

Connecting the blocks: Curriculum, Robotics Classroom and RoboCupJunior Australia

Gerard Elias
RoboCupJunior Australia

Abstract. This presentation is a result of a paper that has as its focus the collaboration of *RoboCupJunior Australia* with the newly released Australian Curriculum to engage students in Science, Technology, Engineering and Mathematics (STEM). The goal of this collaboration is to create links with the new curriculum scaffold and develop teaching process and practice for robotics in the classroom. It outlines the steps taken by the *RoboCupJunior Australia* committee to develop these links and creation of resources for implementing curriculum, teaching and robotics. *RoboCupJunior Australia* has addressed the needs of teachers in a number of significant curriculum areas including resourcing and pedagogy. The committee consists of professionals from the fields of education, industry and academia who have developed the connectors of skills, knowledge and application. In this discussion the areas of unit development and planning, teaching of robotics in the classroom, resources complementing the teaching process, assessment and authenticity of student work will be explored. In addition, the challenges and the highlights of entering a national event such as *RoboCupJunior Australia* will be discussed.

Keywords: Curriculum, Education, Pedagogy, Robotics, Assessment and RoboCupJunior Australia