

QUBE – 3D E-Learning System



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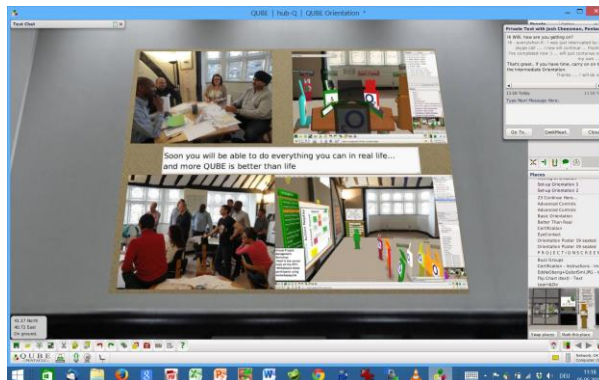
1. WHAT:

QUBE is a system which allows to learn, teach and work collaboratively in a face to face way, although all participants are not present in a physical room but interact online from anywhere. F2F & online: a contradiction? Not with QUBE. On QUBE you are an avatar, able to communicate with other people just as you would in the real world. You can move around in the rooms of a building, physically interact and work shoulder to shoulder, literally, brainstorming with many other persons by means of whiteboards and sticky notes. You can exchange instant messages, share documents, open and work on spreadsheets together, and even sit around a table for a confidential conversation. Because of HOW the system is designed (see below), learning and teaching with QUBE is even better than in a conventional setting in presence.



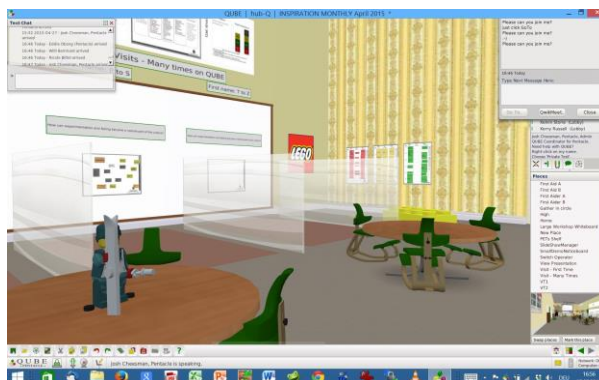
2. WHY:

Face to face and blended learning offer many advantages, but travelling to the teaching location and back home is becoming more and more time consuming, increases air pollution and makes it more difficult for students and teacher to fit the events into their busy schedules. Student teams who try to collaborate online on conventional LMS (like Moodle) are often disappointed because they cannot interact in their habitual way; so they shift to conventional ways of collaborating, like meeting in presence. QUBE offers a new, pragmatic solution to needs and goals like effective learning, effective teaching, flexibility, ease of transfer from learning to doing and the efficient use of resources (time, money, natural resources) etc.



3. WHO:

Students who want to learn collaboratively, teachers and lecturers who want to teach collaboratively, distributed project teams, especially those who cannot meet f2f, workshop and webinar leaders who want to improve small group working and plenary reporting, etc.



4. HOW:

How does QUBE allow to learn and to teach in a face to face way although all participants are online? QUBE makes this possible by integrating 3 main elements: 1) learning methods, 2) applications to practice and 3) a 3D virtual environment with avatar-based interaction, enabling the first two. Learning methods, applications to practice and the 3D components are designed in an integrated way which makes the most out of the opportunities provided by a 3D environment. Thus QUBE is much better than the known 3D platforms (like Second Life). For example the avatars of QUBE were conceived and designed with the main goal of making the learning effective in the 3D environment; the usual realistic representations of persons are impressive ... but highly distracting; moreover they cause performance problems, depending on bandwidth. The QUBE solution to these problems consists in box figures (like LEGO minifigures, but gender-neutral) which are very simple but provide enough of a human form to foster the needed identification.

