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**LEARNING AND RESEARCHING INTERCULTURAL COMPETENCE
WITH LINK THE SERIOUS GAME:
A PEDAGOGICAL INNOVATION BY SCIENCES PO GRENOBLE**

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Abstract:

A project team of international professors and researchers have developed LINK the Serious Game, a pedagogical innovation for teaching and learning intercultural competence. This digital game simulates work in a global, virtual team in order for students to practice working with diverse teams and to learn about cultural dimensions. On the other hand, the game provides data to researchers to answer the question: How can we measure and develop intercultural competences?



The InterCCom Project, hosted at Sciences Po Grenoble and funded by *IDEX Grenoble Alps*, has developed a digital serious game called LINK the Serious Game. The game is based on an interactive scenario that simulates interactions between members of an international project team. The player's intercultural competences are put to the test through their choices within the team and project.

LINK the serious game intends to address the question *How can we better understand and develop intercultural competences?* in a twofold way.

On the one hand, the game is a training tool where the player is put in the situation of the leader of a global virtual team. The tool also includes videos and documents that explain the theoretical background to the player, in an inversed learning process.

On the other hand, the serious game also makes research on intercultural competences possible through experimental methods, because quantitative data related to player choices are collected.

Using games and simulations to teach (and measure) intercultural competence

Today's businesses and organizations often rely on international teams that are dispersed throughout the world in order to fulfill their goals. In order to achieve successful collaboration within these teams, the Intercultural Competence (IC) of its members is crucial (Molinsky et al., 2012).

Training in and research on IC, along with other soft skills that are necessary for international teamwork, show several weaknesses. Namely, training at the university level is limited. IC is often considered as an automatic acquisition of academic stays or internships abroad. Yet, Bartel-Radic (2014) found that these stays only account for about 5% of IC. Secondly, foreign language courses often include some information about the specific culture in question. While this allows the student to learn about a specific situation, it does not prepare them for high cultural diversity. Finally, intercultural management courses, which were almost nonexistent 20 years ago, are now included in different fields of study. These courses often include a presentation of cultural dimensions and case studies, or even a focus on particular countries. While this is helpful in understanding the theory behind IC, its acquisition remains another matter.

As far as research on IC, traditionally, it has focused on only one of its three components, namely personality traits linked to IC. However, these poorly explain another component of IC, intercultural knowledge (Bartel-Radic & Giannelloni, 2017). Furthermore, measures of IC have relied heavily on self-assessment metrics, rather than being measured more objectively, and within the context.

The InterCCom project aims to understand the connections between cultural personality and knowledge by measuring participants' behavior in intercultural situations through an interactive pedagogical tool. This tool is specifically a serious game where the player is immersed into a scenario and where their competence is measured via their behaviors. This experimental approach through a serious game has been rarely used in intercultural management, even though serious games have attracted increasing attention as innovative tools that can teach about skills and skills management (Michel, Kreziak & Heraud, 2009; Vallet et al., 2016).

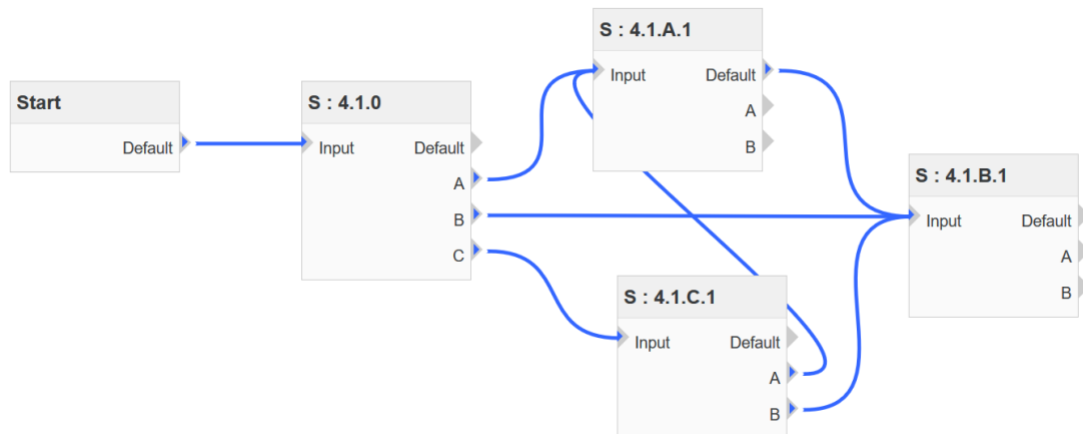
Content, context and courses: using the serious game for intercultural training

LINK the Serious Game is the digital serious game on intercultural competence developed by the InterCCom project. In LINK the Serious Game, the player coordinates a team of fictional characters from various cultures, attempting to ensure their satisfaction. The context and situations, as well as the interaction within those situations, are made to be as realistic as possible. As a context, the team must design and launch a new product, in this case a revolutionary new office chair. The player works to coordinate the different responsibilities of the team members and makes decisions to move the project forward. S/he communicates with

the team via email, videoconference and instant messaging, choosing from a selection of possible answers when prompted for a decision. It is important for the player to remember to adapt his/her choices according to the other team members' cultures.

The story itself evolves differently depending on the player's choices (see example scene architecture below). This nonlinear storyline reflects the IC of the player, and the player will be scored based on their choices regarding interaction decisions.

Figure 1: Example of nonlinear scene architecture




While the game mostly employs the idea of inverted learning, where the student learns through experience and problem solving, there are additional explanatory videos where experts interpret the outcomes of the scenes based on cultural dimensions (see below). These cultural dimensions reflect how situations can be interpreted differently based on culture and are related to concepts such as time, the group, hierarchy, competition, rules, etc.

The game will be used in various contexts including courses in English, intercultural management and other courses that teach professional soft skills. It is also designed to prepare students for academic stays abroad and international internships. In total, the game represents approximately 10 hours of interactive immersive learning.

Figure 2: High vs. Low Context Communication by Nordine Hocine, lecturer at Sciences Po Grenoble and collaborator of the InterCCom Project

HIGH CONTEXT	LOW CONTEXT
Most of the information is either in the physical context or internalized in the person, while very little is in the coded, explicit part of the message	One considers that the context of the communication / message is not clear, so it has to be mentioned in the message
Implicit communication: information is fast and quite allusive	Explicit communication: information is precise, exact and slow
Too much information is interpreted as insulting	Implicit communication is not understood



In "high-context" cultures, most of the information is either in the physical context or internalized in the person, while very little is in the coded, explicit part of the message.

More information about the InterCCom project and team

The project team of about 50 members led by Anne Bartel-Radic, a full professor in international management at Sciences Po Grenoble, is international and interdisciplinary in nature, and includes researchers, professors, PhD candidates and students in management, computer science, and language and civilization studies, and the international relations department at Université Grenoble Alpes (UGA). Additionally, international colleagues from a variety of countries and cultures provide additional expertise in intercultural management and information systems.

Besides LINK the Serious Game, three other games on international teamwork are also under development. This collection is known as the i-Team Games collection, and along with IC includes serious games about corporate social responsibility, conflict management and English proficiency within the context of a global, virtual team. All of the games will be housed on UGA's proprietary serious game platform GenaGame, which was also developed in the context of the InterCCom project.

For more information about the InterCCom project and the various games for research or training purposes, please contact Anne Bartel-Radic at anne.bartelradic@iepg.fr.

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