Original Paper

A Tool to Measure Teachers' Soft Skills: Results of a Pilot Study

Orlando De Pietro^{1*} & Natalia Altomari¹

Abstract

Soft Skills are a set of skills of fundamental importance in the performance of work activities; they are not technical or specific skills but are strongly related to personal qualities and attitudes and social and management skills. Due to their intangibility, some of them are difficult to recognize, quantify, evaluate and develop. The acquisition of such skills for teachers is indispensable to successfully address different contextual situations (Schulz, 2008). Soft Skills are necessary to interpret and understand complex situations, also in order to design training courses that enhance the personal qualities of the students. (Ngang, Yie, & Shahid, 2015).

Our study aims to develop a tool capable of measuring the Soft Skills needed to effectively carry out the teaching profession, in order to promote activities aimed at strengthening them in the training courses: initial and in itinere. This paper presents the structure of the instrument, the sample to which it was administered, the descriptive statistics and indices of normality relating to the subdimensions of the questionnaire and, therefore, the analysis of the items and reliability.

Keywords

soft skill, assessment, educational research, teacher training

1. Introduction

New metadata, citation and similar papers at core. As caused significant changes poth in the socio-economic sector and in the sparing of knowledge has caused significant changes poth in the socio-economic sector and in the provided by scholink Journals are true, by a caused significant changes poth in the socio-economic sector and in the provided by scholink Journals are true, we are

witnessing the development of an open and non-discriminatory knowledge society in which the information resource and communication processes have reached levels of primary importance for the community. In fact, these have become elements of wealth and development not only in economic terms but, above all, in working, social and cultural terms. At the same time, *working models* and participation in collective life, stimulated by continuous processes of technological innovation, require changes in the

¹ Department of Humanities, University of Calabria, Italy

^{*} Orlando De Pietro, Department of Humanities, University of Calabria, Italy

way roles collaborate, in the use of one's own relational and communicative abilities and in interpersonal and group life practices. Consequently, people, future workers, must be able to learn to learn, possess cognitive intelligence, accept "work mobility" and be able to adapt to any environmental context.

It is clear from this that intangible assets such as experience, imagination, relationality, creativity, intelligence, imagination, persistence, curiosity and initiative are factors that characterize and qualify the skills needed to live contemporary society and that people must possess to enter and emerge in the labor market. It is clear, therefore, that there is a need to qualify an education system that enables young people to develop the basic skills needed to guarantee them a genuine right to active global citizenship. Teachers are therefore called upon to design and manage learning-teaching processes that are not limited to the exponential acquisition of knowledge but are capable of giving life and continuously feeding a multidimensional training of students (MIUR, 2017).

These competences, which fall within the sphere of Soft Skills, are a set of skills of fundamental importance in the performance of work activities (Pachauri & Yadav, 2014); they are not technical or specific skills but are strongly linked to personal qualities and attitudes and to social and management skills. Due to their intangibility (Dall'Amico, 2016) some of them are difficult to recognize, quantify, evaluate and develop. The acquisition of these skills for teachers is essential to successfully deal with different contextual situations (Schulz, 2008) and the Soft Skills are necessary to interpret and understand complex situations, also in order to design training courses that enhance the personal qualities of the students (Ngang, Yie, & Shahid, 2015).

These represent, therefore, for the teachers, but also for the other workers, the "new basic alphabets" (Vannini, 2009) necessary, as the European Commission (EC, 2009, 2018) claims, to live and manage complexity, uncertainty and less predictability.

Teachers in this complex and ubiquitous society (Bauman, 2011) are faced with daily challenges that see them engaged with the problems of the students, with the preparation and implementation of the lesson plan and with the demands of parents (Brewster & Railsback, 2001). These challenges can be skillfully managed by those teachers who have transversal skills and not just technical skills

According to Hattie (2003), professionally qualified teachers with the appropriate soft skills have a direct impact in influencing the interest and commitment of students to achieve their educational success more easily. On the basis of the above, our work aims to develop a tool capable of measuring the Soft Skills necessary to promote activities aimed at strengthening them in the training courses (initial and *in itinere*) of the teachers.

2. Objectives, Steps and Methods of Research

Considering the fact that the relationship between learning, knowledge and skills, the purpose of basic training, and decision-making processes in educational and didactic planning, allows us to identify research hypotheses that focus attention on the Soft Skills (De Pietro, 2019), it is necessary to explicitly define and delineate which are these Soft Skills and how to measure them so that teachers can become

aware of their possession and implement them during their teaching.

Starting from this premise, our study was divided into two research phases (Isidori et al., 2015):

- a) in the first phase, of theoretical nature, starting from the definition of Soft Skills provided by different researchers, the different types underlying them were identified and classified. Specifically, the existing literature on the Teaching-Soft Skills relationship (see par. 3) was analyzed to develop the items of the questionnaire (tool);
- b) in the second phase, the activities focused on applied research activities, of statistical and descriptive type, aimed at the construction and statistical validation of the questionnaire on the basis of the types of Soft Skills and items identified in the first phase.

3. Soft Skills of the Professional Teacher

In literature, the term Soft Skills (EC, 2011) is used with a multiplicity of denominations that generate ambiguity and, consequently, cause difficulties to determine a clear and univocal definition from which the expression of their peculiarity is evinced.

James Heckman (Note 1) (2012), Bernd Schulz (Note 2) (2008), Elena Dell'Amico (Note 3) (2016), highlight the ongoing changes in education systems, called to develop those useful skills in everyday social and working life. In this regard, our attention has been focused on the classification proposed by Elena Dall'Amico (2016, pp. 11-12), and adapted by us, of 21 Soft Skills, grouped into three macro-areas:

- A: Making your way in the world of work: identifying work goals; learning to learn; adaptability and flexibility; motivation; recognizing the application of rules and values at work; respecting rules and hierarchical levels; managing responsibilities; managing time; managing the digital process
- B. Mastering Social skills: communication skills; managing the communication process; self-control and stress management; working in groups; understanding the needs of others; leadership; managing conflicts; intercultural awareness.

C. Achieve results: making decisions; problem solving; creativity and innovation; critical thinking The taxonomy defined by Elena Dall'Amico, therefore, seems to respond to requests from employers (Note 4) because the skills of the three macro areas "help to weave all the possible interconnections that connect cognitive and emotional spheres, ethics and organizational skills, spirit of initiative and communication skills" (Cinque, 2014, pp. 135-136). This concerns, therefore, the ability of an individual to operate effectively in the workplace and for teachers it is necessary, above all, to be aware of and understand which of these become strategic in their educational action.

As it was observed in the previous paragraphs, the Soft Skills are becoming increasingly important in the workplace and, in particular, in educational and training contexts teachers are called to grow their own Soft Skills and to live the profession in a new way for an effective management of the student-teacher relationship in the didactic interaction.

Analyzing various studies and research carried out on the "Teaching-Soft Skills" connection, 5 softs were

identified as most fundamental for teachers: Communication; Leadership; Team Group; Lifelong Learning; Problem solving.

3.1 Soft Skills Essential for Teachers.

According to what was noted in the previous paragraph, we report below the five soft skills declaration which were considered by us for research purposes.

3.1.1 Communication

Beginners teachers should be fluent and able to communicate effectively in both the mother language and the English language. They should be able to communicate their thoughts clearly and confidently in both written and oral form; be active listeners providing at the same time the necessary response; be able to provide and use technology during the presentation with confidence. Schutz (1958) has developed a system called FIRO (Fundamental Interpersonal Relations Orientations) which identifies three main interpersonal orientations that are reflected in the way of communicating: a) a tendency towards inclusion: the need to be assisted, to attract the attention of others, to be at the center of interest, to collaborate; b) a tendency to control: need for power, to manipulate decision-making processes; c) a tendency to affectivity: need to be close to others, sharing their emotions and affections.

The literature shows that the communicative style of the teacher is a crucial factor in the teaching-learning processes. In particular, style behaviors influence perceptions of teaching effectiveness.

This explains the "affective" learning and mediates the "cognitive" one (Schutz, 1958).

3.1.2 Problem Solving

With this skill, beginning teachers should be able to think critically, creatively, innovatively and analytically including the ability to apply knowledge. The elements that must possess, in this respect, are the ability to identify and analyze complex situations, as well as to make justifiable assessments. They should also have the ability to expand and improve thinking skills, to provide ideas and alternative solutions. The most used tool for detecting the ability to solve problems is the *Problem Solving Inventory* developed by Heppner and Petersen (1982) and subsequently applied to a number of different contexts.

3.1.3 Teamwork

Teamwork skills involve the ability to work and cooperate with people from different social and cultural backgrounds in order to achieve common goals. In order to build a good working relationship with peers, it is essential to be respectful of the attitude, behavior and conviction of others, sometimes assuming the role of leader and sometimes the role of group member. Ohland and his colleagues (2012) have developed a tool, called CATME (*Comprehensive Assessment of Team Member Effectiveness*) to measure *teamwork ability* and have identified the five skills related to teamwork (Ohland et al., 2012):

- 1) Contributing to teamwork: includes different behaviors such as individual contributions that improve the quality of the work; for example helping classmates who have difficulties by delivering homework on time;
- 2) Interacting with colleagues: understanding different behaviors such as active listening to other

colleagues, asking and showing interest in the ideas of other colleagues, providing encouragement and enthusiasm to the team;

- 3) *Keeping the team on track:* monitoring team progress, providing constructive feedback, knowing what each team member is doing and noticing the problem;
- 4) Expect quality in the work: motivate the team to do a great job, firmly believing that the team can do an excellent job;
- 5) Having relevant knowledge and skills: this includes different behaviors in which individuals are expected to show that they are doing excellent work, taking care to acquire new skills for the benefit of the team, being able to play any role in the team if necessary.

3.1.4 Life-Long Learning

In acquiring skills and knowledge, Crick, Broadfoot and Claxton (2004), have developed the *Lifelong Learning Inventory*, highlighting, through this tool, that beginner teachers should be able to do self-regulated learning independently; have the skills to search for pertinent information from various sources and be able to manage it efficiently; moreover, be receptive to new ideas and able to develop an investigative mind.

3.1.5 Leadership

Leadership skills imply the ability of novice teachers to conduct different activities. Beginner teachers should have knowledge of basic leadership theories that will enable them to conduct a project. It is also essential that they are able to understand the role of a leader and a group member and to be able to play these roles interchangeably. Houghton & Neck (2002) developed a self-leadership questionnaire in the school context, called *The revised self-leadership questionnaire*, to which reference should be made for in-depth study.

4. The Detection Tool

From the previous paragraph 3 it is easy to understand that the five soft skills have different characteristics but, above all, are placed on different levels of personality that the professional teacher should have, so that he, says Michele Pellerey (2017), can "[...] solicit, guide and support the activity of reflective, interpretive, conceptualizing and development of appropriate clothes of government" of the learning-teaching process.

Reflecting on the items exhibited by researchers in the previously selected Soft Skills (Crick et al., 2004; Heppner, 1988; Heppner & Petersen, 1982; Houghton & Neck, 2002; Ngang et al., 2015; Ngang et al., 2015; Ohland et al., 2012; Tang, 2018), we have re-proposed for each of them 14 items, 7 of which correspond to "direct questions" (Table 1) and the other seven to "indirect questions" (Table 1), for verifying the coherence of the answer given by the sample.

The number in brackets of each item represents the position that the same item occupies in the questionnaire administered.

Table 1. Items of the Questionnaire on Teachers' Soft Skills (Direct and Indirect Questions)

Communication			
Direct items	Indirect items		
1. I spend a lot of time listening to others (1)	8. At the end of a discussion I do not always wonder if		
	others understood what I said (36)		
2. During a training activity I am pleased that questions are	9Sometimes I have difficulty understanding the		
being asked about the topic I am explaining (6)	intentions of the other (46)		
3. I am willing to accept criticism and discuss about it (11)	10. I use a highly sought-after language with an		
	uncommon terminology (16)		
4. Exchange my ideas with others (21)	11 I avoid showing appreciation with gestures (26)		
5. I compare myself with the different points of view of my	12 I don't waste time discussing problems that slow down		
interlocutors (31)	the activities I set myself (51)		
6. I use a clear and simple language (41)	13. I interact with the others only during the times		
	provided for in my day program (56)		
7. I am willing to help others by going beyond the required	14. I prefer to use verbal language rather than gesture		
commitment (61)	language (66)		
Problem solving			
Direct items	Indirect items		
15. I try to predict what could happen before performing an	22. When I think of how to manage a problem, I resort to		
activity (2)	already known schemes (17)		
16. I try to understand the causes of each problem (7)	23. To solve a problem situation it is necessary to		
	intervene directly on the problem (27)		
17. Carefully compare different solutions to solve problems	24. To solve a problem it is not necessary to go back to the		
	24. To solve a problem it is not necessary to go back to the causes that produced it (37)		
	causes that produced it (37)		
(12)	causes that produced it (37)		
(12)18. I examine the problematic situation trying to get all the	causes that produced it (37) 25. When a problem arises, I implement the first thing that comes to mind to solve it (47)		
(12) 18. I examine the problematic situation trying to get all the important information (22)	causes that produced it (37) 25. When a problem arises, I implement the first thing that comes to mind to solve it (47)		
(12)18. I examine the problematic situation trying to get all the important information (22)	causes that produced it (37) 25. When a problem arises, I implement the first thing that comes to mind to solve it (47) 26. In analyzing a problem I do not dwell much on the details (57)		
(12)18. I examine the problematic situation trying to get all the important information (22)19. I can find new and useful ways to solve a problem (32)20. When I solve a problem, I make decisions that later	causes that produced it (37) 25. When a problem arises, I implement the first thing that comes to mind to solve it (47) 26. In analyzing a problem I do not dwell much on the details (57)		
(12)18. I examine the problematic situation trying to get all the important information (22)19. I can find new and useful ways to solve a problem (32)	causes that produced it (37) 25. When a problem arises, I implement the first thing that comes to mind to solve it (47) 26. In analyzing a problem I do not dwell much on the details (57) 27. Faced with a problem it is necessary to act immediately without thinking long (62)		
 (12) 18. I examine the problematic situation trying to get all the important information (22) 19. I can find new and useful ways to solve a problem (32) 20. When I solve a problem, I make decisions that later prove to be satisfactory (42) 	causes that produced it (37) 25. When a problem arises, I implement the first thing that comes to mind to solve it (47) 26. In analyzing a problem I do not dwell much on the details (57) 27. Faced with a problem it is necessary to act immediately without thinking long (62)		
(12) 18. I examine the problematic situation trying to get all the important information (22) 19. I can find new and useful ways to solve a problem (32) 20. When I solve a problem, I make decisions that later prove to be satisfactory (42) 21. When a problem arises, it must be resolved as quickly as	causes that produced it (37) 25. When a problem arises, I implement the first thing that comes to mind to solve it (47) 26. In analyzing a problem I do not dwell much on the details (57) 27. Faced with a problem it is necessary to act immediately without thinking long (62) 28. I never think about what could happen when I solve a		
18. I examine the problematic situation trying to get all the important information (22) 19. I can find new and useful ways to solve a problem (32) 20. When I solve a problem, I make decisions that later prove to be satisfactory (42) 21. When a problem arises, it must be resolved as quickly as possible (52)	causes that produced it (37) 25. When a problem arises, I implement the first thing that comes to mind to solve it (47) 26. In analyzing a problem I do not dwell much on the details (57) 27. Faced with a problem it is necessary to act immediately without thinking long (62) 28. I never think about what could happen when I solve a		
18. I examine the problematic situation trying to get all the important information (22) 19. I can find new and useful ways to solve a problem (32) 20. When I solve a problem, I make decisions that later prove to be satisfactory (42) 21. When a problem arises, it must be resolved as quickly as possible (52) Teamwork	25. When a problem arises, I implement the first thing that comes to mind to solve it (47) 26. In analyzing a problem I do not dwell much on the details (57) 27. Faced with a problem it is necessary to act immediately without thinking long (62) 28. I never think about what could happen when I solve a problem, I rely on my instincts (67)		

working in a group (8)	demonstrate the validity of my own (28)		
31. In group work I recognize the usefulness of the different	38. I have difficulty managing conflict situations (38)		
perspectives of each individual member (13)			
32. I encourage the establishment of a positive atmosphere	39. I assume a dominant role within my group (48)		
among the members of my work or study group (23)			
33. I appreciate projects that require group work (33)	40. In group work it is not useful to share personal		
	progress with other members (53)		
34. In a group work I express to the other members my	41. In group work I do not consider it essential to		
impressions on the progress of the project (43)	integrate my work with that of others (58)		
35. In a working group I tend to entrust my part to the other	42. Within a group I do not express judgments on the		
colleagues (63)	work of others (68)		
Lifelong learning			
Direct items	Indirect items		
43. It is not necessary to continue to train after having	50. Reflecting on the knowledge already possessed goes		
achieved job stability (4)	to the detriment of the speed of acquisition of new ones		
	(19)		
44. I can improve the way I do things (9)	51. It is more useful to learn quickly rather than pause to		
	reflect on knowledge already possessed (29)		
45. I can establish connections between new things I learn	52. I do not waste time in training and I focus on work		
and things I already know (14)	(39)		
46. I interact with others to solve problems and improve my	53. I focus only on the things that really matter (49)		
knowledge (24)			
47. If I get stuck in a learning activity I think about how and	54. When I encounter an obstacle in my study or work I		
what to do to overcome the difficulty (34)	think I am not up to the task (54)		
48. I question my previous knowledge (44)	55. There are few things of real interest that deserve		
	constant study (59)		
49. My ideas vary according to the new knowledge acquired	56. I am not sure of the correctness of a solution if I did		
(64)	not process it myself (69)		
Leadership			
Direct items	Indirect items		
57. I use imagination to project myself into important tasks	64. I decide the goals of the group (20)		
(5)			
58. I have expectations of success before starting a certain	65. In contrasting situations I propose no definitive		
activity (10)	solution (30)		
59. I tend to overcome the challenges I face (15)	66. In most cases the goals are reached randomly and not		
	in relation to the commitment (40)		

60. I try to foresee the requests of each member of the group	67. It is more important to focus on achieving short-term		
(25)	goals than on long-term goals (50)		
61. When I set goals, I focus on those in the short, medium	68. I feel guilty when I am not doing a good job (55)		
and long term (35)			
62. I use written notes to organize the work phases (45)	69. I will not dwell on the positive aspects of my work		
	(60)		
63. I focus on the pleasant aspects, not the unpleasant ones,	70. When I focus on the goals to be achieved, the things I		
of my activities (65)	like to do escape me (70)		

The instrument consists of 70 items to detect the soft skills defined in the previous step. The questionnaire has been submitted to 5 members of our Research Group (2 internship tutors, 1 research fellow, 1 PhD student, 3 students of the SFP course, 1 speech therapist) in order to report their opinions with regard to the syntactic and semantic clarity of the items and the ease of compilation (instructions, format and time required).

4.1 The Evaluation Scale

In the phase of analysis and definition of the items of the detection tool (see paragraph 4 Table 1), it was also decided to use, for the measurement of the items, the Likert scale, because it is more suitable for the detection of these and to show the extent to which the respondent is found in the statements (items) contained in the questionnaire. Proposing, therefore, to choose in a scale of values from 1 (not at all agreeable) to 5 (completely agreeable) and to assign the other evaluations (2, 3, 4) for all intermediate cases.

5. The Sample of the Pilot Study

In order to test and validate the questionnaire, a pilot study was carried out consisting of a sample of 306 students enrolled in the IV and V year of the Course of Science in Primary Education, University of Calabria (Italy), in the academic year 2019/2020.

54.9% of the sample consists of students enrolled in the fourth year of the course, 41.2% are students enrolled in the fifth year of the course, 2.6% in the third year of the course, while 1.3% concerns students out of course as demonstrated on Figure 1.

95.5% are female students. The nationality is entirely Italian and the average age is 24.89 years with a prevalence of 75.6% of people aged between 21 and 25 years.

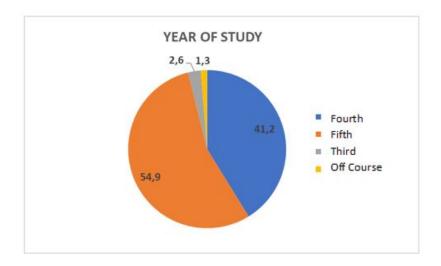


Figure 1. Course Year Interviewed Students

6. Elaboration and Descriptive Statistical Analysis

Considering that the construction of a survey tool such as the questionnaire we proposed, would have involved the complex problem of validation, we started from the awareness that it should satisfy the fundamental principles of empirical research in education: validity, reliability and comparability of results: the objectives of this work.

In proposing to proceed with the validation of the questionnaire through factorial analysis, which is still in the processing stage. The results will be the subject of a forthcoming publication.

6.1 Preliminary Data Screening

Below is the Figure 2 relating to the normal curve represented by the data collected. Taking into consideration the criteria of Curran, West, and Finch (1996) (Asymmetry> |1| = severe not normality; Kurtosis> |3| = moderate non-normality) the value of item 58, as regards asymmetry, can be considered at the limit of a severe non-normality. Although only one item presents these values, the results of descriptive analyzes can be considered reliable.

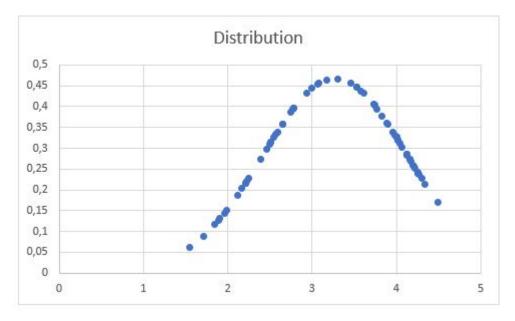


Figure 2. Curve Distribution of the Examined Sample

6.2 Internal Consistency

Regarding the analysis of items and reliability, we explored, through the statistical program SPSS 25, if the five scales that measure the Soft Skills form a set of consistent items.

As can be seen in the Table 2, the scales examined show correct correlations item-total scales ranging from a minimum of .01 to a maximum of .55.

While the values of Cronbach's Alpha are between .55 and .70, showing that the items in the questionnaire present a good degree of reliability.

It should be noted that the Cronbach Alpha values, related to the Teamwork scale, do not reach satisfactory levels (Alpha = 0.40) and, that a further objective of the study in future statistical analyzes, is the improvement of the item exposure as well as the increase of the database.

After this the internal consistency will be reformulated and a greater value can be expected with respect to the Teamwork variable.

Table 2. Reliability and Correlations

Soft Skills	Item number	Reliability	Correct correlations	item-scale
Communication	14	Cronbach's Alpha = .57	Da .01 a .50	
Problem Solving	14	Cronbach's Alpha = .70	Da .02 a .53	
Teamwork	14	Cronbach's Alpha = .40	Da .01 a .55	
Lifelong learning	14	Cronbach's Alpha = .58	Da .01 a .42	
Leadership	14	Cronbach's Alpha = .55	Da .01 a .41	

7. Conclusion

The challenge of teacher training in progress shows that the Soft Skills are necessary to interpret and understand complex situations to design training courses that enhance the personal qualities of the students; it is therefore necessary to make the teachers aware of which Soft Skills are necessary to effectively carry out the teaching profession and how to measure them to realize if they are owned by them and to what extent.

The pilot study carried out on the tool (as described in paragraph 3 below), highlighted that it was valid and responsive to the validity and reliability paradigms. Developments in progress foresee the validation of the questionnaire by means of factorial analysis, still under elaboration, the results of which will be the subject of a forthcoming publication. However, we can consider the preliminary data satisfactory as they represent sufficiently a representative sample of the normal population, so our database results reliable and analysable.

The experimented questionnaire is proposed as a tool to make teachers aware of a reflection on the training needs, which are indispensable for personal and professional growth in relation to their educational action. The emphasis is on the real need for collaboration between the group and the individual. Working, in fact, on the awareness of the teacher, on his place within the group, on his way of communicating and interacting, it becomes natural to focus on possible educational interventions to improve the teaching-learning process, considering the relationship as a fundamental and essential tool. It is however necessary and essential, in the future development of the pilot project, to measure the soft skills for a sample belonging to different geographical areas in order to evaluate the instrument of cross-cultural validity and, therefore, proceed with the calibration.

Acknowledgment

The present paper was conceived, designed, discussed and approved jointly by the authors. Then everyone developed his part according to common indications. Paragraphs 1, 2, 3, 4, 5, 6, 6.1 and 7 by De Pietro; paragraph 3.1, 4.1, 5, 6.1 and 6.2 by Altomari.

References

Bauman, Z. (2011). Modernità liquida. Bari: Laterza

Brewster, C., & Railsback, J. (2001). Supporting Beginning Teachers: How Administrators, Teachers, and Policymakers Can Help New Teachers Succeed. By Request Series.

Cinque, M. (2014). Dalle virtù alle competenze alle soft skills. In C. Ciappei, & M. Cinque (Eds.), *Soft skills per il governo dell'agire. La saggezza e le competenze prassico-pragmatiche.* Milano: Franco Angeli.

Crick, R. D., Broadfoot, P., & Claxton, G. (2004). Developing an effective lifelong learning inventory: The ELLI project. *Assessment in Education: Principles, Policy & Practice*, 11(3), 247-272. https://doi.org/10.1080/0969594042000304582

- Curran, P. J., West, S. G., & Finch, J. F. (1996). The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychological methods*, *I*(1), 16. https://doi.org/10.1037/1082-989X.1.1.16
- Dall'Amico E. (2016). *Quali sono le Soft Skill più richieste dalle imprese?* (Project 2014-1-IT02-KA204-003515, Valorize High Skilled Migrants). Centro Estero per l'Internazionalizzazione Piemonte, Torino.
- De Pietro, O. (2019). Service Learning e Alternanza Scuola Lavoro: Un possibile raccordo per maturare le Soft Skills richieste dal mondo del lavoro. Una indagine esplorativa. *Italian Journal of Educational Research*, 22, 157-177.
- EC. (2009). Quadro europeo delle qualifiche per l'apprendimento permanente (EQF). Istruzione e cultura, Comunità Europea. Retrieved from https://ec.europa.eu/ploteus/sites/eac-eqf/files/broch it.pdf
- EC. (2011). Transferability of Skills across Economic Sectors: Role and Importance for Employment at European Level. European Commission, Luxembourg, Pubblications Office of the European Union.
- Hattie, J. (2003). Teachers Make a Difference, What is the research evidence?.
- Heckman, J. J., & Kautz, T. (2012). Hard Evidence on Soft Skills. *Labour Economics*, 19(4). https://doi.org/10.1016/j.labeco.2012.05.014
- Heppner, P. (1988). The problem solving inventory. Palo Alto, CA: Consulting Psychologists Press.
- Heppner, P. P., & Petersen, C. H. (1982). The development and implications of a personal problem-solving inventory. *Journal of counseling psychology*, 29(1), 66. https://doi.org/10.1037/0022-0167.29.1.66
- Houghton, J. D., & Neck, C. P. (2002). The revised self-leadership questionnaire: Testing a hierarchical factor structure for self-leadership. *Journal of Managerial psychology*, 17(8), 672-691. https://doi.org/10.1108/02683940210450484
- Isidori, E., Migliori, M., Echazzarreta, R. R., & Maulini, C. (2015). Il questionario per la rilevazione dei profili pedagogici degli allenatori: uUn contributo alla ricerca in pedagogia dello sport. *Italian Journal of Educational Research*, *VIII*(14), 142-153. https://doi.org/10.1016/j.sbspro.2015.04.649
- MIUR. (2017). *Indicazioni nazionali e nuovi scenari*. (a cura di) Comitato scientifico nazionale per l'attuazione delle Indicazioni nazionali e il miglioramento continuo dell'insegnamento. Retrieved from
 - http://www.indicazioninazionali.it/wp-content/uploads/2018/08/Indicazioni-nazionali-e-nuovi-scenari.pdf
- Ngang, T. K., Yie, C. S., & Shahid, S. A. M. (2015). Quality teaching: Relationship to soft skills acquisition. *Procedia-Social and Behavioral Sciences*, 191, 1934-1937. https://doi.org/10.1016/j.sbspro.2015.04.204
- Ngang, T. K., Yunus, H. M., & Hashim, N. H. (2015). Soft skills integration in teaching professional 256

- training: Novice teachers' perspectives. Procedia-social and behavioral sciences, 186, 835-840.
- Ohland, M. W., Loughry, M. L., Woehr, D. J., Bullard, L. G., Felder, R. M., Finelli, C. J., & Schmucker, D. G. (2012). The comprehensive assessment of team member effectiveness: Development of a behaviorally anchored rating scale for self-and peer evaluation. *Academy of Management Learning & Education*, 11(4), 609-630. https://doi.org/10.5465/amle.2010.0177
- Pachauri, D., & Yadav, A. (2014). Importance of Soft Skills in Teacher Education Programme. In *IJERT: International Journal of Educational Research and Technology*, 5(1), 22-25.
- Pellerey, M. (2017). *Soft skill e orientamento professionale*. Retrieved from http://www.cnos-fap.it/sites/default/files/pubblicazioni/soft skill.pdf
- Schulz, B. (2008). The Importance of Soft Skills: Education beyond academic knowledge. In *NAWA: Journal of Language and Communication*, (June), 146-154.
- Schutz, W. C. (1958). FIRO: A three-dimensional theory of interpersonal behavior.
- Tang, K. N. (2018). The importance of soft skills acquisition by teachers in higher education institutions. *Kasetsart Journal of Social Sciences*. https://doi.org/10.1016/j.kjss.2018.01.002
- Vannini, I. (2009). La qualità nella didattica. Trento: Erickson.

Notes

- Note 1. Nobel Prize for Economics
- Note 2. Senior Lecturer at the Polytechnic of Namibia where, since 2000, he teaches Information Technology
- Note 3. Centro Estero Internazionalizzazione Piemonte
- Note 4. Adecco Group Report 01/2017. Soft Skill: the new imperative. From behaviour to empathy, an analysis of the true strength of soft skills in a now automated world. Excerpt from https://adeccogroup.it/wp-content/uploads/2017/06/Soft-skill-il-nuovo-imperativo_The-Adecco-Group 2017 whitepaper.pdf (30/07/2018)