Design Methods for Training Teachers in Conflict Management Within Multi-Ethnic and Multicultural Classes: A Proposed Psychological Framework

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Abstract. Educational systems play a pivotal role to prevent social exclusion and discrimination and to promote equity, mutual understanding and respect. Teachers, in particular, are required to take an active stand in supporting social inclusion, adapting their practices and developing new skills to successfully deal with the increasingly diverse range of learners in their classrooms. Therefore, enhancing teachers' intercultural skills and competencies represents a key priority in the contemporary challenging educational context. The present study aims at describing the psychological framework underpinning the development of an original e-learning tool created for teachers and educators to self-assess and to improve their intercultural skills and competencies. In particular, the study will describe in detail the Dryden and Constantinou' Model of Effective Communication and the Rahim' Model of Conflict Management styles, clarifying their application for the design of a Technologically Enhanced Educational Role-Playing Game (EduTechRPG), namely ACCORD Game, developed to train teachers to deal with interethnic conflicts within realistic school context scenarios.

Keywords: Interethnic Conflict Resolution, Assertive Communication, Virtual Role-Play, Teaching.

1 Introduction

In recent years, following the important population flows, European countries have become increasingly interconnected, multi-ethnic and multicultural, requiring people to be more and more able to effectively deal with cultural differences. In particular, the growing changes in society have placed increasing demands on the educational systems, defining the achievement of equity and inclusion as a main concern and a shared priority at European level as worldwide [1].

Within this challenging portrait, teachers and educators play a key role, and, therefore, they are required to adapt their practices and to develop and enhance new skills and competences to successfully deal with the increasingly diverse range of learners in their classrooms. Accordingly, classroom management represents one of their main challenges, requiring them to be able to adapt the learning environments, to teach more tailored programs as well as to efficiently manage relational aspects of the educational duties [1, 2].

From this perspective, the more teachers are skilled and trained in inclusive education the more they gain in self-efficacy for teaching diverse students populations, so engaging students in the learning processes, successfully modelling positive relationships with students and between students, and reducing exclusionary behaviors in the classroom [3]. Indeed, research highlighted that inclusive education provides excellent gains in terms of students' academic achievement, also promoting their inclusive and cooperative attitude and behaviors in class [3, 4]. Teacher-student negative interactions, instead, were demonstrated as having a significant negative impact both for teachers (i.e., increasing work-related stress and determining leaving intention) and for students (i.e., decreasing motivation, engagement, and performance) [4-8].

Nevertheless, despite the clear role played by the school systems to prevent social exclusion and discrimination and to promote mutual understanding and respect, teachers generally reported some difficulties in adapting their practices to the multiple cultural backgrounds of their students [1].

Consequently, further efforts should be still made to provide greater support to teachers and to the school staff by defining interventions aiming at developing and enhancing their skills and competences to deal with potential conflictual situations that may emerge in classes, in order to improve the integration of migrant and minority students in schools.

2   The present study

Taking into account the key goal of enhancing teachers' skills and competencies to successfully handle conflictual situations that may emerge with students in the contemporary educational context, the study aims to describe the psychological framework underpinning the development of an original e-learning tool created for teachers and educators to self-assess and to improve their intercultural competencies.

Accordingly, the study will describe the psychological models used for the creation of a Technologically Enhanced Educational Role-Playing Game (EduTechRPG), namely ACCORD Game, developed in order to train teachers to deal with interethnic conflicts within realistic school context scenarios.

In line with the Simulation Technology-drama based system, ACCORD game has been developed by applying three core approaches: technological, pedagogical, and psychological [9, 10]. More specifically, ACCORD gaming experience is based on the SimTech technological approach, that allows the creation of "artificial" micro-worlds based on computer simulated, formal, models about social and psychological phenomena to which teachers interact with; on the other side, the pedagogical per-

spective adopted to build the gaming experience is based on two learning approaches, namely the Scenario-based learning (SLB; it provides meaningful learning experiences by engaging teachers in authentic school environments to support reflective practices and active learning in a real-world problem and in a subsequent solution finding process) and the Game-based learning (GBL; it offers risk-free virtual worlds characterized by freedom of exploration, so allowing a real sense of agency over actions and the possibility to try out different options without suffering the consequences of failure in real life) [11-13].

However, the creation of the gaming experience is also underpinned by a relevant psychological framework. Therefore, this study will specifically focus on the psychological models used to develop ACCORD game, guiding the creation of the game scenarios and the self-assessment tool (i.e., the structured feedback provided).

The study was developed as part of the ACCORD Project (Attain Cultural Integration through COnflict Resolution skill Development; www.accord-project.eu). One of the key objective of the project is designing constructive interactive virtual learning environments organized in role-playing scenarios addressing intercultural diversity in order to: (a) enhance teachers' awareness of the appropriateness of conflict management styles to deal with intercultural conflicts; (b) to support them to effectively handle intercultural conflicts which may arise in the school; (c) to promote effectiveness in teachers-students intercultural interactions and the inclusion of culturally diverse students.

3 Psychological Approach: Model Identification and Their Application in the School Context

3.1 Effective Communication Within Teacher-Student Interactions

The Model of Effective Communication [14] describes the communication process as represented along a continuum from a passive to an aggressive style, by passing through an assertive style.

Following this model, people adopting a Passive communication style tend to give too much regard to the perspectives and the preferences of the others. Accordingly, they communicate in a way that aims to continuously please others at the expense of personal opinions, needs and goals. This style is mainly an expression of the need to avoiding, sidestepping the discomfort of a conflict, as personal disclosure is perceived as dangerous (i.e., potentially upsetting, disappointing, and offending for the others). Despite passive people may experience a significant reduction of anxiety and sense of guilt by adopting this behavior, in the long run, it can result in loss of confidence, increased frustration, resentment and even in aggressive reactions.

On the opposite side, people adopting an Aggressive communication style mainly consider their needs as more important than those of the others. Accordingly, they communicate with a hostile attitude, denigrating other's opinions and perspectives in order to protect personal interests. Although the adoption of this communication style may help to feel possessing power and control, relationships with others are built on

fear, resentment and intimidation, so requiring to be in a continuing state of alert from external attaches.

Finally, people adopting an Assertive communication style are able to directly, firmly and honestly express their rights, perspectives, needs and feelings, while respecting the rights, perspectives, needs and feelings of the others.

In line with this model, being able to successfully negotiate implies adopting an assertive style, since both passive and aggressive behaviors may hinder the possibility of creating positive and constructive relationship through mutual, reciprocal and balanced processes.

From this perspective, considering the school context, teachers should be supported in the adoption of Assertive communication strategies to be able to involve students and the whole group class in constructive and generative negotiation processes, encouraging open discussions in which both teachers and students can express perspectives, needs and feelings, not at the expense of the others.

Therefore, the development of ACCORD game addressed the necessity to target this aim, supporting effective communication strategies among teachers. Assertive behavior, indeed, can be discovered, developed, learnt and improved through dedicated training programs [15].

3.2 Teachers' Conflict Management Styles Within Teacher-Student Interactions

In the field of organizational behavior and management, the Rahim' Model of Conflict Management Styles for interpersonal conflicts represents one of the most adopted model for investigating conflict management within different work contexts [16].

The model analyses the negotiation processes referring to two basic dimensions: concern for self (i.e., the degree to which individuals aim at satisfying their own concern in conflict management processes) and concern for others (i.e., the degree to which individuals attempt to accomplish with the concern of the other party involved in a conflict). On the basis of the different combinations of these two dimensions, five styles of handling interpersonal conflict have been proposed (i.e., Integrating, Obliging, Dominating, Avoiding, and Compromising).

Integrating style (i.e., high concern for self and for others) is considered as a "Win-Win" strategy of conflict management. People adopting this style, indeed, are willing to optimize rather than sacrifice themselves for the other party, trying to reach a mutual and acceptable solution that overwhelms the personal vision of the problem through openness, exchange of information, examination and exploration of differences.

Obliging style (i.e., low concern for self and high concern for others) reflects the attitude to adopt a non-confronting behaviors. People adopting this style try to minimize differences and to emphasize commonalities with the other party involved into the conflict, even sacrificing personal concern to safeguard the relationship.

Dominating style (i.e., high concern for self and low concern for others) is considered a "Win-Lose" strategy. People adopting this style are willing to win/defend their

position, even if it means adopting forcing behaviors and ignoring needs and perspectives of the other party.

Avoiding style (i.e., low concern for self and for others) is characterized by the tendency to withdrawal, buck-passing, sidestepping situations. People adopting this style display an attitude to refuse to openly face conflicts.

Compromising style (i.e., intermediate concern for self and for others) is characterized by attempts to splitting the difference, exchanging concession, or seeking a quick, middle ground position to reach mutually acceptable decisions. However, both parties involved in the conflict need to agree giving up something to solve the conflict.

With respect to the school context, the application of the Rahim' Model is of particular relevance. Indeed, teachers are constantly involved into negotiation processes, and, nowadays, conflicts with students from the new generation have become increasingly complex as they may arise also due to perceived differences in worldviews, ideologies, and cultures [17, 18]. Nevertheless, conflicts could be considered not only a source of pressure but also a significant opportunity for development and enhancement of skills, critical reflection, and growth both for teachers and for students. Therefore, particular attention should be given to teachers' ability to effectively handle conflicts, rather than avoiding their emergence, by adopting constructive and creative management strategies [17].

However, teachers' adoption of specific strategies to manage conflicts with students is always influenced by the teachers' role as accountable for classroom management, and, therefore, the appropriateness of the use of the different styles is strongly influenced by their duties and goals, as well as by the specific characteristics of the conflictual situation. Teachers, indeed, need to address the necessity to handle conflicts while simultaneously targeting the educational goals and safeguarding the relationship with students and a satisfactory group climate in the classroom.

From this perspective, research highlighted that teachers may use different strategies to efficiently manage conflicts with students [17, 18]. For example, teachers mainly recur to Integrating and Compromising strategies (e.g., reasoning and discussing with the student/s to explore new possible solutions and ways to deal with the difficulties emerged) due to the importance they attribute to the necessity to understand students' perspectives. Moreover, they may adopt Obliging (e.g., ignoring minor disruptions/infringements) and/or Avoiding strategies (e.g., delaying confrontation; sending the student/s to the school head) whenever they evaluate the beginning of a conflict as hindering the continuity and the quality of the teacher-student educative relationship and/or for the achievement of the educational goals. Finally, they may adopt Dominating strategies (e.g., recurring to verbal admonishment; requesting periods of school suspension) whenever they perceive the necessity to express their authority to manage students and to quickly regain control over the class.

However, more recently, a broader approach further insights into the Rahim' Model, defining teacher' negotiation process as resulting by the configuration of different styles, rather than by the recourse to independent styles. In particular, the study conducted by Zurlo, Vallone, Dell'Aquila and Marocco [19] identified four meaningful patterns of styles of handling conflicts adopted by teachers within teacher-student

interactions: i.e., Multi-strategic and Engaged, Multi-strategic and Solution-Oriented, Control-Oriented and Avoidant, and Mediating.

In particular, Multi-strategic and Engaged pattern groups teachers that, depending on the situation, show to be able to adopt all the conflict management strategies except for avoiding strategy. Therefore, they display the tendency to be constantly engaged in negotiating with their students, always trying to face and solve conflictual situations outright, rather than retreating from them.

Multi-strategic and Solution-Oriented pattern includes teachers that are potentially able to successfully handle a wide range of conflictual situations. Indeed, they display to adopt all the management strategies and, thus, to search for moment-to-moment solutions depending on the situation.

Control-Oriented and Avoidant pattern groups teachers who mainly handle the conflicts by adopting dominating and avoiding strategies, also displaying to be less willing to recur to integrating, compromising and obliging strategies.

Conversely, Mediating pattern includes teachers who mainly adopt integrating, compromising and obliging strategies, also showing to be less willing to recur to dominating and avoiding strategies.

Overall, research reported above provided useful information for a greater and more complex understanding about teachers' negotiation process, also emphasizing the different configuration of styles they primarily adopt for handling conflicts with students. This could allow promoting teachers' awareness about their conflict management pattern profile, supporting them in effectively and successfully dealing with intercultural conflictual interactions.

4 Designing an Original E-Learning Tool for Interethnic Conflict Management: ACCORD Game Development

Considering research reported above, the Model of Effective Communication [14] and the Rahim' Model of handling interpersonal conflict [16] have been identified as the theoretical foundation for the ACCORD game development.

Furthermore, in order to build a reliable educational virtual game, teachers and educators were directly involved in the creation and definition of the interethnic conflict scenarios. More specifically, National Surveys (to obtain data on teachers' current intercultural competences and on the adoption of conflict management styles) and Focus Groups (to understand teachers' level of training on intercultural conflict and their training needs; to identify realistic conflictual situations they may potentially encounter in their daily work life; and to gain insight on their attitude towards game-based learning) were organized in the five project countries (i.e., Austria, Belgium, Germany, Italy and Spain). Teachers' contribution allowed to understand at a deeper level how to create meaningful, realistic and engaging scenarios with an accurate level of information (i.e., clarifying the content of the sentences, body language, facial expressions) to efficiently promote learning experiences for teachers [10].

4.1 ACCORD Game: Main Characteristics

ACCORD game is a single-player educational tool to train intercultural communication and negotiation skills in realistic scenarios during the interaction with artificial agents, to be employed by teachers in secondary school contexts. The game focuses on the simulation of a dialogue between two characters (i.e., an avatar controlled by a human player, that is the teacher, and a BOT computer-controlled counterpart, that is the student) (see Fig.1). Both the teacher and the artificial agent with which the user interacts with during the game are implemented as 3D avatars able to perform a range of basic expressions using verbal cues and non-verbal indicators (e.g., vocal tone, shape of the speech bubble, body posture).

Fig. 1. ACCORD Game: Introduction

Within ACCORD game, the user can choose one among five/seven possible sentences based on the five styles of Rahim's Model [16] i.e., covering integrating, obliging, avoiding, dominating and compromising styles (appropriate and/or inappropriate according to the conflictual situation proposed). Each of the styles is complemented with gesture and facial expression, and manifests itself in a pattern of observable behavioral indicators that we have identified in the communication model of assertiveness, passivity and aggression [14] (see Fig.2).
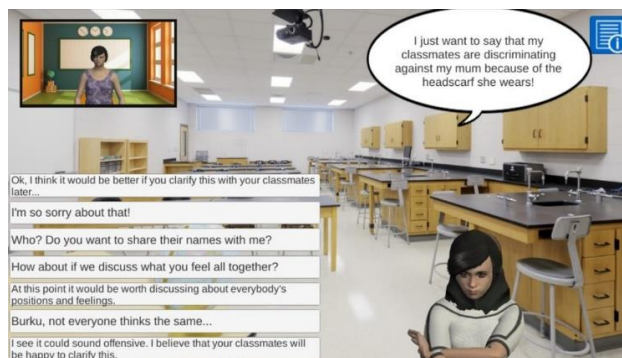

Fig. 2. ACCORD Game: Seven State Sentences

However, the most pioneering aspect of ACCORD game is the opportunity for the user to become aware of personal handling conflict styles and related communication skills particularly relevant to effectively deal with intercultural conflicts. The tool, indeed, offers a completely self-sustained assessment and training system through which teachers can test and enhance their conflict management skills and their intercultural competences with the support of the tutoring system provided (see Fig.3).
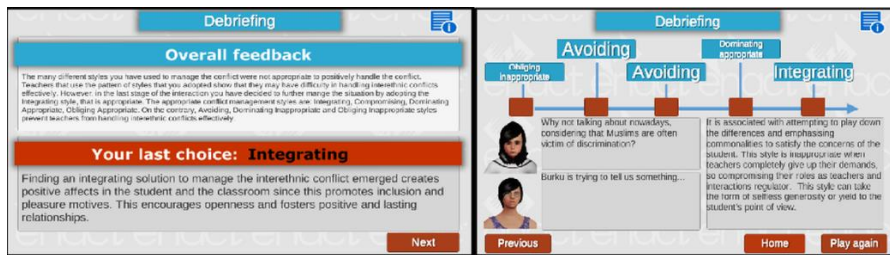

Fig. 3. Debriefing system

In this perspective, research findings on the different configuration of styles adopted by teachers for handling conflict with students [19] provided useful information to develop more comprehensive and targeted feedback to propose at the end of the game experience. This allows promoting and supporting teachers in effectively dealing with conflicts by providing them with a complex debriefing about their negotiation path. Teachers, indeed, may become aware of their tendency to mainly manage conflicts by adopting control-oriented strategies, or by consistently recurring to strategies focused on safeguarding the relationship with the students and a positive class climate. However, they may also reflect on the possibility to also adopt a wider range of strategies, whether the specific situation requires a different approach. From this perspective, also teachers already recurring to different strategies during their pathway of interaction can test and enhance their ability to find the more adequate solution depending on the careful assessment of the conflictual situation, so achieving an optimal conflict management strategy within the class according to the specific situation.

5 Conclusions

In conclusion, the present study described in detail the psychological framework adopted for the design of ACCORD game, an original e-learning tool to be used by teachers and educators to self-assess and to improve their intercultural skills and competencies.
Indeed, the use of Technologically Enhanced Educational Role-Playing Games (EduTechRPG) in educational contexts can lead to the awaited learning goals only assuring the quality of the methodology sustaining its development.
Accordingly, besides its technological and pedagogical foundations, ACCORD methodology for the game development is enriched by a rigorous psychological framework, that includes the two pivotal theoretical models of Effective Communication

[14] and of Conflict Management styles [16]. Their application to the specific field of teacher-student interactions, as well as their further declination to promote intercultural competences, guided, indeed, the development of ACCORD game scenarios and of its comprehensive feedback.

Therefore, it is hoped that the robust psychological framework underpinning ACCORD game development could provide a solid foundation to support the achievement of the expected learning goals. Furthermore, the direct contribution of teachers and educators for designing ACCORD game allowed to improve and enhance the training experience, as well as the gaming experience, increasing the possibility to provide them with meaningful learning opportunities.

However, future studies will be developed to evaluate and test the adequacy and efficacy of ACCORD game, by assessing teachers' intercultural competence development and enhancement, as well as their attitude toward the proposed gaming and learning experience. We are confident that in the future testing phase of the game, the use of the tool will be able to propose enriching learning experiences that are engaging, motivating, and especially transferrable to situations in the real world school contexts.

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