Towards a New, Sophisticated Teaching and **Learning Culture in Engineering Education** STUDENT LEARNING CYCLE (SLC) Learning DEVELOPMENT / CREATION OF IDEAS, SOLUTIONS AND / OR by doing OUTCOMES TO PROBLEM / PROJECT + REFLECTION The project. **SLC** problem based learning task (PBL task), designed with clickable links to defined electronic information sources Advice. **VENGLER** (Virtual ENGineering directions. LEarning Resources) Design SLC supervision, assessment, The electronic information feedback Tutor: foundation platform giving learning as task support to the student to develop designer, solutions/outcomes to the PBL task. facilitator. advisor and assessor SLC STUDENT LEARNING CYCLE (SLC) Learning

by doing

DEVELOPMENT / CREATION OF IDEAS, SOLUTIONS AND / OR

OUTCOMES TO PROBLEM / PROJECT + REFLECTION

Tim McLernon SCoBE

Learning by doing

SLC

Research and interpretation



Student: as action learner

SLC

Learning by doing