Background: Various types of simulators exist, ranging from simple models to highly advanced, computer-driven systems corresponding to a very wide offer of courses often without an unified and homogenous educational strategy from basic to highly advanced neonatal/paediatric resuscitation courses.

Conceptual Underpinnings: to unify and integrate teaching models and materials of simulation in paediatric resuscitation integrating real children in trauma scenarios.

Description of Material/Procedures: Screening of existing courses in our area with trauma issues and stepwise educational and formal integration between 2003-2008: Italian PBLS Paediatric Life Support since 1998, Italian PALS Paediatric Advanced Life Support 1998-2004, EPLS European Paediatric Life Support (ERC European Resuscitation Council) since 2003 (1), Paediatric Trauma Course/Module (2) since 2005 in provider and instructor courses including real children in cooperation with PICU Paediatric Intensive Care Unit – Hospital Vall d'Hebron (Barcelona/Spain), Paediatric Anaesthesia – Bellinzona Hospital (Ticino/Switzerland) and Paediatric Cardiology and Intensive Medicine – Medical School (Hannover/Germany), highly advanced Simulation with paediatric mannequins and real children including CRM Crisis Resource Management since 2007 in cooperation with DRF German Air Rescue. Further Cooperations: Hannover Firebrigade since 2004, Paediatric Trauma Group (AITP) Canarian Islands since 2007.

Evidence for the benefit of the Concept: Integration between Italian PBLS and EPLS-ERC (2003). Paediatric Trauma Course with real children (Argentina 1990 / Spain 1996 / Southtyrol 2005) well suited since 2005 as supplementary module to EPLS and Instructor-courses in 2006 (Skill) and 2007 (Scenarios). First (2008) homogenous course offered in our region: 1st level: PBLS (1 day), 2nd level: PALS (2 days), 3rd level: advanced paediatric simulation integrating real children (5 scenarios with mannequins, 2 scenarios with children, 1 day).

Conclusions/Next steps: Integration of different courses is possible increasing cost effectiveness. Real children in Simulation increase realism, communications kills and meet face to face with the specific pediatric patient situation. This is a very important issue for healthcare providers not daily involved in paediatric care as EMT Emergency Medical Teams outside of hospitals. It is time for an unique International Standard for Paediatric Simulation Training (from basic to highly advanced).