Chapter 1

Future Media Adoption in Learning and Teaching:
Current Study Design from the Perspective of Cultural Studies

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ABSTRACT

A lot of effort is put into studies to find more elaborated forecasts of future media adoption in learning and teaching. In this chapter, some methods of futurology, such as the Delphi method or the scenario technique, will be sketched. Afterwards, this current study design will be critically considered from the perspective of cultural studies. For this, the terms of media and culture will be introduced and Debray's approach of mediology and the adaptation on education will be discussed. Through this, we aim to illustrate that the current study designs could be enhanced by a bigger awareness of the insights of the cultural studies and their adaptations for education, the pedagogical media theory. The presented approach does not explicitly deal with the processes of adoption of new educational media systems on a practical level. But pedagogical media theories and studies on cultural and social changes and media provide a basic framework for various specific approaches dealing with the future of technology enhanced learning. Just as we can hardly understand how it feels to live in an oral culture, we are not able to imagine how we will think, act and communicate in the future of the evolving new "mediosphere".

INTRODUCTION

The invention of the World Wide Web in 1993 brought forth intensive discussions about the effect of (new) media on education. Indeed, the basic conditions for learning and teaching have changed a lot in the last decades, especially in the last years with the advent of Web 2.0. The Internet is a nearly ubiquitous medium providing fast access to information. Mobile devices especially allow for access to the Internet nearly independent from time and space. Although reality shows that not every student is naturally used to this new possibilities,

these technologies reflect how the learning possibilities are changing.

Not surprisingly, a lot or discussion and also research is done to get more and better insights in future media adoption within learning and teaching. The dominant approach is currently to ask a group of experts in a more or less methodological sound way on what they think about future media adoption in education. From our point, this can be criticised for several reasons, but in this chapter we will concentrate on one point: Cultural studies in the field of media and education illustrate the problems of an estimation of future adoption. We will therefore describe theories and ideas of a pedagogical media theory. Afterwards, we will sum up our findings of this confrontation.

CURRENT STUDY DESIGN: USING THE WISDOM OF CROWDS OF EXPERTS

There are several methods available for use from the field. Futurology is derived from ideas about the future development of media within learning and teaching. In the following, we describe some methods of futurology, building on the idea of the "wisdom of crowds of experts" to illustrate each approach with some exemplary current studies. These approaches build on the idea that widespread information research and knowledge building should be the source for forecasts. The opinion of experts or crowds of experts are seen as superior to the knowledge of one person due to synergy effects and several perspectives on developments. In the following we describe the Delphi method, the scenario technique, and the method of road mapping as such approaches. All are already used in the field of educational technologies and media within learning and teaching. Additionally, we will sketch the methodology of the Horizon report with its own, newly derived format.

Delphi Method

The *Delphi method* involves experts from different related disciplines in two-step moderated group discussion to identify possible future developments. This strategy is described as helpful when new technological trends or innovations with a wide range of given possibilities should be discussed. There are several examples where these methods were used to get insights about future developments. For example, the Delphi method has been used for a prediction of future adoption of online assessment within higher education in Germany. Schaffert (2004) brings together the answers and ideas of 48 experts in a two-step process based on questionnaires. The experts came to the (not very surprising) conclusion that a moderate rise in of the adoption of online assessment is expected, especially in branches, where the usage of computers is a daily routine.

The Scenario Technique

According to Steinmüller (2002), the *scenario technique* is one of the most commonly used future analysis methods because it offers one of the widest approaches, including other well established prediction methods (Grunwald, 2002, p. 226). The scenario technique offers a method for deriving a set of predictions based on a present status and their most relevant influencing factors. The method is based on the strategic military developments of the 1950s, where scenarios were used to identify different outcomes of complex situations. Scenario technique tries to develop "orientation knowledge", which aims at a better understanding of what will happen in the near future. The scenario technique is typically applied in a set of three scenarios: "(1) a surprise free projection, describing the baseline and most likely scenario, (2) the worst case projection, offering the pessimistic scenario, and (3) the best case projection, referring to positive changes in the relevant area." (Boon et al. 2005, p. 207). Scenario construction

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