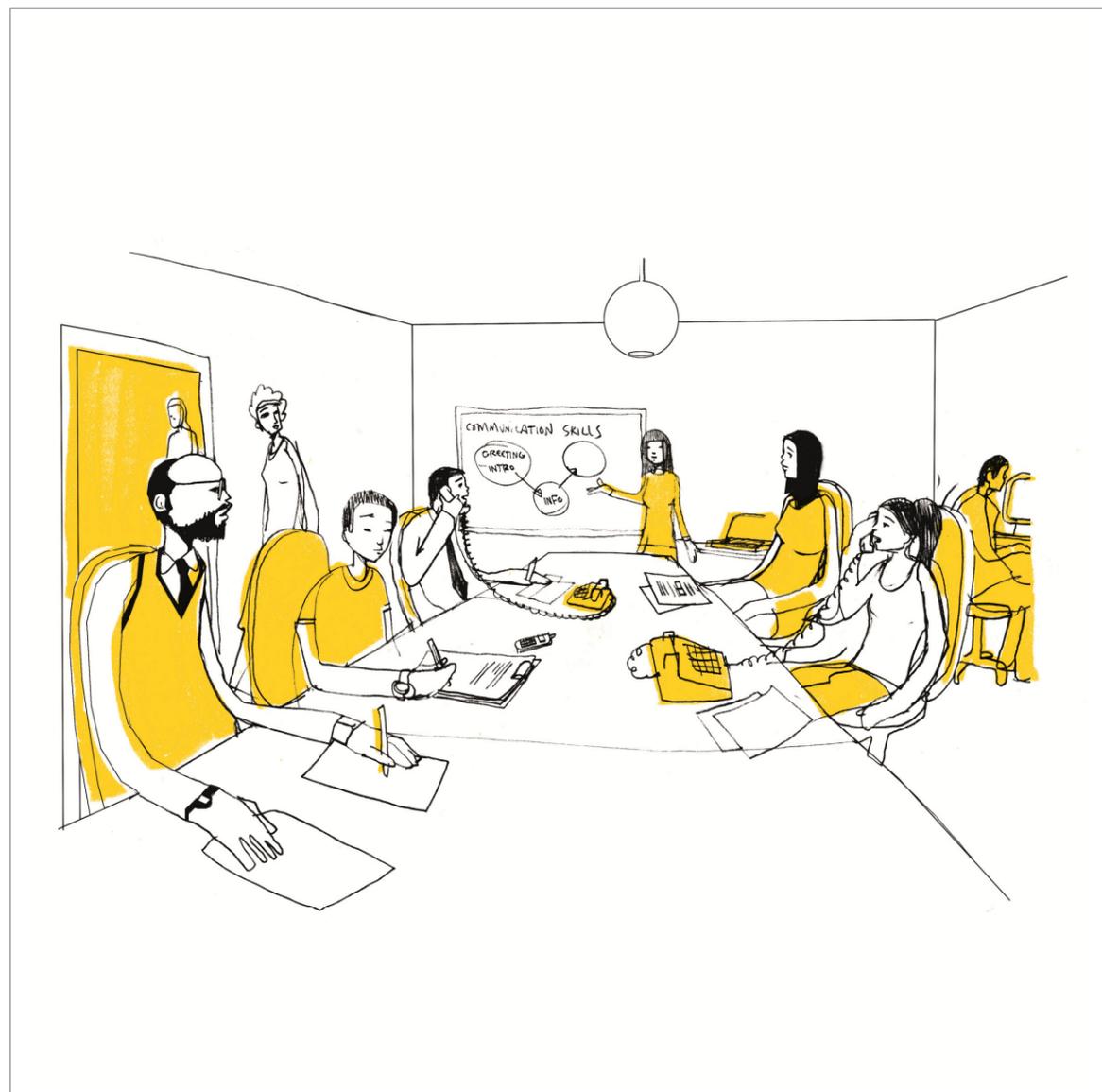


ITEC mini-scenario, December 2010

Simulated authentic environments

Trends considered:

- influential corporations have agreed standards of 21st century skills, such as self-regulated learning.
- Teachers become more involved in helping students learn autonomously at their own pace.



ASPIRATION STATEMENT

To involve large companies in the formal education and help teachers help students

AIMS OF ACTIVITY

- Involve corporations in the development of simulations that allow teachers to demonstrate in engaging ways how subject knowledge is applied in real contexts.
- Help teachers use simulations and serious games (recreating authentic learning environments like real workplaces)

TYPE OF ACTIVITY

Problem-based learning that relies on real, authentic challenges professionals face in their real work.

INTERACTIONS

Teachers are central, directly involved in how students use the simulations and are capable of providing support when needed, linking learning outcomes to specific curricular and assessment requirements.

NARRATIVE OVERVIEW

A large carrier airline decides to participate in the programme to fulfil their commitment to corporate social responsibility and education in particular. They liaise with the simulation developers and education experts, turning the basic template into a serious game in which players are required to use maths to solve problems faced by pilots and other airline professionals on a daily basis; these range from the development of a flight-plan to a structural safety analysis of an airplane. Maths teachers in schools around the country spend a couple of weeks familiarising with the game and further customising it, embedding specific learning requirements/ measures, and support students to play autonomously the simulation over a set period, until a fixed deadline when specific learning outcomes need to be demonstrated.

TECHNOLOGY AND RESOURCES

A template for a simulation which can be used by different large companies to create “games” that help learners understand how subject knowledge is used in their specific contexts.

TASKS

Companies are directly involved and are supported by the developers of the game and by education experts (perhaps teachers or even students) in the creation of custom versions of the simulations, which are then used by teachers.

SPACES

Games can be played in traditional classrooms but can also be accessed from home as they live on a remote server (should be web-based).

ROLES

- Education experts in companies
- Game/simulation developers
- Teachers are the primary target audience, learners are the players