

**CONTRIBUTO TEORICO**

## On the educator as researcher: implicit knowledge and professional epistemologies.

## L'educatore come "ricercatore" tra saperi impliciti ed epistemologie professionali.

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### ABSTRACT ITALIANO

Quale formazione teorica e metodologica è oggi essenziale per la costruzione di identità professionali solide e flessibili, capaci di guidare l'azione dei professionisti dell'educazione nella pluralità e complessità dei contesti in cui operano? È necessaria una imprescindibile riqualificazione professionale nell'ottica di un profilo di educatore "ricercatore", che diventi agente generativo di cambiamento. Adottando la metafora quale dispositivo epistemico e metodologico di disvelamento dei saperi impliciti, l'articolo invita a esplorare quelle epistemologie personali e professionali tacite, latenti, nascoste che permeano in modo più o meno inconsapevole l'agire educativo. Inoltre, illustra una proposta di laboratorio per interpretare l'esercizio della professionalità educativa come forma di apprendimento trasformativo e di pratica metariflessiva.

### ENGLISH ABSTRACT

What professional learning and development do educators need today to develop strong and flexible professional identities capable of understanding the complexities of social contexts? Essential professional requalification is required to develop a profile of educators who become generative agents of change. The article invites readers to investigate tacit, latent, or hidden personal and professional epistemologies that influence educational action in a more or less unconscious manner. Finally, the article proposes a methodological approach to revealing implicit knowledge that employs metaphor as an epistemic and methodological tool.

### Introduction

The recent national and international educational debate (Corbi, & Perillo, 2015a; Orefice & Corbi, 2017; Ulivieri *et al.*, 2017; Iori, 2018; Fabbri & Torlone, 2018; Iqbal *et al.*, 2018; A.A.VV., 2019; Molla, & Nolan, 2019; Calaprice, 2020) has centered on a new profile of educator, a professional called to intervene, with responsibility, in uncertain and complex situations. Professional educators and educationalists are crucial in guiding the cultural, political, and social changes that are taking place. The current cultural scenario has introduced new challenges that can be addressed by employing cross-disciplinary skills, both theoretically and practically (Orefice *et al.*, 2011).

In a complex scenario requiring responses to unexpected training needs and issues, it is critical to consider what pedagogical principles should guide educators' practise.

What professional development is now required, in particular, to develop strong and adaptable professional identities capable of having a significant impact on people's lifepaths in a variety of social and cultural contexts? To create a profile of an educator who acts as a change agent, i.e., an educator who works from a transformational perspective, professional and ethical requalification is required. As a result, we should focus not only on acquiring new knowledge and skills, but also on the hidden dimensions that promote meta-reflection and self-awareness of one's own personal and professional expertise, as well as the ability to accommodate change, which is central to any learning process (Fabbri, 2012). Personal epistemologies and implicit educational theory must thus be investigated in order to deconstruct the representations/narratives that innervate thinking and educational action; these intangible and invisible dimensions are pervasive in the definition of one's own professional profile and can serve as a critical tool for re-orientation and learning. In other words, it is necessary not only knowing how to do, but also knowing how to be.

On this basis, what theories, concepts, and sources can be useful and relevant for the professional development of educational professionals? The purpose of this article is to outline research perspectives for professional learning and training that employ metaphor as an epistemological device and methodological tool for developing latent implicit knowledge as well as personal and professional epistemologies (Massa, 1992).

### **Towards a signature pedagogy for educational professionals: the value of implicit knowledge**

The most recent normative change has assisted in better defining the roles, functions, and responsibilities of the professional group of educators. Higher education, and particularly the university, is directly involved in the design, preparation, and management of courses for initial and continuing professional development of educators (Federighi, 2018). Recent efforts have been made in this regard, as evidenced by the recent establishment of the ANVUR group, to develop a shared framework of core content for the training of educational professionals (L-19) (Fabbri & Torlone, 2018). What could be the educational professional's signature pedagogy?

Lee Shulman (2005) used the term signature pedagogy for the first time in his article *Signature Pedagogies in Professions* to indicate "types of teaching that organize the fundamental ways in which future practitioners are educated for their new professions. In these signature pedagogies, the novices are instructed in critical aspects of the three fundamental dimensions of professional work - to think, to perform, and to act with integrity" (p.52). Shulman recommends paying close attention to the nurseries where these professions are formed - which are frequently university courses - if one wishes to observe the dynamic development of the world of professions. This pedagogy is referred to as a "signature" pedagogy of a profession because it can be developed and personalized in nearly all of the formative institutions where that type of profession is formed. Every profession should have its own pedagogy, which defines the contents and processes by which knowledge is analyzed, critiqued, accepted, or, ultimately, eliminated (Chick *et al.*, 2012).

The field of training and professional development is defined by the establishment of explicit professional standards and the pursuit of effective, efficient, evidence-based practices with the goal of improving outcomes for stakeholders (Evans, 2019). This perspective is frequently interpreted narrowly in relation to professional activity, which is potentially visible and associated with a variety of outcomes. According to Webster-Wright (2009), prevalent professional development research is guided by an objectivist epistemology that views knowledge as something transferable, that can be “acquired” through learning, and that can be studied independently of the sociocultural context in which knowledge is used (Wenger, 2000). Assuming that any impact or effect of learning or professional development will be apparent (immediately) ignores the complexity dimension and the multidimensionality of learning and professional development. This issue must be addressed in the planning of educational professional development (Evans, 2019).

One starting point for this discussion is the concept of professional identity, as described by Holland *et al.* (1998). Identity is defined as a “socially constructed” entity that manifests itself in what the authors refer to as “figurated worlds”. These “figurated worlds” are processes and traditions in which we participate: each person is embedded in multiple “figurated worlds” with multiple identities and sub-identities that can or cannot coexist, and the identity of a person manifests differently in each “figurated world”, depending on its position, status, and power in that world (Holland *et al.*, 1998). The training of educators can be considered as a “figurated world” that shapes the professional identities of both educators and those who work in the educator training (in this case, those who design initial and ongoing professional development of educational professionals. i.e., university lecturers or educational experts).

Another factor to consider when developing and shaping the identity of a prospective educator identity is a broad definition of learning that encompasses the process of transformation, acquisition, and internalization of skills, experiences, and knowledge (Iori, 2015). The concept of knowledge acquisition as a living process that is constantly created and recreated emphasizes the unique characteristics of each subject (Del Gobbo, 2007). A holistic understanding of learning recognizes the individual subject as a critical factor and agent in the creation of new knowledge, as well as the challenges that existed prior to learning and the learning process itself. It is intended to consider educators as professionals capable of interpreting their own situations and posing theoretical questions based on practice, rather than simply consumers or implementers of theories and models (Pescarmona, 2018). In general, as Schön (1989) contends, professional knowledge becomes more complicated when there are problems to solve, such as in everyday life situations that necessitate uncertainty and criticism. Expert knowledge manifested in tacit knowledge or it is guided by implicit knowledge, common sense pedagogy, as well as popular pedagogy. As result, there is a distinction in literature between explicit and implicit, or tacit, dimensions of knowledge gained through experience. Tacit knowledge is deeply rooted in action and context and it is often acquired without conscious awareness. Explicit knowledge, on the other hand, is defined as knowledge that has been articulated, codified, and transmitted through the use of formal and systematic language. Tacit

knowledge has been identified as a result of experience-based learning and a foundation for continuous learning (Trishchenko, 2018).

In our work, we place a greater emphasis on forms of professional development and learning that are not explicitly stated or indicated as such, and which are frequently undervalued as a result. Among these are “implicit learning” or “implicit knowledge”, which is obtained in an unobtrusive, inconspicuous, and often unintentional manner (Rogers, 2014).

Implicit learning helps to develop implicit knowledge, a type of peripheral knowledge that is frequently difficult to transfer to another subject. Personal communication, experiential training, and the development of personal experience in a specific activity are frequently used to transfer this knowledge (Polanyi, 2009). Implicit knowledge can be made “visible” by actions, gestures, images, expressive language, and body movements, which frequently elude formalization in language. Beliefs, ideals, values, inner schemes, and mental models are all part of this knowledge. Regardless of how difficult it is, this implicit knowledge shapes our perception of the world. Implicit knowledge is used in human behavior; it is the foundation of professional automatisms, inner meanings, intuitions, and feelings. We believe that by making tacit knowledge explicit, experienced-based learning can be developed or reconstructed. In this sense, the role of reflection as an important component of experience-based learning has long been established. Reflective methods, however, have been criticized for being largely non-theoretical, prescriptive, and lacking in sufficient empirical support (Matthew & Sternberg, 2009). In the following section, we describe a specific methodological approach that allows for the emergence of explicit and implicit knowledge content and thus can contribute to the design of reflective methods in the context of training of educators and educationalists.

### **Metaphor as an epistemological and educational tool**

Metaphor can be used to promote self-reflection and an epistemologically sound approach in the context of the construction of educators’ professional identities (Fabbri & Munari, 2010). The metaphor can be viewed as a different way of representing and comprehending the world. When we use a metaphor, we “feel” rather than “think”: we create an alternative image because metaphor teaches us new aspects of reality and stimulates our “debate” between analogies and oppositions (Eco, 1984). Metaphors are helpful because they can be used to teach, inspire and guide. The term “metaphor” comes from the Greek word which means “transfer”. As a result, the etymology of the word includes a semantic movement that, by analogy, extends to a field other than that normally expressed. As a result, the polar opposite is stagnation, which indicates a lack of movement and, consequently, a lack of new information.

Metaphor has always been a significant part of human communication. Aside from its primary function in language, it has important implications as a cognitive tool for understanding and interpreting reality. Its creative ability has the potential to have far-reaching and significant effects, ranging from a tool for good speech to a cognitive tool for developing new knowledge and eliciting divergent thought. Our way of thinking is metaphoric, in every way. In educational languages, analogies and images are common,

and metaphor is used in pedagogical knowledge as well. The metaphor has conceptual gestalt value because educational languages are frequently associated with abstract dimensions that we need to intend through something more concrete (Baldacci, 2006; Strongoli, 2017). As a result, metaphor has evolved into a cognitive requirement. Metaphor reclaims a leading role in the learning process within educational discourse because it is concerned with all conceptual domains that structure ontological and epistemological correspondences rather than isolated terms. This way of thinking about metaphor has clear educational implications, and it has become a true and distinct tool for two reasons: first, it asserts an implicit theory of education; second, it promotes knowledge and beliefs on a conceptual dominion by activating semantic and gnoseological connections, and thus with their heuristic and generative function (Baldacci, 2006).

The Laboratories of Operational Epistemology (LEO®), founded by neo-Piagetians Donata Fabbri and Alberto Munari (2005) are a paradigmatic example of metaphors being used in a formative key for the construction of the professional self. Around the turn of the twentieth century, the two authors proposed an innovative approach to the study of learning and knowledge processes which they call "Operational Epistemology" (OP). OP is not only a theoretical model, but also a methodological tool and intervention strategy for training processes based on active experiential experimentation. This line of inquiry, which uses the metaphorical approach, employs a tool known as "metaphorical translation", which generates *déplacement*. This is required for any cognitive awareness. From an etymological standpoint, *déplacement* is a French word that refers to the action of moving something or oneself. Cognitive *déplacement* is defined as the ability to stimulate the individual to the unpredictable, curiosity, and creativity because he/she "decreases cognitive defenses, eliminates the use of prefabricated answers, and thus invests and reveals the subject's deepest knowledge, [...] his/her beliefs not said or not normally made explicit" (Amietta *et al.*, 2011, p.181). This causes an inner perturbation, which leads to the deconstruction of fixed patterns of knowledge. The operations of cognitive *déplacement* directly challenge the personal value system of the subject (to which is inextricably linked the personal way of knowing), bringing to light the fact that no knowledge is ever free of involvement or personal beliefs and convictions, but is always imbued with feelings, values, emotions, emotional and experiential dimension.

In this case, metaphor can play an important role in the training process because it allows us to investigate the emotional and psychic dynamics of learning and knowing (Fabbri, 2005; Fabbri & Munari, 2010). LEO® Workshops are made up of materials and concrete activities, both individual and group-based, that are organized in a way that encourages the emergence of new forms of knowledge organization in those who participate. These issues are significant in terms of educator preparation for the development of flexible and progressive pedagogical skills required to guide educational choices and transformative processes. In this sense, other languages of human subjectivity must be welcomed. Metaphor is a powerful research and training tool for investigating the values, beliefs, and attitudes of participants in the educational process. We believe that developing prospective educators' capacity for reflection and self-reflection is essential for increasing awareness and structuring personal and professional experiences (Korthagen *et*



*al.*, 2006). Personal reflection is a valuable tool for both personal and professional development. It allows people to analyze ideas, learning, and training experiences from both cognitive and metacognitive perspectives by employing strategies and tools such as (self-)reflection journals, learning portfolios, observation sheets, and self-assessment sheets. Reflection on key issues confronting educators prior to and during their professional practice should become a guiding principle in training (Hanne & Kaal, 2018). The use of metaphor in training workshop activities necessitates the use of multiple levels of observation at the same time in order to increase participants' opportunities for meta-reflection. A systematic "epistemic observation" of group work is conducted, and the resulting individual reflections are then shared in group for active exploration of various issues and the search for new ways of thinking about problems.

### **On the educator as researcher. A workshop proposal**

Given the preceding considerations, it appears promising to improve those pedagogical latencies that act on a deep level of training experience for the development of educational professionals. The tacit variables of training can be numerous and operate on multiple levels. It is important to remember that what is at stake here is not only knowledge and knowing how to do, but most importantly, knowing how to be. The educational event requires not only knowledge and specific skills to respond to the subjects' demands and training needs, but also essential sensitivities to grasp the meaning of a human educational relationship that places the professional educator in front of the face of the Other. In this regard, more critical metacognitive reflection training for educational professionals is required in order to refine their qualities of observation and reporting of lived experience within the context of reflective professionalism (Schön, 1983; Striano, 2001; Fabbri, 2007; Biagioli, 2019).

In other words, what emerges is a desire to replace technical rationality with reflective rationality by promoting new professional epistemologies, as well as a need to create a vital flow between theoretical research and educational practice. In this context, we propose the profile of "educator as researcher" who investigates the conditions of educational action and is constantly in "reflexive conversation" with the situations in which he/she operates; the educator designs and implements new forms of action and evaluates the effectiveness, validity, and transferability of various practices. This process transforms the relationship between educator and knowledge so that the educator is no longer just a user of knowledge but also a constructor; it is a reorientation that includes the relationship with research as a form of knowledge production i.e., an open, problematic, multi-tensional knowledge. It is a search for human reality that takes place within human reality, which becomes the subject of reflection and research. However, this search does not faithfully apply theories developed by others; it does not imitate, it does not reproduce, but rather attempts to elaborate and create new knowledge, interpretative theories, and models of intervention (Thorsen & DeVore, 2013).

According to the model of "reflective professional", the educator can be considered as a "researcher" because, when confronted with uncertain, contradictory, or ambiguous situations, he or she discovers authentic and personal lines of inquiry; this mode qualifies

professional action and makes it functional not only to provide practical advice but also to provide contextual knowledge.

Any educational practice that aspires to be conscious, innovative, and motivating must include research and reflection. The educator is influenced in this case by a concrete motivation to learn as well as a clear intention to pursue a specific goal, both of which drive him or her to construct and deconstruct his or her own cognitive and symbolic knowledge. In this manner, the educator progresses from one's own preconceptions to the development of metacognitive skills and the critical re-elaboration of one's own beliefs in light of new learning. Assuming a research perspective and implementing methods in professional practice can help us broaden our understanding of educational reality and guide more wisely our decisions and educational practice, thereby developing responsibility and autonomy.

University education is traditionally based on single, formalised epistemology. In contrast, the educational reality experimented in professional practice is mutable and disordered, fostering uncertainty and the unknown. The current hyper-cognitisation of university knowledge, both traditional and digitalised, cannot and must not remove the depth of human reality and its invisible dimension, which is built on care and emotional and psychic intelligence, as well as a formative time in which each subject has its own rhythm (Fadda, 2016).

Contributing to the training of educators capable of designing and managing educational change processes may imply focusing on the development of meta-competencies, which are expressed in terms of heuristic competence. This meta-competence is supported by direct, real-world, and ongoing knowledge gained within the various organizations where professional education is practiced (Corbi & Perillo 2015b; Perillo, 2017).

In terms of educator professional development, we propose using the epistemological and methodological frameworks outlined in the paradigm of epistemology of professional practice, which enhances the "reflectivity" (Dewey, 1961/1933) as a tool to support the development of professional identity. This proposal is viewed through the lens of interpreting the practice of education as a form of "transformative learning" (Mezirow, 2016).

In terms of research, professionalizing educational practice entails allowing educators and educationalists in training to exercise *forma mentis* in order to comprehend that educational action is both "thoughtful action" and "thought in action" (Perillo, 2017).

Within this context, and in light of the regulatory recognition of the profile of the socio-pedagogical Educator, we intend to present the MetaLab workshops for the training of educators (Bufalino, D'Aprile, & Strongoli, 2019; 2020). These workshops are part of the "Intercultural Pedagogy with Laboratory" module, degree course in Educational Sciences (University of Catania).

The training interventions for educators employs a metaphorical approach and propose a variety of reflective paths that serve as ideal places for discoveries, reflections, and cognitive and emotional training. The workshop experience we propose is envisioned as a link between formal disciplinary knowledge and operational practice, involving phases of

displacement- understanding- attribution of meaning and planning for the acquisition-reconstruction of new professional habits and skills. The workshop is envisioned as a space where knowledge can be transformed into competence through reflexive paths of awareness (Schön, 1993).

The use of metaphors and storytelling through the presentation of images or stories, as well as the construction of images and models, are pillars of the workshops: this allows to involve the emotional side of the participants and increase the levels of attention and involvement thanks to different verbal, tactile, visual stimuli that allow participants to create unexpected and unusual connections.

The workshops encourage continuous reflection in order to avoid the traps of prescriptive indications, and they take concrete form as a practice of circular connection between experiences, narratives, and theories, which is useful for removing fixed visions. By participating in specially designed activities that use storytelling, participants in these workshops can come into contact with their own personal way of knowing and re-elaborating the knowledge that each person possesses. This approach can help prospective educators become active creators of theoretical assumptions from which to interpret their training experience (Blezza; 2021). Professionals can explore situations or educational problems related to their daily practice in social and educational contexts using storytelling processes and metaphors. Reflection is encouraged in order to discover the hidden meanings provided by metaphor from different angles and perspectives. Educators are asked to reflect more authentically on their perceptions or on educational strategies to be identified in order to gain a deeper understanding of the contents of teaching programs. During workshops, for example, educators and students are asked to create their own metaphors and sharing their perspectives with others allows them to consider both their own and others' perceptions.

The Metalab workshop experience aims to differentiate training courses aimed at developing the professional identities of educational professionals. To put it in another way, it is about starting re-culturing processes that lead to redefining one's personal/professional actions and serve as the foundation for genuine paradigmatic and cultural change (Formenti et. al, 2017).

The goal of our work is to provide future educators and educationalists with the opportunity to improve their reflective skills in order to learn from the various situation situations in which they are involved as students or professionals. Educators are change agents committed to developing and experimenting with a new repertoire of action; they also engage in an ongoing dialogue with themselves in spaces of reflection where it is possible to present, review, and reinterpret the various action models and meanings of educational concepts. In this way, the educator's professional role is viewed as dynamic, always generated and/or transformed by actual practice.

### Authors' notes

The authors developed the idea and project of this article together. In detail, paragraph 1 and paragraph 2 were written by Giambattista Bufalino, paragraph 3 and paragraph 4 were written by Gabriella D'Aprile.



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