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## Managing Objectives in Inquiry Learning Arrangements

### *Description*

The downloadable worksheet aids teacher students to manage objectives in self-determination-oriented Inquiry Learning Arrangements. When outlining such Arrangements it is recommended to keep the objectives non-operationalized. Due to the openness of Inquiry Learning Arrangements the definition of operationalized objectives in the course of the outline would lead to high effort of direction and is therefore unfavorable. Nevertheless the consideration of operationalized objectives also in the course of Organization plays an important role namely when teachers reflect their periods. To think about achieved objectives after a performance specifies impressions concerning the performed period and may supply important aspects and meanings for the outline of the next period.

The tool “Managing Objectives in Inquiry Learning Arrangements” refers to the taxonomy of cognitive objectives of Krathwohl (2002) and helps teacher students to structure their objective-based reflections. The tool is recommended to be employed after each Inquiry Learning period. Seeing that Inquiry Learning Arrangements quite often embrace several periods the tool can be consulted several times per arrangement.

The purpose of this tool is rather to support teacher trainings (e.g. enhancing competences in reflecting objectives) than to support the everyday organization of Inquiry Learning.

### *Useful definitions*

*Taxonomy of Objectives:* A framework for classifying statements of what can be learned as a result of educational settings is called taxonomy of objectives. A common taxonomy of cognitive objectives was elaborated by Krathwohl (2002, p. 212-218):

	<i>Remember</i>	<i>Understand</i>	<i>Apply</i>	<i>Analyze</i>	<i>Evaluate</i>	<i>Create</i>
<i>Factual Knowledge</i>						
<i>Conceptual Knowledge</i>						
<i>Procedural Knowledge</i>						
<i>Metacognitive Knowledge</i>						

*Period:* Both in lessons and periods education occurs. But conventional lessons are bound to classical class hour structures and last 45, 50 or 60 minutes. Period as an alternative term distinguishes from this comprehension. According to school parameters (schedule, institutional flexibility) and group needs a period can last up to several hours. An Inquiry Learning Arrangement can take from one period up to several periods.

*Outline:* It is hardly possible to predict what will exactly happen within a widely self-determined educational setting. That is the reason why the preparation of an self-determined Inquiry Learning Arrangement is an open action, just as the arrangement itself. The preparation is rather an outlining process than a planning one. Therefore Reitingger (2012b, p. 112-114) suggests using the term “outline” instead of the term “planning” when talking about the preparation of Inquiry Learning.

*Performance:* This term means the actual run of a lesson or a period. The more pupils are allowed to work self-determined the more outlined suppositions may vary from the actual performance.

*Reflection:* Reflection describes the process, within you think carefully about your practice experiences collected during the outline and performance process.

## **Instructions**

Basically you should be familiar with the taxonomy of cognitive objectives. Read therefore the article of Krathwohl (2002, p. 212-218).

An Inquiry Learning Arrangement can take one period up to several periods. Each period stands for one circle of outline, performance and reflection. Use for each period one worksheet!

It is not determinable but also not imperatively necessary to affect each of Krathwohl’s 24 objective categories in every period or arrangement. Nevertheless if you reflect a complete project it would point to an effective performance if at least some diverse categories are embraced. The more differentiated your indicated objectives are the more manifold your Inquiry Learning was.

## **References**

Krathwohl, D. R. (2002). A Revision of Bloom’s Taxonomy: An Overview. *Theory into Practice*, 42(4), Ohio, p. 212-218. [http://www.unco.edu/cetl/sir/stating\\_outcome/documents/Krathwohl.pdf](http://www.unco.edu/cetl/sir/stating_outcome/documents/Krathwohl.pdf)

Reitingger, J. (2012b). Differenziertes forschendes Lernen in den Naturwissenschaften mit leistungsheterogenen Schüler/-innengruppen. (*transl.: Differentiated Exploratory Learning in the Sciences with Heterogeneous Groups*). Eine empirische Studie zur Performanz und Wirksamkeit des AuRELIA-Konzeptes. In T. Bohl, M. Bönsch, M. Trautmann & B. Wischer (Eds.): *Binnendifferenzierung. (transl.: Internal Differentiation)*. Didaktische Grundlagen und Forschungsergebnisse zur Binnendifferenzierung im Unterricht. Teil 1, (Reprint with supplements). Kassel, p. 107-133.