HYPOTHESES:
Specify your working hypotheses or questions that will guide your research. **The maximum length for this section is ½ page. (Arial or Verdana, font size 10).**

- H1. It is possible to develop or adapt an education-oriented framework allowing the development of a wide range of applications intended to run on a variety of hardware platforms with a common or similar human-computer interface.

- H2. It is possible to support collaborative learning inside and outside the classroom with an integrated system. This will allow all actors (students, teachers) to use learning material created in one scenario in another one and also share it with other actors using various computer devices.

- H3. Briggs’ Technology Transition Model assumptions apply: potential users will adapt technology if its benefits outweigh its disadvantages (notably, the cost of learning how to use it), adjusted by the frequency of use.

GOALS: Specify your general and specific goals. **The maximum length for this section is ½ page. (Arial or Verdana, font size 10).**

General Goal:
Develop or adapt, and validate a framework for developing a wide range of education-oriented applications supporting several types of learning activities under an integrative approach. The approach will promote and facilitate the switching from one computer supported learning activity to another one. The integrative approach will be achieved by applications which:

- share a common human-computer interaction paradigm based on similar gestures, having similar functionalities and looking the same as far as possible in spite of the different devices on which they will run,
- use the same data format,
- use a compatible communication middleware, so they are able to communicate with each other.

Specific Goals:
G1: Design and/or adapt an object oriented data format which would be platform independent and at the same time not too heavy to be used in devices with low computation capabilities.

G2: Define a set of easy to remember gestures associated to certain editing functions (like, cut, paste, delete, resize) and at the same time, easy to perform in screens with different sizes.

G3: Select, adapt and/or complete an existing communication platform which will allow setting up the required connections between devices of different characteristics for the various scenarios.

G4: Design and implement a set of applications using the framework. Each application is intended for a specific learning scenario which requires data exchange with another application.

G5: If possible, extend the suitability of this approach and framework to other non-educational scenarios.