

# Teacher Training Concept

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PIA<sup>2</sup>  
PROJECT

## Teacher Training Concept

### Trainer Handout

This handout is a supportive planning and accomplishing device for trainers that conduct the teacher trainings. The aim of these trainings is to introduce the teachers to the methodology of the concept “Project Management: Setting the Standards”.

### Introduction

“Project Management: Setting the Standards” is a concept originated from project management methods and terms within the school context, based on current standards. Along with teaching and learning materials (teaching guideline and teaching poster), it contains a framework that aims at assisting schools in the introduction and the maintenance of PM in their classrooms. The “Didactic Concept” comprises the essential didactic principles on which PM is based on. It also serves as a helping device for using and working with the guideline. The document “Evaluation of Learning Success in Projects” is a concept for the evaluation of the work accomplished in projects. The “Teacher Training Concept” talks about how to set up teacher trainings. It is built up on, and integrates, the above mentioned documents. Goal of the “Teacher Training Concept” is to assist trainers introducing teachers into the work with the guideline “Project Management: Setting the Standards”.

In the following, we will outline the prerequisites and the organizational framework, along with the structure of the training, and an exemplary procedure.

**Author:**

Andreas Sebe-Opfermann

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## Prerequisites and Framework Conditions of the Training

### The Target Group and the Trainer

The concept “Project Management: Setting the Standards” is meant for teachers at vocational and grammar schools. It can also be used, however, in different pedagogic fields such as youth work, in which self-organized work within teams is to be taught and established.

The training requires **the trainer** to have a comprehensive understanding of the teaching guideline “Project Management: Setting the Standards” and further knowledge about project management along with experiences in teaching adults. The trainers should have planned and realized at least one project with the help of the guideline by themselves. Knowing classroom situations in schools is also helpful for trainers in order to better understand the teachers’ interests and problem areas.

### Organizational Advice

For teacher trainings an ideal **group size** of 3 teams with 3-4 teachers per team has been proved to be optimal. If there are more than 12 participants a second trainer is recommended.

The **constellation of the teams** can happen in different kind of ways: randomly, self-chosen (depending on the relationship between the participants), or governed by content-related reasons of a project. Projects, project classes, and project management are implemented and realized in very different contexts and sometimes with very different framework conditions in schools. Many different ways are possible. Framework conditions influence what role project management plays in the teacher’s (pre-) planning, in the planning with the students, in the realization of projects, and they also influence the evaluation of students. That is why framework conditions should be considered in the constellation of the teacher- teams.

### Location and Materials

During the training, different **kinds of working** alternate: (a) teacher-centered teaching e.g. for the introduction of the procedure of planning-processes (the guideline explains in detail the working steps); (b) meetings e.g. for exchange of experiences, discussion, and reflection; (c) individual work within groups. The switches between phases, in which there are discussions and presentations, and phases in which participants work in teams, require enough room both to be able to work in **places for team-work** and to have seating arrangements for **plenum work**.

## Structure of the Training

In the following, goals, contents, procedure, and framework conditions of the teacher-training for the concept “Project Management: Setting the Standards” will be introduced.

### Goals of the Training

Goal of the training is to prepare teachers to work with the teaching-guideline “Project Management: Setting the Standards” in their schools. On one hand, the teachers are supposed to get to know the teaching guideline’s issues, and on the other, to receive suggestions how to organize and refine their classes with the concept:

- Didactical principles of the concept (explained in the “Didactic Conception”) – are implemented and are supposed to be reflectively connected to the experiences of the teachers
- Action-oriented learning of the methods and testing of the steps
- Advice for planning and designing teaching with the help of the guideline
- Networking of teachers who know and use the concept “Project Management: Setting the Standards”, and are interested in project management and in its realization in schools

## Training Contents

The content of the training is made up of (1) an introduction into the basic methods and terms of project management as it is set-up in the teaching-guideline “Project Management: Setting the Standards”. The topics are complemented by (2) the didactical principles (see “Didactic Conception”) and (3) the working out of the most important framework conditions for teaching project management with the guideline.

(1) The teachers work on and plan in teams of 3 to 4 people with the help of the teaching-guideline a (self-) chosen project and within the process create their planning-document for their own teaching. They work with the guideline like their students will do later on in the classroom. Thereby, the teachers learn the essential methods and terms of project management, and how to work with the guideline.

(2) Within the separate phases and steps of the guideline, the teachers discuss and reflect on the background of the didactic principles<sup>1</sup> on which the concept is based on, and on their role and their options of taking action as teachers.

(3) Advices for preparation and (pre-) planning of a class-project that is based on the concept guideline “Project Management: Setting the Standards”, contain:

- Preparation of the material
- Personal preparation for their role
- Pedagogic goal-setting (introduction into project management methods vs. subject-based problems)
- Student evaluation

## The (Planning-) Project within the Training

The focus of the teacher-training is a problem<sup>2</sup>, ideally constructed like an order of a vocational problem, just like their students will have to deal with. Possible orders may be worked out together with the participants of the teacher training, e.g. using brainstorming. When selecting a project order, it is important to keep in mind the project order’s total complexity<sup>3</sup>. For an effective introduction into the basic terms and methods of project management, it is essential that the participants are familiar both with the subject and the methodology<sup>4</sup>.

Teaching projects need a specific framework which has to be planned and prepared in advance by the teacher. Within the so-called “Meta-Projects”<sup>5</sup> teachers plan the preparation and implementation of this framework, based on the guideline “Project Management: Setting the Standards”.

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<sup>1</sup> The didactic principles are explained in the “Didactic Conception”. That is why they are not explained in detail here. Key words are: new roles within teaching, self-organized learning, interdisciplinary work, order and problem as core of projects, team work, cooperative learning.

<sup>2</sup> The differentiation between problem and issue is explained in more detail in the “Didactic Conception”.

<sup>3</sup> The inter-play between the complexity of content and organizational within a project is meant.

<sup>4</sup> E.g. a class trip, a school event, a graduation ball, or a school party.

<sup>5</sup> Here, the steps are being used which start directly after the DDTA-Team-Analysis.

### Recommendation of a Training Procedure (approx. 2.5 days) – The Script

The following **procedure scheme** is related to the teaching guideline. During the training, these steps will be continuously discussed and reflected with regard to the implementation and supervision from the point of view of the teachers. Besides giving room for further questions, participants get to know how to use the materials (e.g. teaching poster, moderation cards, post-its).

A **photo protocol** of all of the generated materials by the participants is recommended as a supportive tool for the ongoing learning processes.

1 <sup>st</sup> Day	Duration	Content	Method	Preparation
	5	Welcoming		
	20	Introduction round and expectations/ worries	Card query	Pens and tape for name tags
	5	Introduction of the Agenda	Moderation with FC	FC Agenda
		Introduction into PM		
	5	Defining PM: What is Project Management? What is a project?	PowerPoint	Slides
	5	PM Planning-Principles		
	10	Procedure and steps „PM: Setting the Standards“	PowerPoint	Slides
	5	Finding/ predetermining project orders	Brainstorming/ fixing project-order	Presentation cards
	5	Introducing teaching guideline	Distributing guidelines	12 guidelines
		Step: Project Preparation – goal-setting and teaching procedure	Moderation and references to the guideline	
	5	Project logbook – purpose and outline	Moderation and references to the guideline	
	5	Study journal – purpose and outline	Moderation and references to the guideline	
	5	Learning with the project example “Class trip to London“	Moderation and references to the	

1 <sup>st</sup> Day	Duration	Content	Method	Preparation
			guideline	
	5	Team-building		
	5	PM basics and team work – team roles and team rules – purpose	Explaining goals and examples	
	10	Team analysis with DDTA – introduction and both individual and collective execution within the teams	Introduction and team work	12 printed sheets of the DDTA
		BREAK		
	15	Presenting DDTA team profiles	Contrasting and discussing the DDTA FCs of the teams within the plenum	FC with axis of coordinates
	10	Description of the situation/project order	Distribute and reading	12 prints
	5	Distinction between project goals as well as subject-related and interdisciplinary pedagogic goals	PowerPoint Presentation	slides
	15	Project management file	Team work with FC	
	5	Introduction: Project context and stakeholder analysis	Moderation and reading	
	15	Stakeholder analysis – project context	Team work with FC	
	15	Stakeholder - portfolio	Team work with FC	
	15	Stakeholder matrix	Team work with FC	
	15	Presentation of results	Comparing and discussing FCs	
	10	Goal matrix – Introduction and procedure	Moderation and references to the guideline	
		Lunch - BREAK		
	45	Goal matrix – working on goals	Team work with FC	
	30	Presenting and discussing goals	Comparing and discussing FCs	

1 <sup>st</sup> Day	Duration	Content	Method	Preparation
	30	Coffee BREAK		
	5	Phase Planning – introduction and procedure	Moderation and references to the guideline	Post Its
	30	Constructing phase-planning	Group work with FC	
	10	Work on phase plan	Comparing and discussing FCs	
	20	Reflection of the 1 <sup>st</sup> PM training day	Central question: How am I doing? / What did I learn? / What am I still thinking about?	

2 <sup>nd</sup> Day	Duration	Content	Method	Preparation
	5	Short revision	Lecture with the help of the works of the 1 <sup>st</sup> day of the teams	
	5	Agenda	Lecture	Agenda on FC
	5	Project charter – purpose and outline	Moderation and references to the guideline	
	5	Project planning (detailed planning) – purpose and steps	Moderation and references to the guideline	
	10	Work breakdown structure (WBS) – introduction	Moderation and references to the guideline	
	5	Brainstorming – purpose, clarifying relevance and introducing rules	Lecture with FC	Rules on FC
	40	Brainstorming of the project’s structure	Group work with moderation material	Distributing moderation material
	15	Structuring of the cards – further proceeding	References to guideline	

2 <sup>nd</sup> Day	Duration	Content	Method	Preparation
	15	BREAK		
	15	Testing the structure – purpose and procedure	Lecture on the pin board of a team	
	30	Presentations of the WBSs	Presenting and commenting on a number of team works	Tracking and marking differences between team works
	5	Work packages – purpose and procedure	Moderation and references to the guideline	
	15	Work packages – conducting description exemplarily	Team work - let each participant write one WP description	Identifying good examples
	10	Realization of some descriptions of the WPs from the WBS: a) giving numbers to WPs and b) preparing the corners of the moderation cards for the duration and predecessor		
	30	Estimating the duration of each WP (alternative of a sub-project)	Team work (discussion and clarification in terms of deviations)	Watching the progress in the teams
		Lunch BREAK		
	10	Overall project schedule (OPS) - purpose	Moderation and references to work with the guideline	
	30	OPS – thinking about the chronological sequence and visualizing it	Team work	
	30	Defining predecessors; writing them on cards	Team work	
	10	Calculating time scale	Team work	
	30	BREAK		
	30	Visualizing duration		
	20	Reflection of the 2 <sup>nd</sup> PM training day	Questions see 1 <sup>st</sup> day	

3 <sup>rd</sup> Day	Duration	Content	Method	Preparation
	5	Short revision	Lecture	FC and teaching poster
	5	Agenda		
	60	Visualization of overall project schedule (OPS)	Team work	
	10	Adapting work packages	Team work	
	15	BREAK		
	30	OPS – presentation – How did it go?	Presentation and discussion in plenum	
	5	Milestone plan – introduction and procedure	Moderation and references to the guideline	
	15	Working on the MS-plan	Team work	
	15	Presenting		
	10	Project organization - short	Short introduction and references to the guideline	
	5	Risk analysis – introduction	Moderation and references to the guideline	
		Risk portfolio – introduction	Moderation and references to the guideline	
		Risk measures – introduction	Moderation and references to the guideline	
	15	Project execution	Moderation and references to the guideline	
		Examples of planning material	PowerPoint with planning material	PowerPoint
	5	Evaluation	Reference to the document “Evaluation of Learning Success in Projects”	

	5	OPTIONAL: Software-Tools – outlining of freeware, such as Mind Mapping (Freemind, Xmind) or Gantt - Illustration (Ganttproject, Openproj)	Lecture	
	60	Lunch BREAK		
	40	Round table discussion (optional). Contents might be a) What is a good project order? b) The roles of teachers and students, c) methods, freedoms and self-organization	Discussion with moderation	FC for the documentation of the results
	15	Summarizing review	Lecture	Agenda of the training days
	30	Feedback	Central question and moderation	FC with central question

**Abbreviation:**

WP: work packages;

FC: flip chart;

MS: milestone;

WBS: work breakdown structure;

OPS: overall project schedule;

PM: project management;

## Annex

### Checklist for Training Material

1. Beamer and Laptop	
2. Pin walls (recommended: 2 per group), 3. Pin wall paper (recommended 2-3 per group)	
4. Moderation material/moderation tool kit: <ul style="list-style-type: none"> <li>• Moderations cards in 3-4 colors;</li> <li>• A few glue sticks;</li> <li>• Enough thick felt tips (recommended: one black felt tip for each participant; additionally two red and green felt tips per group);</li> <li>• A few scissors;</li> <li>• Crepe tape;</li> <li>• At least 1 pincushion per group,</li> <li>• Enough pins (recommended 30-50 per group)</li> <li>• Post-Its (around 100 per group, preferably in different sizes)</li> </ul>	
5. Flipchart stand; Flipchart paper for moderation (20-30 papers)	
6. Teaching guidelines “Project Management: Setting the Standards” for each participant	
7. Teaching poster “Project Management: Setting the Standards”	
8. Camera for photo documentation	
9. Optional: PowerPoint-Presentation for introduction into the separate steps, planning material, PM-Software Tools	