

# Chapter 1

## The Turbo Principle in Sustainable and Developmental Learning Design

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### ABSTRACT

*This chapter conveys two key success strategies for complex, self-guided interdisciplinary learning: (1) rhythmizing as a theatrical tool (regarding organization along time) and (2) multi-perspectivism as a tool allowing the organization regarding viewpoints (in the space of perceptions). While the first can be achieved by a suitable script of the didactic process, the second can be supported by seating orders, the arrangement of tables, and allocation of roles to role-playing learners. The meaning of “roles” in game-based learning is analyzed, based on both literature and interdisciplinary teaching experience. As an example of role-based and game-based learning, this chapter analyzes the temporal dynamics of several social dimensions of learning in the case of the five-level negotiation game “Surfing Global Change” (SGC, © G. Ahamer).*

### 1. INTRODUCTION

This chapter draws conclusions from the earlier two chapters in this book (Ahamer, 2017a, b). Theoretical deliberations on pragmatism (Dewey, 2000), didactics (Illich, 1975; Stähli, 1998; Ossimitz, 2000; Ahamer & Kumpfmüller, 2013) and pedagogy

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(Rogers, 1974; Montessori, 1996; Wild & Quinn, 1998) reveal that it is helpful to provide learners with the opportunity to make the most of a course regardless of their previous achievements – in other words to maximise their relative learning progress when measured from the start of the course. This will be called *self-adaptive individualised learning*.

## **1.1 Divergent Learning Profiles and How to Cope With Them**

Learners are seen to have differing *profiles* in a number of dimensions (intellectual, social, self-esteem, communicational capabilities etc.) and so the learning process should be self-adaptive with regard to these profile properties (see symbolically in Figure 1). As a consequence, any learning endeavour should provide a sufficient number of “docking stations” for the learners multi-dimensional profiles.

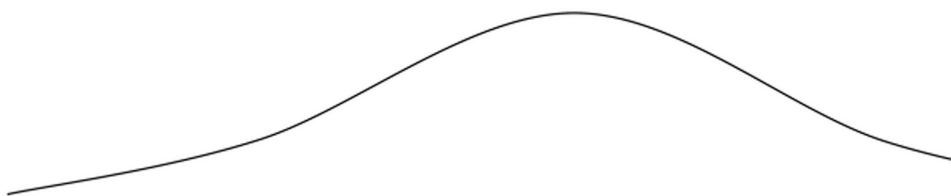
Different learning profiles exist; but these profiles are changeable through learning activities.

Another key aspect is the mutual inner linkage of the “learning paths” available in the different dimensions. This relates to the usual entanglement of dimensions in life and characterises any learning situation. One can only decide – given the framework conditions – to address suitably loose, but still guiding framework conditions for learners’ social procedures.

In addition to the general remarks above, the following practical conclusions can be drawn from earlier research (Ahamer, 2012b, 2013a, b, 2017a, b): the usability of any didactic structure is high if a sufficient number of adhesive “glue” points along the dramatic axis can be retrieved by a maximum of learners who show varying personal profiles and who stand at various stages of mastery. If a sufficiently structured “choreographic surface” is exhibited by the learning framework, more learners could “glue into” the process more easily, rendering learning more efficient.

- The sense of the *macrostructure* of any learning design is to be a driver of the overall social and psychological motion.

*Figure 1. Any dimension of the learning process exhibits a frequency distribution across the given group of learners.*



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