Figure 1: Needs Assessment

Stage 1: Analysis of practical problems by researchers and practitioners

Stage 2: Development of solutions with a theoretical framework

Stage 3: Documentation and reflection to produce “design principles”

Refinement of problems, solutions, and methods

Phase 2: Formative Evaluation

Stage 1: Analysis of practical problems by researchers and practitioners

Stage 2: Development of solutions with a theoretical framework

Stage 3: Evaluation and testing of solutions in practice

Stage 4: Documentation and reflection to produce design principles

Refinement of problems, solutions, and methods

Phase 3: Effectiveness Evaluation

Stage 1: Analysis of practical problems by researchers and practitioners

Stage 2: Development of solutions with a theoretical framework

Stage 3: Evaluation and testing of solutions in practice

Stage 4: Documentation and reflection to produce design principles

Refinement of problems, solutions, and methods

Future impact and maintenance evaluations