reciprocal Teaching.

James Madison uni Virginia

Modul 4 Block 1 20

You as expert readers will know that **time** is a **factor which very much influences your attitude and approach to a text** you want to read. Another factor is your **reading purpose or intention.**
You adapt your mode of reading depending on these factors

Skimming and scanning are two processes that are used for speed-reading. Skimming aims at getting the overall picture of the contents in a passage or longer text. When skimming, you would be reading in a vertical manner rather than horizontally.
Take a research on "Reciprocal Teaching" as an example.
Example 1: In a longer article on strategy instruction you will quickly skim the pages to see whether the content suits your purpose.
Example 2: In an internet research you will quickly survey hyperlinks that come your way to see whether they suit your purpose or not.

Modes of reading: fast track – slow track

- **Scanning:** the technique by which you are **looking for a specific piece of information**, a selective skimming.
- To find out important details in a longer article or textbook, you run your eyes quickly over the text, to locate specific words, phrases, data of interest to you.
- Example: you would scan a telephone directory for a friend's phone number.

www.freedigitalphotos.net

Modul 4 Block 1 21

Scanning, involves looking for a specific bit of information in a longer document.
Example: you would scan a telephone directory for a friend's phone number.

Modes of reading: fast track – slow track

- **Reading for detail = Close reading, intensive reading,** the technique for actually understanding all pieces of information in a complete text. This reading mode takes time.
- Example: reading the dense text of a poem or a graph with many data.
- Example: reading instructions for an experiment in chemistry or a contract for the rental of a flat where every single word counts.

Modul 4 Block 1 22

In other cases you will take your time, like when reading a poem or a graph with many data which both require full attention to every detail. Sometimes you **just have to read on the "slow track"** because you have to fully understand all details of the the complete text, e.g. when reading an instruction for a risk-involving experiment in chemistry or a contract for the rental of a flat.

Modul 4 Block 1 23

How can strategies be taught?

- Assigning set against modelling, scaffolding, fading
- In reading as in many other spheres of life **practice alone does not make perfect!**
- Remember your first ride on the motorway. How much explanation before and after the actual practice did it take from the side of your driving instructor?
- Can you think of other learning situations where instruction is absolutely necessary for an apprentice to a trade or skill?

Modul 4 Block 1 24

How can the aim of all reading instruction – **helping learners to gradually become more and more expert and independent readers** - be achieved?
One might assume that through repeated practice, students would learn skills, internalize them and apply them to new texts they read. Research has shown, however, that reading **practice alone does not make perfect. This is true for many everyday skills, too.**
Take a beginning driver: nobody would hit upon the idea of just letting him practice how to ride his car on a motorway without preceding explanations and reasoning.
Interactive part: You may know more examples of this kind?Trainer collects examples from participants. These examples show: Just as the driving instructor will teach strategies for riding strategically on a motorway, teachers of all subject areas have to purposefully teach approaches to subject-specific texts.

How can strategies be taught?

- Parallels to reading:
  - **Assigning students to practice using comprehension skills is not the same as actually "teaching" them the skills**. A separate skills training which prevailed in the classrooms up to the 1980s did not prove effective for fostering comprehension. Teachers assigned, students practiced, teachers tested but did not demonstrate to their students how to go about their task.
- The **how to** teach comprehension strategies was found to be the missing link of the instruction (studies by Durkin).

Modul 4 Block 1 25

During the 1980s much research was conducted on cognitive strategies. They found that practicing **comprehension skills was not the same as actually teaching the skills**. Durkin showed that teachers did not use any systematic approach; instead, teachers mentioned or assigned reading skills, students practiced the skills and teachers "tested" whether students could use them.
The *how to* teach comprehension strategies was the missing element of the instruction, according to Durkin. Her work convinced a generations of reading researchers that many students were unlikely to learn comprehension skills well enough to apply them to their daily reading.
Durkin's study led to the teaching of specific cognitive strategies with a focus on *how to use* the strategy when reading a text. Durkin's conclusions were used to transform the teaching of skills into the teaching of strategies for low readers. The hope was that by learning how to become strategic readers, students **would learn how to apply the skills** that had remained a mystery to them.

How can strategies be taught?

- There are different ways of teaching reading strategies:
  - **the direct or explicit explanation model** which helps students understand the strategies in a meaningful way,
  - understand why they are learning the strategies and how the strategies can help them,
  - learn how to use the strategies step-by-step,
  - understand when and where the strategies can be used,
  - evaluate their use of the strategies so they can monitor and improve their comprehension.

Modul 4 Block 1 26

There are different ways of teaching reading strategies:

the direct or explicit explanation model (Duffy, 2002; Duffy & Roehler, 1987).
Winograd and Hare (1988) identified five critical components of this instructional model. In the direct explanation model, instruction must help students
1) understand the strategies in a meaningful way,
2) understand why they are learning the strategies and how the strategies can help them,
3) learn how to use the strategies step-by-step, 4) understand when and where the strategies can be used,
and 5) evaluate their use of the strategies so they can monitor and improve their comprehension.

How can strategies be taught?

- In research studies of the 1980s, teachers provided students with detailed explanations of reading strategies that included the **declarative (1), procedural(2) and conditional (3) knowledge** (knowing about s.th., e.g.different strategies (=1); knowing how to do them (=2) ; knowing when and why to use them (=3).
- Knowing **and** understanding strategies could be identified as influencing reading comprehension essentially.
- Another instructional delivery model for cognitive strategies is the **cognitive apprenticeship model (Collins, Brown, & Newman,1989, Schoenbach & Greenleaf)** spoken about in more detail in connection with slides 33 and 34 of this PPT.

Modul 4 Block 1 27

In research studies of the late 1980s, teachers provided students with detailed explanations of reading strategies that included the **declarative, procedural and conditional knowledge** (= knowing about s.th., here different strategies; knowing how to do them; knowing when and why to use them). (Paris et al., 1983) Knowing and understanding these strategies could be identified as influencing reading comprehension essentially.

All these features of effective strategy delivery can also be found in the **cognitive apprenticeship model named "Reading Apprenticeship"** (Collins, Brown, & Newman 1989, Schoenbach & Greenleaf 1999) which attributes the role of literacy experts to all content area teachers and the role of novices (= apprentices) to their students. Details on this model may be regarded as optional at the end of this block.

How does apprenticeship learning work?

Reading is like dancing

As we slowly begin to fade fade they begin to grow

Choreographer Royston Maldoom in the 2004 film production "... "Rhythm is it", a co-production of 240 Berlin students from secondary modern school and the Berlin philharmonian orchestra

Modul 4 Block 1 28

Practice without instructions or explanations is a hard way to success. An apprentice's learning can be promoted considerably by a competent other (teacher or peer).This is true in many areas of life, e.g. in dancing.
This photo shows a scene from the project **„Rhythm is it".**
As the dancing novices actually grew through the adult team's stimulating and demanding models of behaviour and of art, they became more and more self-assured **and competent**.
"You Can Change Your Life In A Dance Class" (Royston Maldoom) **and we might continue, you can equally change your life in a reading class.**
(Cf. Conceptual Modules, M4, p. 164-166)

Lesson Plan for Strategy Instruction

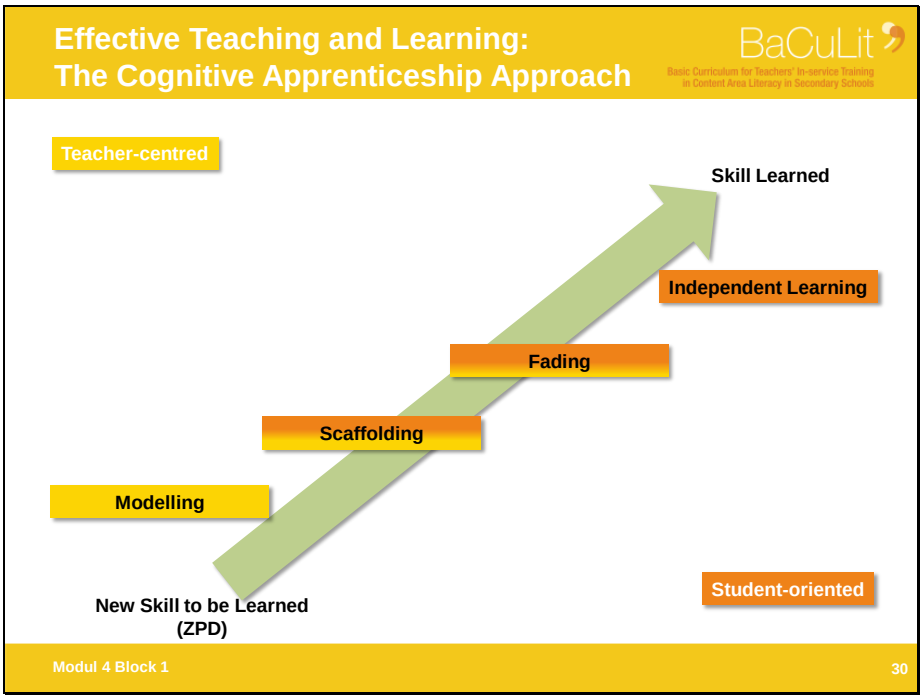
- Setting the purpose
- Modelling (includes thinking aloud)
- Coaching and scaffolding
- Building Independence
- Reflecting

Modul 4 Block 1 29

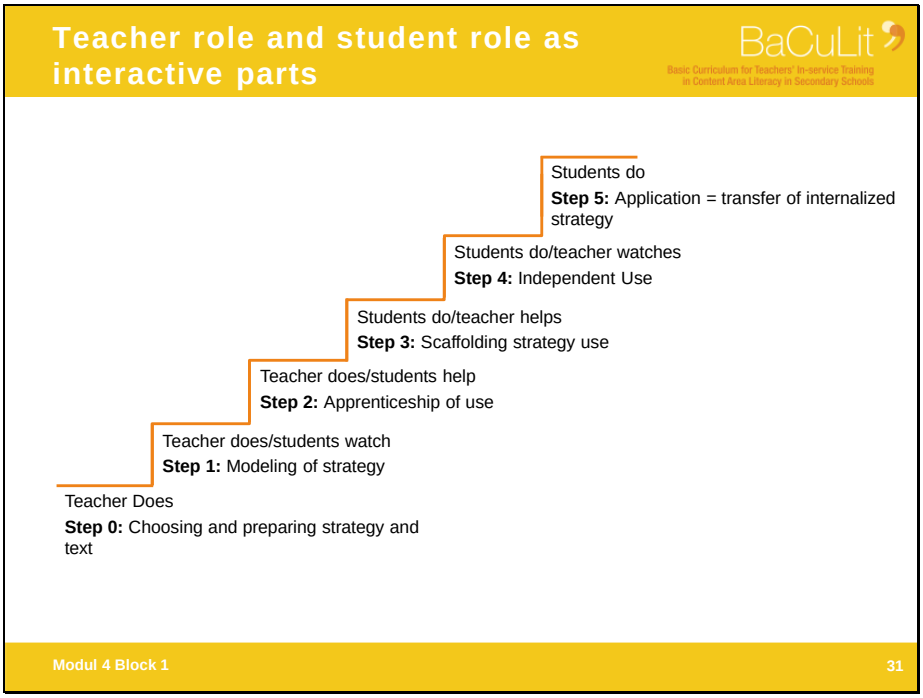
In dancing as in reading the instructional aim is making the learner more and more independent and expert. **This process does however not happen automaticially**. It takes professional knowledge and sensitivity for a teacher to approach instruction effectively.

An effective lesson plan for strategy instruction includes the following phases:

- Setting a clear purpose
- Modelling the strategy to be learned
- Coaching and scaffolding the students' learning processes
- Building the learners' independence
- Reflecting on the learning process



Input by trainer:
In dancing as in reading the instructional aim is making the learner more and more independent and expert. **This process does however not happen automaticially**. It takes professional knowledge and sensitivity for a teacher to approach instruction effectively.
This kind of instruction is , however, not the rule. The kind of teaching that still is typical of most middle and high school classrooms is that the **teacher tells and the student listens**, then the student tells and the teacher evaluates.
More progressive teaching is seen when teachers model strategies and knowledge making in the context of task completion, and then students attempt to do the task the way the teacher did it.
In a process of modelling, scaffolding, and fading teachers can lead students towards an independent use of skills learned.
There is clearly a need for this kind of active and sustained support for improving reading through the middle and high school years.



Input by trainer: Here again a closer look at the interactive roles of teacher and student in the process from total teacher responsibility (modeling) to total student responsibility (independent practice).
Step 1: Teacher uses and talks about strategy through techniques like think-alouds. Students observe. As an option students follow up use of technique through think-aloud checklist. (Schoenbach & Greenleaf, see Mat 1 f) Teacher stresses what, why, and when of strategy use.
Step 2: Teacher uses strategy. Students talk about it and help, identifying when and how strategy should be used.
Step 3: Students use and talk about strategy with help of scaffolding technique like think-alouds, usually in small groups. Teacher observes, provides feedback, and helps as needed.
Step 4: Students independently use strategy, demonstrating competence through techniques like think-alouds. Teacher observes and assesses; plans future instruction.
Step 5: Students apply strategy to new texts and reading situations.

PARTICIPANT ACTIVITY

Beaufort Scale	
No.	Description
0	Calm, smoke rises straight up
1	Light air, smoke drifts gently
2	Light breeze, leaves rustle
3	Gentle breeze, flags flutter
4	Moderate wind, twigs move
5	Fresh wind, small trees sway
6	Strong wind, large branches move
7	Near gale, whole tree sways
8	Gale, difficult to walk in wind
9	Severe wind, slates and branches break
10	Storm, houses damaged, trees blown down
11	Severe storm, houses seriously damaged
12	Hurricane, devastating damage

(M4_Mat. 1f)

Source: Dorling Kindersley Science Encyclopedia

Module 4 Block 1 32

You as a trainer prepare text on transparency, widely spaced, with wide margin for annotations T models *think aloud,* learners follow on think aloud checklist. (Mat. 1f)

You will find detailed suggestions for trainer modelling and participant activity in the Conceptual Foundations, M4, p. 165-166.

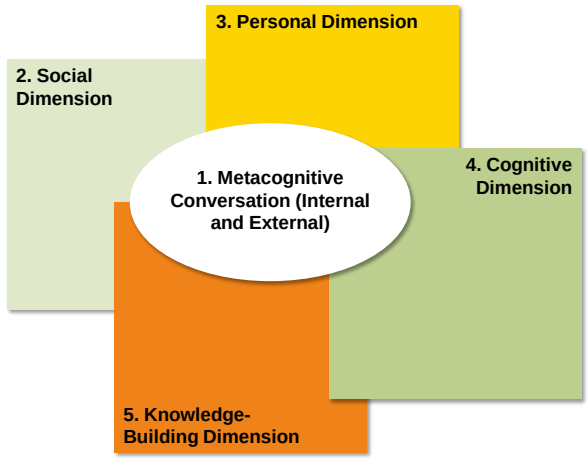
Optional: Empowerment through "cognitive apprenticeship"

- Instead of „staring at deficits"
  (Valtin)
- A strength-oriented and optimistic approach
- **If Johnny still can't read in class 9, it's not too late**.
  (Reading Apprenticeship© WestEd)

Modul 4 Block 1 33

Among the cognitive apprenticeship models the **Reading Apprenticeship** model has gained wide reputation over the last two decades.
What is specific about it? It is an optimistic approach to the problem of reading deficits in secondary schools, instead of lamenting about achievements not made it offers a second chance to adolescent struggling readers. These young people take on the role of reading apprentices who like in an apprenticeship for a trade or for a craft, are introduced to good practice by experts. The teachers in all subject areas as reading specialists of their domain assume the role of „master readers". Students can also serve as competent readers for their mates. This team-based approach transforms the classroom into an enquiring community of learners etc (Cf. Conceptual Foundations, M4, p. 163-64)

Optional: The 5 Dimensions of Reading Apprenticeship



Modul 4 Block 1 34

Strategies never stand alone in good reading instructions. Four key dimensions of classroom life that are necessary to support adolescent reading development are combined in the **Reading Apprenticeship** Model,

- *„Personal dimension": engagement*
- *„Social dimension": interaction*
- *„Cognitive dimension":* of central relevance in this module as well as in module 5
- *„Knowledge-building dimension":* of central relevance in modules no. 2 and 3.

At the center of this model you find *„metacognitive conversation"* – the first cross-curricular concept of BaCuLit, called „metacognition" – which ties the four dimensions together.

(Cf. Conceptual Foundations,M1, p. 38-39, cf. also Slides M1_Mat 2)

PARTICIPANT ACTIVITY

Think of your students' disciplinary learning in the light of what you have learned and experienced in this module and answer the following questions following a think- pair-share procedure.

- Which benefits, which drawbacks can you see in the use of reading strategies in your content area classroom?
- What could be your next practice to make better use of reading strategies in your disciplínary classroom?

If no time is available for the above activity, it may well follow as an implementation in the weeks after this module:

- Together with two colleagues from your discipline choose an appropriate text and jot down ideas for strategy use based on your learning in module 4.

Module 4 Block 1 35

Debrief this block of module 4 wrapping up with a think-pair-share reflection following the two above questions. (available as worksheet for participants Mat. 1 i)

Just read on

„Folks do not have any idea of how much time and effort it takes to learn how to read and to profit from your reading. It took me eighty years.“

Johann Wolfgang von Goethe, German poet, 1749 - 1832
(Goethe on 25/01/1830 to Frédéric Soret)

- What if he had been taught some reading strategies?

Modul 4 Block 1 36

Thank you for your attention!

Modul 4 Block 1 37

PPT Slides M4_Mat 2

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

Module 4 Block 2 (material 2)

Teaching Reading Strategies: Reciprocal teaching (Option A)

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

- "This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein."

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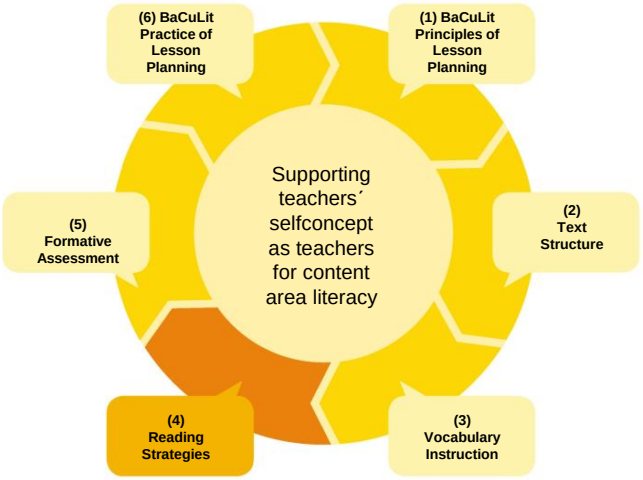
Lifelong Learning Programme

Universität zu Köln

Modul 4 Block 2 2

The BaCuLit Curriculum



Modul 4 Block 2 3

This PPT contains basics concerning reading strategies which research has found to be powerful tools for fostering the development of reading comprehension.
As the "only reason for teacher professional development is improved student learning " (cf. Helen Timperley) reading strategies hold a significant place in a teacher training on literacy development.

Content of Module 4, Block 2 – Reciprocal Teaching

Block 1: Strategies as an element of the BaCulit curriculum

- Introduction: Strategies as an element of the Baculit curriculum
- How can strategies be taught to develop students' growth as independent readers?

Block 2 (Option A): Reciprocal teaching

- **What exactly is "Reciprocal teaching (= RT)?"**
- **What is the research base saying about RT?**
- **How to implement RT in teacher training**
- **How to implement RT in the classroom**

Modul 4 Block 2 4

Module 4 block 1 contained basic information on the relevance of reading strategies , powerful tools for fostering the development of reading comprehension.
Of course the final goal of teacher professional learning is improved student outcome and growth (Timperley and NZ), as ADORE has it: it is all about helping learners to build up **self- efficacy** and develop a **stable concept as a reader (ADORE)**
The optional Block 2 gives you information on **a research-based and especially effective strategy set** under the name of „Reciprocal Teaching".
The questions to be answered will be:
How can strategies be taught to develop students' growth as reader?
What exactly is understood by RT
What is the research base saying about this set of strategies?
How can it be implemented in teacher training?
How can it be implemented into the classroom?

How can strategies be taught to develop students'growth as independent learners?

- **Assigning students to practice using comprehension skills is not the same as actually "teaching" them the skills**. A separate skills training which prevailed in the classrooms up to the 1980s did not prove effective for fostering comprehension. Teachers assigned, students practiced, teachers tested, but did not demonstrate to their students how to go about their task.
- The how to teach comprehension strategies was found to be the missing link of the instruction

(studies by Durkin)

- Many research studies in the 1980s dealt with effective delivery models for reading strategies. Among them was the research by **Palincsar & Brown** who developed **Reciprocal teaching, a cognitive strategy instruction** which enabled students to gradually take the lead in their own learning.

Modul 4 Block 2 5

Looking at the strategy set „Reciprocal Teaching" brings up a question of a more general range:
How can strategies be taught to develop students'growth as independent learners?
Durkin's study led to the teaching of specific cognitive strategies with a focus on *how* to use the strategy when reading a text. Durkin's conclusions were used to transform the teaching of skills into the teaching of strategies for low readers. The hope was that by learning how to become strategic readers, students **would learn how to use and apply the skills** that had remained a mystery to them.
Among the many research studies that followed Durkin's findings was **Reciprocal Teaching**, a cognitive strategy instruction developed by Palincsar & Brown could provide answers to the introductory question: It has been found to enable students to take the lead in their own learning.
(Cf. Conceptual Foundations, M4, p. 167-168)

What exactly is Reciprocal Teaching (RT)

- Developed 1986 by **Palincsar & Brown** to support 7th graders with greater comprehension problems
- **Aim:** improving student learning from texts.
- RT = **a means to an end**, gives students an opportunity to practice comprehension strategies and finally internalize them.
- **Procedure:**
  - Learning how to use four especially effective **strategies flexibly and interactively.**
  - Application in a **clearly structured dialogue/discourse.**
- **Why "reciprocal"?** - continuous student **interaction** with teacher and/or peers focused on text:
  - in the role of the teacher students inviting their peers to apply the strategies, in the role of the student supporting one another in meaning-making from text.

Modul 4 Block 2 6

Reciprocal teaching was developed by the US researchers Ann Palincsar and Ann Brown in 1986.
This training program was **designed especially for struggling readers** to improve their **learning from texts.**
It served as **a means to an end** giving students the opportunity to practice comprehension strategies and finally internalize them.
It was innovative as students did not learn isolated strategies but rather a **set of strategies** that they could apply flexibly and interactively.
These strategies are applied in a clearly structured dialogue/discourse between teacher and peers or among peers to actively deal with text.
Their dialogue/ discourse is a process of interaction, cooperation and co-construction of meaning.
Student role and teacher role continuously change in this process: In the role of the teacher (or discussion leader), students invite their peers to apply the strategies.
In the role of the student, learners interact with their teacher and with their peers supporting each other's comprehension.
The name of the procedure **„reciprocal"** is based on this specific interaction.

What exactly is Reciprocal Teaching ?

- "…. an instructional activity that takes place in the form of a dialogue between teachers and students regarding segments of text. The dialogue is structured by the use of four strategies: summarizing, question generating, clarifying, and predicting. The teacher and students take turns assuming the role of teacher in leading this dialogue."

Palincsar and Brown (1986)

- As this definition by Palincsar & Brown shows, RT supports students in their growth as readers. Breaking the complex task of comprehending texts down into 4 units (= strategies) to be shared by teacher and students sets off a „gradual release of responsibility" for learning.

cf.Pearson & Gallagher (1983)

- Teacher control gradually fades, as responsibility for learning moves from teacher to student.

Modul 4 Block 2 7

Palincsar & Brown provided the following definition for Reciprocal Teaching:
It is "…. an instructional activity that takes place in the form of a dialogue between teachers and students regarding segments of text.
The dialogue is structured by the use of four strategies: summarizing, question generating, clarifying, and predicting. The teacher and students take turns assuming the role of teacher in leading this dialogue." Thus a group effort for co-constructing meaning is facilitated.
The importance attached to dialogue and cooperative learning links this instructional procedure to Vygotsky's theory of the fundamental **role** of social **interaction for learning.** (cf. module 1, block 1 , cf. mod. 4 block 1)
Through sufficient text demands learning is triggered in the students' zone of proximal development.
Breaking the complex task of comprehending texts down into the four RT elements (= strategies) to be shared by teacher and students, the teacher sets off a „gradual release of responsibility" for learning. (cf.Pearson & Gallagher 1983, 34). As the responsibility for strategy use gradually moves from teacher to student, teacher control gradually fades.
(cf. Module 4 , slides 18 ff)

What is the research base saying on effects of RT?

- Considerable effects proven through a whole series of comprehensive studies: Palincsar and Brown, Oczkus et al.
- **Palincsar & Brown 1984**: Students who scored around 30 percent on a comprehension assessment scored 70 to 80 percent after just 15-20 days of instruction using reciprocal teaching. After one year, the students maintained the comprehension growth they had achieved.

Palincsar & Klenk (1991)

- German Demmrich Brunstein, Mannheim etc.
- Therefore highly recommended by 2000 Reading Panel

Modul 4 Block 2 8

Among the various **intervention programs** for improving reading comprehension Reciprocal Teaching stands out as it has been evaluated as being highly effective.
Palincsar and Brown (1984) provided the initial research on this teaching technique. They found that 7th grade struggling readers who were instructed in RT during one-to-one sessions, made significant gains in comprehension of expository texts in comparatively short time.
Oczkus evolved the use of reciprocal teaching strategies for elementary students expanding its use on literary texts. She applied RT in three classroom settings: whole-class sessions, guided reading groups and literature circles, adding student self-assessment. In her own research with reciprocal teaching, Oczkus (2003), found that students' reading levels rose one half to one full grade level in just 18-20 reciprocal teaching lessons two or three times per week. The National Reading Panel 2000 recommended Reciprocal Teaching as highly effective for improving comprehension from texts.

What is the research base saying about the strategis chosen for RT?

- **In their research on reading education, Palincsar & Brown identified six functions common to all procedures:**
  - Understanding the purposes of reading
  - Activating relevant background knowledge
  - Focusing attention on major content
  - Evaluating content critically for consistency and compatibility with prior knowledge resp. common sense
  - Ongoing monitoring of comprehension
  - Drawing and testing various kinds of inference, including interpretations, predictions, and conclusions.

Modul 4 Block 2 9

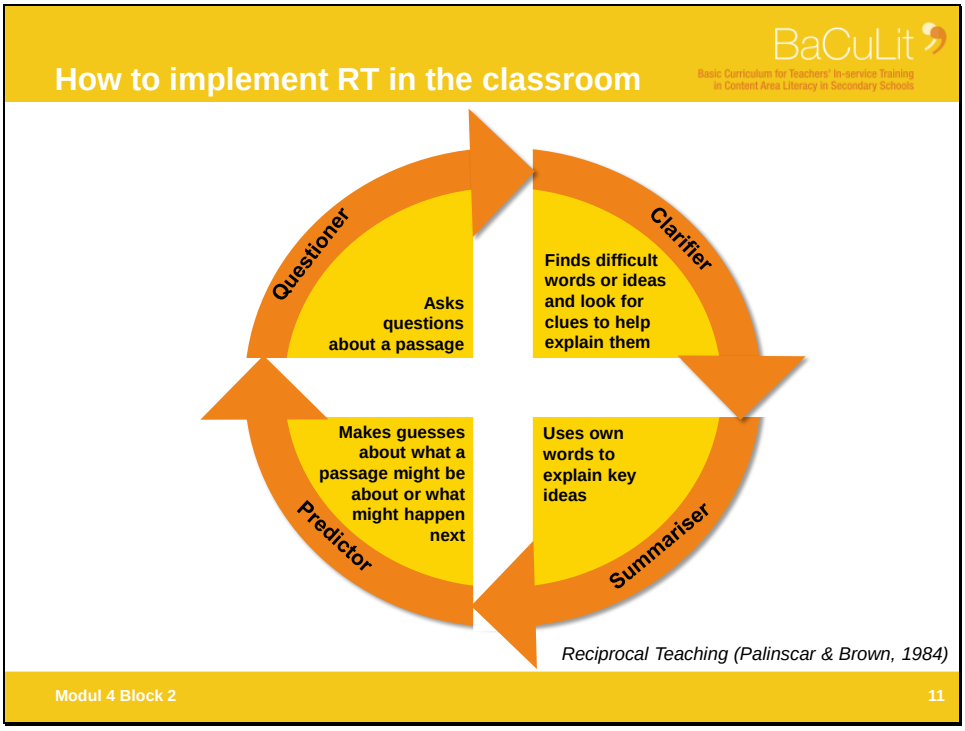
Cf. M4_Mat 2, Slide 8

What is the research base saying about the strategies applied in RT?

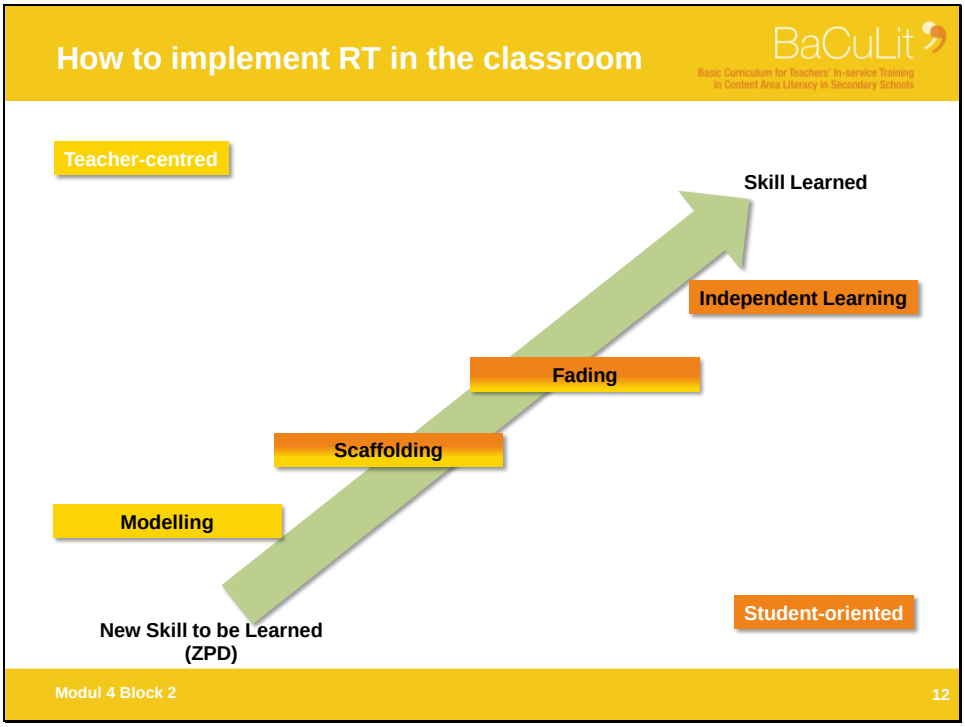
- **Based on these findings, Palincsar & Brown chose 4 strategies that cover the essentials of the 6 functions above and that reading novices can apply:**
  - Questioning
  - Summarizing
  - Clarifying
  - Predicting
- These four strategies work with dual function: “comprehension – fostering and comprehension – monitoring” at the same time.

cf. Palincsar & Brown (1984)

Modul 4 Block 2 10



Which order for the use of the strategies?
When Palincsar & Brown evolved Reciprocal Teaching in the 1980s the original sequence of strategies used, which was: questioning, summarizing, clarifying, predicting has become model to many practitioners.
During the decades to follow alternative sequences have been practiced, especially due to the importance attached to the activation of prior knowledge.
As R.C. Jones summarizes his ample experiences with Reciprocal Teaching in Teacher training: "The order in which the four stages occur is not crucial; you'll want to try out different versions of the strategy to see if a particular protocol suits your teaching style, and your students' learning styles, better. You will also want to choose text selections carefully to be certain that they lend themselves to all four stages of reciprocal teaching. " (cf. Jones, R.C. in:http://www.readingquest .org/strat/rt.html)
It is, however, vital for the success of RT that **all four strategies, the "fab 4 "as Oczkus called them,** are applied flexibly in a continuous flow of interaction with teacher and/or peers over text.



To teach a whole set of strategies like Reciprocal Teaching, teachers have to separately model the 4 strategies involved. How exactly can teachers facilitate student growth towards independent reading and learning?
We want to take a closer look at the steps of a process which was called „scaffolded instruction". (cf also module 1, block 2 and module 4, block 1, Conceptual Foundations, M1, p. 29-30).

How to implement RT in the classroom

Modelling the procedure following original design by Palincsar & Brown

Strategy	Teacher modeling	Student application
Questioning	1	2
Summarizing	3	4
Clarifying	5	6
Predicting	7	8
Repeating steps 1-8 with following passage		

(Graphic organizer adapted from Smith, J.A. & Reutzel,D.R., 2006)

Modul 4 Block 2 13

Before RT can be implemented

- students have to have thorough practice with each of the 4 strategies of the procedure and can put the 4 strategies together.
- teacher chooses a suitable clearly structured subject-area text and determines the stopping points for the use of strategies.

Teacher Modelling RT with whole class

explaining the whole RT, modeling the orchestration of the 4 strategies

To begin with teacher tells students which part of the text to read silently.

- Teacher models questioning and invites students to ask questions themselves. Etc.
- Teacher models summarizing and invites students to add to the summary.
- Teacher models clarifiying and invites students to clarify.
- Teacher models prediction and invites students to predict.

(cf. Smith, J. A, & Reutzel D.R.(2006) Reciprocal Teaching.
(Cf. Conceptual Foundations, p. 170)

How to implement RT in the classroom

Modelling the procedure following original design by Palincsar & Brown

Strategy	Teacher modeling	Student application
Questioning	1	2
Summarizing	3	4
Clarifying	5	6
Predicting	7	8
Repeating steps 1-8 with following passage		
Changes: greater importance of predicting as drawing on prior knowledge More thorough preparation of summarizing through clarifying activities		

Modul 4 Block 2 14

Over the past decades **more flexible approaches** towards using the elements of reciprocal teaching have emerged.–

The change in the sequence of elements compared to Palincsar & Brown's original training design responds to:
1. the greater importance attributed to previewing and predicting activities before reading in more recent instructional designs – which at the same time draw on prior knowledge
2. the challenge of summarizing prior to getting opportunities for clarifiying confusing words or passage which often led to non-satisfactory results.

How to implement it in the classroom

Which texts?
- Material selection on the basis of the students' reading/listening comprehension level yet challenging enough.
- Palincsar & Brown: expository or informational text only,
- In more recent practice narrative texts found equally suitable

Which time range?
- Palincsar, David & Brown (1989): 25 sessions (incl 5 for introducing strategies)
- Demmrich & Brunstein: 13-18 classroom periods

Which students to support with RT?
- Initially for struggling 7th graders, developed extensively, e.g. for elementary schools and as far as universities
- Not only for struggling readers, but of benefit for all students due to positive effects of cooperation and co-construction of meaning.

2 preconditions for the use of RTs:
- students have to be able to decode
- and they must be well acquainted with its component parts, the 4 strategies.

Modul 4 Block 2 16

There is no standard answer to the following questions:
Which texts for RT?
Expository and informational texts → literary texts. RT has been implemented across the curriculum, most commonly, though, in sciences and in literature classes.
Which time range for the training?
Palincsar, David and Brown (1989) calculate 25 sessions, Demmrich & Brundstein (2004) calculate 13 -18 classroom periods of 45 minutes.
Which students to support with RT?
Expands from originally 7th grade to the classes of elementary schools (cf Oczkus 2003) and up to college education (cf. Hart & Speece 1998).
A precondition for the use of RT is, however, that students are able to decode and that they have been well acquainted with its elements before using the whole set.
(Cf. Conceptual Foundations, p. 170-171)

How to implement it in the classroom

- The teacher places students into heterogeneous groups of four.
- He/She asks students to make a **fishbowl** in the middle of the room and invites one group after the other to come into it. For each group teacher acts as the discussion leader. (DL)
- Assigning a different piece of text, teacher invites each group into the fishbowl again. This time one student is assigned the role of the discussion leader
- After each group has been in the fishbowl twice, groups work individually with another piece of text, this time group members taking turns in being the „teacher" in the role of the discussion leader.

Modul 4 Block 2 17

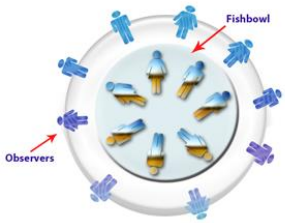
Preparing students to take the lead in their own learning, the *how to* has to be in the focus of instruction, as explained on slide 5. (cf. Module 1, block 2 and Module 4, block 1)
Modelling RT with small groups in a fishbowl (Schoenbach & Greenleaf, 1999, p.96f)
Preparation: In the days before this lesson students have been introduced thoroughly to the four strategies. It is recommended that the initial instruction take place on consecutive days.
Now the stage is set for the application of RT**:**The teacher places students into mixed ability groups of four. He/She asks students to make a **fishbowl** in the middle of the room.
(Cf. Conceptual Foundations, M4, p. 171)

How to implement it in the classroom

- **Advantages of fishbowl:** for those inside it: In the centre of attention students take procedure seriously. Students outside it can experience several times how RT works and take notes on the procedure.

  cf. Schoenbach & Greenleaf, 1999, p. 96 f

- **Teacher modeling RT with small groups in a fishbowl:**



Modul 4 Block 2 18

Modelling RT in a fishbowl holds advantages for all participants involved:

- for those inside it: In the centre of attention students take procedure seriously.
- for those outside it: Students outside it can experience several times how RT works and take notes on the procedure. Thus they can prepare their own use of the strategy set.

cf. Schoenbach & Greenleaf 1999, p. 96 f

PARTICIPANT ACTIVITY

- Practicing RT with content area text

  M4_Mat 2a

Module 4 Block 2 19

Introduce and model RT with text M4 Mat 2a Women's roles in the 1950s. (a text equally suitable for teacher training as for advanced students)

Further practicing for teacher training is provided through text M4 Mat 2c (an extract from Palincsar & Brown on RT)

You will find a step-by-step guide to professional development based on Mat 2 a in the Conceptual Foundations, M4, p. 170-174. This guide reflects experiences from teacher training sessions in Germany.

Role card for predictor

- **Predicting** means hypothesizing about what will follow in the text. It sets a purpose for reading on. Language prompts scaffold strategy use.

Your task: As a discussion leader or a predictor you make an assumption on the text to follow:

- **Based on what I know, I think this text will be about…**
- **Based on what I have read so far, I think the next section will be about**
- **As a clue for my prediction I used** …

Addressing the other team members:

- **Which prediction would you make for the next section?**

After reading section or whole text:

- **In the light of what we have just read, was our prediction logical?**

Modul 4 Block 2 20

This strategy requires the reader to hypothesize about what the author might present first or next in the text.
An initial prediction provides a purpose for reading on: to confirm or reject what has been predicted.

Students are not accustomed to use expressions for talking about their reading processes. Therefore they have to acquire expressions for the thinking activities they engage in. **Prompts** on the role card will scaffold their learning in all four expert roles they may assume in reciprocal teaching., e.g. for making predictions they might draw on their background knowledge and say: „Based on what I know I think this text will be about…"

Role card for questioner

- **Generating questions** increases students' awareness of the main ideas of a text.

Task: As a discussion leader or a questioner you ask questions on words or phrases in the text. Your questions could begin with:

- What
- When
- Where
- Who
- How
- Why
- What if
- (addressing the other team members:)

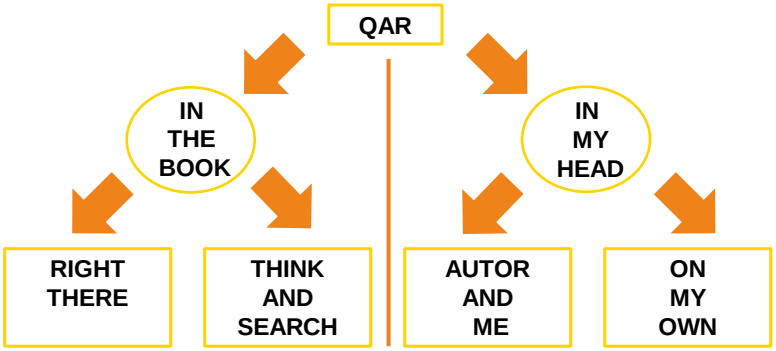
Which questions would **you** ask about this text?

Modul 4 Block 2 21

Questioning increases students' awareness of the main ideas of the text.
At first students ask questions „teacher-like" questions that can be answered from the text itself.
When **advanced**, students can be taught to **use deeper questioning** . Based upon Pearson and Johnson's (1978) trichotomy for classifying question-answer relations, she taught fourth-, sixth-, and eighth-grade students to discriminate among three situations depending on: (a) whether both the question and the answer come from the same sentence in the text; (b) whether the question and the answer come from different parts of the text; (c) and whether the question is motivated by the text but the answer comes from the reader's prior knowledge.
(Cf. Conceptual Foundations, p. 171-172).

Role card for questioner

- **Generating questions** increases students' awareness of the main ideas of a text using Taffy Raffael's Question-Answer-Relationships (QARs)



Modul 4 Block 2 22

Cf. Slide above

Role card for clarifier

- **Clarifying** helps readers monitor their comprehension. Using this strategy readers identify "roadblocks" in the text where their understanding breaks down.

Task: As a discussion leader or a clarifier you help to understand unclear or confusing words or passages.

The following expressions will be helpful:

- I don't know what the author means with ...
- I have no clue/no idea what the author wants to tell us with...
- I don't get the meaning of line(s) ...
- What does ... mean?
- What puzzles me is...
- Do you know what ... means?
- This sentence is like a roadblock for me: ...

Modul 4 Block 2 23

Clarifying helps readers monitor their comprehension. They identify „roadblocks" that impede understanding.
This strategy helps them to identify unfamiliar words, sentences or passages that are unclear.
When teaching students to clarify, their attention is called to the many reasons why text is difficult to understand; for example new vocabulary, unclear words, and unfamiliar or difficult concepts. Recognizing these blocks to understanding signals the reader to reread, read ahead, or ask for help. To struggling readers this is especially beneficial as they do not recognize where their understanding breaks down and often answer the question „What was difficult for you to understand! by responding „Everything!".

Role card for summarizer

- **Summarizing requires to identify and integrate only the most important information (= the gist) in the text.**

Task: As a discussion leader or a summarizer you put together the main ideas of a section or of a whole text:

- This section/text is mainly about
- I think the most important idea is…
- The main important idea/ event of this section/ of this text is
- To me the most important information in this passage is …
- (addressing the other team members:)

Can you add to my summary or correct it?

Modul 4 Block 2 24

Summarizing requires to **recall and arrange only the most important ideas** in a text.
"…research suggests instruction and practice in summarizing not only improves students' ability to summarize text, but also their overall comprehension of text content."
*(*Duke & Pearson 2002)

Summarizing is a demanding task. Students must sift through text, identify unimportant and important ideas, and synthesize the important ideas to create a new text that stands for the original. As Palincsar & Brown put it, they have to progress from" imitation" to "invention". (Palincsar & Brown 1984)
This skill needs to be reviewed and practiced as students encounter increasingly challenging texts.

Trainer input to introduce participant activity:

Invite the participants to reflect upon the information and, maybe, their practical experience with RT as to its potential benefits but also its potential risks for their disciplinary classroom.

Prompt: **Which benefits, which risks could RT imply for the learners in your disciplinary classrooms?**

Reflection Time

- In the light of your experiences and learning in block 2:
- **Which benefits, which risks could RT imply for the learners in your disciplinary classrooms?**

Module 4 Block 2 25

PARTICIPANT ACTIVITY

- **How could you prepare a lesson on RT for tomorrow?**
- **In disciplinary groups choose a text to try out the following suggestions:** Pre-read the selection(s) you bring into the classroom.
- Jot down:
  - a procedure activating background knowledge
  - model predictions
  - model words to clarify
  - a list of model questions
  - main ideas for a model summary
  - Plan before , while and after reading activities on RT

M4_Mat. 2e

Module 4 Block 2 26

Invite the participants to reflect as to their "next practice" with RT based on a content area text.
Prompt: **In disciplinary groups choose a text to try out the following suggestions:**
Pre-read the selection(s) you bring into the classroom.
Jot down:

- a procedure activating background knowledge
- model predictions
- model words to clarify
- a list of model questions
- main ideas for a model summary
- Plan before-, while- and after reading activities on RT

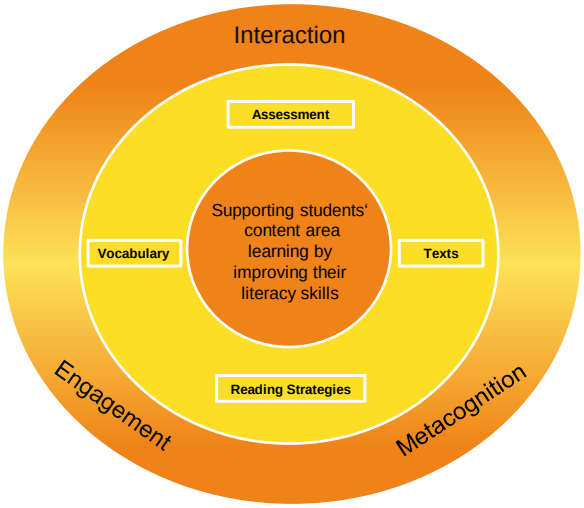
Outlook and overview

- **Guiding Questions for Lesson Planning regarding the BaCuLit Framework**

Material: M1_Mat. 2f_Guiding Questions for Lesson Planning

Modul 4 Block 2 27

Lesson Planning Framework of BaCuLit



Modul 4 Block 2 28

The **BaCuLit Framework for Lesson Planning** (WH) is based on the ADORE Reading Instruction Cycle. The main goal though is to support students' content area learning by improving their literacy skills, as is indicated in the orange circle.

The inner circle shows the core concepts:
texts (Module 2)
reading strategies (Module 4)
vocabulary (Module 3)
assessment (Module 5)

The outer circle includes the cross-curricular concepts . These three concepts - engagement, interaction and metacognition – will therefore be introduced in module 1 in the following block.
(See also Conceptual Foundations, M1, p. 23-24)

Guiding questions for lesson planning (BaCuLit framework)

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

METACOGNITION

- How can I help students understand the importance of activating their own background knowledge?
- How can I help them focus on the learning tasks and setting own learning goals?
- How can I help students continually monitoring their own comprehension?
- What opportunities will students have to fix up areas of misunderstanding in order to perform well on the tasks and the final assessment?
- How will I provide students with opportunities to evaluate and reflect about their learning?

Modul 4 Block 2 29

Guiding questions for lesson planning (BaCuLit framework)

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

READING STRATEGIES

- How can I model and scaffold the use of strategies before – during – after reading in order to support students to better understand this particular text?
- Which tools should students use for structuring the content of this text during and after reading (e.g., selective underlining, summarizing, concept maps, Venn diagrams, tables, time relations, two column notes…)?
- Which strategies will I offer my students to support their active persistence while reading?
- Which opportunities do I offer my students to reflect metacognitively upon the range and usefulness of the strategies applied?

Modul 4 Block 2 30

Module 5
Formative Assessment for Content Literacy and Learning

Overview

In this module, participants will gain important foundational knowledge about formative and content literacy assessment. They will also receive practical tools for assessing the specific literacy abilities for reading and learning from content area texts.

Block 1: Participants of the module begin by filling out a *vocabulary self-awareness* chart. This formative assessment approach to monitoring the learning of key vocabulary will provide participants with direct experience of an assessment process they can use with their own students in the content-area classroom. Throughout the module, participants should keep returning to the vocabulary self-awareness chart and fill in, revise, and add information about each key term. In this way, participants can keep track of their expanding vocabulary. At the end of the module, participants are asked to make final entries in their vocabulary self-awareness chart, reflect on the activity, and consider its assessment and instructional implications for their own practice as content-area teachers.

Block 1 continued: participants also share critical information and ideas related to *formative assessment*. It will become clear that the main aim of formative assessment in content-area classrooms is to give teachers information about students' reading needs, using the texts they are expected to read and learn from. Teachers can then use this information to adapt their instruction to students' needs. It will also become clear that formative assessment should be ongoing, so that the response of the content-area teachers can also be ongoing.

Participants should be guided through the *Formative Assessment Activity* that will give them a clearer understanding of the importance of formative assessment in content-area reading and learning. The aim of this activity is to show participants how important it is to use real texts and topics in content-area classrooms to obtain specific information about students' reading abilities: it enables them to design their instruction practice to respond to students' needs.

Block 1 conclusion: it is important for trainers to conclude Block 1 by asking participants to think of ways in which they could use content reading strategies and practices, learned about and experienced in previous modules, as formative assessments. For example, in Module 2, participants are shown how students' reading logs can be analysed to determine how often they read and what kind of text they read. This information about students' reading practices both inside and outside

school can help teachers to decide which texts to use in content-area instruction and how to support students' reading of particular genres.

Block 2: The trainer introduces participants to the *Content Area Reading Inventory (CARI)* and then provides information about how to use *CARI* results. Participants should be encouraged to think of additional strategies and practices gained from work with other modules or from their own experience that could build students' ability to read content text.

The trainer will prepare this aspect of the module by first designing, implementing, and analysing a CARI with secondary students. The trainer is then able to provide participants with the text on which the CARI was based and real examples of student responses to the CARI. The trainer should then demonstrate to the participants how to make, administer and then analyse their own CARI and encourage them to have a thorough and detailed discussion about the processes. This activity will serve as a basis for participants to create their own CARI. Participants should be asked to bring to the workshop the textbook or other major text source that they use in their own content area classroom.

At the end of this module workshop, the trainer should engage participants in a discussion about other assessment options and sources that could help to inform their instruction. For instance, national reading assessments may provide student-level results.

As with other BaCuLit modules, Module 5 content can be delivered in a flexible way. For instance, it is possible for Block 2 on the *Content Area Reading Inventory (CARI)* to be delivered on its own. Also, content from Block 1 on formative assessment can be incorporated into previous modules. Finally, the Vocabulary Self-Awareness assessment strategy in Block 1 could be incorporated into Module 4 on Vocabulary.

Module Highlights

- ❑ Formative assessment is assessment *for* instruction
- ❑ Formative reading assessments can be designed by teachers, using classroom texts, and lead to responsive content area reading instruction based on student needs
- ❑ Vocabulary Self-Awareness is a useful formative assessment tool for content area teachers and a metacognitive tool for students
- ❑ The *Content Area Reading Inventory (CARI)* is a flexible, text-specific reading assessment that gives clear instructional direction to teachers

Workplan

Block	Topic	Activities	Resources (Materials)
1	*Estimated time: 3 hours* **[Essential Content]**		
	Vocabulary Self-Awareness *(~ 30 mins.)*	Formative assessment ACTIVITY 1 (part 1): Teachers fill in the Vocabulary Self-Awareness Chart	**Material 1a:** Vocabulary Self-Awareness Activity
	What formative assessment is *(~ 60 mins.)*	Formative assessment ACTIVITY 2: Comparing assessment case studies INPUT 1: What is formative assessment? Why does it matter? Short reflective ACTIVITY 3: How are principles of formative assessment evident in the two case studies?	**Material 1b:** Formative Assessment Activity **Material 1:** PPT Block 1, Slides 7-12 **Material 1b + 1c**
	COFFEE BREAK		
	What should be formatively assessed in the content area classroom; why it should be assessed *(~ 30 mins.)*	INPUT 2: - engagement - relevant prior knowledge - vocabulary - comprehension - reading strategies Short reflective ACTIVITY 4: What do assessments in the other modules assess? How have the results been used?	**Material 1:** PPT Block 1, Slides 15-25
	Vocabulary Self-Awareness: ☞ What it is ☞ How to administer ☞ Using the	Formative assessment ACTIVITY 5 (part 2): Participants' filled-in Vocabulary Self-Awareness Sheets	**Material 1a:** Vocabulary Self-Awareness Activity
		INPUT 3: Vocabulary Self-Awareness	**Material 1:** PPT Block 1, Slides 29-43

	results to guide instruction *(~ 60 mins.)*	Short reflective ACTIVITY 6: Reflection on how to use vocabulary self-awareness in one's own classroom	

Block	Topic	Activities	Resources (Materials)
2	*Estimated time: 6 hours* **[Essential Content]**		
	Content Area Reading Inventory (CARI): ☞ What it is ☞ How to administer ☞ Using the results to guide instruction *(~ 90 mins.)*	INPUT 1: CARI Short reflective ACTIVITY 1: How to support Tyrone's literacy skills?	**Material 2:** PPT Block 2, slides 5-21
		ACTIVITY 2: Teachers analyze CARI examples	**Material 2a:** Trainer's CARI *(see preparatory work)* **Material 2b:** CARI analyzing sheet
	COFFEE BREAK		
	(~ 90 mins.)	INPUT 2: Using CARI Results as Assessment *for* Instruction (examples of instructional strategies)	**Material 2:** PPT Block 2, slides 25-42
		ACTIVITY 3: Teachers match CARI results & instructional strategies from other modules	**Material 2a:** Trainer's CARI **Material 2b:** CARI analyzing sheet
	(COFFEE or LUNCH) BREAK		
	(~ 180 mins plus coffee break)	ACTIVITY 4: Teachers develop own CARIs (individual work in content groups; presentation of CARIs/gallery walk) ➔ Instructions see PPT 2	**Material 2c:** CARI Handout **Material 2d:** Teachers' textbooks *Poster paper, markers*

[Optional Content]	**National Assessments**	*You may decide to include national assessments in the module – as input and/or activities.*	(a) Standardized tests (b) Good examples of assessment strategies

Attention: Preparatory work for TRAINERS[2]

For Block 2 of this module, the trainer prepares some materials BEFORE the workshop: the CARI examples, including the corresponding content-area text *(material 2b)*.

1. Choose a national content area text from a text book for the student target group: 3-7 pages with features that correspond to the CARI topics.
2. Develop a CARI for this text (for more information see *M5_Material 2_PPT Block 2, slides 7 – 20* and *M5_Material 2c_CARI Handout*).
3. Conduct the CARI with students (full class assessment).
4. Choose the CARI of two different students as examples for the BaCuLit course.

Note: Preparatory materials for TEACHERS

For Block 2 of this module, the teachers need to bring their ***own content area text books*** *(material 2d)*!

[2] Note: In case you do not have the chance to conduct your own CARI, you could use the CARI-example from a grade 7 history class given in the workbook (M5_Material 2a_CARI_Examples & M5_Material 2a_CARI_Text Book Extracts).

List of Materials

No.	Title / Topic
1	PPT Block 1: Formative Assessment & Vocabulary Self-Awareness
1a	Vocabulary Self-Awareness Activity
1b	Formative Assessment Activity
2	PPT Block 2: Content Area Reading Inventory (CARI)
2a	*CARI-Examples (prepared by trainers beforehand)* ***OR*** Example of a History-CARI (with extracts from a text book)
2b	CARI Analyzing Sheet
2c	CARI Handout
2d	*Teacher's Own Content Area Textbooks*

Conceptual Foundations for Module 5
[William G. Brozo, Karl Holle & Stephanie Schmill]

Over 30 years of theory development and research has characterized literacy as an interactive, context bound, purposeful process of meaning construction (Ruddell & Unrau 2004). Over the same period, we have progressed in our understanding of what literacy behaviors should be assessed and how that assessment should be represented (Johnston & Costello 2005). At the secondary school level, these changes have translated into an emphasis on teachers defining what it means to be literate and knowledgeable in their classrooms and designing a variety of performance-based activities and authentic opportunities to assess their students as they interact with content area information and concepts (Clark & Clark 2000). More important, the recent advances in assessment theory and research point out what teachers have always known—that "In successful schools, assessment goes on continually and in a way that helps, not hinders, the search for better educational policies and teaching practices" (Apple 1999, 28).

As our understanding of readers' cognitive development and affective characteristics grows, there is a parallel evolution of knowledge in the field of assessment and measurement. We understand that effective instruction is the result of matching what is taught with what students need and are able to understand (Afflerbach 2007). In this module, issues and strategies of assessment are presented relative to one basic assumption: *The aim of content area literacy assessment is to provide teachers with knowledge about how best to improve and support learning for students and to help learners to gain self-knowledge that will allow them to become more reflective, active, and purposeful readers and learners*.

By the time students reach secondary school, they are fully aware of the importance of tests and their results. They know that completing a course, entering a specific academic program, exiting from secondary school and gaining admission to college and university, are largely dependent upon how they perform on tests. It is important for teachers to realize, however, that these summative assessments of students are a representation of the teaching that preceded them. That is, test scores tend to get better when teachers have an ongoing and developmental assessment focus, which guides them in the here and now of their daily teaching. While summative assessment, such as end of unit or semester tests, offers a summary measurement of student learning, formative assessment helps teachers identify, understand and describe students' current needs and abilities. Thus, formative assessment informs our ongoing instruction. Many of our secondary school level assessments are summative: they provide information on what students have learned in different content area classes and may figure in promotion and retention decisions. Missing is a focus on our secondary students' continuing growth as readers. Most readers never cease to learn to read better. The idea that we move from "learning to read" in the primary grades to "reading to learn" in the secondary grades needs reconsideration. Each of the content areas demands particular reading mindsets, strategies and stances. Literal readers must become inferential readers, and all readers must become proficient at critically appraising the accuracy of text information and at judging the value and trustworthiness of what they read.

Formative Assessments differ from other assessments mainly by setting a special goal (better student learning through better ongoing instruction). They also have a wider range of kinds of assessments than do traditional assessment routines. Let us look at some background knowledge about goals and kinds of assessments.

Overall, teaching and learning activities occur within three situations that differ in their goals, their levels of challenge, and their ideas about how to handle students' errors: Instructing, diagnosing, and marking.

(1) *Instructing*. Here the main goal of the teacher is to support students' learning and their development of knowledge, skills, abilities, and so on. Most teachers do that by designing interesting tasks at a level that is slightly higher than students' current level of competence. Unsatisfactory solutions, errors, and other inadequacies are normally motors for clarifying ideas, perspectives, and underlying assumptions. All these important opportunities for building a deeper understanding of the respective subjects can demonstrate their potential only within a secure and trusted learning environment, where meaning negotiation is possible without fear of negative social consequences when demonstrating and discussing inadequacies.

(2) *Diagnosing*. In such situations, teachers' main goals are the detection of students' strengths and weaknesses. They can do that by administering a wide range of formal (standardized) and informal (teacher-made) diagnostic tests, or by analyzing errors or miscues in students' normal working outcomes. The point is that only errors can give hints and indications for describing the quality of strengths and weaknesses. An outcome without errors says only *that* a student has mastered a task and nothing about *how* or *because of what underlying assumptions* he or she has achieved the results. It can be seen that correct answers are the result of extended memorization and have no deeper connections to the relevant theoretical framework, or are based on inadequate ideas about the theoretical framework. Imagine two chess players, one a novice and one a master. In some chess positions, both made 'right' moves. However, the master will win the game, because he or she made the right moves on the basis of an adequate understanding of the positions. The novice will lose the game because he or she doesn't have such a deeper understanding, although this lack of knowledge can lead to 'right' moves.

Whereas errors only give hints at what a student is *not able to do* at first glance, when looked at again, they provide the most important data for detecting what a student is really *able to do*. The crucial question for this option is: "On the basis of what underlying assumptions could it be possible for an obvious error to present a useful solution?"

Analysis of students' errors is crucial for the diagnosis of their strengths and weaknesses of students. Therefore diagnostic tasks should exceed the current state of their competencies significantly – the taks must provoke errors. Particularly in diagnostic situations, students must be sure that their results will not disadvantage them, but that the error analysis will enable them and their teachers to recognize not only the weaknesses that they have but also the strengths.

In principle, there are two options for diagnostic work in the classroom.

(1) Applying standardized diagnostic tests. These are available for almost every problem - for reading and writing skills, for kinds of deductive reasoning, for the development of subject-specific competencies and skills etc. One will and should use these tests only in special situations, if it seems necessary to supplement the data already available with additional data and reconcile them.

(2) More important: Ongoing analysis of students' outcomes. In this option, teachers deal with authentic data that are directly connected to the current problems students have, both in understanding the respective subject topics and in the reading and writing skills to work through those topics appropriately. From the perspective of formative assessment it can be seen that data of both options can be combined and can thus provide a basis for teaching decisions.

(3) *Marking*. Here, the main goal of teachers is to discover whether their students have mastered a new knowledge domain appropriately. In most cases, students will be compared with each other on a grading scale. These assessments have significant social and personal consequences because they result in important decisions about grading, placement, passing/failing, etc. These Highstakes-effects can be reduced if the assessments follow these principles: (a) They should be reduced to a minimum and only take place after continuous formative assessment and instruction; (b) The students should be sufficiently informed about the topics they will be questioned on; (c) The level of the questions should correspond to knowledge structures that have already been taught; (d) The grading scale should not be a 'normal distribution' (the middle grades have the highest values; the higher and lower grades have the lowest). Instead, because learning should have taken place, the scale should be a 'skewed distribution' (the higher grades should have higher values than the lower grades).

Generally speaking, for a good learning climate teachers should avoid mixing these four principles; for example, by using diagnostic data or errors in instructional situations for marking. Instead, they should make sure that their students know which of these assessment situations they are in.

Now let us consider types and quality of assessment in general. For instructional purposes, most teachers use two kinds of assessment: (1) Norm-oriented assessments in the form of standardized tests. These 'psychometric' tests give information about probable behaviors of groups, cause (risk) factors, developmental courses, and prognoses. They compare individual behaviors against current behaviors of representative groups, so that the ranking criteria are not external criteria, but criteria which reflect the current behavior of the norm group. Therefore comparisons between tested groups or individuals can be made on a reliable basis. On the other hand, the test items represent the test specific underlying theoretical model of the behavior in question, and teachers should know the relevant dimensions of the model so that they can interpret the test outcomes. (2) Criterion-oriented assessments in the form of a non-standardized test. Unlike norm-referenced assessments, these assessments are designed to determine what students know and can do based on expected learning or criteria. These tests are not used to compare student achievement with a norm

group, but to gauge how well students have acquired knowledge and skills. There are standardized versions of criterion-referenced assessments, though an end-of-unit test in science is a good example of a criterion-referenced test teachers might typically use. It is important to bear in mind that neither norm-referenced or criterion-referenced tests offer teachers formative data on students.

At the heart of our conceptualization of formative assessment and its connection to instruction and learning is the “teachable moment.” When we are well informed about our students’ current abilities and needs, from cognitive, content area knowledge and motivation perspectives, we can use this information to identify issues in fine detail and are thus able to plan successful instruction. This is not a revelation, nor is it simple. What we are describing is the nitty-gritty of teaching and learning, driven by our knowledge as teachers of how readers develop, the particular skills and strategies that are central to that development and the content area knowledge that represents core curricular content and goals in the different subjects we teach: science, social studies, literature, history, economics and civics.

The ability to read and use information and ideas from text is a continuous and dynamic process that takes place over time and changes with each new instructional situation (Brozo & Simpson 2007). Based on studies of testing and achievement, William (2000) states that "if schools used assessment during teaching to find out what students have learned, and what they need to do next, on a daily basis," student achievement would rise. Assessment approaches designed to give information about students’ performance using the actual texts of instruction will guide content area teachers in building supportive classroom learning environments.

Effective teachers meet students at their current levels of ability and then scaffold attention and learning so that students can move to the next levels of achievement. Vygotsky (1978) characterized such good teaching and learning as working in what he termed students’ “zones of proximal development”. Working in these zones, content area teachers can build on students’ competencies by presenting them with comfortable challenges that foster reading and learning growth. But to teach ably in a student’s zone of proximal development, to present students with appropriate reading challenges, teachers must have detailed and “fresh” assessment information that helps to direct the instructional focus. Teachers of science, mathematics, history, languages, and other subjects must have knowledge of their individual student readers in order to customize the instruction to best fit the teaching and learning situation. This is possible only with formative assessment information (Afflerbach 2004).

When formative assessment information is available, content area teachers are in the best position to help their adolescent students read successfully through a textbook chapter, a newspaper or magazine article, a graphic novel, or any other print or electronic text source.

Successful assessment always involves our making accurate inferences from our assessment information or data. Whether our assessment is focused on comprehension strategies, decoding strategies, fluency or vocabulary, it is our job to reason about students’ instructional needs from the evidence that assessment provides. The greater the faith we have in our assessment materials and procedures, the more accurate and helpful our inferences about students’ needs may be.

Therefore, to obtain more useful and meaningful information on students' literacy and learning abilities in the content areas, instructional decisions must be based on ongoing formative assessment. One such assessment tool acquired through this module is *Vocabulary Self-Awareness*. Because students bring a range of word understandings to the learning of new topics in the content areas, it is important to assess students' vocabulary knowledge before reading or performing other tasks involving text (Fisher, Brozo, Frey, & Ivey 2010). This awareness is valuable for students because it highlights their understanding of what they know, as well as what they still need to learn in order to fully comprehend what they are reading (Goodman 2001).

Another useful assessment tool participants are offered in this module is the *Content Area Reading Inventory (CARI)* (Readence, Bean, and Baldwin 2004), which helps judge how successfully students can learn from their content area texts. This teacher-made inventory is constructed using the students' actual content area textbook and yields diagnostic information that is both informative and relevant. Teachers can assess which areas of the text or which skills and strategies may present potential problems for students (Brozo & Simpson 2007; Vacca, Vacca, & Mraz 2010).

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PPT Slides M5_Mat 1

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

Module 5 – Block 1 (material 1)

Formative Assessment for Content Literacy and Learning

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

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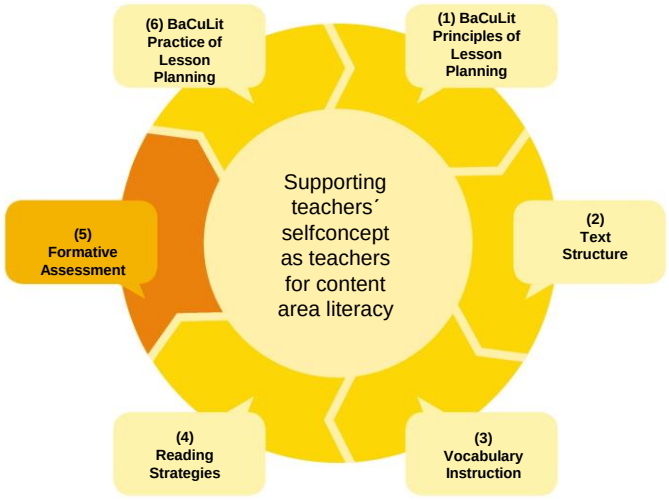
Lifelong Learning Programme

Universität zu Köln

Module 5 Block 1 2

The BaCuLit Curriculum



Module 5 Block 1 3

Explain that although formative assessment is taken up as a separate topic in module 5, instructional strategies and practices advocated and demonstrated in the four previous modules create numerous opportunities for teachers to assess student's content area literacy in ongoing and formative ways. Good instructional strategies always have a feedback element that allows teachers to learn about students' abilities and challenges. And when challenges are observed and noted, teachers can adjust instruction to make it more responsive to students' needs and readers and learners.

Content of Module 5 – Formative Assessment

BLOCK 1

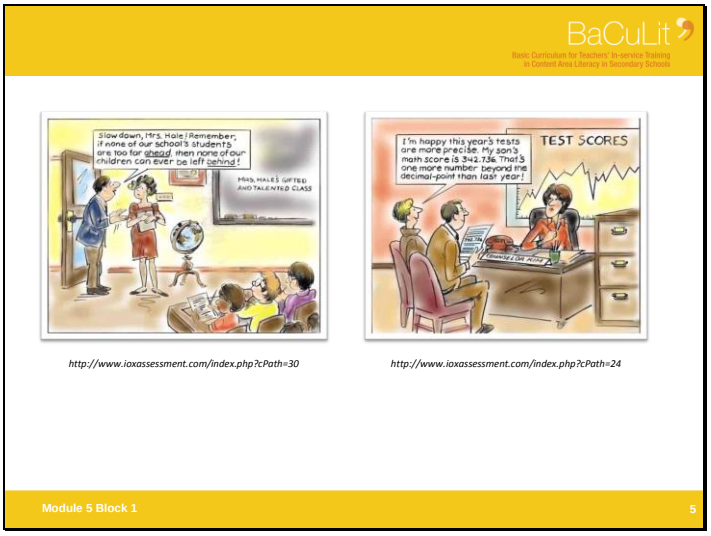
- Why is formative assessment an assessment ***for*** instruction?
- What should be formatively assessed in the content area classroom?
- How can Vocabulary Self-Assessment be used by teachers in order to inform instruction?

BLOCK 2

- What is the *Content Area Reading Inventory (CARI)* and how can it be designed by teachers to give clear instructional directions?

Module 5 Block 1 4

Module 5 is organized into two blocks, each of which can be delivered separately. For example, input and activities associated with formative assessment could be delivered much earlier in the module sequence, and Vocabulary Self-Awareness could be incorporated into module 4 on vocabulary.



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Module 5 Block 1 5

You may use this slide to ask the participants to reflect for just a few minutes on the purpose of assessment. What are the assessment results good for?

The gist of this could be something like: *„We should test students not to just give grades but to improve the quality of instruction."*

PARTICIPANT ACTIVITY

- **Vocabulary Self-Assessment (part 1)**

(M5_Mat. 1a_Vocabulary Awareness Activity)

Module 5 Block 1 6

Do only hand out *page 1* of *material 1a*. You will have to hand out *page 2* at the end of *Block 1*.
For instructions see *material 1a (page 1)*.

Assessment *of* and Assessment *for* Instruction

- Summative Assessment is assessment **of** instruction – determine what students have learned and mastered
- Formative Assessment is assessment **for** instruction – determine what students need so they can achieve mastery and modify instruction to ensure student mastery

Module 5 Block 1 7

Emphasize that assessment of instruction, or summative assessment, should occur only after students have been given numerous formative assessment opportunities.
When assessment for instruction occurs, teachers can adjust practices to address students' reading and learning needs in the content classroom. This process of responding to students' needs based on formative assessments will improve the chances that students will demonstrate mastery on summative assessments.

Content Literacy Assessment *of* Teaching and Learning

- Occurs at one point in time (e.g., a final examination day)
- Is high-stakes – results in important decisions about grading, placement, passing/failing, etc.
- Should occur only after continuous formative assessment and instruction

Module 5 Block 1 8

Content Literacy Assessment *for* Teaching and Learning

- Should provide teachers with knowledge about how best to improve and support reading and learning
- Should provide students the self-knowledge to become more reflective, active, and purposeful readers and learners

Module 5 Block 1 9

Content Literacy Assessment *for* Teaching and Learning

- Occurs within the context of daily instruction and situated literacy activities
- Helps teachers craft more responsive curricula to facilitate progress for all students
- Informs teachers and learners in ways that lead to improvement of the teaching and learning process

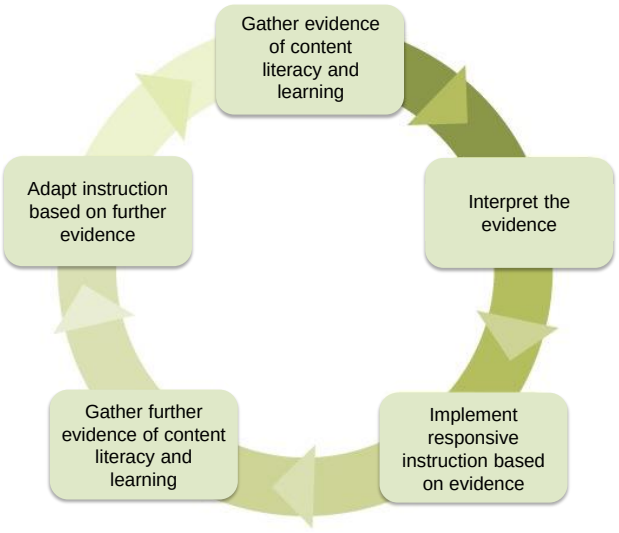
Module 5 Block 1 10

Content Literacy Assessment *for* Teaching and Learning

- A continuous process of becoming informed about:
  - how best students read and learn;
  - the best instructional strategies to employ with students to facilitate their reading and learning; and
  - how to encourage active, independent reading and learning by students

Module 5 Block 1 11

Formative Assessment Cycle for Content Literacy and Learning



Module 5 Block 1 12

The Formative Assessment Cycle begins with the use of instructional strategies that provide ongoing feedback on students' reading and learning in the content areas. Teachers can structure this feedback in more formal ways as, for example, with Vocabulary Self-Awareness or the Content Area Reading Inventory, or within the flow of regular classroom instruction and activities. After feedback or evidence of students' reading and learning is obtained, teachers need to analyze strengths and needs for every student. Based on this analysis, teachers should employ appropriate instructional strategies and continue to gather feedback from students to determine whether the strategies were effective or whether further instructional adjustments are needed.

It is helpful to give an actual content area literacy example of the Formative Assessment Cycle. Describe how a science teacher gathers his students' daily notes to determine whether they (a) are recording accurately the essential content, and (b) are taking notes in the correct format. The science teacher decides whether to present information and concepts in ways that are more easily organized into the desired notetaking format and/or to reteach content using alternative approaches if students failed to get it. The science teacher continues this process until he feels confident his students are ready for a final summative evaluation.

Reflection Time

Principles of formative assessment in case studies

- How are principles of formative assessment evident in the two case studies you analyzed earlier?
- Take a moment and write down your thoughts.
- Share your insights first with a partner/small group, then in plenary.

Module 5 Block 1 13

Short reflective activity:

- Ask participants to think about how principles of formative assessment are evident in the case studies.
- Invite questions and comments (in plenary).

Content of Module 5 – Formative Assessment

- BLOCK 1: Formative Assessment
  - Vocabulary Self-Awareness Activity (part 1)
  - Formative Assessment Activity (case studies)
  - Input on formative assessment (part 1)
  - Short reflective activity: Principles of formative assessment in case studies
- COFFEE BREAK
- **Input on formative assessment (part 2)**
  - Short reflective activity: Assessments in other BaCuLit modules
  - Vocabulary Self-Awareness Activity (part 2)
  - Input on vocabulary self-awareness is
  - Activity: Using vocabulary self-awareness in my own classroom

Module 5 Block 1 15

You may use this slide to remind the participants of what has been covered thus far and what will be covered next.

What should be formatively assessed in the content area classroom?

- engagement in reading and learning
- relevant prior knowledge
- vocabulary
- reading comprehension
- reading strategies

Module 5 Block 1 16

1. Engagement in Reading and Learning

- Engagement is a critical component of successful reading
- Engagement means a reader has the desire, skills, and ability to become deeply involved with a text and content
- "Engaged readers draw on knowledge gained from previous experiences to construct new understandings, and they use cognitive strategies to regulate comprehension, so that goals are met and interests are satisfied."

(Baker, Dreher & Guthrie 2000, p. 2)

Module 5 Block 1 17

Why Engagement in Reading and Learning Should be Formatively Assessed

- Content area teachers need to know whether students have the desire and interest to learn new information and ideas
- Teachers can use evidence of students' level of engagement to adjust instructional approaches and practices to make reading and learning more engaging

Module 5 Block 1 18

2. Relevant Prior Knowledge

- What students already know about a topic
- Active readers and learners use their prior knowledge as they interact with text to enhance comprehension
- Students with well-developed relevant prior knowledge for certain topics are better able to comprehend texts on those topics at deep and meaningful levels

Module 5 Block 1 19

Why Relevant Prior Knowledge Should be Formatively Assessed

- Teachers need to know whether and to what extent students have relevant prior knowledge for text and course topics
- Teachers can use evidence of students' relevant prior knowledge to fill in knowledge gaps in advance of reading about and exploring new content

Module 5 Block 1 20

3. Content Vocabulary

- Vocabulary knowledge is one of the essential components of reading
- There is a very close relationship between vocabulary knowledge in the content areas and comprehension of content texts
- Teachers need to emphasize the vocabulary of their content area to increase reading comprehension and knowledge acquisition

Module 5 Block 1 21

If participants have previously gone through module 3 on vocabulary, remind them of what was learned in that module and make clear that this content reinforces the content of module 3.

Why Content Vocabulary Should be Formatively Assessed

- Teachers need to determine what and how well students know essential content area terms and concepts
- Teachers can use evidence of students' knowledge of essential content vocabulary to adjust instructional approaches and practices to ensure students acquire knowledge of these terms and concepts

Module 5 Block 1 22

4. Reading Comprehension

- Reading comprehension is an essential process in gaining knowledge in the content areas
- Students must be able to comprehend accurately and deeply in order to expand their understanding of content area topics
- Reading in the content areas builds foundational knowledge that leads to better comprehension of future reading in those content areas

Module 5 Block 1 23

If participants have previously gone through module 4 on reading strategies, remind them of what was learned in that module and make clear that this content reinforces the content of module 4.

Why Reading Comprehension Should be Formatively Assessed

- Teachers need to know whether the texts they require students to read and from which students are expected to learn are comprehensible to students
- Teachers can use evidence of students' comprehension abilities to adjust instructional approaches and practices, provide needed scaffolding, and alternative texts to ensure students acquire knowledge of content area topics through reading

Module 5 Block 1 24

If participants have previously gone through module 2 on text organization and diversity, remind them of what was learned in that module and make clear that this content reinforces the content of module 2.

5. Reading Strategies

- Students need to be strategic readers in order to process complex text and become independent learners
- Strategic reading involves knowledge and skills of reading strategies as well as the metacognitive ability to employ strategies when needed to maximize comprehension and satisfy one's reading goals

Module 5 Block 1 25

Why Strategic Reading Should be Formatively Assessed

- Teachers need to know whether students possess effective reading strategies for achieving their goals as readers and learners in the content areas
- Teachers can use evidence of students' knowledge and use of reading strategies to adjust instructional approaches and practices and provide needed modeling and scaffolding to ensure students learn and use effective strategic reading processes

Module 5 Block 1 26

If participants have previously gone through module 4 on reading strategies, remind them of what was learned in that module and make clear that this content reinforces the content of module 4.

Reflection Time

Assessments in Other Modules

- Think about assessments you got to know in the previous modules. What do they assess? How did you use the results of the assessments?
- Take a moment and write down your thoughts.
- Share your insights first with a partner / small group, then in plenary.

Module 5 Block 1 27

Short reflective activity:

- Ask the participants to think of assessments they got to know in the previous modules. What do these assess? How did the participants use the results of the assessments? Invite questions and comments (in plenary).
- An example is the **reading log** in Module 2 (see M2_Material 1a).

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Module 5 – Block 1 (material 1)

Vocabulary Self-Awareness: Assessment *for* Better Instruction and Learning of Vocabulary

PARTICIPANT ACTIVITY

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- **Vocabulary Self-Assessment (part 2)**

(M5_Mat. 1a_Vocabulary Awareness Activity)

Module 5 Block 1 29

- Hand out page 2 of *material 1a*. See *directions 2 (on page 2)*.
- It is important that the participants individually compare their two charts first. Afterward, allow them to discuss with a partner. Invite questions and comments (in plenary).

Vocabulary Self Awareness

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- Because students bring a range of word understandings to the reading of content area texts, it is important to assess their vocabulary knowledge before reading.

(Fisher, Brozo, Frey, & Ivey, 2010)

- This awareness is valuable for content area teachers as well as for students because it provides a reflection of the critical academic language they know, as well as what they still need to learn in order to fully comprehend the reading.

(Goodman, 2001)

Module 5 Block 1 30

Vocabulary Self Awareness

- Provide students a Vocabulary Self-Awareness chart before they begin reading new material.
- The chart should list key terms from the passage you want students to know and learn.
- Ask students to rate each vocabulary word according to their level of familiarity and understanding.
  - A plus sign (+) indicates a high degree of comfort and knowledge; a check mark (√) indicates uncertainty; and a minus sign (--) indicates the word is brand new to them.
- Also students should to try to supply a definition and example for each word.
  - For words with check marks or minus signs, students may have to make guesses about definitions and examples.
- Do not give students definitions or examples at this stage.

Module 5 Block 1 31

Vocabulary Self Awareness

- Over the course of the readings and exposure to other information sources throughout the unit, students should be told to return often to the chart so they can revise original entries and add new information about each vocabulary word.
- The goal is for students to replace all the check marks and minus signs with a plus sign by the end of the reading or unit.
- Because students continually revisit their vocabulary charts to revise their entries, they have multiple opportunities to practice and extend their understanding of important content terminology.

Module 5 Block 1 32

Tell participants that if they use one Vocabulary Self Awareness chart for students, each time students return to their chart they should include new information about each term/concept by either writing in another colored pen or pencil. In this way, students can see vividly how their knowledge about key vocabulary has grown from the beginning of the unit to the end. This record of word learning is formative assessment for both the student and the teacher.

Vocabulary Self Awareness

- Vocabulary Self-Awareness activity provides another formative assessment of students' content area vocabulary knowledge and learning.
- Information about students from this assessment can be added to the other assessment information gathered from the CARI to guide instruction in content area vocabulary building and reading.
- The Vocabulary Self-Awareness activity is evaluated informally.

Module 5 Block 1 33

Vocabulary Self-Awareness: An Example from Science

Word	+	✓	-	Definition	Example
density					
mass					
volume					
weight					

Module 5 Block 1 34

Vocabulary Self-Awareness: An Example from Math

Word	+	✓	-	Definition	Example
Exponent					
Constant					
Factor					
quotient					

Module 5 Block 1 35

Vocabulary Self-Awareness: An Example from Civics

Word	+	✓	-	Definition	Example
Sovereignty					
Constitutional law					
Parliamentary system					
Primeminister					

Module 5 Block 1 36

Using Vocabulary Self Awareness as an Assessment *for* Vocabulary Learning and instruction

- Students can use Vocabulary Self Awareness to determine the extent of their prior knowledge for key content area vocabulary and monitor their growth in word learning
- By observing students' responses to the key terms on the Vocabulary Self Awareness chart, Teachers can identify students who need vocabulary instruction before, during, and after reading

Module 5 Block 1 37

Nathan's Vocabulary Self Awareness responses <u>before</u> reading about Early Civilization

Word	+	✓	-	Definition	Example
artifacts		✓		Unsure, maybe like facts from art	
archaeology			-	I'm not sure what this means	
specialized		✓		I think it's anything that's real special to you	Like, someone who's real special to you
anthropology				It's some kind of scientist, but I'm not sure	

Module 5 Block 1 38

Nathan's Vocabulary Self Awareness responses after reading about Early Civilization

Word	+	✓	-	Definition	Example
artifacts	+			something made or given shape by man, such as a tool or a work of art	a gold chain from ancient Egypt
archaeology	+			study of human activity in the past by analysis of the physical culture	Learning about ancient Egyptian culture by analyzing the pyramids and tombs
specialized		✓		I think it's having a special skill or being able to make something that does one thing	Ancient Egyptians had a special tool for making jewelry
anthropology	+			study of humans in the past and today	Margaret Mead was an anthropologist who studied Samoans

Module 5 Block 1 39

Vocabulary Self Awareness: Analysis of Nathan's Performance

- A teacher's analysis of a Nathan's performance with this Vocabulary Self Awareness activity could read:
  - His prior knowledge of key vocabulary, as reflected was sufficient to aid in comprehending the passages, and he enriched his understanding of key terminology through reading
  - Nathan does not appear to need any additional vocabulary instruction of these key terms

Module 5 Block 1 40

Jodi's Vocabulary Self Awareness responses before reading "What is Science?"

Word	+	✓	-	Definition	Example
subdividing		✓		To divide something	
application		✓		Apply to a job	Like at McDonalds
interdependent			-	I don't know	
antibiotics		✓		It's some kind of medicine	

Module 5 Block 1 41

Jodi's Vocabulary Self Awareness responses after reading "What is Science?"

Word	+	✓	-	Definition	Example
subdividing		✓		something to do with categories	animals
application		✓		using something	using science
interdependent		✓		living together	like, birds and bees
antibiotics		✓		some kind of medicine	for the flu

Module 5 Block 1 42

Vocabulary Self Awareness: Analysis of Jodi's Performance

- A teacher's analysis of Jodi's performance with this Vocabulary Self Awareness activity could read:
  - Jodi's low-level of familiarity with key vocabulary from the passages before reading and her difficulty acquiring new vocabulary knowledge through reading appeared to contribute to her overall problems with comprehension
  - Jodi will require additional instruction related to these and other key science terms before, during, and after reading *(see next slide)*

Module 5 Block 1 43

Vocabulary Self Awareness: Assessment *for* Instruction for Jodi

- **Strategies Before Reading**
  - Pre-Teach Key Vocabulary
  - Vocabulary Cards
- **Strategies During Reading**
  - Concept of Definition
  - Student Friendly Definitions
- **Strategies After Reading**
  - Word Study Guide

Module 5 Block 1 44

Here you may also refer to Module 4 strategies for building content area vocabularies.

Reflection Time

Reflection on Vocabulary Self-Awareness in Own Classroom Practice

- How could you use vocabulary self-awareness in your own classroom instruction?
- Take a moment and write down your thoughts.
- Share your insights first with a partner/small group, then in plenary.

Module 5 Block 1 45

Short reflective activity:

- Have participants consider how vocabulary self-awareness could be used in their own classroom instruction. Invite feedback and write the participants' suggestions on the board.

PPT Slides M5_Mat 2

Note for trainers:
We strongly recommend that you construct and conduct your own CARI! Like this you will be much more an expert for the CARI and able to answer participants' questions.

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

Module 5 – Block 2 (material 2)

CARI
Content Area Reading Inventory

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

- "This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein."

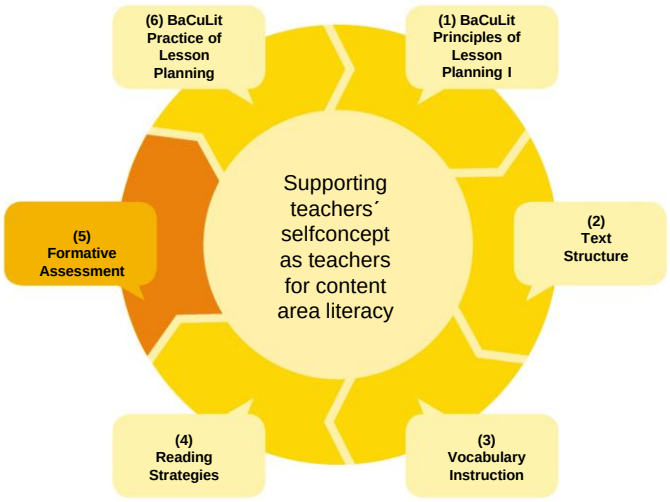
BaCuLit
BaCuLit Association e.V.

Lifelong Learning Programme

Universität zu Köln

Module 5 Block 2 2

The BaCuLit Curriculum



Module 5 Block 2 3

Explain that although formative assessment is taken up as a separate topic in module 5, instructional strategies and practices advocated and demonstrated in the four previous modules create numerous opportunities for teachers to assess students content area literacy in ongoing and formative ways. Good instructional strategies always have a feedback element that allows teachers to learn about students' abilities and challenges. And when challenges are observed and noted, teachers can adjust instruction to make it more responsive to students' needs and readers and learners.

Content of Module 5 – Formative Assessment

BLOCK 1

- Why is formative assessment an assessment ***for*** instruction?
- What should be formatively assessed in the content area classroom?
- How can Vocabulary Self-Assessment be used by teachers in order to inform instruction?

BLOCK 2

- What is the *Content Area Reading Inventory (CARI)* and how can it be designed by teachers to give clear instructional directions?

Module 5 Block 2 4

If Block 1 of Module 5 is delivered just before Block 2, be sure to help participants see the connections between formative assessment input and practices in Block 1 and the CARI in Block 2.

Content Area Reading Inventory (CARI)

- A tool that assesses students' reading, thinking, and study processes with content texts that teachers plan to use for instruction
- **Results** can be **turned into instruction** to address specific reading and learning needs

Module 5 Block 2 5

Content Area Reading Inventory CARI

- CARI is a teacher-made inventory designed to detect:
  - aspects of the text that may present potential problems for students
  - important skills and strategies students may lack for effective reading of particular texts
- Teachers can address reading and learning needs of individuals and groups based on CARI results

Module 5 Block 2 6

Emphasize that these features of the CARI make it an ideal formative assessment tool.

Content Area Reading Inventory CARI

- Because CARI is a teacher-made assessment tool, it is **highly flexible**.
- Teachers can design their own CARI to assess whatever reading skills and strategies they believe their students need to possess.

Module 5 Block 2 7

Stress with participants that although they will see examples of CARI, the CARIs they design should include questions and prompts of their own design that emphasize strategies and abilities they believe are important for their students to possess and to be able to apply with course texts.

Steps in Developing a CARI

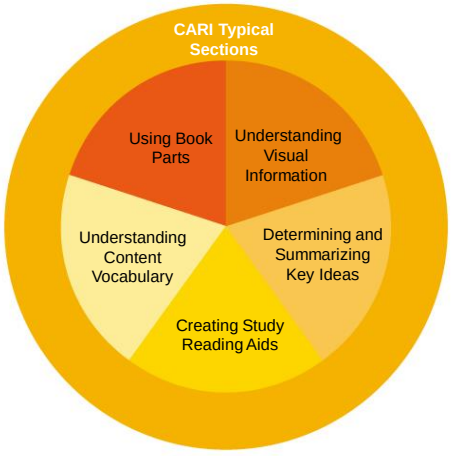
- Identify the reading, writing, and thinking skills essential to using the primary text effectively.
- Select a typical excerpt or excerpts from the text. The selections need not include an entire chapter or story but should be complete within itself and not dependent on other sections. In most cases a few pages will provide a sufficient excerpt from the text.
- Design questions and prompts for students that will provide an adequate reflection of how they navigate through, read, and study from a text. To increase the accuracy of the CARI each section should be comprised of 3-5 questions/prompts.

Module 5 Block 2 8

Typically, a primary text is the course textbook or some other text that is used and relied on often by teachers and students. Because of their flexibility, CARIs can be designed for an entire textbook or for a textbook chapter or even some other kind of text.
The CARI described in these slides is one that assesses students' using different parts of an entire textbook.

Suggested components of a CARI

Components of a Typical CARI



Module 5 Block 2 9

Content Area Reading Inventory CARI
1. USING BOOK PARTS

- In this section, students are prompted to demonstrate the ability to use the table of contents, glossaries, indexes headings and subheadings, highlighted terms, etc.
- **Sample Questions for A World History Textbook**

1. On what pages can you find information on the Silk Road?
2. In what part of the book can you find the meaning of Sharia?

Module 5 Block 2 10

Content Area Reading Inventory CARI
2. UNDERSTANDING VISUAL INFORMATION

- In this section, students are prompted to demonstrate the ability to read, understand, and gather information from graphs, charts, diagrams, illustrations, photos, etc.
- **Sample Questions for A Health Textbook**

1. According to the chart on page 61, what is the second-largest cause of death among children?
2. What does the graph on page 334 imply about the relationship between cancer and cigarette smoking?
3. What does the cartoon on page 101 suggest about ways obesity influences national health policy?

Module 5 Block 2 11

Content Area Reading Inventory CARI
3. UNDERSTANDING CONTENT VOCABULARY

- In this section, students are prompted to demonstrate their prior knowledge of key concepts and terms as well as their ability to use context to determine word meanings.

Module 5 Block 2 12

Remind participants that vocabulary strategies in Module 3 include assessment features and that Block 1 of Module 5 included the Vocabulary Self Awareness strategy for formative assessment of content are vocabulary knowledge.

Assessing Content Vocabulary in a CARI using the Cloze/Maze Approach

- Requires students to read a passage in which particular types of words have been deleted.
- With content area text, the deleted words are content-specific vocabulary.
- When students come to the deletion, they must select the correct word from multiple options.
- Requires students to demonstrate either prior knowledge for or contextual understanding of key content area terminology.

Module 5 Block 2 13

Assessing Content Vocabulary in a CARI using the Cloze/Maze Approach

- One important advantage of cloze/maze is that teachers can easily incorporate it into their CARI
- Using the same text source for a CARI, paragraphs can be formatted as cloze/maze tasks to determine students' contextual reading skills as well as their understanding of key content-specific terminology.
- Cloze/maze has been well-documented in the research literature as a viable approach to reading assessment.

(Brozo & Afflerbach, 2010; DuBay, 2004; Madelaine & Wheldall, 2004)

Module 5 Block 2 14

Example of a Cloze/Maze Passage from Science

Suppose you could send a robot to another planet. What kinds of **(1) conduct, trials, experiments** would you **(2) list, program, code** the robot to carry out? Before you programmed the robot, you would need to figure out what **(3) information, order, rank** you wanted it to **(4) arrange, gather, group**. Scientists are currently **(5) emerging, mounting, developing** robots that they plan to send to Mars. These robots are being **(6) designed, deliberate, planned** to examine the **(7) atmosphere, ambiance, population**, rocks, gravity, and magnetic **(8) meadows, fields, turfs** of the planet.

Module 5 Block 2 15

Allow participants to try to select the correct vocabulary word for each of these cloze/maze items as you read the passage aloud, then check their responses with the answer key in the next slide.

Answers to cloze/maze science passage

- experiments
- program
- information
- gather
- developing
- designed
- atmosphere
- fields

Module 5 Block 2 16

Content Area Reading Inventory CARI
4. DETERMINING AND SUMMARIZING KEY IDEAS

- In this section, students are prompted to demonstrate their ability to identify and summarize important ideas, points, and arguments in content text.

- **Sample Prompts for a Mathematics Textbook**
  1. Write a one-page summary for the section entitled "What is a hyperbola?" on page 55. Be sure to include in your summary the key ideas and any other pertinent information. Use your own words as you write your summary.
  2. In your own words, state the key idea of the paragraph on the Pythagorean Theorem on page 262, second paragraph from the top.

Module 5 Block 2 17

Content Area Reading Inventory CARI
5. CREATING STUDY READING AIDS

- In this section, students are prompted to demonstrate their ability to create a record of their reading for ongoing study and review

- **Sample Prompt for a History Textbook**
  1. Imagine that you will have a multiple-choice and short-answer test on the section in Chapter 18 entitled "Dangers of Fascism". Organize the material in that section by taking notes over it in a way that would help you prepare for the test.
  2. If you prefer another study aid, create that one over the section in Chapter 18.

Module 5 Block 2 18

Content Area Reading Inventory CARI

- **Other Assessment Options**
  - engagement / motivation to read and learn the content
  - reading fluency
  - writing

Module 5 Block 2 19

Using CARI Results as Assessment *for* Instruction

- Once students have completed a CARI, teachers can organize and analyze the results:

  a. Whole class profile

  b. Individual profile

Module 5 Block 2 20

- If participants completed Block 1 of Module 5, remind them that in the Formative Assessment Activity they read and analyzed the components of a ***teacher-made formative assessment tool*** that included ***student engagement and motivation*** for the topic of the textbook.
- Teachers can also add checks of ***reading fluency*** in their CARIs by including ***timed readings of a text segment***.
- Teachers can also prompt students to ***write*** within their CARIs to check ***composition skills*** with content topics.
- *If you would like to get some more background knowledge on the assessment of reading engagement and motivation, you may read the article on "Assessing Motivation to Read" by Sharon M. Pitcher et al. (see also reference list in trainer handbook).*

Using CARI Results as Assessment *for* Instruction

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

Math Classroom Summary Assessment: Analyzing Students' Outcomes of Content Area Reading Inventory

Name	Using Party of the Book					Following Directions				Understanding Math Symbols				Understanding Vocabulary				Noting Main Ideas				Drawing Conclusions				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Jason	✓					✓	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tamika										✓	✓		✓	✓								✓	✓	✓	✓	✓
Jorge										✓	✓		✓		✓	✓										
Michelle																						✓	✓	✓	✓	✓
Tyrome	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓	✓	✓	✓	✓
Gareth										✓	✓							✓				✓	✓	✓	✓	
Avery	✓					✓				✓	✓	✓		✓	✓	✓		✓	✓	✓				✓		
Judd			✓			✓				✓	✓			✓			✓			✓		✓	✓			
Chanda	✓	✓				✓	✓	✓	✓		✓			✓	✓	✓		✓	✓			✓	✓	✓	✓	
Jennifer		✓				✓	✓	✓	✓					✓				✓	✓	✓		✓	✓	✓	✓	✓

Pace a check mark under the number of the question that was missed and alongside the name of the student who missed it.

Module 5 Block 2 21

Short reflective activity:

- Ask participants to think about a student like Tyrone and identify his strengths and weaknesses based on the pattern of responses on this CARI summary sheet.
- Have them compare Tyrone with another student, such as Tamika.
- Next ask how participants could support a student like Tyrone by improving his literacy skills in the math classroom. Participants should be encouraged to think of strategies and practices learned in the previous modules. Remind participants that additional strategies for responding to students' needs on a CARI will be shared after the coffee break.
- Invite questions and comments (in plenary).

This is **one possible** example of how CARI sections and reading strategies could be matched:

- Using book parts / Understanding visual information
  - Before reading: Activating prior knowledge
  - During reading: Identifying text structure
  - After reading: Evaluating the function of text structure
- Understanding Content Vocabulary
  - During reading: Identifying, marking and clarifying unknown words
- Determining and summarizing key ideas
  - During reading: Recognizing important statements
- Creating Study Reading Aids
  - After reading: Creating own visualizations to reflect on text comprehension

PARTICIPANT ACTIVITY

Analyzing example CARIs

(M5_Mat. 2a_CARI examples) & (M5_Mat. 2b_CARI analyzing sheet)

- Work in groups.
- With the examples of student CARI results fill out the CARI classroom analysis sheet.
- Determine for two students their areas of strengths and needs. Write down your results in a chart *(material 2b, page 2)*:
- Share your results in plenary.

Module 5 Block 2 22

Content of Module 5 – Formative Assessment

- BLOCK 2: Content Area Reading Inventory (CARI)
  - *Input* on CARI
  - CARI Analysis *Activity*
- COFFEE BREAK
- **Input on using CARI results to guide instruction**
  - *Activity*: Matching CARI results & instructional strategies
- *(COFFEE or LUNCH) BREAK*
  - *Activity:* Developing own CARIs
  - Homework assignment
  - Evaluation

Module 5 Block 2 24

You may use this slide to remind the participants of what has been covered thus far and what will be covered next.

Using CARI Results as Assessment *for* Instruction

Addressing Student Needs in Using Book Parts

- **Text Mapping**
  - Sensitizes students to textbook features and organization
  - Identify pages from the text that contain important organizational features, such as table of contents pages for the first chapter; introductory pages of the first chapter with title, headings, and subheadings; pages with highlighted terms; related glossary and index pages

Module 5 Block 2 25

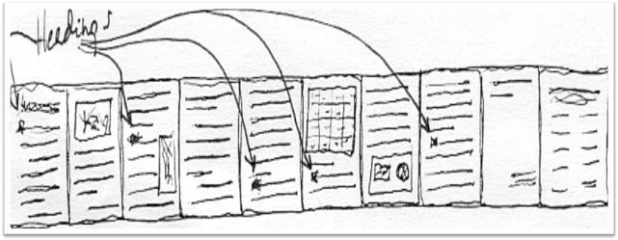
Using CARI Results as Assessment *for* Instruction

Addressing Student Needs in Using Book Parts

- **Text Mapping**
  - photocopy these pages into class sets with one set per group of three or four students
  - organize the pages from table of contents through index pages edge to edge and tape them together into a long scroll
  - Tape one of the scrolls to the board and distributes one to each of several groups of students. Students spread the scrolls out at their tables
  - Distribute markers to students and ask them to identify various text features

Module 5 Block 2 26

A Text Map Scroll



Module 5 Block 2 27

This example of a text mapping scroll highlights headings found in text. Make it clear to participants that this same scroll could be used to help students identify graphic material, section or chapter summaries, italicized and bold print, and more.

Using CARI Results as Assessment *for* Instruction

- **Addressing Student Needs in Understanding Visual Information**
  - Model with students the use and function of visual material. Using a textbook, select a graph, table, chart, map, illustration, or photo and explain to students how it works in relation to the text (is it central, supplemental, or redundant?). Ask students questions about the visual material that require various levels of understanding

Module 5 Block 2 28

Using CARI Results as Assessment *for* Instruction

- **Addressing Student Needs in Understanding Visual Information**
  - Present simple visuals to students. Create simple visual materials or find visual materials from another source that relates to the textbook section. Ask students to decide whether these visuals are valid or invalid by using specific evidence from the text to justify their decision.
  - Ask students to synthesize their learning. Students can create their own graphic material for the textbook section they have just read or they can evaluate how effectively the textbook's graphics were used.

Module 5 Block 2 29

Using CARI Results as Assessment *for* Instruction

- **Addressing Student Needs in Understanding Content Vocabulary**
  (from Module 4)
  - Academic Word Walls
  - Using vocabulary strategies while reading
  - Class Notebook Word Study Guide

Module 5 Block 2 30

- The following three slides are examples from the Vocabulary Module. You may remind participants of this and go over these slides quickly.
- If participants did not have Module 3 before, check the Module 3 PPT slides for further information and talk about these a bit more detailed.

Academic Word Walls

- Examine a text you plan or are currently using in your classroom
- Circle the content words that your students might not know

- **Make a list:**
  - Level 1: Critical Before words
  - Level 2: Important before words
  - Level 3. Critical after words
  - Level 4: Words not to teach

- **Academic Word Walls:**
  - Level 1 and 3 words
  - Essential words in full view (currently in play)
  - Provides multiple exposures

Module 5 Block 2 31

Using vocabulary strategies while reading

- When you're reading a text from a textbook , and you come upon a word you don't know, you can follow these steps:
  - Don't panic;
  - Go back a few sentences, maybe the meaning is explained there already;
  - Read on: maybe the meaning is explained in what follows;
  - Look at pictures or diagrams in your text, maybe the word is used or illustrated there;
  - Ask your classmates or teacher;
  - Look the word up in your dictionary.

Module 5 Block 2 32

Class Notebook Word Study Guide

Word	Explanation	Examples	Visual Image
Dilute Sentence (and page #) in which you found the word: "Dilute the solution with an equal amount of water." (pg 132)	When **you** dilute something, you make it less in some way.	If your coffee is too strong you could add milk to dilute it.	

Module 5 Block 2 33

Using CARI Results as Assessment *for* Instruction

- **Addressing Student Needs in Determining and Summarizing Key Ideas**
  - GISTing

Module 5 Block 2 34

GISTing

- GISTing is a text summarization strategy
- Teacher models the process by progressing sentence by sentence through a paragraph while limiting the gist to a pre-set number of words
- Students practice the GISTing process with teacher guidance
- The goal is to prepare students to create gists automatically when they read

Module 5 Block 2 35

GISTing

Paragraph for GISTing from Social Studies Textbook

Julius Caesar was famous as a statesman, a general, and an author, but ancient traffic jams forced him to become a traffic engineer, too. These traffic snarls were so acute in the marketplace of Imperial Rome and around the Circus Maximus that all chariots and ox carts were banned for ten hours after sunrise. Only pedestrians were allowed into the streets and markets. Caesar also found it necessary to abolish downtown parking and establish one-way streets.

Module 5 Block 2 36

Students learn to GIST using paragraphs from the textbook or other text source.

GISTing

GIST for each sentence and final GIST is limited to 15 words total

1. Julius Caesar was famous for many things including traffic engineer. _____ _____ _____ _____ _____
2. 2. As traffic engineer Julius Caesar banned chariots and ox carts from Rome during the daytime.

Module 5 Block 2 37

Students write a gist statement for each sentence in a paragraph, one at a time, adding key elements from each sentence in the paragraph, so that each new gist statement combines ideas and information from the preveious sentences.

GISTing

GIST for each sentence and final GIST is limited to 15 words total

3. As traffic engineer Julius Caesar banned all but pedestrians from Rome during the daytime.
4. As Rome's traffic engineer Julius Caesar allowed only pedestrians created one-way streets and banned parking.

Module 5 Block 2 38

The final gist statement should serve as the overall gist for the entire paragraph, because it should have important information and ideas from each sentence of the paragraph.

Using CARI Results as Assessment *for* Instruction

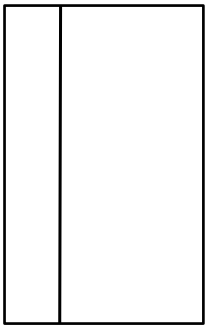
- **Addressing Student Needs in Creating Study Reading Aids**
  - Split-Page Note Taking

Module 5 Block 2 39

Split-Page Note Taking Method

STEPS

- Use DIN A4 lined paper.
- With a ruler or some other straight edge, draw a line from top to bottom on each page. Try to split the page into one-third/two thirds.
- Write big ideas, key dates, Names etc. in the left column and supporting information in the right column. Paraphrase and abbreviate as much as possible.
- Prompt recall by bending the sheet so that information in the right or left columns is covered.



Module 5 Block 2 40

Example 1 for instructional strategy „split-page note taking“

"The Most Dangerous Game" – Richard Connell English 10

Plot defined	▪ related events that present and resolve a problem/conflict
Rainsford Sanger	▪ celebrated hunter ▪ learned meaning of terror ▪ forced to become hunted
Setting	▪ Ship Trap Island ▪ Caribbean Sea ▪ jungle environment ▪ General Zaroff's preserve
Plot	▪ R. falls overboard ▪ R. swims to shore ▪ Zaroff admits hunting man ▪ Zaroff hunts R.

Module 5 Block 2 41

Chapter 11, Metallurgy

Metallurgy	▪ taking metals from ore ▪ refining ores ▪ preparing ores
Ores	▪ rock or mineral ▪ metal obtained profitably
Metallurgy of Iron	
– iron age	▪ began 1500 BC ▪ 5000 BC meteorites were used
– iron	▪ 4th most abundant ▪ reddish brown
– taconite	▪ found @ Lake Superior ▪ 25% - 50% iron ▪ crushed/refined

Module 5 Block 2 42

PARTICIPANT ACTIVITY

Matching CARI results & instructional strategies from other modules

(M5_Mat. 2a_CARI examples & M5_Mat. 2b_CARI analyzing sheet)

- Think of further instructional strategies you got to know in the other BaCuLit modules. Which of these would you use to support the students from your CARI example in using literacy skills for content area learning? Give reasons for your instructional decision.
- Share your ideas with a partner and write down your choices in the column „instructional strategies“ *(M5_Material 2b, page 2)*.

Module 5 Block 2 43

Module 5 Block 2 44

- Example 1 for instructional strategy „split-page note taking“

Content of Module 5 – Formative Assessment

- BLOCK 2: Content Area Reading Inventory (CARI)
  - *Input* on CARI
  - CARI Analysis *Activity*
- COFFEE BREAK
  - *Input* on using CARI results to guide instruction
  - *Activity*: Matching CARI results & instructional strategies
- *(COFFEE or LUNCH) BREAK*
- **Activity: Developing own CARIs**
  - Homework assignment
  - (Evaluation)

Module 5 Block 2 45

- You may use this slide to remind the participants of what has been covered thus far and what will be covered next.

PARTICIPANT ACTIVITY

Developing own CARIs

(M5_Mat. 2c_CARI Handout & M5_Mat. 2d_Own textbook)

- Work in content teams.
- Individually construct a CARI for your content area text book. *(As guidelines you may use material 2c/CARI handout and the example CARIs)*
- Then share your results and/or questions with your group.
- In your group, decide which 1 or 2 CARIs to share with the whole group. Write these CARIs on a poster.
- Display your CARIs in the classroom (Gallery Walk).

Module 5 Block 2 46

You may decide if all teachers should display their CARIs.
How to use Gallery Walk? – Steps:

- The CARIs will be displayed on pin boards.
- The teams rotate between posted charts.
- They examine and discuss the work results of the respective team. – Participants could also pin comment cards on the posted charts.
- The technique closes with the teams providing feedback to each other in plenum.

Guiding questions for lesson planning (BaCuLit framework)

FORMATIVE ASSESSMENT I

- What do my ongoing assessment routines say about the strengths and weaknesses of my students (with respect to content, literacy learning, motivation)?
- How can I use this assessment information to provide responsive content literacy instruction? How can I support my students (whole class, single groups, and/or individual students) in using their strengths to overcome their weaknesses?

Module 5 Block 2 47

Please provide all participants with either the questions (Material 2f) or the checklist (Material 2g) before presenting the questions. Then present the questions of each section and add comments or examples, after each section give participants time for questions and comments or time to fill in their checklist answers.

Guiding questions for lesson planning (BaCuLit framework)

VOCABULARY

- How do I build understanding of essential vocabulary?
- How do I select words that are essential for students to learn in my content area?
- What strategies will I use to create students´ ownership of important vocabulary?

Module 5 Block 2 48

Guiding questions for lesson planning (BaCuLit framework)

FORMATIVE ASSESSMENT II

- How can I assess my students' literacy abilities and strategies with my content texts?
- How can I assess my students' knowledge of key concepts and vocabulary from my content texts?
- How can I use this assessment information to provide responsive content literacy instruction?
- How can I help my students monitor their progress as readers and thinkers of my content texts?
- Which kind(s) of self-assessments should my students use?
- Which assessment information will I provide to students so they know what is expected of them?

Module 5 Block 2 49

Conclusion

BLOCK 1

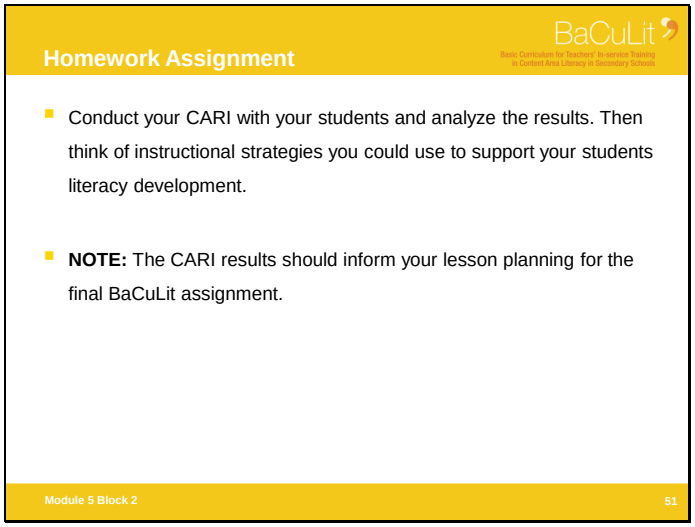
- Formative assessment is assessment ***for*** instruction
- Formative reading assessments can be designed by teachers, using classroom texts, and lead to responsive content area reading instruction based on student needs
- Vocabulary Self-Awareness is a useful formative assessment tool for content area teachers and metacognitive tool for students

BLOCK 2

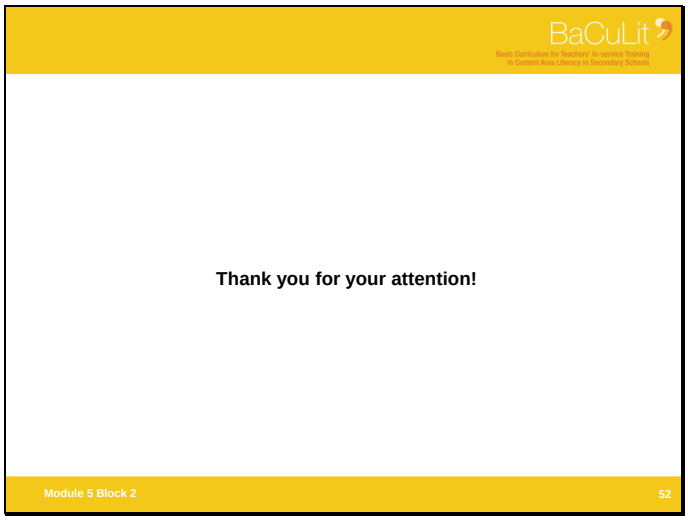
- The *Content Area Reading Inventory (CARI)* is a flexible, text-specific reading assessment that gives clear instructional direction to teachers

Module 5 Block 2 50

What did we learn in Module 5?
Give a short lecture on the highlights of this module.
You may also have the participants reflect on whether they learnt what was „promised" and what else they found helpful for their own classroom instruction.



If you teach this block directly before Module 6, you may also introduce the final assignment (developping own BaCuLit lesson plans).
The idea behind the Module 5 homework assignment is that participants use assessment data (CARI) to inform their instruction in order to improve their students' literacy skills in content area classrooms.



Module 6
BaCuLit Practice of Lesson Planning

Overview

This final module consists of three related blocks. All three blocks are essential, but their length can differ according to the number of participants or the emphasis the trainer puts on one or more topics in the three blocks. The total length of this module can range from 3 to up to 6 hours.

In this module there are no specific new instructions or new input regarding metacognition, interaction, modelling or engagement. But of course, these elements should be a part of this final module. The trainer must try to integrate them in the planning of this module.

Some suggestions:

- Think of ways to engage the teachers in presenting the posters;
- Use the technique of modelling to make clear how they can give feedback on each other's lesson plans and presentations;
- As a trainer, use scaffolding while giving feedback on the lesson plans.

Short description of the content:
The module has three main topics:

1. Interactive poster presentations of the final assignment: examples of lesson planning and/or activities carried out by the teachers;
2. Reflection on teachers' own development: evaluation of the course on a personal professional level by developing a personal action plan;
3. Evaluation: looking back on the course as a whole.

Goal(s)

1. The teachers know how to integrate the BaCuLit model for content area literacy instruction in their lesson plans.
2. The teachers have developed clear ideas on 'adaptive and strategic reading' and supportive instructional tasks before, while and after reading a text.
3. The teachers can articulate and reflect on the way they changed their teaching. Teachers develop a personal action plan on how to sustain BaCuLit in the future in their teaching.
4. Teachers can articulate what they have gained by the course, and the ways in which they have benefited from it.

Module Highlights

- ❑ Poster presentations: How did I embed the BaCuLit cross-curricular concepts and the framework for lesson planning in my own lesson planning? How did it work out for my students?
- ❑ Reflection on teacher's own development: How can I embed concepts and elements of the BaCuLit course in my own personal action plan to sustain BaCuLit concepts in my future teaching?
- ❑ Evaluation: What did I like about the whole course? What improvements would I suggest?

Workplan

Block	Topic	Activities	Resources (Materials)
1	Presentation of lesson planning examples and activities by the teachers *Estimated time 90 min* **[Essential Content]**		
	Introduction M6	INPUT: overview of content and organisation of M6, emphasis on 'connecting the dots and wrapping up': linking the circle **by referring to lesson planning components and cross-curricular concepts, as introduced with materials from M1!**	**Material 1:** M6_mat.1 : PPT1 **Material 2:** M1_Mat2f: Questions for Lesson Planning M1_Mat2g: Checklist for Lesson Planning M1_Mat2h: Make sure and check **Material 3:** M1_Mat1d: Final assignment for Module 6

	Teachers know how to integrate all different components and cross-curricular concepts in the BaCuLit model for content area literacy instruction in their lesson plans. The teachers have developed clear ideas on 'adaptive and strategic reading' and supportive instructional tasks before, while and after reading a text.	Presentation of lesson planning examples and/or activities by the teachers, by means of individual poster presentations. See below for alternative ways in which these presentations can be organised.	Teachers have brought their own posters which they will use as reference in their 5 minutes-presentations.
		Teachers and trainer take notes on their checklist during the presentation. They formulate their reactions and feedback after the presentation on the checklist. All teachers get the opportunity to offer their (new, alternative, additional) feedback to the presenter. The trainer wraps up and closes with his feedback.	**Material 4:** M6_Mat4: Checklist feedback by teacher **Material 5:** M6_Mat5: Checklist feedback by trainer

	The Interactive Poster Session: a few options regarding the organization Each session consists of poster presentations with short oral 5 - minutes introductions and in-depth discussion. There are several ways to organize this as an interactive activity with the involvement of all participants, not just of the trainer. Please feel free to adjust this important part of Module 6 to your own preferred style, but keep in mind that interactivity and engagement of all present is needed. Choose one of the options below for the organisation of the presentations which will fit best with your group composition. Make good use of the M6_mat4 and M6_mat5 formats; and/or distribute multiple Post-Its in three different colours, corresponding with 'I compliment you on…', one for 'I've got a question for you on …', and one for 'I want to give you constructive feedback on…'. **** interactive poster presentation in a smaller (sub)group(s):*** All teachers take turns in presenting their work plenary before the (sub)group and comment on each other's posters by asking questions and putting comments on post-its which they attach to the poster. **** interactive poster presentation in expert groups:*** Teachers of the same subject matter form groups. The groups have parallel interactive poster presentations, discuss their experiences, and finally present their expert group findings to the group as a whole (this is an option for groups of (over) 20 people); **** tell a friend:*** If more teachers of one school are attending the training: invite colleagues who didn't attend the course for these poster presentations. This will definitely give rise to different kinds of questions, feedback, and lots of interaction.

Block	Topic	Activities	Resources (Materials)
2	Reflection on teachers' own development **[Essential Content]** *Estimated time 60 min*		

	The teachers can articulate and reflect on the way they changed their teaching	ACTIVITY: Teachers engage in **one of the following** activities that help them to reflect on their own development: * Carry out a SWOT-analysis: what are the strengths, weaknesses, opportunities and threats for sustainability of BaCuLit within the context of your own teaching and classes. Use the information on the PPT slides and the empty SWOT format.	M6_mat7a_SWOTanalysis ppt M6_mat6_SWOTemptymatrix
		*Teachers compare their initial lesson plans, used in Module 1, to the lesson plan in their final assignment, using colours to underline the improvements.	M1_mat2i_Lesson Planning Form as filled in in the Trainer's Handbook during M1.
		* Teachers look back in their workbook to the Lesson Planning Checklist they filled in. Mark with a different colour how you would respond to these questions now. Reflect in pairs on questions like: what have you accomplished, and how are you going to hold on to those changes in your teaching? What are the aspects of teaching you still want to work on, how do you plan to get those aspects to work for you, and to keep on track of that?	M1_mat2g_Checklist for Lesson Planning as filled in in the Trainer Handbook during M1.

	Teachers develop a personal action plan on how to sustain BaCuLit in the future in their teaching	ACTIVITY: Discussion of the material used in the topic above; preferably ending in personal action plans. Choose one of these options, or choose your own, more fitting or appropriate activity. *** Option 1:** The teachers make individual action plans and share these in pairs. Guiding questions: How are you going to carry out your plan? Who is going to guide you? Where are you going to find resources and materials you may need? *** Option 2** If you were asked to tell your colleagues about this course, what would you tell them? What have you learned? What were the profits? How did it change your way of teaching? How did your students benefit from these changes?	M6_mat8a_Format personal plan of action; M6_mat8b_six tips on making a personal plan of action; M6_mat8c_getting results from a team-based action plan.
Block	**Topic**	**Activities**	**Resources (Materials)**
3	Evaluation: looking back on the course as a whole **[Essential Content]** *Estimated time 30 min*		

		ACTIVITY: Teachers fill out the Evaluation Questionnaire for M6. They look back in their workbook at the Evaluations they gave of all previous modules. They formulate both Recommendations and Compliments on the BaCuLit course as a whole – as many as they like – on Post-its in two colours. The Post-its are collected on two sheets of paper, for the trainer to evaluate afterwards and use for the benefit of future courses.	Evaluation Questionnaire for every module (cf M1_Mat2k) Post-its in two colours 2 large (A1) paper sheets
	Celebration		

[Optional Content]	**Professional development and the implementation angle**	*This content can be of interest for your particular group, but to ensure engagement in your teachers,* ***make sure it ties in with your national or local context****. Make that your starting point. You may decide to include background information (in English only) and the corresponding ppt slides on this subject into the module – as additional input.*	Information on local or national initiatives and implementation programmes in education, brought in by the trainer. The general information from research on implementation included in the introduction on pages below in this Handbook. M6-mat 7b_optional on implementation.ppt

List of Materials

No.	Title / Topic
1	PPT Block 1
1a	Checklist
1b	SWOTemptymatrix
2	SWOTanalysis Ppt
2a	Format personal plan of action;
2b	Six tips on making a personal plan of action
2c	Getting results from a team-based action plan
OPTIONAL 7b	Effective Professional Development for Teachers: An Implementation Angle. Summary of main points on implementation in a PPT. This information is also mentioned in the text below this table.

Conceptual Foundations
[Heleen Strating]

On Effective Professional Development for Teachers: An Implementation Angle

Since this final module is first and foremost meant to act as a stage for the participants to show how they've learned to tie together the different BaCuLit perspectives and to think about how they will consolidate these personal results in the future, there is no additional theoretical input on reading literacy, strategies or instructional perspectives to share here.

Instead, this section of the Handbook for Trainers will, for Module 6, give you a short insight not only into what international research has said about aspects of programmes on the professional development of teachers, but also on what can be said about the factors that have a bearing on the successful implementation of such programmes. What is needed to enable an effective professional development programme; to survive an implementation phase that aims at broad, long-lasting implementation?

This content is presented as an *optional* element in Module 6: you can incorporate this information to broaden your participants' views on implementing change not only on a relatively small scale, in their personal classroom activities, but also on a much larger scale (school, nation). You should bear in mind, though, that the inclusion of local or national perspective will more readily elicit optimal engagement from the participants.

What are elements that make professional development for teachers effective?

Recommendations for sustainable programmes say that effective professional development for teachers:

- Is an ongoing process
- offers classroom practice, and possibilities for inquiries into practice
- asks teachers to read and discuss demanding texts
- offers teachers opportunities to deal with content area texts and gain generative knowledge
- is collaborative and offers opportunities for interaction between colleagues
- respects teachers' beliefs and expertise. Teachers' beliefs must be respected, otherwise experienced teachers might be unwilling to make a change; in addition, teachers often feel discouraged, devalued, and misunderstood when their beliefs are ignored.
- acknowledges professional autonomy
- builds upon the teaching reality of the teachers
- considers the needs of the teachers
- aims for school-wide coverage. All members of a school community should be involved to enable the development of a 'culture of improvement'; professional development needs to be adjusted to each individual school and its background
- aims for a long-time effect by planning follow-up activities
- starts out from consensus: all participants should affirm the goals of the programme
- is sufficiently supported by school management, via funding, materials, and substitute teachers for instance

- incorporates learning communities (at the very least by way of group discussions) as part of the programme. In general, secondary school teachers do not have to share their beliefs and classroom practices with anyone, but conversation with colleagues can have positive effects. These include: novices learning from experts, deeper understanding of learning objects, development of collaborative norms that foster active thinking, reflection on practices, programmes and theories.
- focuses on certain learning objects instead of focussing on universal teaching methods or 'tricks'. Professional knowledge should be combined with pedagogical knowledge so that it can connect to the practice of the teachers.
- fosters an open and positive dialogue in the school by naming an internal facilitator of the programme. This should be someone who works within the school and who has a connection with the teachers, in contrast to external experts who have no idea of the unique circumstances of a particular school or class.

Extricating the content angle form the implementation angle

Biancarosa and Snow's well-known report ‚Reading Next' (Biancarosa and Snow 2006) names fifteen key elements of effective adolescent literacy programs that result from their extensive review study. These elements are either of an instructional or an infrastructural nature (Biancarosa and Snow 2006, 4-5; 12). Their overview offers a clear distinction between, and insight into the ‚content and form'-issues in ongoing professional development with regard to (content area) literacy programmes:

Instructional improvements	**Infrastructure improvements**
Direct, explicit comprehension instruction	Extended time for literacy
Effective instructional principles embedded in content	Professional development that is both long-term and ongoing
Motivation and self-directed learning	Ongoing summative assessment of students and programmes
Text-based collaborative learning	Teacher teams
Strategic tutoring	Leadership
Diverse texts	A comprehensive and coordinated literacy program, which is interdisciplinary and interdepartmental and may also coordinate with out-of-school organizations and the local community
Intensive writing	
A technology component	
Ongoing formative assessment of students	

Most of the nine instructional improvements mentioned, are also part of the BaCuLit course. The items in the second column should be looked into by any professional development programme for teachers. Trainers and teachers participating in such programmes should be aware that these factors

are of as much importance as the factors on content and instruction in the successful implementation of change in everyday school practice. It has become clear in many studies that the ‚infrastructural' components can make or break an effective implementation of the improvements mentioned in the first column. Longlasting improvement of literacy across the curriculum can only become a reality if it combines the instructional with the infrastructural elements; be it in the context of a single school, or in the context of a national implementation (Van Reeuwijk 2012; Anders 2008; Greenleaf & Schoenbach 2004; Geijsel et al. 2001).

References and Recommended Readings

Anders, P.L. (2008), Multiple Dimensions of Adolescent Literacy Teacher Education. In: K.A. Hinchman; H.K. Sheridan-Thomas (Eds.), *Best Practices in Adolescent Literacy Instruction*. London & New York: The Guilford Press. 339-360.

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Geijsel, F., Sleegers, P., Berg, R. van den & Kelchtermans, G. (2001), Conditions Fostering the Implementation of Large-Scale Innovation Programs in Schools: Teachers' Perspectives. *Educational Administration Quarterly* 37 (1). 130-166.

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Reeuwijk, M. van (2012), *Critical factors for successful implementation of Literacy and Numeracy*. ICSEI paper [http://www.icsei.net/fileadmin/ICSEI/icsei_2012/papers/1792326__Martin_van_Reeuwijk.pdf].

PPT Slides M6_Mat 1

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

Module 6 (material 1)

BaCuLit Lesson Planning II: Teacher's own Lesson Plans

BaCuLit
Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools

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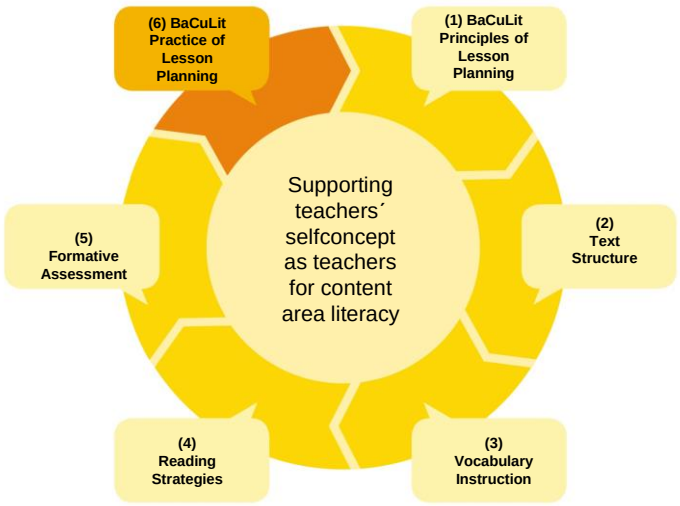
Modul 6 2

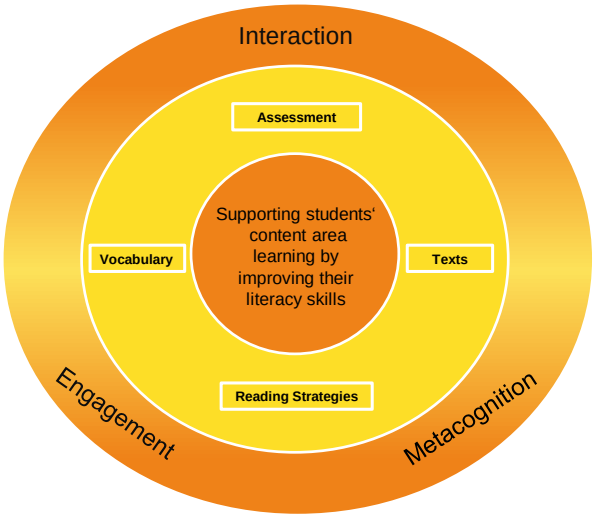
The BaCuLit Curriculum



Modul 6 3

Module 1 and 6 deal with Lesson planning as the central instrument of BaCuLit for bringing lesson planning elements and concepts into practice. Therefore the curriculum cycle starts and ends with this topic. In this Module 6 all participants are requested to present their own BaCuLit lesson plan which incorporates all elements and cross-curricular concepts they encountered during the course.
You can use this slide with the curiculum and the next slide with the lesson planning framework to briefly go over the key elements and the ways in which they are connected.

Lesson Planning Framework of BaCuLit



Modul 6 4

The **BaCuLit Framework for Lesson Planning** is based on the ADORE Reading Instruction Cycle. The main goal though is to support students' content area learning by improving their literacy skills, as is indicated in the orange circle.

The inner circle shows the core concepts:
texts (Module 2)
reading strategies (Module 4)
vocabulary (Module 3)
assessment (Module 5)

The outer circle includes the three cross-curricular concepts: engagement, interaction and metacognition .

Content of Module 6: BaCuLit Lesson Planning No. 2 – Teachers´ own Lesson Plans

- Poster presentations: How did I embed the BaCuLit cross-curricular concepts and the framework for lesson planning in my own lesson planning? How did it work out for my students?
- Reflection on teacher's own development: How can I embed concepts and elements of the BaCuLit course in my own personal action plan to sustain BaCuLit concepts in my future teaching?
- Evaluation: What did I like about the whole course? Which improvements would I suggest?

Modul 6 5

This module is made up of three blocks, of which the first one will very likely take up most of the available time. The time needed for this module depends largely on the number of participants, since everybody is asked to give a presentation of their own ‚BaCuLit-Style'- Lesson planning examples and activities.
In this module, participants will look back on how their (planning of) lessons have changed, having learned to work with BaCuLit cross-curricular concepts and the lesson planning framework. They will present the outcome of the Final Assignment they were given in Module 1, and elaborate on their own development and the way in which this affects their students' learning.
Together with the teachers, you will be tying all elements of the course together; you're connecting the dots as it were. Finally, the teachers will be drawing up their own personal plans on how to make sure that they'll keep up the good work in their classes, maybe even at the school-level.

Presentations of Teachers' own Lesson Plans

- **Poster presentations:**
  - How did I embed the BaCuLit cross-curricular concepts and the framework for lesson planning in my own lesson planning? How did it work out for my students?

Modul 6 6

Ideally, the presentations will be delivered in plenary, one by one. Check the Workplan for Module 6 in your Trainer Handbook for possible alternative ways to organise these presentations.
Make sure everybody understands the task, and uses their checklist for feedback. You can either copy a multitude of empty checklists, or ask teachers to use a new blank paper for every presentation. Every presenter is given the checklists the others have filled in for him.

PPT Slides M6_Mat 2

BaCuLit
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Module 6 (material 2)

Effective Professional Development for Teachers and Teams: Using a SWOT-Analysis

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Modul 6 2

SWOT-analysis

- **What is a SWOT Analysis?**
  - A **SWOT Analysis** is an effective way of identifying the **strengths** and **weaknesses** of the implementation of new policy, new curricula, protocols, parent-partnership arrangements, and so on, and of examining the **opportunities** and **threats** your school may face when implementing such policies, curricula, protocols, and arrangements.
  - A SWOT Analysis enables you to identify both the **internal** and the **external** factors that may influence the implementation process in your school

Modul 6 3

SWOT-analysis

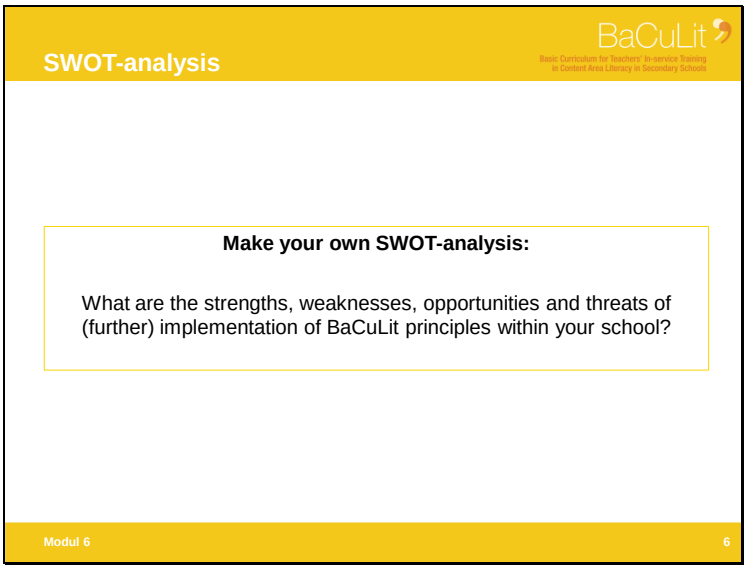
- **Definitions**
  - **Strengths:** Attributes of the school that are likely to have a positive effect on achieving the school's objectives.
  - **Weaknesses:** Attributes of the school that are likely to have a negative effect on achieving the school's objectives.
  - **Opportunities:** Conditions external to the school that are likely to have a positive effect on achieving the school's objectives, e.g, new local policy, national introduction of new standards etc.
  - **Threats:** Conditions external to the school that are likely to have a negative effect on achieving the school's objectives.

Modul 6 4

SWOT-analysis

- **Purpose**
  - The purpose of a **SWOT analysis** is to develop strategies and goals that:
  - capitalize on the school's strengths,
  - minimize the effects of any weaknesses,
  - exploit available opportunities
  - and defend against threats.
  - Implementing these strategies and goals should lead to achieving the school's objectives.

Modul 6 5



Refer the teachers to the workbook, M6_Mat 1b: the empty SWOT-matrix. Once again, point out that although the material is based on a school-approach, it can just as well be used on an individual level. If used in that perspective, it is a step a teacher can use in the process of making a Personal Action Plan. Stated the other way around: a SWOT analysis on a school or team level is a stage in coming to an effective and SMARTly phrased 'School Action Plan'.