


## Chapter 5

# Designing Integrated Learning Paths for Individual Lifelong Learners and/or Small Groups: Backwards Curriculum Design From Target Complex–Skill Capabilities (for Nonformal Informal Learning)

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### **ABSTRACT**

*Curriculum design is often applied to creating formal learning sequences to ensure that learners pursuing accredited coursework experience the proper learning contents, activities, life-building, and fair assessments in the proper order. In a lifelong learning context, learners will engage in a combination of formal (accredited), nonformal (byproduct learning from structured unaccredited learning contexts), and informal (unintentional) learning. For the latter two contexts, and for individual and groups of learners, there may be benefits in constructing a backwards curriculum design to enable target complex-skill capabilities (even those that require years of effort). This work explores how to create a backwards curriculum design from target complex-skill capabilities, using manually created data tables and related mind maps as early design tools. These enable advancing targeted learning by skill branches or by sequential approaches towards the target skillset.*

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## INTRODUCTION

A “curriculum” represents “the expression of educational ideas in practice” and is based on “the Latin word for track” (Prideaux, 2003, p. 268), so it refers to a learning path, a course of study in accredited schools and universities. Another definition suggests that a curriculum “is an ideological, social and aspirational document that must reflect local circumstances and needs” and “is made up of all the experiences learners will have that enable them to reach their intended achievements from the course” (Grant, 2010, p. 1). “Curriculum design” is an outgrowth of efforts to create formal accredited coursework, in pre-K12 through doctoral studies programs. As a matter of practice, curriculum design involves reasoned, data-based, and systematized building of blocks and sequences of learning to ensure that the target learning objectives are achieved effectively. In political framing, there are stated curriculums, hidden or sub-textual ones, and omitted ones (what is left out), in any curriculum design (CD). Ideally, such designs should consider the whole learner and their overall well-being as well as the necessary “knowledge, skills, and abilities / attitudes” (“KSAs”), from a term originated by staff at the U.S. Office of Personnel Management:

**Knowledge, Skills, and Abilities (KSAs):** *The attributes required to perform a job and are generally demonstrated through qualifying service, education, or training.*

**Knowledge:** *A body of information applied directly to the performance of a function.*

**Skill:** *An observable competence to perform a learned psychomotor act. **Ability:** Is competence to perform an observable behavior or a behavior that results in an observable product. (“Knowledge, skills, and abilities,” Nov. 17, 2018)*

The advent of the Social Web has meant that a wide variety of learning resources have become available to the broad public. The Web 2.0 technologies have broadened the sharing methods for curriculum resources (Xie, Bai, Li, & Yin, 2014). Some of these are open-source, others open-access, and others behind paywalls. Regardless, there are numerous available resources for learning: social videos, games, published research articles, datasets, simulations, image sets, immersive virtual worlds, and others. Many resources are hosted online, on repositories, in digital libraries, on learning management systems, image-sharing platforms, video sharing platforms, and others. Massive open online courses (MOOCs) enable a defined-path to various skillsets. And beyond MOOCs, in this contemporaneous space, lifelong learners may pursue professional / personal / hobbyist learning interests outside of formal channels. They may pursue nonformal learning from non-credit learning contexts and informal learning through the experiences of everyday life and without learning

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