3.2. Showcase Education

The target audience of the showcase education are university teachers that plan to extend the usage of robot platforms in their classes and labs. During the conception phase of this showcase the barriers for the integration of robot platforms in teaching have been identified as the large effort of students to get acquainted with the platform and tools and large effort for the teacher to build doable exercises and experiments. Therefore the aim of BRICS should be to reduce these efforts.

To demonstrate this reduction in effort the showcase education will consist of:

- Exemplary exercises or lab projects for several class settings
- Support of these lab projects by tutorials and lecture material
- An exercise generation manual

These items will be first provided for a number of classes at the partner BRSU. Possible examples and their corresponding classes at BRSU would be:

- Class: Autonomous Mobile Systems
  - o Exercise: SLAM, path planning and execution
- Class: Computer and Robot Vision
  - o Exercise: Object search
- Class: Learning and Adaptivity
  - o Exercise: Robot learning for grasping an object
- Class: Planning and Scheduling
  - o Exercise: Task planning applied to assembly scenario
- Class: Multirobot Systems
  - o Exercise: Task planning and coordination of multiple robots in extended assembly scenario

As the youBot platform, the RRP for this showcase, became available now and the BRICS repositories and tool chains become more mature a first example will be developed until T32.