



## Improving Communication Skills Using Simulation-based Education: Review of Current Interventions and Identification of Best Practice

Anna Siri<sup>1</sup>, Marco Chirico<sup>2</sup>, Giancarlo Torre<sup>3</sup>

### Abstract

*Being able to communicate successfully is one of the most important life-long-learning skills.*

*Good interpersonal communication skills enable us to work more effectively in groups and teams, which may be either formal or informal. But all too often, when we try to communicate with others something goes astray. This can cause misunderstandings, frustration, conflicts, and problems in home/school/work relationships.*

*The ability to relate with students, families, colleagues, superiors, other professionals, and with patients in the healthcare area, has always been considered an innate, instinctive ability: there are those who own it and those who do not.*

*In reality it is a capacity that can be learned by example, reflection, experimentation in protected and facilitating places.*

*In order to develop communication skills further, simulation approach may be used. It can take lessons from the medical community using simulation strategies to develop long-lasting understanding. In this article, the authors want to investigate whether the simulation helped gain increased understanding of how the communication model may be used in practice, and whether the communication skills improved after the simulation.*

*The authors suggest that educational leaders would be well advised to include this important strategy in their professional development plans as a school-wide initiative across disciplines.*

*Keywords: simulation; communication skills*

### Introduction

The innovation economy is changing the world. Thus, the education sector must keep pace with change, accustoming students to acquiring new skills that are suitable for the labour market that the economy of innovation produces. Problem-solving, creativity, ability to lead a team, effective communication.

Today, in fact, work requires a more varied mix of skills than in the past. For example, the ability to solve problems and analyse available information is increasingly being sought.

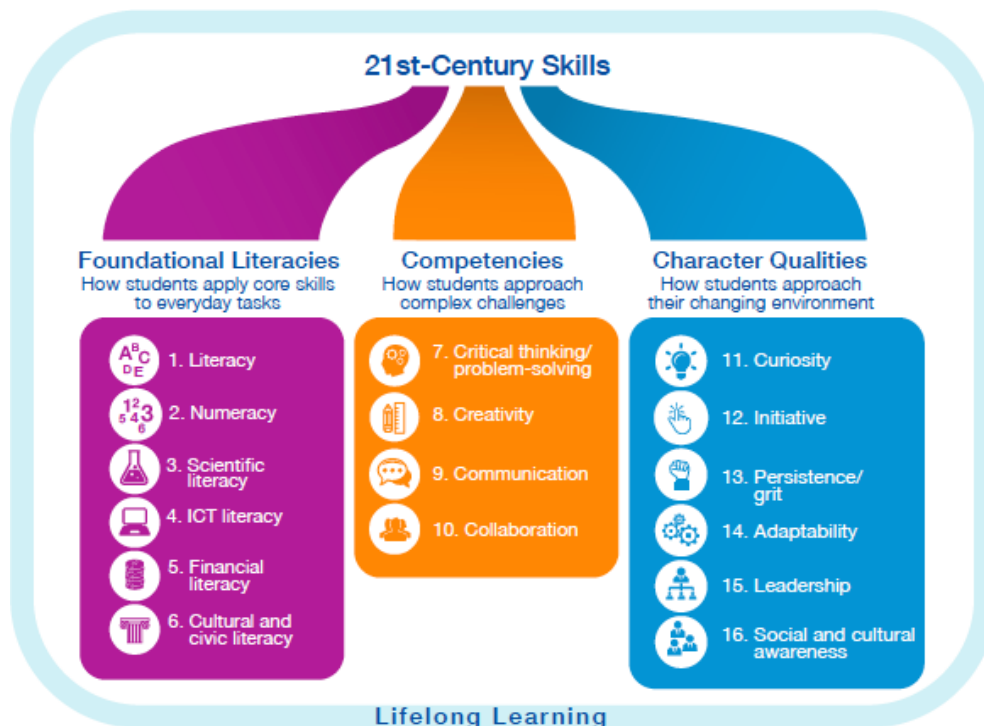
With this in mind, the World Economic Forum published a report in 2015 entitled "New Vision for Education. Unlocking the Potential of Technology". The study has drawn up a list of the 16 skills of the twenty-first century, that is, the skills that the education system must guarantee today.

---

<sup>1</sup> University of Genoa, Italy

<sup>2</sup> University of Genoa, Italy

<sup>3</sup> University of Genoa, Italy



Source: World Economic Forum, New Vision for Education, 2015.

According to the report of the World Economic Forum, more than a third of global companies encountered difficulties in filling vacancies in 2014 due to a shortage of people with the skills that jobs required.

Communication and interpersonal relations are essential skills of the 21st century and are of great importance in the private and working lives of individuals and communities. The emotional well-being and social gratification of individuals, as well as the functioning of families, schools, organisations and thus of society as a whole, depend to a large extent on their development.

However, this importance has only recently been recognised, and most people lack the knowledge and practical skills necessary to deal consciously and effectively with interactions with others, not least because these areas are entirely neglected in both school and university curricula. The negative results of this communicative-emotional-relational illiteracy are manifold: from growing misunderstandings in couples to the exasperated proneness to conflict of many separations; from the problematic relationships between parents and children to the equally problematic ones between teachers and students; from bullying in schools to the coldness and conflictuality of contacts in the workplace.

### The role of simulation in vocational training

All professions have the objective of transferring specialist knowledge: this can happen during work activities (Gherardi 2006) or outside work contexts in so-called institutional training moments (Lave and Wenger 1991). For this reason, medicine introduced the simulation approach rooted in the theoretical assumption of the Knowles andragogy (2008) that allows students to "practice by simulating the work" (Gaba, 2000).

The study of the simulated contexts has highlighted that in order to make an experience realistic and involving it is necessary to approach the simulated experience to the work one, re-inserting in the course of the simulation the elements that compose the job, or instead building what we could define the "scenario of the working practice". These are material and immaterial elements that are perceived through the senses of the subjects (Strati, 2008) who participate in the experience (sight, hearing, touch and the ability to make aesthetic judgments).

The performance of the simulation takes place through rules, or scripts (Goffman 1959, translated 1979) shared by the subjects participating in the courses, so that they consider likely and accountable (Garfinkel 1967; 1996) the experience they are living.

The simulated activities, therefore, represent those types of internal formative control that serve

communities to protect themselves from the errors that their members may make (Benner et al., 1996; Kelly et al., 2014). These mistakes would damage both the prestige of the profession itself and the professional career of the individual, but in the case of "risky professions" also the lives of other people. For this reason, simulation can be considered as one of those tools through which subjects can be prepared for unexpected and rare events (March and colleagues, 1992; Decker et al., 2007; De Oliveira, 2014), which are difficult to present in the workplace, and for the management of errors (Gaba, 2000; Catino and Albolino 2008) and emotions.

Simulation is one of the alternative training approaches aimed at anticipating the transfer of expert knowledge before entering the labour market or in other cases accompanying it throughout the professional career. Therefore, simulation is becoming more and more widespread in various professional sectors.

### **A new approach to the development of communicative and relational competencies**

Simulation has been identified as a useful approach also for teaching and developing communication skills (Decker et al., 2007; De Oliveira, 2014), as well as building learner self-confidence (Lasater e Nielsen, 2007; Titzer et al., 2012; Kolbe et al., 2015). Simulation stimulates students to learn from each other and to become more self-confident by developing the ability to evaluate oneself (Titzer et al., 2012). The simulation provides opportunities for inter-professional collaboration, facilitating the comparison of the specific knowledge of each professional category, thus determining the improvement of the understanding of the different roles among students of different disciplines and the achievement of problem-solving skills (Titzer et al., 2012; King et al., 2015). Although several authors have reported case studies within an interprofessional simulation, many questions remain about the feasibility, acceptability and effectiveness of this form of interprofessional learning, particularly in the university context (Bukley et al., 2012).

As pointed out by Rhodes and Curran (2005), the simulation process includes three phases: pre-briefing or briefing, simulated scenario and debriefing. Pre-briefing is designed to assist participants in defining scenario objectives and contains roles, functions, timing and settings (Meakim et al., 2013).

The briefing phase establishes the learning methodology and it is crucial to guide and evaluate the students' achievement. Providing precise information through the pre-briefing is essential to adapt the objectives to the knowledge and experience of the students (Meakim et al., 2013).

Debriefing, finally, is the process through which teachers and students review at the end of a simulation session, to foster the development of clinical reasoning and judgment through reflective learning (Dreifuerst, 2009; Arafeh et al., 2010). Debriefing is the core of team-based learning based on simulation (Paige et al., 2015). It is a conversation between students, led by a conductor/developer, which aims to explore and understand the relationships between processes, events, actions, thoughts and feelings, as well as the results of simulation performance. This post-simulation conversation/discussion is hugely demanding, both for the trainer/leader and for the participating students. (Brett-Flegler, 2012; Fanning, 2007; Mariani et al., 2013). The effect of the overall learning experience in a simulation setting can be determined by the debriefing phase (Gaba, 2013). Its peculiarity is that it is functional to the improvement of learning through the stimulus to speak freely about the experience without being judged, to clarify the criticalities encountered, to understand what skills are deepened, whether behavioural or more active and emotional (Garrino et al., 2015).

### **Conclusion**

The literature highlights that simulation is an educational approach that allows people to stimulate reflection and accompanies the student throughout the learning process. From the studies examined, it emerges that through meditation, briefing and debriefing, the student becomes able to process his or her experience and transform it into critical thinking and skills.

It is fundamental to keep in mind that within the contemporary dynamics of the versatility of knowledge, based on transversality and capable of responding to the needs of adaptation and direct personal involvement, teachers are asked to know how to form multi-processor bits of intelligence, capable of reacting and interacting to solve problems of different nature.

In all its variants, simulation represents a moment of active participation of learners who can invest the best strategies to understand, understand, react to a situation, a problem, in short, to any communicative event and in a spontaneous way.



## References

- [1] Arafeh J, Hansen S, Nichols A (2010). Debriefing in simulated-based learning: facilitating a reflective discussion. *J Perinat Neonatal Nurs* 2010;24:302-9
- [2] Benner P, Tanner C, Chelsea C (1996). *Expertise in nursing practice: caring, clinical judgment and ethics*. New York: Springer 1996.
- [3] Brett-Fleegler M, Rudolph JW, Eppich WJ, et al. (2012). Debriefing assessment for simulation in healthcare. Development and psychometric properties. *Simul Healthc* 2012;7:288-94.
- [4] Buckley S, Hensman M, Thomas S, et al. (2012). Developing interprofessional simulation in the undergraduate setting: Experience with five different professional groups. *J Interprof Care* 2012;26:362-9.
- [5] Catino M., Albolino S. (2008). Colpa ed errore. Logiche d'analisi in aeronautica e in medicina, in *Studi Organizzativi*, (1: 117-44.)
- [6] De Oliveira SN, do Prado ML, Kempfer SS, et al. (2015). Experiential learning in nursing consultation education via clinical simulation with actors: Action research. *Nurse Educ Today* 2015;35:50-4.
- [7] Decker S. (2007). Integrating guided reflection into simulated learning experiences. In: Jeffries P, editor. *Simulation in nursing education: from conceptualization to evaluation*. New York, NY: National League for Nursing 2007, pp. 73-85.
- [8] Dreifruerst KT (2012). Using debriefing for Meaningful Learning to foster development of clinical reasoning in simulation. *J Nurs Educ* 2012;51:326-33.
- [9] Fanning RM, Gaba DM (2007). The role of debriefing in simulation-based learning. *Simul Healthc* 2007;2:115-25.
- [10] Gaba D. (2000). Anaesthesiology As a Model for Patient Safety in Health Care, in *BMJ*, (320): 785-788.
- [11] Gaba D. (2004). The Future Vision of Simulation in Health Care, in *Qual. Saf. Health Care*, 13(1): 2-10.
- [12] Gaba DM (2013). Simulations that are challenging to the psyche of participants: How much should we worry and about what? *Simul Healthc* 2013;8:4-7.
- [13] Garfinkel H. (1996). Ethnomethodology's Program, *Social Psychology Quarterly*, 59(1): 5-21.
- [14] Garrino L, Arrigoni C, Grugnetti A, Martin B, Cola S, Dimonte V (2015). Il briefing e il debriefing nell'apprendimento protetto in simulazioni per le professioni della cura: analisi della letteratura. *MEDIC* 2015; 23(2): 73-90.
- [15] Gherardi S. (2000). Practice-based theorizing on learning and knowing in organizations: An introduction", in *Organization*, 7(2): 211-23.
- [16] Gherardi S. (2006), *Organizational Knowledge: Texture of Workplace Learning*, Blackwell Publishing.
- [17] Goffman E. (1959), *The Presentation Of Self In Everyday Life*, Garden City, Ny, Doubleday (trad. it. *La Vita Quotidiana Come Rappresentazione*, Bologna, Il Mulino, 1979).
- [18] Kelly MA, Hager P, Gallagher R (2014). What Matters Most? Students' Ranking of Simulation Components that contribute to clinical judgement. *J Nurs Educ* 2014;53:97-101.
- [19] King AEA, Conrad M, Ahmed RA (2013). Improving collaboration among medical, nursing and respiratory therapy students through interprofessional simulation. *J Interprof Care* 2013;27:269-71.
- [20] Kolbe M, Grande B, Spahn DR (2015). Briefing and debriefing during simulation- based training and beyond: content, structure, attitude and setting. *Best Pract Res Clin Anaesthesiol* 2015;29:87-96.
- [21] Knowles MS (2008). *Quando l'adulto impara*. 9a ed. Milano: Franco Angeli 2008.
- [22] Lasater K, Nielsen A (2009). Reflective Journaling For clinical judgment development and evaluation. *J Nurs Educ* 2009;48:40-4.
- [23] Lave, Jean & Wenger, Etienne (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.
- [24] March J., Sproull L., Tamuz M. (1992), "Apprendere dalle eccezioni", in *Sviluppo e Organizzazione*, (129): 37-49.
- [25] Mariani B, Cantrell MA, Meakim C, et al. (2013). Structured Debriefing and Students' Clinical Judgment Abilities in Simulation. *Clin Simul Nurs* 2013;9:147-55.
- [26] Meakim C, Boese T, Decker S, al. (2013). Standard of Best practice: Simulation. Standard I: Terminology. *Clin Sim Nurs* 2013;9:3-11.
- [27] Paige JT, Sonal A, Gladys F (2015). Debriefing 101: training faculty to promote learning in simulation-based training. *Am J Surg* 2015;209:126-31.



## International Conference The Future of Education

- [28] Rodhes M, Curran C (2005). Use of the human patient simulator to teach clinical judgment skills in a baccalaureate nursing program. *Comput Inform Nurs* 2005;23:256-64.
- [29] Strati A. (1999). *Organization and Aesthetics*, Sage Publication, London, Thousand Oaks, New Delhi (trad. it Estetica e organizzazione, Mondadori Education, Milano, 2008).
- [30] Titzer JL, Wenty CF, Hoehn WG. (2012). An Interprofessional Simulation Promoting Collaboration and Problem Solving among Nursing and Allied Health Professional Students. *Clin Simul Nurs* 2012;8:325-33.
- [31] World Economic Forum (2015). *New Vision for Education. Unlocking the Potential of Technology*".