

INCLUSION OF UNACCOMPANIED FOREIGN MINORS: THE SUPPORT OF TECHNOLOGY IN THE ACQUISITION OF LANGUAGE SKILLS

L'INCLUSIONE DEI MINORI STRANIERI NON ACCOMPAGNATI: IL SUPPORTO DELLA TECNOLOGIA NELL'ACQUISIZIONE DI COMPETENZE LINGUISTICHE

Giuseppe Filippo Dettori¹

University of Sassari
fdettori@uniss.it

Barbara Letteri

University of Sassari
barbara.letteri68@gmail.com

Abstract

Unaccompanied foreign minors are minors present on the Italian territory who do not have an Italian nor an EU citizenship and are not assisted by adults. The Italian Ministry of Labour and Social Policies report has shown that their number has progressively increased in recent years. The first obstacle they encounter in school and social inclusion is tied to the difficulty in the use of the Italian language. The study intends to detect the neuropsychological dynamics of language learning and the innovative tools that facilitate the process of language learning. Concrete experiences in the use of technologies will be proposed (use of Alternative Augmentative Communication, illustrated and voice synthesised E-books, subtitled videos, language enhancement applications, etc.) and which have proved effective in the acquisition of the Italian language to these young people on our territory.

I minori stranieri non accompagnati sono minori presenti sul territorio italiano che non hanno cittadinanza italiana o comunitaria e non sono assistiti da adulti. Il loro numero è progressivamente aumentato negli ultimi anni, come dimostra il rapporto del Ministero del Lavoro e delle Politiche Sociali italiano. Il primo ostacolo che incontrano nell'inclusione scolastica e sociale è dovuto alla difficoltà nell'uso della lingua italiana. Lo studio intende rilevare le dinamiche neuropsicologiche dell'apprendimento linguistico e gli strumenti innovativi che facilitano il processo di apprendimento della lingua. Verranno proposte esperienze concrete nell'uso delle tecnologie (uso della Comunicazione Aumentativa Alternativa, E-book illustrati e sintetizzati con la voce, video sottotitolati, applicazioni per il potenziamento della lingua, ecc.) che si sono dimostrate efficaci nell'acquisizione della lingua italiana per questi ragazzi nel nostro territorio.

Key-words

Unaccompanied foreign minors, inclusion, BES, Italian L2
Minori stranieri non accompagnati, inclusione, BES, italiano L2

¹ The article is the expression of a synergic sharing by the two Authors. Giuseppe Filippo Dettori is the Author of paragraphs 1 and 3; Barbara Letteri is the Author of paragraphs 2 and 4.

1) Unaccompanied foreign minors: some figures

Unaccompanied Foreign Minors (MSNA) are minors who are present on the Italian territory and who are without an Italian or an EU citizenship. They are neither assisted nor represented by their parents or other adults legally responsible for them in accordance to the laws in force in the Italian legal system. The Italian Ministry of Labour and Social Policies reports that their number has progressively increased in recent years. The report indicates that there are 6,265 unaccompanied foreign minors (MSNA) present on the Italian territory as registered in the database set up pursuant to art. 4 of the Prime Ministerial Decree no. 535/1999.

95% of these minors are male and aged between 6 and 17 years old; the majority are between 15 and 17 years old and distributed as follows: 15 years old (7.4%), 16 years old (25.4%), 17 years old (62.3%). 4.7% are minors between the ages of 7 and 14, while only 0.2% are under 6 years old. The majority of MSNs (data as of 31 March, 2020) are of Albanian, Egyptian and Bangladeshi nationality.

The Italian regions offering hospitality to these minors and who hold the first positions in ranking and register values above 10% of the total are: Sicily (15.8%), Lombardy (14.2%), Friuli-Venezia-Giulia (10.7%), Tuscany (7.7%). The numbers of unaccompanied minors on the national territory, are therefore very variable and range from 833 in Sicily, 52 in Molise, 29 in Sardinia, to 13 in Val d'Aosta. These numbers should be considered both in reference to the population density as well as in reference to the presence of work activity (Lombardy), and to their geographical position (Sicily, which receives migrants arriving by sea), which pushes many minors to join acquaintances in various Italian cities.

According to the recent report by the Garante Nazionale dell'Infanzia (National Guarantor for Children) 61% of the underage guests in the communities present on the Italian territory are of foreign origin. Among the foreign guests in 2017, the majority (about three out of four) are unaccompanied foreign minors (44% in 2017), who are concentrated, in particular, in Sicily (37.32%), Calabria (15.24%), Campania (8.30%), Emilia Romagna (7.50%) and Lazio (5.18%).

On an international level, the United Nations Convention on the Rights of the Child of 1989, in particular art. 20 on the specific protection and assistance by the State for children temporarily or definitively deprived of their family environment, talks about the implementation of "substitute" protection by means of family fostering, placement in a suitable facility for children, taking care to respect their ethnic, religious, cultural and linguistic origin. Article 22 of the same Convention refers to minors who seek refugee status, whether alone or accompanied by parents or another person, and who must benefit from the necessary protection and human assistance.

On the European level, the Council of Europe Resolution 2136 of 2016 urges Member States to ensure the protection of children at various levels, including through national and regional intervention actions and through the cooperation with the countries of origin. In paragraph 5, it is made clear that: "The Assembly recalls that the general principle of respect for the rights of migrant children, first and foremost as minors, implies that they should benefit from specific protection, including social and health care that ensures their physical and psychological integrity and development, as well as sufficient and child-friendly information, education and empowerment. Based on the observation of the situation in the Member States, it is clear that these conditions are far from being systematically offered to unaccompanied migrant minors. The Council of Europe therefore invites Member States to rethink the reception of MSM, providing new forms of support and accompaniment that take into account the fragility and vulnerability due to their young age.

Until the introduction of the Italian Law No. 47 of 7 April 2017 on "Provisions on measures for the protection of unaccompanied foreign minors", known as the Zampa Law, the matter was governed by the provisions contained, mainly, in Articles 32 and 33 of the Consolidated Act on Immigration (Legislative Decree No. 286/1998), as well as in its Implementing Regulations (Presidential Decree No. 394/1999) and Prime Ministerial Decree No. 535 of 1999.

Law 47/2017 (amending several articles of the Consolidated Act on Immigration) regulates interventions aimed at MSNA: i.e., minors who do not have an Italian or an EU citizenship and who are for whatever reason in the territory of the State or who are otherwise subject to Italian jurisdiction, without assistance and representation by their parents or other adults, legally responsible for them

under the laws in force in the Italian legal system. Article 1 reads: "Unaccompanied foreign minors are entitled to the rights concerning the protection of minors on an equal footing with minors of Italian or EU citizenship". They are considered particularly vulnerable subjects (art. 2) and therefore need special attention from the Italian State.

When we direct our attention to the panorama of international scientific literature and more specifically on the topic of MSNA and the form resulting from the processes of migration of people in the 21st century, we are unable to boast a consolidated historiographic tradition because it is still too recent. However, the perspective of the history of Italian emigration between the nineteenth and the twentieth century can offer reasons for further exploration; an evaluation of the paths of juvenile emigration allows, in fact, to reflect on the motivations that push many young people to travel and to meet new cultures and new lands. In the past, the condition of emigration was strictly linked to the economic problems of families (Bevilacqua et al., 2001), while in the current era the motivations are multiple and, increasingly, the migratory flows towards Italy and towards the more industrialized countries of Western Europe reflect the strong imbalance in terms of development, welfare and protection of human rights.

The most recent studies and research tackle the phenomenon of MSNA from a multitude of points of view and disciplinary perspectives (Dettori 2021). When examining the main outcomes, aspects and open problems, some converging nodes emerge, especially in the pedagogical field, to which the literature tries to provide answers. Firstly, the importance of considering the different factors behind the migration choice is underlined, often tied to the intention of MSNs to reach family or friends in the regions where they have settled or to contribute to the subsistence of their family members remaining in the country of origin (Pierce, 2016). As a result, they may find relatives in Italy who already know Italian and can be a first port of call for basic needs. Sometimes, however, this does not happen: minors are hosted by families (uncles and aunts) who do not know the language of our country and the minors find themselves greatly disoriented when they begin attending school. One of the main causes of school failure is precisely due to the fact that although the children attend school, they do not have the opportunity to practice Italian because they only socialize with compatriots who speak the language of their country of origin (Foschino Barbaro, 2021). Children who arrive in the country alone, often entrusted to acquaintances, immediately show great capacity to adapt, to integrate into new contexts, an inclusion that is in reality "apparent" especially if they do not integrate into the socio-cultural context that hosts them. Knowing the language is the element that favours the transition and the passage from the situation of foreigners excluded to foreigners participating in the host community (Leone, Mezzi, 2011).

Other studies address the ways in which MSNs are able to integrate into the hosting countries. Many studies underline the importance of promoting school attendance which guarantees the opportunity of meeting other young people and promotes other ways, besides didactic and also educational and socialization opportunities. A study carried out in Sweden on the basis of interviews involving headmasters in schools hosting refugee pupils, many of whom arrived as unaccompanied minors, highlights the importance of devising specific didactic programs for their integration. The research clarifies, in fact, that when a student does not encounter an inclusive and facilitating scholastic context, he tends to "flee" and accumulate a large number of absences. The school, for MSNs, therefore represents the first step towards a real inclusion, as long as specific didactic methods are used for the active involvement of the pupils (Norberg, Gross, 2019).

2) Neuropsychological dynamics of language learning

Evolution has allowed us to inherit representations of factors important for our survival: space, number, linguistic competence, but there are no evolutionary aspects typical of reading, writing and formal arithmetic. Learning recycles brain systems for new cultural uses.

In Figure, we can see the outcomes of basic literacy in reading-writing, which allows learning the ability to visually discriminate phonemes, morphemes and graphemes in a non-specular form: Exner's area represents the motor plane of handwriting, the temporal plane ensures the auditory representation

of phonemes, Broca's area represents the motor plane of phoneme vocalisation and the Visual Word Form Area (VWFA) allows visual representations of letters. During literacy, the VWFA can receive top-down input with discriminatory information from phonological, gestural (handwriting) and speech production areas and bottom-up input from lower-level visual areas. All of these inputs can help the VWFA discriminate between mirror representations, thereby correctly identifying letters to enable fluent reading (Oliverio, 2001).

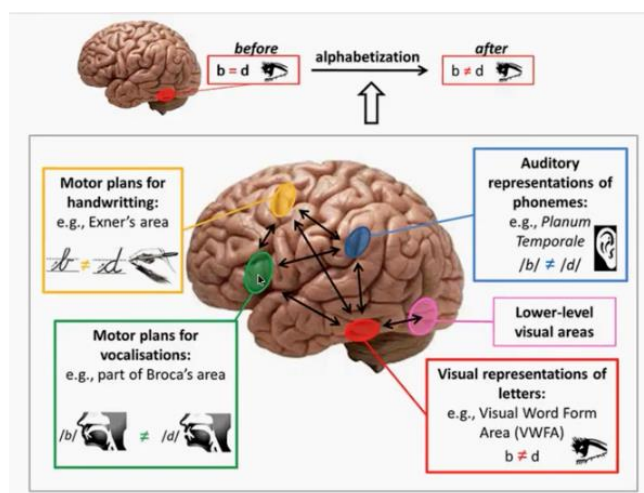


Figure 1: Literacy outcomes

Reading and writing, in fact, are transcoding processes that take place through the stable relationship between a phonological code and an orthographic code and vice versa.

Transcoding:

- It is a universal process, common to all linguistic systems.
- The solutions are different and depend on the specific characteristics of the language systems.
- Strategies and learning times for reading are different depending on the language (e.g., Romanian and Albanian do not have double letters; English, unlike Italian, is an opaque language, grapheme and phoneme do not correspond except in a minority of cases; French writes accents but does not pronounce them).

Italian is a transparent language with 21 letters, 30 phonemes and 27 graphemes (French has 35 phonemes represented by 190 graphemes and English has 40 phonemes represented by 1120 graphemes) so it is easier for Italian children to learn Italian than English for English children precisely because in this second language there is no correspondence between grapheme and phoneme.

The phonological or articulatory loop deals entirely with the processing of phonetic and phonological information in the reading-writing systems. It consists of two sub-components

1. a short-term phonological storehouse, i.e., a rapidly decaying auditory memory.
2. an articulatory repetition system, which avoids the decline of a particular track.

It is assumed that every auditory verbal stimulus automatically enters the phonological storehouse. Verbal stimuli, presented visually, can be encoded through the phonological storehouse.

The phonological loop therefore plays a key role in vocabulary acquisition, particularly in early childhood and also in the learning of a second language (at any age). There are two possible routes for learning to read and write:

- a) the sub lexical or phonological or indirect way: used when the reader has to read words that he has never seen before or that are meaningless (non-words). In this case the reader assembles the verbal structure of the word, piece by piece, through the grapheme-phoneme conversion and the subsequent fusion of the single phonemes, without the need for semantic

mediation. The phonological representation is pre-lexical and does not necessarily depend on the pre-existing phonological lexicon. Access to the lexicon is subsequent to the sequential assembly of phonemes and syllables.

- b) A lexical or direct route: the reader immediately recognises the word from its orthographic structure and semantic context. Phonological representations are therefore activated after the semantic and lexical representation of the word. Thus, the phonological representation is post-lexical. The lexicon, in this case, is involved from the beginning of the reading process (Chini, 2015).

Foreign pupils initially use the sub-lexical route, reading new words without understanding their meaning, and then switch to the lexical route when they recognise the lexical context of the words.

3. Research methodologies, products and results

A research carried out during an academic course of a group of 100 teachers (50 primary and 50 secondary teachers) in continuous training and belonging to a network of schools in the province of Sassari saw the experimentation, during their first cycle of education, of the following innovative tools. The literature demonstrates how these tools have facilitated the language learning process 2:

- Use of Alternative Augmentative Communication with <https://arasaac.org>, <https://www.simcaa.it/showcase/> for the creation of routine strings (figure 2).



Utilizzo dell'applicativo ARASAAC <https://arasaac.org/>

Figure 2: Example of a daily routine string

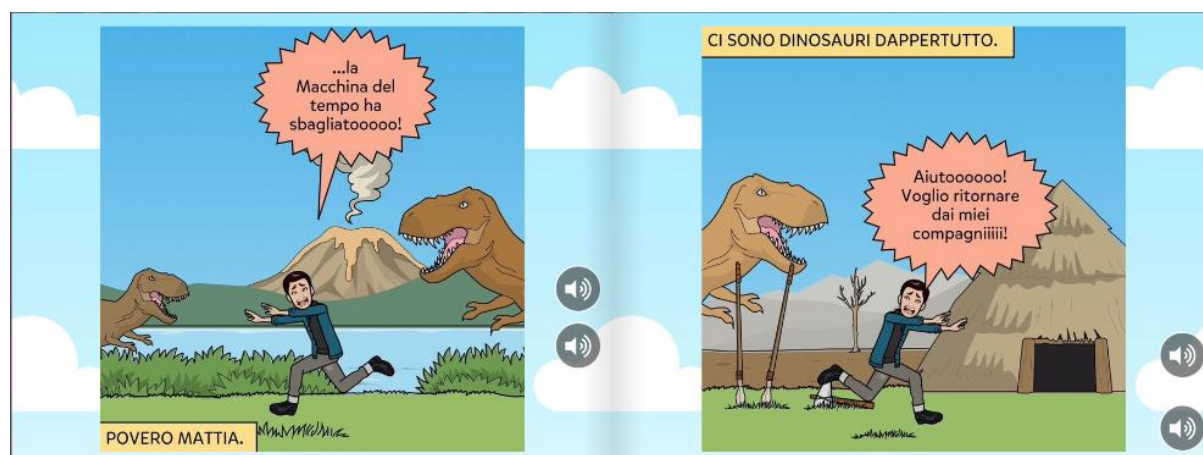
- *E-books illustrated in CAA or with cartoons and synthesised by voice:* the acquisition of Italian, language 2, takes place by matching the picture with simple words and the succession of these. Moreover, the narration is further supported by the voice synthesis of the read text (figure 3).



<https://read.bookcreator.com/9cqV0Ow3KyZY4pbX4IIBakcX9Mb2/iWRjJL4JRiqRqwRvRIkOgw>

Figure 3: Example of e-book with CAA and speech synthesis

In this second case, however, the narration is carried out through explanatory comic strips, created with the Pixton application and supported by voice synthesis (figure 4).



<https://read.bookcreator.com/bBNRbk2qsIWbQfSJgU1rFw1PdG2/I7tN9V5eRR-SdYD5uwILSw>

Figure 4: Example of an e-book with comics and speech synthesis

- *Subtitled videos.*
- *Language enhancement applications, such as <http://www.impariamoitaliano.com> or <https://www.italianoinonda.net/esercizi.shtml>*

At the end of the experience, two focus groups with a sample of 12 teachers per group were organised. They were asked to report their points of view regarding the results of the experiment.

The findings from the focus groups were entirely recorded and then the content was analysed with the support of the Atlas.ti software (Freise, 2019). In order to facilitate the presentation of the results some excerpts of the focus groups considered to be particularly significant will be proposed. These are followed by an identification string that provides some information on the participants, while maintaining their anonymity. The string will indicate the sex (M or F), the school order in which they work as teachers (P - primary, S - lower secondary), the years of service, the focus group in which they took part no. 1 or no. 2 (For example: F-P-6-1: indicates that this is a female teacher, who works in a primary school, has 6 years of service and took part in focus group no. 1).

Participants	Reflections:
[F-S-5-1]	"I was very afraid that my foreign pupils would not respond to my teaching proposals. Experimenting with the use of interactive E-books (with E-book creator), however, has created a lot of motivation in these pupils who have responded with enthusiasm and with a significant improvement in the use of both spoken and written language".
[M-S-10-1]	"During the course I had the opportunity to learn how to use web applications for language teaching (Simcaa, Arasaac, etc.) and for consolidating learning (Wordwall, Learningapps, etc.), which proved to be successful in the experimentation".
[F-S-13-2]	"The training course gave me some really important tools for language support to children who don't know Italian, I found that by using these applications the children were stimulated to learn and succeeded much better than with traditional teaching".
[M-P-16-1]	"I want to dampen my colleagues' enthusiasm about the use of technology. It is true that they are important, but that is not all. I, for example, make a lot of use of working in small groups where children who do not know the Italian language are stimulated to compare notes and I must say that it is very useful. So not only technology, but attention to relationships and dialogue in small groups or in pairs".
[F-P-12-2]	"All of my pupils discovered new ways of learning that were more engaging, creative and inclusive. They experimented together with comic strip creation activities (with Pixton) where they enjoyed writing conversations in different languages. A real cultural and linguistic inclusion."

[M-P-18-2]	"We created beautiful e-books with pictures, cards and interactive games (with Liveworksheets) in which we used speech synthesis to help both foreign pupils and other pupils with BES. A real discovery!"
[F-S-15-1]	"I think that all teachers in service should take qualifying courses in order to improve their professionalism and to implement innovative strategies that significantly improve teaching practice and make it possible to counter the risk of school drop-out of the most difficult pupils".

4. Discussion and conclusions

The discussion in the educational field led to the question of whether it is more useful to set aside "specialised" classes to welcome and support MSNs, who almost always present language difficulties, or to opt for common schools where it is possible to share school life with peers from the welcoming countries. Different views have fuelled a pedagogical debate highlighting that a specialised path is appropriate because language difficulties and basic skills are usually very different from their peers in host countries and this especially in the early stages (Huggins, et al., 2017). Subsequently and in terms of inclusion, it is essential to carry forth a gradual insertion in the common school to give them the opportunity to integrate with local young people and recognise themselves in the community where they reside. The Guidelines for the right of study of minors outside their family of origin, signed by the Minister and the National Guarantor of Childhood and Adolescence at the end of 2017, ask schools for operational flexibility: "In order to guarantee the right of study for this type of pupil, it is necessary to allow enrolment and inclusion in school at any time of the year, even after the deadline and by submitting the application directly to the chosen school, without having to use the online enrolment platform".

A clear invitation to the school, in order to meet the needs of the MSNA, is present in the above-mentioned Law 47/2017, which establishes, in Article 14, paragraph 3, the preparation of specific educational projects. Attending training courses is definitely desirable to "truly welcome" MSNAs by engaging them in motivating activities aimed not only at acquiring the language of the host country, but also specific social skills, as also highlighted by the OECD (2016). Some studies have clarified that after an initial moment of specialist support, also through the involvement of cultural mediators and migrant associations that are set up in the various centres, young people find in school and in vocational courses the right way to integrate socially, thanks above all to the cooperative relationship that is created with peers.

Other lines of research focus attention on the psychological, identity and educational processes that characterise the experience of migration, especially in children, and on the risk of vulnerability due to the loss of a sense of belonging, the difficulty of decoding (not only in linguistic terms) a world very different from their own, which can cause disorientation and loneliness (Rania et al., 2014). Other lines of research focus attention on the psychological, identity and educational processes that characterise the experience of migration, especially in children, and on the risk of vulnerability due to the loss of a sense of belonging, the difficulty of decoding (not only in linguistic terms) a world very different from one's own, which can cause disorientation and loneliness (Rania et al., 2014).

Promoting early language learning is essential to provide concrete support to refugees and migrants, as required by the New York Declaration, adopted by the United Nations General Assembly on 19 September 2016. Studies remind us that the acquisition of the language of the host country is facilitated by the immediate inclusion in school of children and young people who learn by imitation, by discovery, through immersion in the culture of the host country (Polo, Pietrobon, 2022).

The experience carried out in the experimentation phase in schools with unaccompanied foreign pupils has shown that the use of web applications and software has significantly improved the approach to Italian language literacy and the related linguistic mediation, functional to the learning of the basic structures of reading and writing. This has also led to better inclusion of minors in the first cycle of education (primary and secondary school) and to a greater relational capacity and respect for the different cultures and traditions of the country of origin and the host country, in addition to increasing motivation to learn.

The research has also highlighted the importance of continuous training of teaching staff in the use of learning technologies, as they have proved to be motivating facilitators, which have enabled the mobilisation of learning and the strengthening and/or recovery of basic reading and writing skills for those minors who present, for different reasons, socio-cultural difficulties and who therefore manifest Special Educational Needs (BES).

As gathered, there is a need for continuous training together with the knowledge of technological applications which promote a more interactive teaching method involving students who do not know the language. This should be carried out in small groups and through cooperative learning. A more involving school, therefore, which provides confidence to the student, guides and accompanies him in the discovery of knowledge (not only linguistic) in a stimulating and creative way.

References

- Balboni P. E. (2014). *Didattica dell'italiano come lingua seconda e straniera*. Torino: Bonacci.
- Bevilacqua, P., Clementi A.D., Franzina E. (2001). *Storia dell'emigrazione italiana*. Roma: Donzelli Editore.
- Biagioli, R. (2018). *Traiettorie migranti. Minori stranieri non accompagnati. Racconti e storie di vita*. Pisa: Edizione ETS.
- Borri, A., Minuz, F., Rocca, L., Sola C. (2014). *Italiano L2 in contesti migratori. Sillabo e descrittori dall'alfabetizzazione all'A1*. Torino: Loescher.
- Canevaro, A., Malaguti, E. (2014). Inclusione ed educazione: sfide contemporanee nel dibattito attorno alla pedagogia speciale. *Italian Journal of Special Education for Inclusion*, 2, 102.
- Chini, M. (2015). *Il parlato in italiano L2: aspetti pragmatici e prosodici*. Milano: Franco Angeli.
- Cottini, L. (2017). *Didattica speciale e inclusione scolastica*. Roma: Carocci.
- Dettori, F. (2021). *Giustizia minorile e integrazione sociale*. Milano: Franco Angeli.
- Foschino Barbaro, M.G. (2021). *Minori stranieri non accompagnati tra vulnerabilità e resilienza. Percorsi di accoglienza, presa in carico, tutela e cura*. Milano: Franco Angeli.
- Friese S., (2019). *Qualitative Data Analysis with ATLAS.ti*. London: SAGE Publications.
- Huggins, K.S., Klar, H.W., Hammonds, H.L., Buskey, F.C. (2017). Developing leadership capacity in others: An examination of high school principals' personal capacities for fostering leadership. *International Journal of Education Policy & Leadership*, 12 (1), pp. 1-5.
- Leone P., Mezzi T. (2011). *Didattica della comunicazione orale. Lingue seconde e italiano a scuola e all'università*. Milano: Franco Angeli.
- Maffia, M., De Meo, A. (2017). Tecnologie per l'analisi del parlato e alfabetizzazione in italiano L2. Il caso di immigrati senegalesi adulti. *Italian Journal of Educational Technology*, 25(1) pp.83-93.
- Minuz, F. (2014). La didattica dell'italiano in contesti migratori; *Gentes*, 1(1), pp. 107-112. <https://www.unistrapg.it/sites/default/files/docs/university-press/gentes/gentes-2014-1-107.pdf>
- Norberg, K., Gross G.S. (2019). Turbulent Ports in a Storm: The Impact of Newly Arrived Students upon Schools in Sweden. *Values and Ethics in Educational Administration*, 14 (1), pp. 1-7.
- OCSE, *Studenti immigrati a scuola. Promuovere il cammino verso l'integrazione*, Pubblicazione dell'OCSE, 2016. <http://dx.doi.org/10.1787/9789264249509-en>
- Oliverio, A. (2001). *L'arte di imparare*, Segrate (Mi): Rizzoli.
- Pierce S. (2016). Meeting the Needs of Unaccompanied Child Refugees, in *America Educator*, 4 (2), pp. 41-44.
- Rania N., Migliorini, L., Sclavo, E., Cardinali, P., Lotti, A. (2014). Unaccompanied migrant adolescents in the italian context: tailored educational interventions and acculturation stress. *Child & Youth Services*, 35 (4), pp. 292-315.
- Striano, M., Capobianco, R., Cesarano, V.P. (2017). La didattica inclusiva per una scuola di tutti e per tutti. Dal riconoscimento dei Bisogni Educativi Speciali alla personalizzazione degli apprendimenti. *Rivista Formazione Lavoro Persona*, 8, 30.