WHATSAPP GROUPS AMONG (FUTURE) SUPPORT TEACHERS: REFLECTION ON SHARED PROFESSIONAL DEVELOPMENT

I GRUPPI WHATSAPP TRA (FUTURI) INSEGNANTI DI SOSTEGNO: RIFLESSIONI SULLA COSTRUZIONE CONDIVISA DI PROFESSIONALITÀ

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ABSTRACT

The relationship between teacher training and education quality, particularly under Law 107/2015, has sparked debate. While formal training is crucial, it often lacks teaching methods. Informal training within schools is gaining recognition, tapping into teachers experiential knowledge. Communities of practice and informal exchanges among teachers are vital for sharing this knowledge. This necessitates reflection on school restructuring, emphasizing teach'rs'roles as knoledge mediators. Utilizing netnography methodology, this contribution proposes investigating chats to enrich professional development by sharing knowledge, emotions, and experiences.

La relazione tra la formazione degli insegnanti e la qualità dell'istruzione, in particolare dopo la legge 107/2015, ha suscitato un ampio dibattito. Sebbene la formazione formale sia cruciale, la formazione informale all'interno delle scuole sta guadagnando sempre di più un posto di riguardo, attingendo alla conoscenza esperienziale degli insegnanti. Le comunità di pratica e gli scambi informali tra insegnanti sono vitali per condividere questa conoscenza. Questo richiede una riflessione sulla ristrutturazione della scuola, enfatizzando il ruolo degli insegnanti come mediatori della conoscenza. Utilizzando la metodologia della netnography, questo contributo si propone di indagare le chat informali per arricchire lo sviluppo professionale condividendo conoscenze, emozioni ed esperienze.

KEYWORDS

Informal training; support teachers; netnography; communities of practice online.

Formazione informale; Insegnanti di sostegno; netnografia; comunità di pratica online.

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Introduction

In the current organisational context, there has been a shift from a "cartesian" conception of learning, centred on the idea of "I think, therefore I am" and characterised by a transmissive approach, to a more social vision, according to which "we participate, therefore we are". In this perspective, understanding knowledge is seen as a socially constructed process (Biasin, 2016). It is therefore crucial for individuals to learn from themselves and to develop metacognitive skills. Although organisations cannot always devote specific time to alternative forms of learning, it is possible to encourage the adoption of means such as peer learning and communities of practice. This allows a shift from a passive attitude of 'learning about' to an active attitude of "learning to be".

In the area of designing new training pathways, this means taking up the challenge of informal and non-formal learning, based on a new understanding of the learning needs of the actors involved in the processes of knowledge transfer and innovation (Valenzano, 2017). Training should focus less on observable performance and more on human motivations for professional growth, taking into account the complex network of relationships and interactions in which individuals are immersed, with the ultimate goal of self-realisation. In this perspective, the role of training is to support connections and communication, to encourage self-learning and to provide flexible support materials that learners can help to define and develop. This involves shifting from a knowledge transmission-based approach to a learning-centred approach, fostering support systems for individual and organisational change, and promoting the integration of intentional training and tacit learning (Salatin, 2012).

The implicitness of teaching practices is configured, within this interpretive framework, as the primary material of an epistemology of teaching thought that awaits the emancipation of full scientific redemption, but also as the objective of didactic research that aims to articulate teaching. And the clarification of this epistemology of the practical - which is constructed in situ, in the interweaving of classroom (and out-of-classroom) social activities, and which is the result of belonging to a context and not the product of a culturally predetermined standard acquired outside that context - can no longer be ignored today (Perla, Vinci, 2021, p.4).

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¹ Traduzione libera dell'autrice. Riportiamo la versione originale della citazione in italiano: "L'implicito delle pratiche insegnanti si configura, entro questa cornice interpretativa, come il materiale primo di un'epistemologia

1.1 Reflection as a practice of professional self-development

The concept of reflection is central to many theories of learning, particularly those concerned with adult learning (Schön, 2006). Reflection is seen both as a sign of responsible adult maturity and as a primary goal of contemporary adult education. It indicates that adults have achieved full cognitive development, enabling them to activate sophisticated mental processes to understand and conceptualise experience. It also implies a full awareness of self and the external world, including emotional, affective, relational and physical aspects. The theme of reflection applied to practical and formative development has attracted much interest from writers, especially towards the end of the last century. Mezirow (2003), for example, placed reflection at the centre of his theory of "transformative learning", seeing it as a critical tool for understanding the content and premises that guide adult behaviour and thought. Reflection is commonly understood as careful reasoning, the result of deep deliberation that implicitly includes judgments about the outcomes and methods of knowledge acquisition. This process is not a mere repetition of previous thinking, but a consideration that adds intensity and novelty to previous conceptions. Reflection involves a temporal interval that allows for a qualitatively and conceptually enriched return. Through this process, thought is reapplied to the subject matter, producing novel and reflectively mediated outcomes.

The reflections of the author and his students acknowledge that becoming reflective is the result of a process that goes beyond mere cognitive aspects. It involves a personal development dynamic that requires time, constant practice and a supportive learning environment (Mortari, 2004). Although Transformative Learning and much of adult education emphasise reflection, there are doubts about its validity as a pillar of methodological logic. Reflection itself does not guarantee to learn and cannot be automatically equated with it. In addition, adult learning can also take place in the absence of an explicit reflective process, starting directly from the experiential content. Reflection risks becoming an egocentric monologue. It can also be trivialised to legitimise certain transformative outcomes. It is important to recognise that not all adults are automatically able to engage critically with their own transformative and reflective learning process. The role of the trainer in

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del pensiero insegnante che attende l'emancipazione del pieno riscatto scientifico ma, anche, come l'obiettivo di una ricerca didattica che abbia l'ambizione di dire l'insegnamento. E dalla chiarificazione di questa epistemologia del pratico-che si costruisce in situazione, negli intrecci delle attività sociali d'aula (e fuori dall'aula) e che è il risultato dell'appartenenza a un contesto e non il prodotto di uno standard prefissato culturalmente e acquisito fuori da quel contesto-oggi non è più possibile prescindere" (Perla, Vinci, 2021, p.4).

guiding critical reflection is not neutral but seeks to create the best conditions for the learner's well-being. However, this approach has its limitations, as Mezirow points out. He acknowledges that transformation cannot be induced by the educator, but must come from the individual's conscious and critically reflective efforts. Newman's critique (2014) also raises the issue of reflection being tainted by subjective interpretation of the framework of meaning. It is in danger of becoming a kind of solipsistic and self-referential experience.

1.2 Online communities of practice as communities of thought

Communities of practice are based on the idea that learning is a social and experiential process (Trentin, 2014). Participants negotiate new meanings in an environment characterised by strong interaction. The domain, the community and the practices are the three fundamental elements identified by Wenger. A community of practice is not just an informal group or network of contacts but has a shared identity around a particular area of interest. Members engage in joint activities, discussions and mutual support (Addeo, Paoli, Esposito & Bolcato, 2020). They share information and build relationships that foster mutual learning. These communities are not only united by common interests. They also share specific practices and a repertoire of resources such as experiences, stories and tools for tackling problems. The full development of this process is a matter of time and ongoing interaction.

Within Communities of Practice, teachers capitalise on their tacit knowledge two key processes: narrating and reflecting (Mortari, Narration plays a fundamental role in enabling them to organise and make sense of their educational experiences, thereby contributing to the construction of shared meanings within the group. In addition, by helping to shape the teacher's selfperception and role within the community, narrative plays an important role in shaping the teacher's professional identity. To develop effective educational practice, however, narrative alone is not enough. Critical reflection is also necessary. It allows teachers to step back from their perspective and critically examine their actions, decisions and pedagogical assumptions. Through reflection, teachers can explore the theories and models that guide their practice, identify and analyse their beliefs about educational issues, examine work routines and deal with unexpected situations that arise in the teaching context (Alessandrini, 2010). Professional conversations within reflective communities of practice are essential to the process of knowledge sharing and co-construction. These dialogues allow teachers to engage with the experiences, ideas and practices of other group members, thereby opening up new perspectives and critically examine their actions, decisions and pedagogical assumptions. Through reflection, teachers can explore the theories and models that guide their practice, identify and analyse their beliefs about educational issues, examine work routines and deal with unexpected situations that arise in the teaching context. Professional conversations within reflective communities of practice are essential to the process of knowledge sharing and co-construction. These dialogues allow teachers to engage with the experiences, ideas and practices of other group members, thereby opening up new perspectives and pedagogical approaches. Schools should recognise the existence and importance of communities of practice within the organisation to realise their full potential. It is essential to provide communities of practice with the necessary resources for their development, including funding and infrastructure support, and to create an environment that fosters socialisation and collaboration. Furthermore, using digital tools can facilitate the process of sharing and collaborative learning within reflective Communities of Practice.

Online communities of practice play an important role in enabling teachers to learn voluntarily, reflect on their practice with other educators, and provide each other with emotional support (Macia & Garcia, 2016). Blogs, web platforms (such as Classroom) and instant messaging software play an important role in helping teachers rework and adapt information to make it more functional (Cranefield & Yoong, 2009). In addition, the use of mobile devices for learning has been increasingly discussed in recent years, along with the various opportunities offered by technology (Macia & Garcia, 2016). However, there is a lack of adequate literature examining how teachers behave when participating in online Communities of Practice. Macia and Garcia (2016) analysed the impact of online communities of practice on teachers' professional development. However, their study focused mainly on the university setting. Therefore, it is important to explore different aspects of how teachers behave in online learning communities. To this end, the focus of this study was on the use of WhatsApp as an online community of practice by teachers (or future teachers) for their professional development.

In parallel with the concept of communities of practice, the development of the Internet has led to the analysis of "online communities of practice" (Pimmer et al., 2018). In the context of explaining the learning of teachers, both online and offline networks are considered to be communities of practice (Wesely, 2013). Therefore, in the context of communities of practice, the sharing among teachers on WhatsApp, the subject of this study, was investigated. It has been observed that

teachers make extensive use of online learning applications for their professional development (Macia & Garcia, 2016).

2. Methodology

A netnographic research design was used for this study (Kozinets, Gretzel, 2023). In the netnographic method, interaction is distinguished from face-to-face communication, and we already have written documents that allow for participatory observation (Costello, McDermott & Wallace, 2017). With the change in communication technologies, researchers can conduct research in virtual environments (Bryman, 2012). This removes the constraints of time and space (Morais, Santos, & Al-Masri, 2020). In this context, netnography offers the chance to study information and documents in the environments in which information is conveyed. In other words, virtual ethnography is being conducted. Therefore, this study was also conducted using the netnography method (Addeo, Paoli, Esposito & Bolcato, 2020). In this study, messages shared by special education teachers (or future teachers) on WhatsApp, a mobile chat application, were considered. WhatsApp messages for 12 months: from April 2023 to April 2024, were included in the data for the study. WhatsApp is a mobile application programme. WhatsApp Messenger is a cross-platform messaging system for smartphones that uses existing internet data plans to connect users' learning communities. Users interacting online are visible at all times. They can have synchronous and asynchronous conversations within their social networks. Users can send photos, voice recordings and videos. From a technical viewpoint, this programme can be considered as a social network, where people have quick access to a variety of information. WhatsApp allows users to connect with anyone who has a smartphone, an active internet connection and has downloaded the application. In addition, users can create groups, and add and remove people. Participants have equal rights in this programme (Bouhnik & Deshen, 2014).

3.Results

The data collection was based on a WhatsApp chat created by students of the "Specialization course for educational support activities for students with disabilities" of the VIII cycle from different universities. The group includes former students from previous cycles (in particular VI and VII) as moderators. Before starting the analysis of the chat interventions, the participants were informed about the research. They were asked to answer a short questionnaire to

provide contextual information. The majority of members responded (98%). There are 174 participants in the chat. The majority of participants identify as female (86%), while the remaining 14% identify as male. The percentage of participants aged 40-49 is 38%, 33% are aged 30-39, 20% are aged 50-59, only 7% are aged 21-29 and the rest are aged 60 and above. Most participants have a Master's degree (68%), 30% have a postgraduate degree and only 2% have a high school diploma. Seventy per cent of chat participants teach (or are enrolled to become certified) in primary school, 4% in kindergarten, 18% in lower secondary and only 8% in upper secondary. Forty-eight per cent have been teaching for at least 4 years, 27% for 0 to 3 years, 14% are not yet teaching, 6% for 11 to 20 years, and 5% have been teaching for more than 20 years.

Once the profile of the individuals participating in the chat had been reconstructed, the next step was to determine how many members were actually active (at least one intervention within a two-week period). On average, over a two-week period, at least 70% of the members were active in the group chat (excluding emoticons or stickers). This study only considered written interventions in the WhatsApp chat. These were analysed using content analysis and served as the primary data source.

4. Discussion

Content analysis was used in this study to analyse the WhatsApp correspondences that served as the data source. Content analysis can be seen as an attempt to condense qualitative data in order to identify and make sense of consistent aspects within the large amount of data obtained, according to Patton (2002). Initially, open coding was used, which resulted in the identification of fifteen codes. In this context, the messages were read one by one and coded.

The codes were then reviewed, leading to the creation of subcategories and a reduction in the total number of codes (four main categories and six subcategories). These codes were organised into overarching themes in the next step. These themes were then subjected to final refinement and interpretation. Comparison with the literature validated the emerging themes.

The main categories identified are:

- a) Discussions on field-specific knowledge (to special education, school legislation with particular reference to the theme of inclusion);
- b) Discussing school practice (sharing activities, suggesting approaches and methods);
- c) Emotional support (motivational phrases to congratulate efforts and achievements, phrases to build mutual trust);

d) non-relevant messages (e.g. sale of materials such as books, notes from different courses attended, personal photos).

Categories	Sub-categories	Occurrence	Percentages (of total)
Domain-specific	Comparison and reflection	23	6,2%
knowledge discussions	on theoretical issues		
	Regulatory comparisons and considerations	27	7,3%
	Specific training guidance and suggestions	52	14,1%
	Information on access to the teaching profession.	38	10,3%
Discussions related to	Comparison of experiences	33	9%
school practices.	and educational		
	interventions in schools		
	Suggestions for classroom activities/materials	116	31,9%
	Suggestions/sharing of inclusive extracurricular activities/projects in the area aimed at students.	41	11,1%
	Request to complete questionnaires.	8	2,2%
Emotional support	Words of encouragement	20	5,5%
Non-relevant messages	Sale of materials	6	1,7%
	Personal messages or photos	3	0,8%
Total		367	100%

Table 1. Summary of macro-categories, sub-categories, occurrences and percentage of total occurrences for April 2023/April 2024 (12 months).

4.1 Domain-specific knowledge discussions

Discussions about specific subject knowledge is the first category of analysis identified. By this category we mean the specific knowledge of specialised teachers, such as specific pedagogy or regulations that focus specifically on inclusion issues. The two themes are particularly intertwined when considering the recent reforms related to the PEI and its design from an ICF perspective (172/2020). This is not only a legislative issue. The theory guiding the design of the PEI also has a clear interpretive horizon from which it cannot be separated (the ICF perspective). The analysis attempted to differentiate between those which were theoretical in nature and those which sought to address specifically normative issues. The two subcategories identified were "Comparing and reflecting on theoretical issues" and "Comparing and reflecting on normative issues". Within this macro-category, four sub-categories were identified. We will analyse these using examples. An example

of the first category and the debate generated by recent questions about the concept of inclusion follows.

4.1.1 Comparison and reflection on theoretical issues

M1: I'd like to say what I think about what's been said recently about special classes. Premise: I am for inclusion and I am doing the TFA; I have been trained and I am still being trained. I am doing a placement and I am working and in the contexts where I live I am experiencing everything but inclusion. The reflection that comes to me is this: why are we all scandalised by accepting the proposal of differentiated classes? To be honest, I might accept it better than the pseudo-inclusive teachers who cover up exclusive practices by passing them off as something else [...].

M2: It's true that inclusion is often a word that is spoken but not practised. Unfortunately, compulsory schooling remains one of the few, if not the only opportunity for some children to be with their peers. Unfortunately, nothing is left to relate to them afterwards. So what little we have gained... I would keep it. Then the fact that it is a flawed system is well known... especially to us support teachers [...].

M3: But I remember the words of a neuropsychiatrist during a course: "Inclusion is not about keeping the child in the classroom at all costs, it's about giving them the same opportunities... to learn, to grow and to have fun".

M4: We support teachers have to fight for inclusion for the whole class, not just the student we are following, with the tools we have... Everyone is responsible for their own actions... It takes courage and intelligence to change the school system... on a daily basis... the tools are there... it is up to us to put them into practice...

M5: Everyone does what they can. The ICF model often talks about barriers and facilitators. When the barriers are your own colleagues, it's difficult.

This discussion among teachers provides an interesting insight into the challenges and reflections related to inclusion in schools. From frustration at the lack of real inclusion to the importance of providing equal opportunities for all pupils, different perspectives emerge. There is a common desire to work towards a more inclusive school, but also an awareness of the difficulties and limitations of the current system. The extent to which the discussion actually clarifies each other's positions cannot be understood from this brief extract. At one point, M1's sense of misunderstanding leads to an attempt at a reformulation of her thoughts. However, it is not clear whether the rephrasing of the thought stems from feeling attacked or from a genuine desire to clarify her thought. Nevertheless, this confirms what Mezirow (2003) mentioned earlier in the introduction: the subsequent interventions become monologues that do not take into account the theoretical level from the experiential one. In fact, the subsequent interventions reiterate what one would expect theoretically, but do not take into account the reality. Instead, M5's intervention reiterates this. However, we can consider the effectiveness of this context in bringing out the implicit. This is thanks to the contributions of the chat participants, who ask M1 to elaborate on the thought expressed. This requires M1 to make an effort to articulate her own thinking, which also allows her to reconsider her own thoughts and beliefs. It is interesting to see how the importance of inclusion issues is reiterated, not only for the support teacher, but for all the teachers.

4.1.2 Regulatory comparisons and considerations

M104: Good morning, I have a question, this year do the C and C1 models have to be filled in at the same time as the PEI verification section?????

M105: It's very confusing and as usual the blame is put on the school and in particular on the supporting teachers. It is not possible to complete them without the functional profile, based on non-existent or outdated functional diagnoses, and without the presence of child neuropsychiatry experts in the operational working groups. But what a farce it would be to fill them in? Another bureaucratic formality.

M106: We were told yes...

M107: We have to fill them in.

M108: No, they shouldn't be filled in.

This exchange focuses on a regulatory issue related to the completion of the C and C1 tables linked to the creation of the new PEI (2020). In addition to the clarification, M105 does not hesitate to express his disappointment. He reiterates the complex role of the support teacher. He also highlights another interesting aspect: the need for the Support Teacher to work in a team to compensate for skills that cannot be attributed to a teacher (neuropsychiatry is referred to). This does not help to clarify what happened.

4.1.3 Specific training guidance and suggestions

M61: I'm sharing this webinar training with you. I found it interesting. Let me know what you think.

The following video presents the webinar and introduces the topic: Universal Design for Learning (UDL) addresses three major challenges facing society and schools: disability, inclusive education and technology, and promotes a concrete proposal based on the guidelines (version 2.0) developed by the Center for Applied Special Technology (CAST).

Around 14% of all interventions fall into the category of "specific training proposals". It is the second most represented sub-category. The need for formal teacher training is still very strong. However, the majority of proposals are for webinars, as can be seen from the interviews. Teachers therefore see training as the delivery of content in a frontal mode. The most suggested topics range from the characteristics of ASD, AAC, SLD to the creation of PEIs. If we read these data

together with the subcategory related to sharing materials for teaching or, in general, interventions in the classroom, we see that these are the most represented categories. We can imagine that there is a focus on the need to share ideas and tools for teaching. It could be interesting to study how the information gained from the viewing of a webinar (another category of informal training which has been little studied) can be used and how the tools are then integrated with the knowledge acquired.

4.1.4 Information on access to the teaching profession

M56: Good morning. I'm working on my TFA specialisation paper... I need texts on concept maps for autism for secondary school. Can anyone help me? Thank you very much.

M92: I'm going to share this information that I received from Scuola Informa: "Support, recruitment on 100,000 vacancies from first band GPS: step to ensure educational continuity" (followed by a link).

M163: Hi, does anyone have any information about the final test of the trial year?

M164: Have a look if there is anything here [followed by a link with information].

In some months there is a particular increase in requests for information about access to the teaching profession: for example, GPS rankings, TFA, teacher competitions. Individuals feel the need to form communities to support each other, gather information and share knowledge as a result of the changes in access to teaching.

Conclusions

During the study, messages exchanged by students participating in the "Specialization Course for Educational Support Activities for Students with Disabilities" were collected using WhatsApp, a mobile chat application. These interactions were categorised into four main themes: discussions about specific subject knowledge, discussions about school practices, emotional support and irrelevant messages. (Prospective) teachers discuss and share resources to enrich the classroom, suggest methods to engage students, and share teaching experiences. They also support each other with messages of appreciation and encouragement. By creating a culture of trust and support, this collaboration contributes to the professional development of future students.

The transformative dynamic begins with a confusing dilemma and progresses through nine stages, including moments of self-analysis, self-evaluation, comparison with others, exploration of new possibilities, building trust, developing new skills, and attempts to integrate different perspectives (Biasin, 2016). According to Mezirow (2003), what emerges from reflection on assumptions, beyond mere content review and metacognitive processes, constitutes learning itself. Online communities of practice certainly respond to some of the stages identified by Mezirow, as can be seen in the examples given, but we cannot know whether new skills or truly new awareness are being developed. Online communities of practice, by removing spatial and temporal references, do not allow us to understand how much is then experienced in teaching practices or what changes are made in relation to the ideas expressed and discussed. Thus, the immediate feedback we can get through a WhatsApp chat is positive. However, it is not possible to really delve into the communicative intentions of our interlocutors.

References

Addeo F., Paoli A.D., Esposito M., & Bolcato M.Y. (2020). Doing social research on online communities: The benefits of netnografy. *Athens Journal of Social Sciences*, 7 (1), pp. 9-38.

Alessandrini G. (2010). Il modello della comunità di pratica: uno schema di lavoro per la cooperazione tra docenti. In G. Alessandrini & M. Buccolo (a cura di), Comunità di pratica e pedagogia di lavoro: un cantiere per un lavoro a misura umana. Lecce: Pensa MultiMedia, pp. 219-227.

Biasin C. (2016). Adultità, riflessione critica e apprendimento trasformativo. *Metisnumero speciale EDA nella contemporaneità*, pp. 140-152.

Bryman A. (2012). Social research methods (4° ed.). Oxford: Oxford University Press.

Costello L., McDermott M.L., & Wallace R. (2017). Netnography: Range of practices, misperceptions, and missed opportunities. *International Journal of Qualitative Methods*, 16, pp. 1-12.

Cranefield J., & Yoong P. (2009). Crossings: Embedding personal professional knowledge in a complex online community environment. *Online Information Review*, 33(2), pp. 257-275.

Kozinets R. V. & Gretzel U. (2023). Netnography evolved: New contexts, scope, procedures and sensibilities. *Annals of Tourism Research*, 104, pp. 1-13.

Macià M., & García I. (2016). Informal online communities and networks as a source of teacher professional development: A review. *Teaching and teacher education*, *55*, pp. 291-307.

Mezirow J. (2003). Apprendimento e trasformazione. Milano: Raffaello Cortina.

Morais G.M., Santos V.F., & Al-Masri N. (2020). Netnografy: Origins, Foundations, Evolution and axiological and methodological developments and trends. *The Qualitative Report*, 25(2), pp. 441-455.

Mortari, L. (2004). *Apprendere dall'esperienza. Il pensare riflessivo della formazione*. Roma: Carocci.

Newman M. (2014). Transformative Learning: Mutinous Thoughts Revisited. *Adult Education Quarterly*, 64, pp. 1-11.

Patton M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage.

Perla L. & Vinci V. (2021). La formazione dell'insegnante attraverso la ricerca. Un modello interpretativo a partire dalla didattica dell'implicito. *Annali online della Didattica e della Formazione Docente*, 13(21), pp. 38-67.

Pimmer C. et al. (2018). Facilitating professional mobile learning communities with instant messaging. *Computers and Education*, 128, pp. 102-112.

Ranieri M., & Manca S. (2013). Reti professionali di insegnanti su Facebook: studio di un caso. Form@ re-Open Journal per la formazione in rete, 13(1), pp. 44-54.

Salatin A. (2012). Formare gli insegnanti tra formale ed informale. *Formazione & insegnamento*, 10(1), pp. 95-104.

Schön D. (2006). Formare il professionista riflessivo. Per una nuova prospettiva della formazione e dell'apprendimento nelle professioni. Milano: FrancoAngeli.

Striano M. (2008). Formazione degli insegnanti e dispositivi riflessivi. In L. Fabbri, M. Striano, & C. Malacarne, *L'insegnante riflessivo*. *Coltivazione e trasformazione delle pratiche professionali*. Milano: FrancoAngeli, pp. 67-101.

Trentin G. (2014). Formazione degli insegnanti: tra formale, informale e digitale. In M.E. Cadeddu (a cura di), *Il CNR e la Scuola*. Roma: Edizioni CNR.

Valenzano N. (2017). La formazione informale tra docenti. Comunità di pratiche, conoscenze tacite e conversazione. *Formazione & Insegnamento*, XV, 3, pp. 135-147.