BotaCaching

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ABSTRACT

Exploratory study on the interest of the serious gaming for evaluating the practical botany knowledge. The heterogeneity in the levels of knowledge induced by the student’s professional project and the intrinsic difficulty for transposing the academic knowledge to the experimental practice in Plant Biology lead regularly AMAP to become interested in the new pedagogical tools for supporting and developing their training actions in plant morphology and architecture.

Keywords : Developing the plant of the future

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Project type : AAP
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Flagship project : no

Project leader : Philippe Borianne
Project leader's institution : CIRAD
Project leader's RU : AMAP

Budget allocated : 19630 €
Total budget allocated (including co-financing) : 19630 €
Funding : Labex

GOAL

BotaCaching is an intuitive online design tool to create gamelinked to the botany education. Unlike serious game which reproduces a virtual environment, it needs and uses human-nature interactions in the open-air runs.

ACTION

BotaCaching is composed of two software modules which share information across a remote database : BotaTeaching and BotaTraining. BotaTeaching is a CMS (Content Management System) using predefined canvases and mechanisms which allow the teacher to :

customize the structuration and the content of its educational itinerary,
associate questions to specific viewing locations of the open-air run, and
specify the look and the behaviour of the game which will be deduced.
BotaTraining is a GMS (Game Management System) which appears as an embedded playful game for smartphones and tactile tablets with easy and intuitively colourful interfaces.

RESULTS

BotaCaching allows to promote and complete the educational itinerary defi ned by the teachers on the one hand, and to strengthen and evaluate the experimental knowledge of the students from voluntary and entertainment approaches on the other. It is a satisfactory alternative to the lack of practical work

hours and of access to resources. It stimulates so the observation of natural and man-made environments.

PERSPECTIVES

The contextual study stated that BotaCachning could be enlarged and used for sensitizing the general public, specialising the informed amateurs and/or enhancing the plant heritage. The finalisation of BotaCaching could so take the form of a technology transfer.