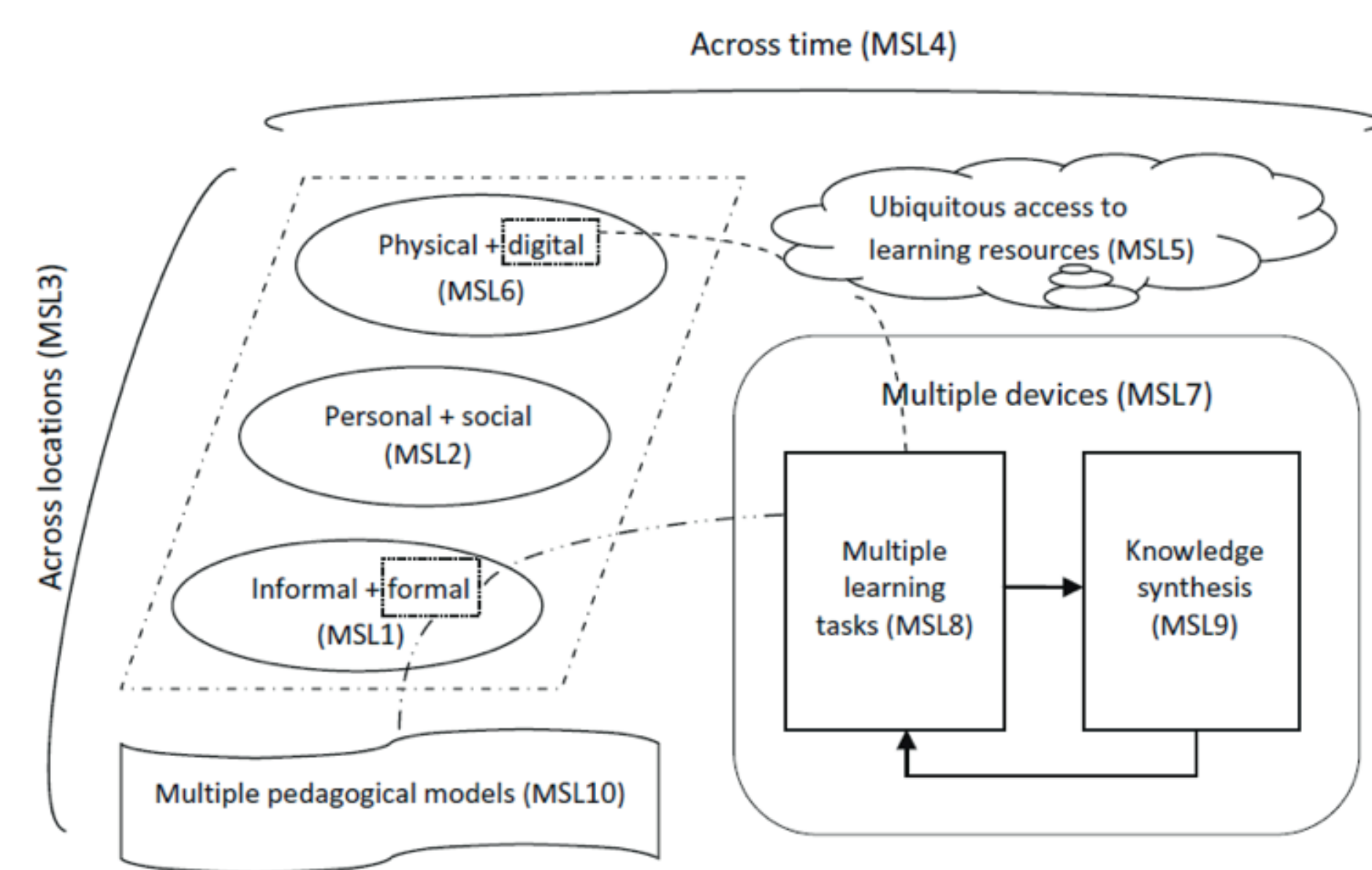


# Seamless Learning in Lake Constance Area

## What

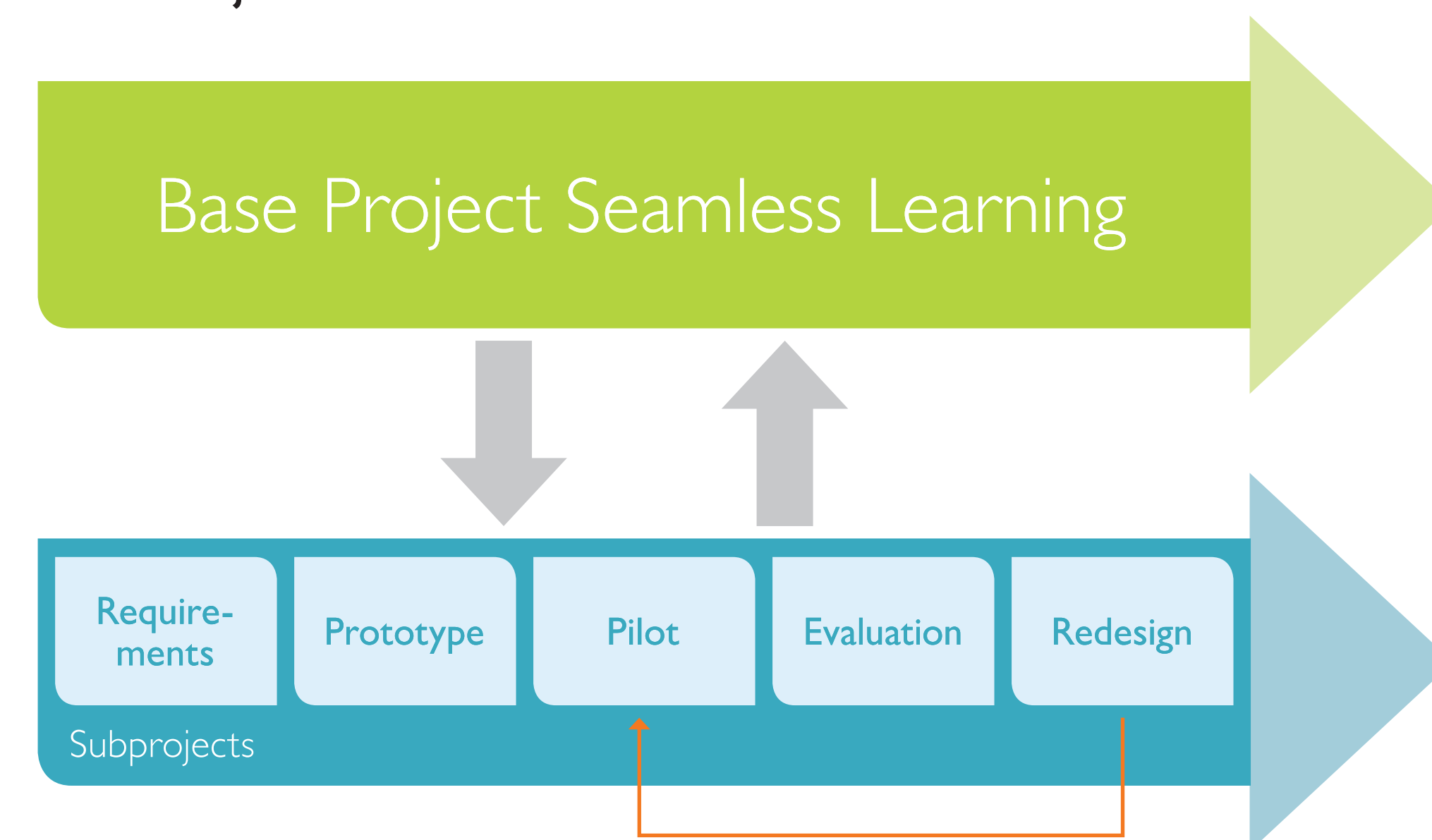
Seamless Learning proposes that learning can take place within different contexts (e.g., physical, social), often with each presenting different requirements. Therefore, Seamless Learning designs aim to ensure continuity of learning across the different contexts and benefits derived from changes of context. Mobile devices with internet access support bridging the different contexts. Didactical design of seamless learning also facilitates a surplus of learning experience.



Dimensions of Mobile Seamless Learning (Wong, 2012)

## How

### 1. Pedagogical Support of Subprojects by Seamless Learning Base Project



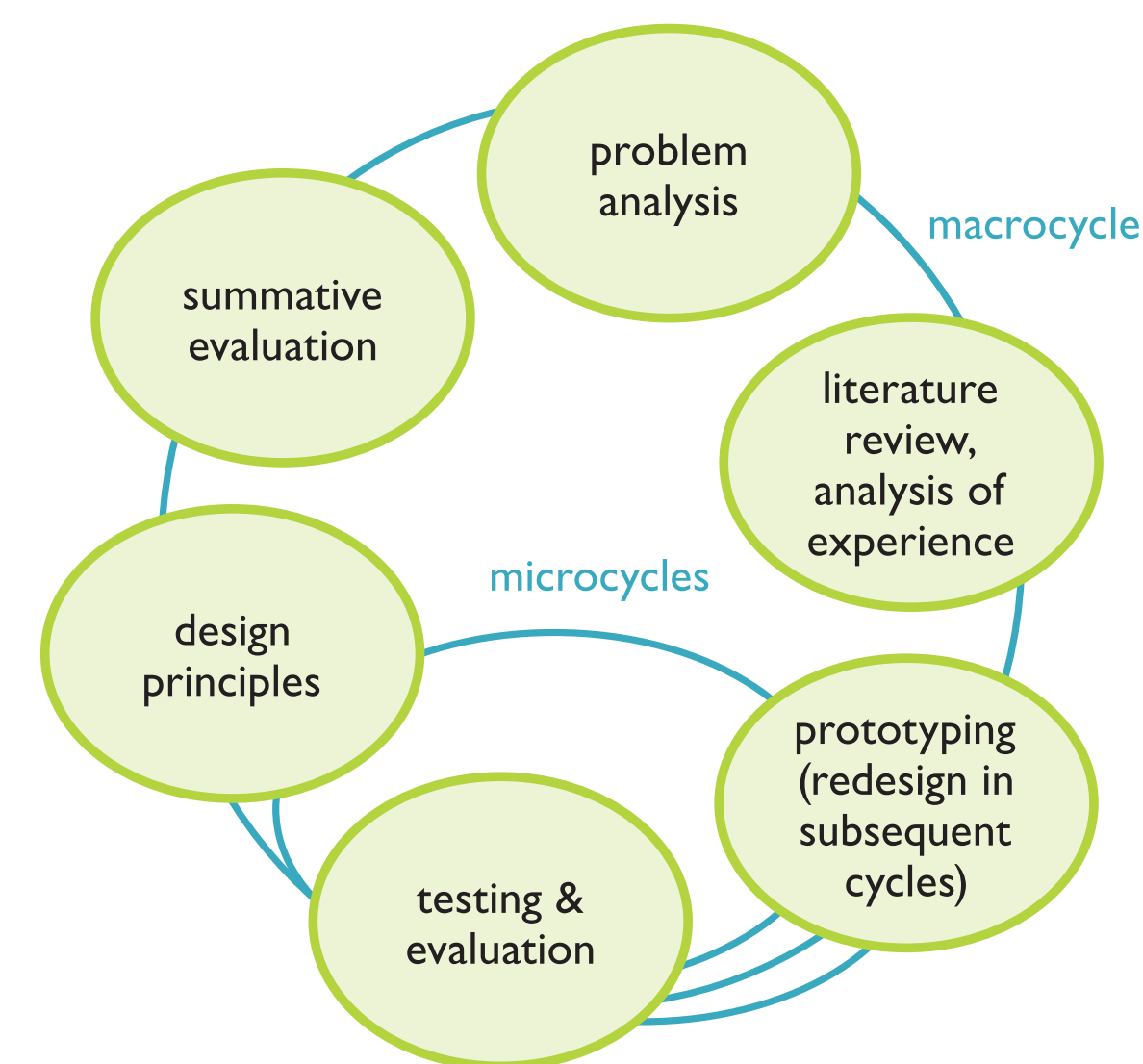
The base project supports subprojects utilising a Design-Based Research approach (DBR).

## Key Points of the Project

- ➔ Development, implementation, and evaluation of Seamless Learning projects in higher and further education utilising a Design-Based Research (DBR) approach
- ➔ Technology integration driven by pedagogical need and didactical design principles
- ➔ International (Lake Constance Region) interdisciplinary four-year (2017 – 2020) project with nine subprojects including business and industrial collaboration

### 2. Design-Based Research (DBR)

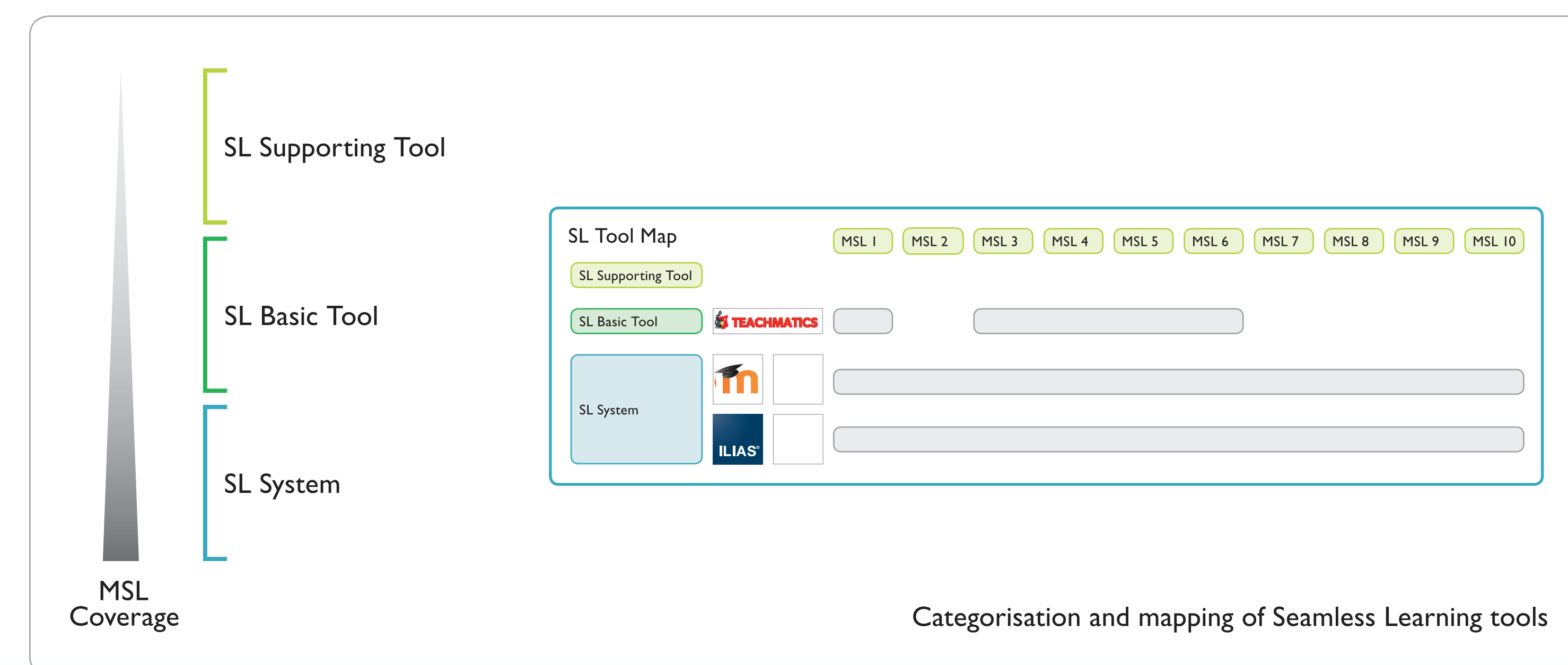
- iterative cycles of analysis, prototyping, testing and evaluation, redesign, design principles definition, and evaluation
- authentic contexts
- collaboration between researchers and instructors / faculty
- mixed-methods approach
- documented design cases
- results: theoretical informed designs & context-sensitive design principles



### 3. Technological Support

Technological support is provided to the subprojects through:

- Provision of guidance on finding sound electronic tools to support seamless learning implementations. Tools are categorised and mapped to the Mobile Seamless Learning dimensions (Wong 2012).
- A virtual showroom allowing instructors and users to test the tools.



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## Expected Outcomes

### Practical

Open access material for practitioners wanting to implement Seamless Learning, particularly within higher and further education:

- Nine evaluated and documented Seamless Learning implementations in different higher/ further education domains
- Open access advice on pedagogical support of developing seamless learning designs
- Open access advice on technological support of seamless learning spaces

### Contribution to State of the Art

- In the design of innovative seamless learning settings, DBR has considerable potential due to its parallel development of innovation in both the practical field and for research in sight. Theoretical concepts and development of seamless learning theory is presently underdeveloped, and requires continuing systematic development.
- With innovative learning settings intended, design principles are as yet unclear; therefore, the process of innovation is framed by theoretical background and systematic testing and reflection.
- In the DBR approach, the agility of design development through early prototyping, testing and redesign is systematically implemented.
- Systematic underpinning of knowledge construction and theory development in the application field is supported through formative and summative evaluation. This is important for seamless learning, not to attract more cases but to further develop the concept of seamless learning.