

## GAMIFIED PROTOTYPE IN GENERIC COMPETENCES FOR HIGHER EDUCATION STUDENTS

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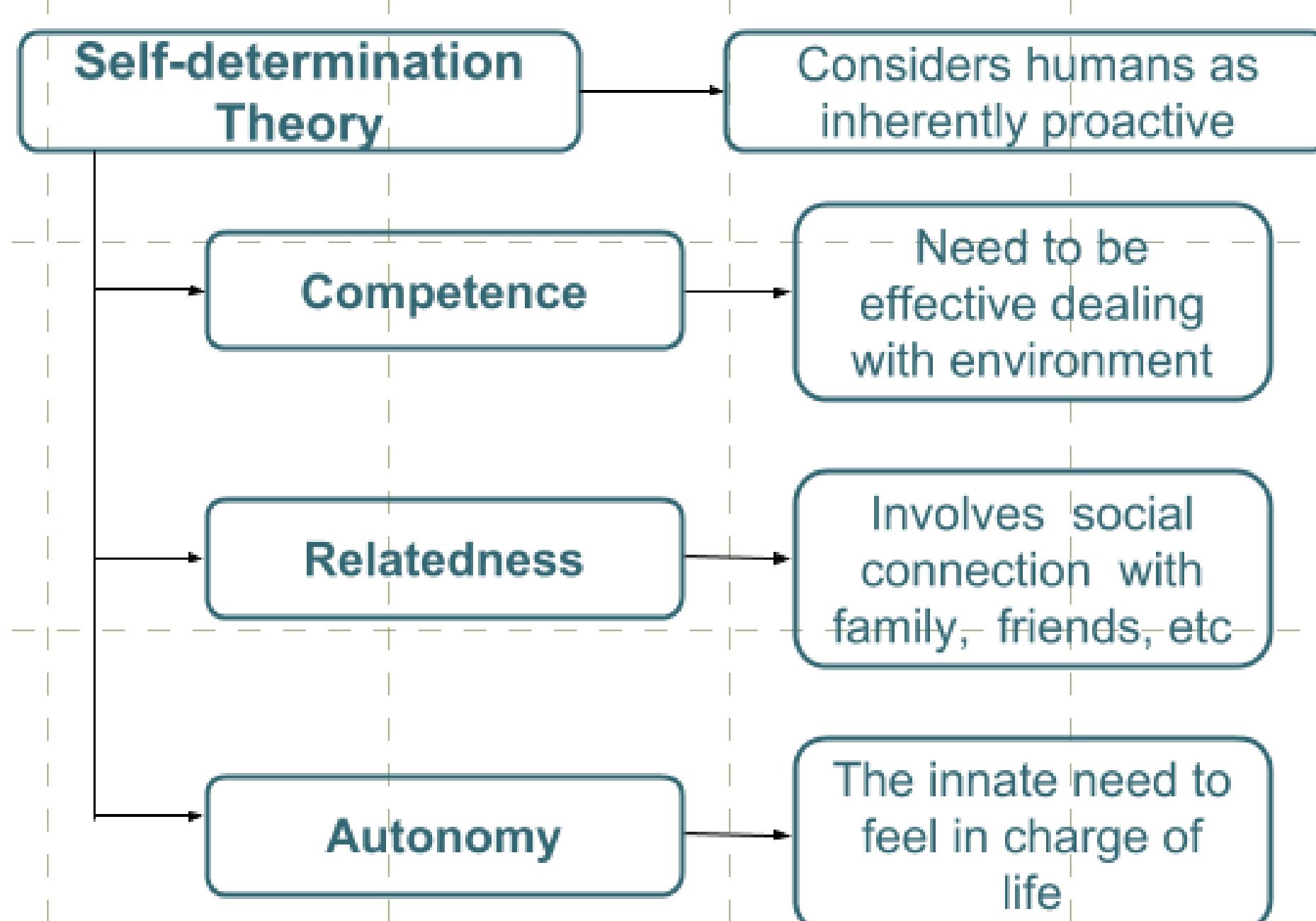
### INTRODUCTION

The *Dirección de Nuevas Tecnologías y Educación Virtual* (DINTEV) from Universidad del Valle, proposed to develop a pedagogical intervention using ICT (Information and Communication Technologies). This intervention is framed in the construction of a Virtual Skills Gymnasium employing gamification techniques to motivate students to reinforce quantitative reasoning and critical reading skills. The goal of this research is to design of a set of gamification mechanics that will be integrated into the Virtual Skills Gymnasium .

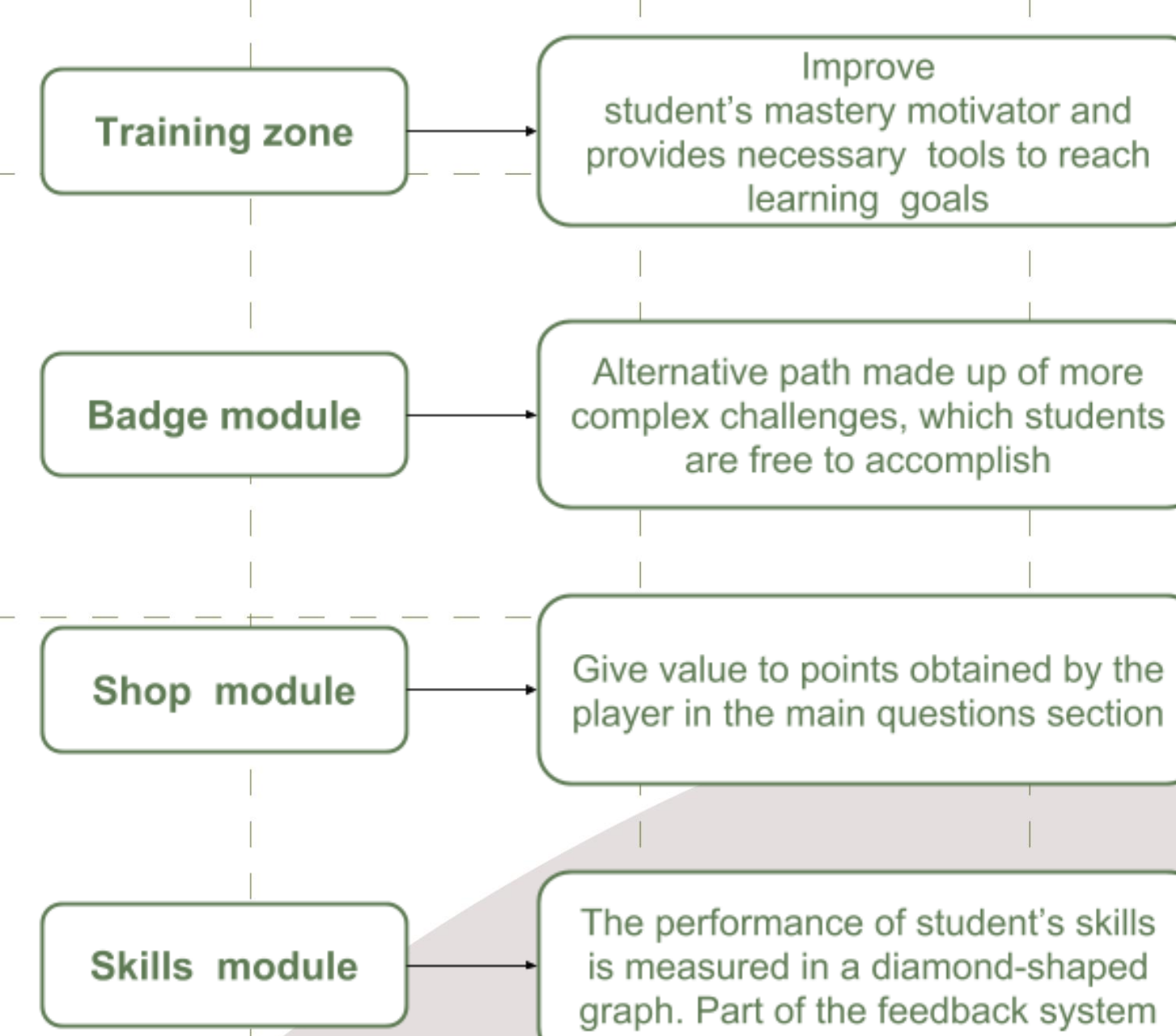
### METHODOLOGY

A set gamification mechanics were selected and/or designed based on the self-determination theory to motivate students to work on their weakest competences. The gamification strategy consists of four mechanics: a training zone, a shop where students can exchange earned points for power ups, a badge module and a skills chart that measures the performance of a student throughout the application.

### METHODOLOGY



Below we present and discuss gamification mechanics from the point of Self-determination Theory:



### RESULTS AND CONCLUSIONS

- This gymnasium is an ICT solution that intends to provide student with new tools that will allow them to reinforce and improve their knowledge everywhere at any time.
- The mechanics of our gamification strategy are oriented to reinforce the intrinsic motivators proposed by the self-determination theory and thus, motivate students to strengthen generic competences. Our aim is to avoid rewards based systems which only concentrates on extrinsic motivators.
- Our gamification strategy not only concentrates on motivating students to answer a set of questions, but also to train and review their weakest competences. Thus, our approach may be effective in supporting students needs of mastery and autonomy.
- This platform is currently under construction in collaboration with CIER. We plan to carry out tests with users and real data, which will allow us to take a closer view on the effect of the gamification strategy and the training zone on students' performance.

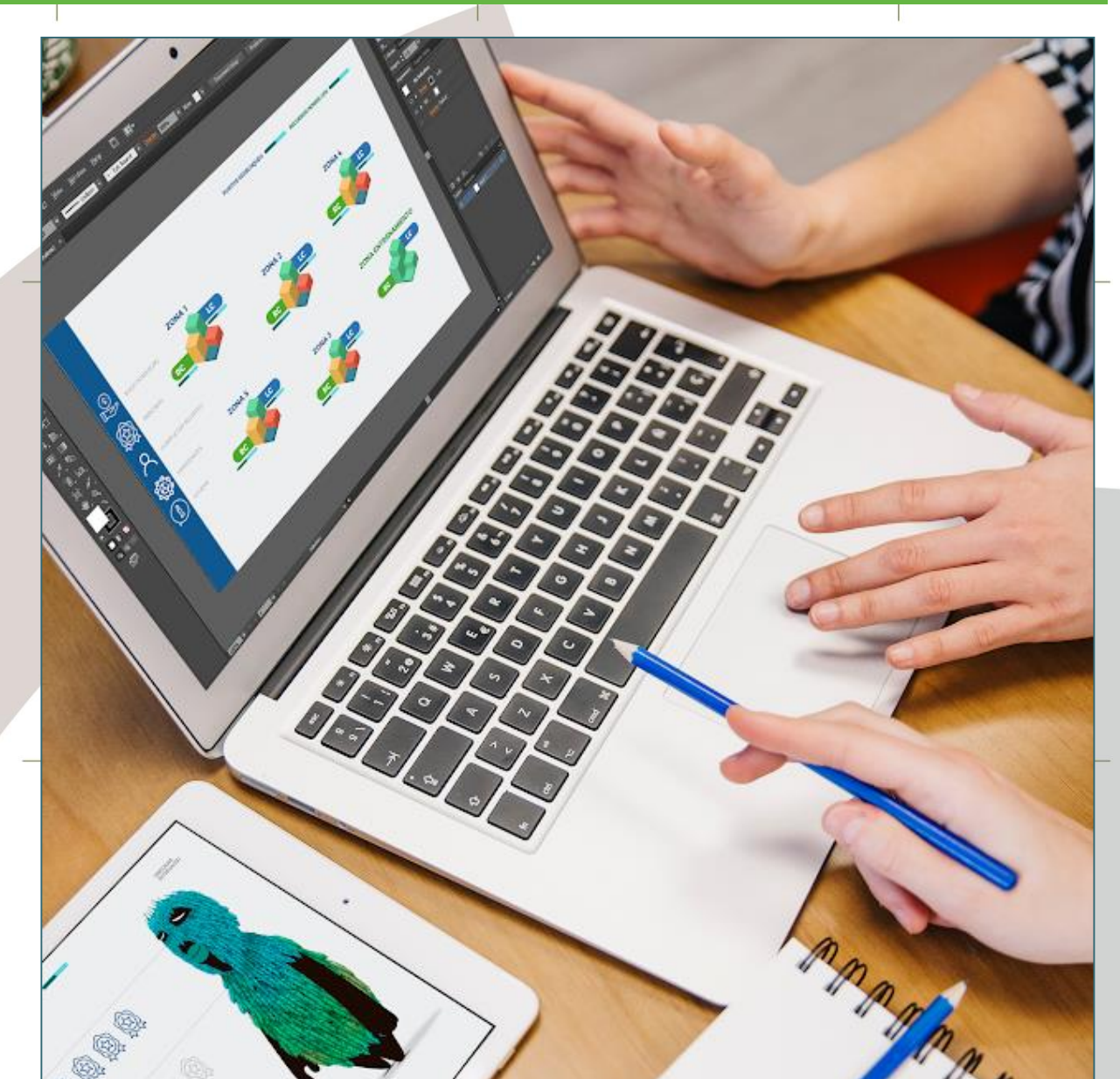


Image 1. Graphic interface design process