

TRANSDISCIPLINARY APPROACH ON KNOWLEDGE PRODUCTION IN FAMILY AS COMMUNITY OF PRACTICE

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Abstract

This paper presents a new perspective on family as a possible community of practice using a transdisciplinary approach and the search window methodology with top-down and bottom up levels of knowledge. In a family as community of practice communication is facilitated by a flexible accessible structure (mutual engagement) between parents to children (top-down perspective) and children to parents (bottom-up perspective). In this mutual inform-action process parents through the mechanism of authority and collaborative relationships encourage learning as a central aspect of children's identity shaped by family participation. The children, through the mechanism of apprenticeship learn through sharing information and experiences. This process of mutual engagement leads to a shared understanding (joint enterprise) and new resources (shared repertoire) which are the building blocks of a community of practice.

Key words: *community of practice, mutual engagement, joint enterprise, shared repertoire, assertive, behavioral and collective family.*

Introduction

The research is focused on the nuclear family as a community of practice (CoP). The term of community of practice (CoP) is a relatively new one even if the development it describes is rather longstanding. The concept soon came to be identified with a paradigm shift of the learning experience in the context of social interaction within a group (Wenger, 1998). A growing number of groups and organizations set out to apply the principles of community of practice (CoP) in order to improve performance. The concept of community of practice (CoP) can be used to any group of people who share a profession, interest, or goal whether the group was created naturally as a result of its members' common concerns; formed specifically as a result of its members' goals; or simply given because of its members' affiliation. This paper takes a different approach to community of practice (CoP) by applying the concept to a special kind of group that exists as a result of genetics, affinity or co-residence. In this sense is presented a new perspective on the process of learning through the sharing of information and experiences in the nuclear family. The nuclear family plays a crucial role in the socialization of children through which they learn to become established members of the society. Socialization as legitimate peripheral participation through apprenticeships implies both a particular

way of belonging to a community (legitimizing and participation) and a location and identity of the social sphere (peripherally and participation) (Lave and Wenger, 1991).

The main purpose of this analysis is to prove that the nuclear family can be a community of practice. This rather daring goal will be achieved by (1) showing that due to mutual engagement each member participates in collaborative relationship and as new goals are identified new norms are established; (2) demonstrating that this process is necessary to the sustainable nature of the family as a human institution that is so much more than just the natural relationship of consanguinity; and (3) illustrating how the interaction between members of the family can lead to a shared understanding (joint enterprise) and produce new resources (shared repertoire) which are the main indicators of a community of practice (CoP) (Wenger, 1998). From this perspective, knowledge is more than just a transmission of information, it is more like an *inform-action* (Pop and Maties 2008) where learning is a central aspect of human identity which in turn is molded by family participation. Contextual communication is considered as critical to the success of the family as a community of practice (CoP). Firstly, communication is a vital need for social presence. Secondly, to communicate efficiently there has to be a motivation to share knowledge both at the transmitter's level and the receiver's level. Thirdly, contextual communication requires cooperation between the top-down perspective (parents-children), and the bottom-up perspective (children-parents) (Pop, 2009), while the ranks of authority are alternatively in a symmetrical and complementary interaction state, depending of the context (Pop, 2008). Therefore, in order to avoid potential conflicts the family as a community of practice (CoP) has to build bridges and avoid barriers, by working in an assumed/negotiated harmony, while avoiding possible disharmony states.

The paper would be of interest to researchers and practitioners working in a broad range of areas such as education, family psychology, social work and sociology. In short, anyone who is interested in a cutting edge approach to knowing and learning in the context of family will find the principles and models shown in this paper useful.

The Nuclear Family as a Community of Practice

For the nuclear family to be a community of practice (CoP), the transmission of the contextual message (with a code and a channel used for this purpose) is facilitated by a flexible and accessible structure (mutual engagement) between parents to children (top-down perspective) and children to parents (bottom-up perspective) (Pop, 2009). Therefore, parents and children engage in a mutual *inform-action* process where the parents encourage learning as a central aspect of children's identity shaped by family participation through the balanced mechanism of authority and collaborative relationships. As transmitters and receivers of a contextual message by participation through apprenticeship the children learn through sharing information and experiences (Pop, 2008). This process of mutual engagement leads to a shared understanding (joint enterprise) and new resources (shared repertoire).

In the family as community of practice (CoP) knowledge is achieved by understanding, learning and practicing skills. This process is based on an active-reactive learning-understanding process (occurring either intentionally or spontaneously) that enables those involved to control information, thus to question, integrate, reconfigure, adapt or reject it (Nicolescu, 1996; Pop and Maties, 2008). A family as community of practice (CoP) is working in a new transdisciplinary educational model moving away from propositional learning, where the student is presented with rational and logical propositions that she is required to learn, to a learning process where the student is educated in an experiential setting (McDowell and Bellis, 2006).

The knowledge achievement process in a family as a community of practice (CoP) takes place through the transdisciplinary teaching/learning approaches (Pop and Maties, 2008):

1. Extrinsic active knowledge approach: “learning to learn to know by doing”, with teaching/learning paradigm, characterized by the structural-functional efficiency of knowledge process working through „*creativity*” with “*adequateness*” and “*innovation*” (*to know-what, how, why*), in „*action*” with “*competition*” and “*performance*” (*by doing-who, what, how and why*).

2. Intrinsic reactive knowledge approach: “learning to understand to be by living with others”, with learning/understanding paradigm, characterized by the ethic-semantic parameter of knowledge process working through „*authenticity*” through “*integrity-character*” and “*excellence-competence*” (*to be-who, how*), and „*participation*” through “*communion*” and “*apprenticeship*” (*by living with others, who-to whom, with who*).

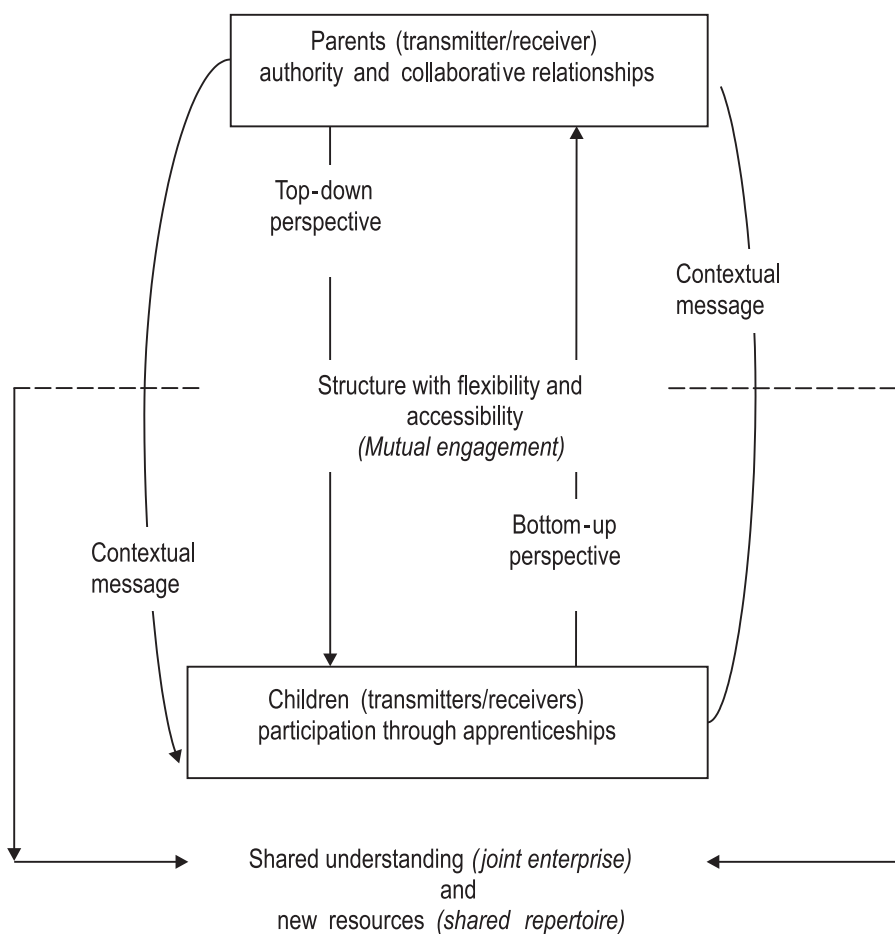


Figure 1. The way the message is transmitted in a family as a community of practice (CoP).

In order to see how these approaches can be put in practice to facilitate the extrinsic active knowledge, *by doing*, characterized by creativity in action and intrinsic reactive knowledge in authenticity through participation (shared understanding and new resources), *by being*, it is possible to identify three kind of families.

The first possible family—assertive family—is promoting a high level of individuality as well as collaboration. In other words, family members are engaged in relationships without losing their individual identity (*learning to understand to be by living with others*). The asser-

ative family has a structure, in the sense that there is a boundary between parents and children, but that structure has flexibility and accessibility, working transdisciplinarily. The authority of the parents is achieved through collaborative relationships, with a mutual engagement and symmetry between the children's participation through communion and apprenticeship and the parents' authority in authenticity, integrity and excellence. In the assertive family mutual engagement leads to a joint enterprise and a shared repertoire, and therefore it is possible to have a balance between "*learning to understand to be by living with others*" and also "*learning to learn to know by doing*", consequently in the assertive family considered as a community of practice (CoP) knowledge is achieved in a sustainable way (Pop and Maties, 2008).

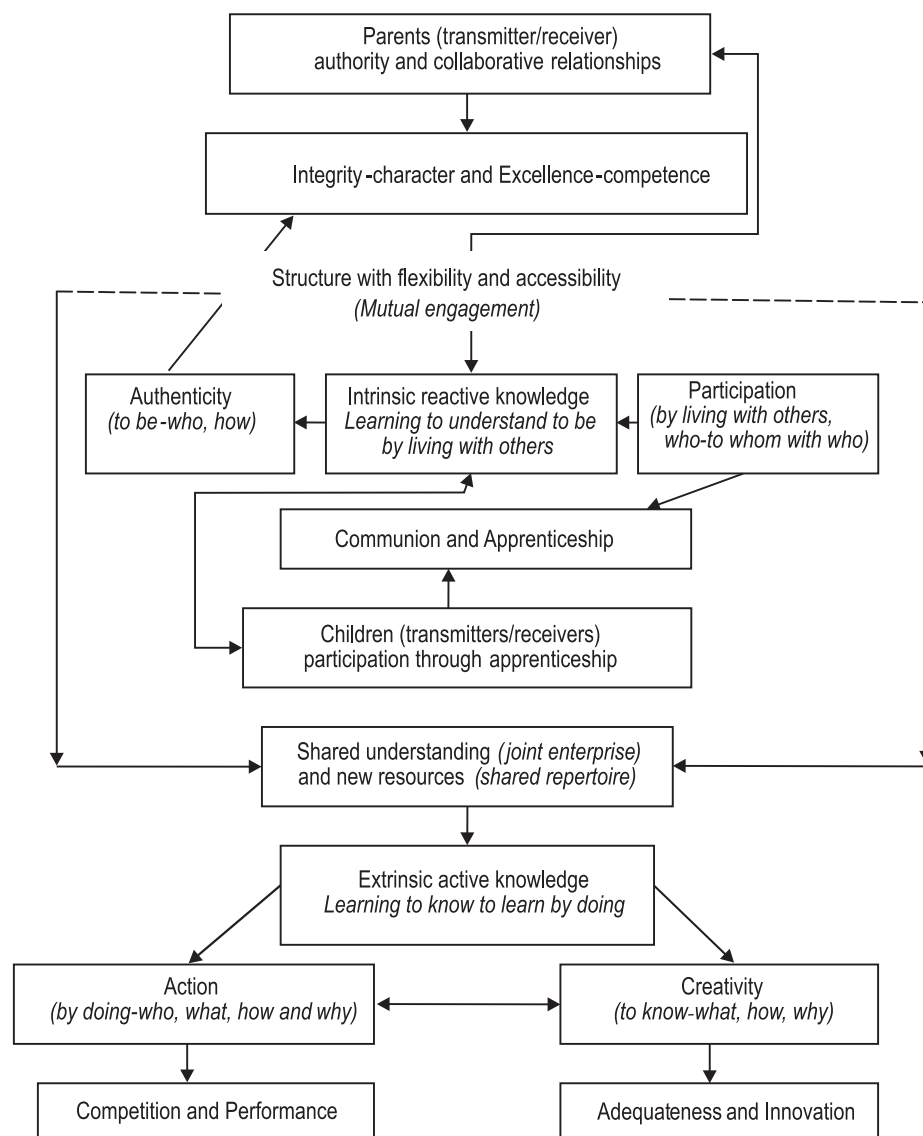


Figure 2. The model of knowledge achievement in an "assertive family".

The second possible family-behavioral family-is considered as a highly structured system without flexibility and little accessibility (*one-sided engagement*) and with a strong orientation toward performance at the cost of interpersonal relationships. The parents are usually the transmitters of knowledge and the children are only the receivers of knowledge. In the behavioral family there is a unilateral autocracy, with the parents being in authority, and the children participating through apprenticeship but without communion (*by living with others, who-to whom without who*). The symmetry between the parents, who are usually in an authenticity position through integrity and excellence, and the children's participation through apprenticeship but without communion is missing. However, because of the family's orientation toward performance, there is an extrinsic active knowledge in action through competition, performance and creativity through adequateness and innovation; an intrinsic knowledge in authenticity through integrity-character and excellence-competence and participation through apprenticeship; but there is little and superficial intrinsic knowledge in participation through communion. Therefore because a one-sided engagement leads to an individual enterprise and a private repertoire the behavioral family is not a community of practice (CoP).

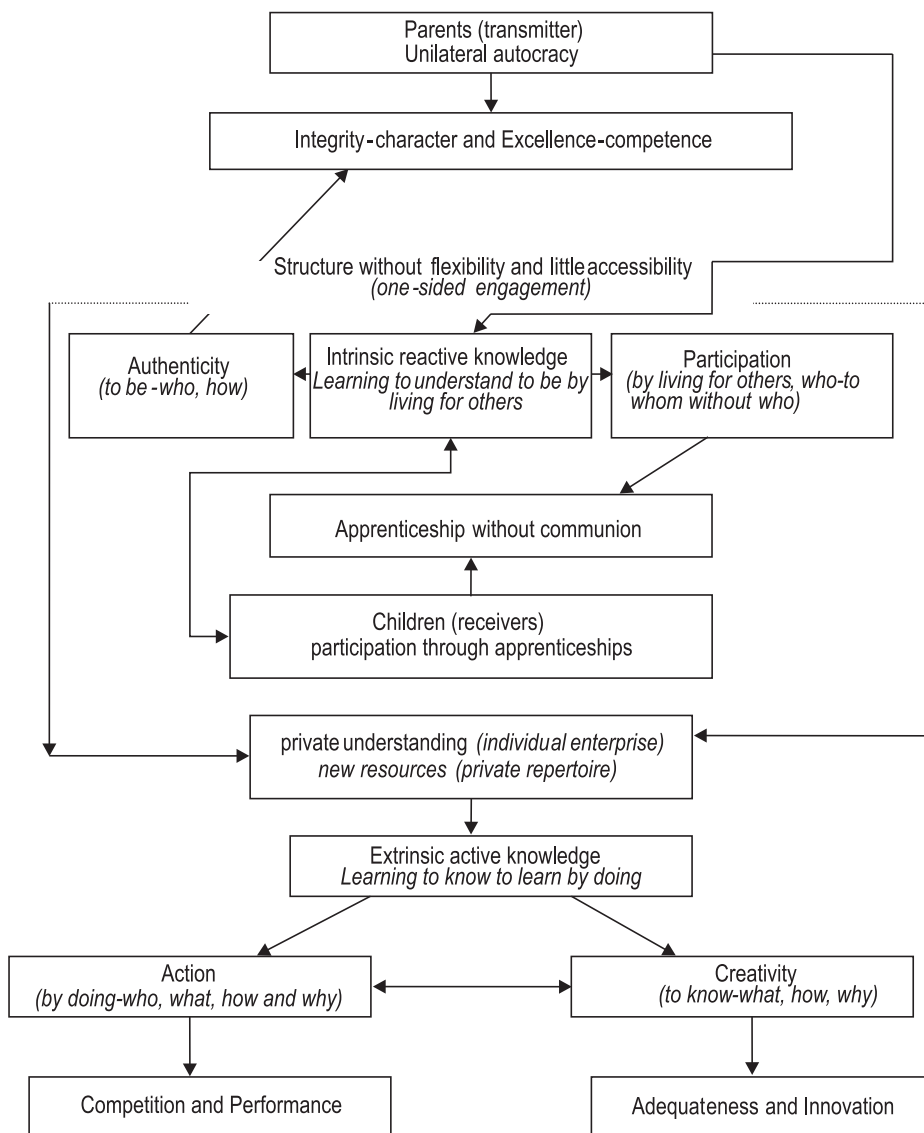


Figure 3. The model of knowledge achievement in a "behavioral family".

The third possible family—collective family—is oriented towards the intrinsic reactive knowledge, often compromising individuality for the sake of collaboration in relationships. The parents as transmitters and receivers of knowledge have little authority and instead of authenticity (*to be-who, how*) they portray more changeableness (*to be-who? how?*) through integrity as dictated by the pressures of a good reputation and mediocrity because of helplessness. In the collective family, the children receive a lot of attention and support but communion is through protectiveness without apprenticeship. The children learn that participation is through petitioning that is often governed by the need of acceptance and sometimes even guilt.

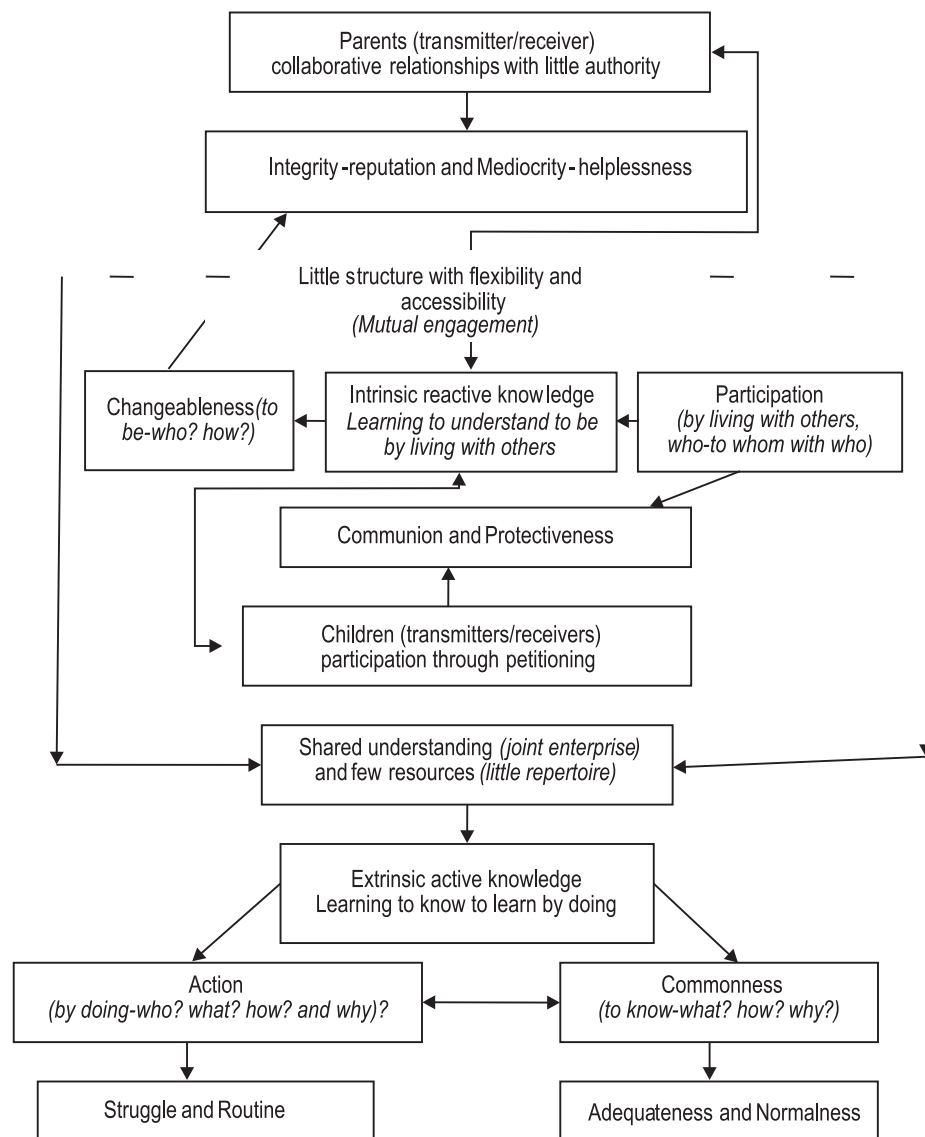


Figure 4. The model of knowledge achievement in a “collective family”.

The collective family has a little structure but with great flexibility and accessibility. The lack of structure together with a high level of intrinsic reactive knowledge leads to a shared understanding (joint enterprise) but few resources (little repertoire). Therefore,

the extrinsic active knowledge is characterized by action (*by doing-who what? how? and why?*) in struggle and routine instead of competition and performance; and commonness in adequateness as normalness, instead of creativity in adequateness and innovation. Therefore, the collective family is not a community of practice (CoP).

For a family to be a community of practice (CoP) there are two important transdisciplinary teaching/learning approaches that have to be in symmetry: the intrinsic reactive knowledge (*learning to understand to be by living with others*) and the extrinsic active knowledge (*learning to know to learn by doing*). We have shown that the only family that met those requirements for a community of practice (CoP) is the assertive family. In this family the focus is both on relationships and knowledge, on learning and understanding. Learning and understanding lead to shared understanding and new resources, having a positive influence on action and creativity by insuring a high performance through competition and adequateness in innovation, all of which takes place in a synergistic communicational context. Learning to know by doing and learning to understand to be by living together with other people also provides an ethical/authoritative context by adding an axiological coefficient (*knowing how and why we live*) (Pop and Maties, 2008).

Sustainable development and the interplay between different educational fields require the process of mutual learning, transdisciplinary problem-solving, creativity, social competencies and communicational skills. Therefore, in the family as community of practice (CoP) both the parents and the children are providers and consumers of information, engaging in a dynamic process of active knowledge (*learn by doing*) which is a lot more complex (and efficient!) than the mere memorizing of data. The intrinsic reactive sphere of the teaching/learning model in a family as a community of practice introduces a spiritual dimension because in *learning to understand* one has to *learn to be*, through a process of apprenticeship in which children and parents are constantly engaging in a mutual learning process, testing information and beliefs, and as a result they are sharing information (*joined enterprise*) and discovering new resources (*shared repertoire*).

Family Dynamics in Relation to Family as Community of Practice

The dynamics between members of a family considered to be a community of practice CoP are in a state of equilibrium. It is important to realize that from the three possible families, only the assertive family has met the requirements to be a community of practice (CoP), but the behavioral and collective family, are not too far from the proper balance between individuality and relationships. Other possible families can, for example, have members that are so disengaged from one another that we could not talk of a mutual engagement that could possibly lead to a joined enterprise or shared repertoire. Others may be so entangled or fused that it becomes hard to separate one's personal identity from the family identity which will, of course have consequences on problem-solving abilities, creativity and social competences. However, the purpose of this paper is to see what kind of family can function as a community of practice (CoP) and for that it is sufficient to analyze only these three possible families.

In terms of family dynamics, the interaction pattern between family members forms the fundamental structure of a family. Each nuclear family is composed of a number of co-existing subsystems: the parent-parent dyad, the parent-child dyad, the child-child dyad. In a family, subsystems can be formed by generation (parents) by gender (mother and daughter) by interest (intellectual pursuits) or by function (caretakers). Within each subsystem different levels of authority are exercised, different skills learned and different responsibilities assigned (Minuchin, 1974). Also, each family member belongs to several subsystems simultaneously and must engage in complementary relationships with the other members. The most enduring

subsystems are the spousal, parental and sibling subsystems (Minuchin et al., 1978), and the most important is the parent-parent dyad. This dyad being the most basic is also bound to resonate throughout the family. For example, if the parents engage in effective interaction, this will influence the effectiveness of relationships between all family members. A dysfunction in the parental subsystem will be felt by the whole family as children are either scapegoated or co-opted into alliances with one parent against the other. In a family as a community of practice (CoP) the marital partners accommodate each others needs, know how to negotiate differences, make decisions through participation and manage conflict in such a way as to produce intimacy, support, mutual engagement and an opportunity for a shared understanding and the development of new resources. The parental subsystem has the responsibility to teach, nurture, guide, limit and discipline. Through interaction with the parental subsystem, the children learn to relate to authority and to strengthen their capacity for decision making. Also, the sibling subsystem, determines patterns of negotiation, cooperation, competition, mutual support and attachment. Spousal, parental and sibling subsystems are in a dynamic relationship, each simultaneously influencing and being influenced by the other (Goldenberg and Goldenberg, 2000). This engagement within and between subsystems help define the family's unique personality.

The balance of individuality and relationship in each person is influenced by the personality of his family of origin (Field, 1988). Along this continuum between individuality and relationship Field identifies five family personalities: the bonding family, the ruling family, the protective family, the chaotic family and the symbiotic family. The bonding family is a model of the equilibrium between individuality and relationships. In this family, the children acquire a good sense of identity and the capacity to interact with others. The ruling family has a tendency to be harsh and aggressive in their relationships; the parents pressing for authority and the children driving for performance. The protective family places the emphasis on relationships, especially in the form of caring for the children but at the cost of personal confidence. The chaotic family is disengaged, with limited interest and knowledge about family members. In this family, the children are often neglected or even abused. In the symbiotic family, the members find it difficult to be self-directed because individuality is perceived as a lack of allegiance to the family. Therefore, the members of the symbiotic family are weak as individuals but strong as a group. From the perspective of a community of practice (CoP) only the bonding family shares information and discovers new resources.

Another matter of importance is that each family lives in an ever-changing context (Fishman, 1988). These new interactive patterns can lead to stress, and a resilient family has to be flexible enough to meet the emerging developmental needs of its members. The coping strategy depends on the type of family, where the family that manages conflict and negotiates the transition between life-stages will also have the ability to successfully carry out the tasks of the following cycle. If the family becomes destabilized in the struggle to accommodate change, stress will be evident and more family members may become symptomatic (Zilbach, 1989). However, even if symptoms in a family member are likely to appear in periods of change (natural transition forms such as retirement of a parent; events resending gains such as a new sibling, or losses such as the death of a parent) sometimes the stress on a family system during a transition can provide an opportunity for the family to develop more productive responses to change. Studies show that families that develop a relational resilience (effective collaborative ways of coping with adversity and hardship) can in fact emerge stronger from persistent stresses or the demands of transitional changes (Walsh, 1996). Through the course of development a family frames and instills fundamental and enduring assumptions about the context in which it lives. As a result, children (and adults) attribute meanings and understandings to events and situations that were set in by their families' social, cultural and historical experiences (Anderson, et al, 1999). The interactive pattern of a family is shaped especially by the narrative or stories the family recounts. These stories help explain and in some cases

justify the acceptance and belief of family members in a set of suppositions about the social environment. The narratives a family reiterates is derived largely from its history and passed on from one generation to the next and so the view on reality is perpetuated in conversations carried on over generations. Resilient families will have narratives that help balance intergenerational continuity and change. Such families will also be characterized by ease of communication, a clear set of expectations about roles and relationships within the family, respect of individual differences and effective problem solving strategies (Goldenberg and Goldenberg, 1998). Resilience should not be thought of as a static set of strengths but more of a developmental process specific to each family that helps to produce adaptive responses to stress or grow in their response to stressors (Hawley and de Haan, 1996).

Families are organized living systems in which members are in a continuous, interactive, patterned relationship with one another extending over time and space. For a family to be a community of practice (CoP) there has to be a balance between relationships and knowledge, and between learning and understanding. Learning and understanding in a family as a community of practice (CoP) leads to shared understanding and new resources, and as a result the performance will be creative and adequate in a synergistic communicational context.

In this paper, the assertive family, being the most balanced, shows a strong marital coalition and also an effective communication with the children. This is important because mutual engagement, especially in the form of communication is shown to be the strongest predictor of academic achievement of children (Sui-Chu and Willms, 1996). The relationships between parents and children can take either the form of mutual engagement (in which discussing activities is an important part) or supervision (where the parents monitor the children's activities but do not encourage mutual engagement). Of course, there are other things that account for variation between children's achievement such as social class, parental expectations, parental level of education, material deprivation, gender, cultural differences, etc. However, parental involvement remains the most significant factor that influences achievement measured as active knowledge (*learn by doing*). In other words, the more parents converse with their children the better grades they get in school (Sacker, et al, 2002). We have seen that in the behavioral family, the parents are strongly oriented towards performance, so as far as active knowledge and creativity goes; the children from this type of family will achieve good grades. The problem is that, while in the assertive family there is also emphasis on intrinsic knowledge through communion, the children the behavioral family will not have the advantage of both *learning to know* and *learning to be*. The parents' behavior and attitudes will influence the children's behavior and attitudes in certain ways (Sylva, et al, 1999). For example, on one hand, children that grow up in families such as the collective family tend to struggle with dependency and could, later in life, develop psychological conditions such as neurotic behavior or schizophrenia. On the other hand, children that grow up in families such as the behavioral family tend to have a lower self-esteem, struggle with an elevated self-orientation, and could, later on, adopt anti-social behavior and develop deviant psychological conditions. Studies show that children growing up in families such as the assertive family, which has been identified as an effective community of practice (CoP), tend to have a higher level of cooperation, sociability and confidence. Also, they engage less in anti-social behavior and have higher cognitive development scores. Moreover, children that grow up in families that are communities of practice (CoP)—or as psychologists say, families that provide a higher home learning environment (HLE)—are better equipped for success regardless of parental qualifications or economic background (Melhuish, et al, 2001). Studies that measure success in terms of academic attainment and behavioral adjustment look for protective factors which seem to promote resilience and protect from vulnerability. Again, we see that families that create a balance between knowledge as an extrinsic active aspect and knowledge as an intrinsic reactive aspect are families where children are resilient and do well both socially and

academically (Schoon and Parsons 2002). The important aspect is not just the simple interaction between parents and children but the manner in which that interaction is taking place. For example, communication in a family as a community of practice (CoP) requires cooperation between parents and children (top-down perspective) and between children and parents (bottom-up perspective). So the ranks of authority are in a complementary interactive state, depending on context. Although family background seems at face value to be an important predictor for the achievement of children, studies show that it is actually the parenting style and family dynamics that generate good academic and social outcomes (Zellman and Waterman 1998). Also, the way mutual engagement is manifested changes with regard to age of children. With younger children, direct help in acquirement of skills is necessary, while with older ones, activities that encourage independence are more generally recommended. That is why for a family to be a community of practice (CoP) there is a need to create a balance between knowledge as an extrinsic active aspect (*by learning to learn to know by doing*) and knowledge as an intrinsic reactive aspect (*by learning to understand to be by living with others*) with a particular focus on personal identity shaped by family participation.

Conclusions

The transdisciplinary teaching/learning model can be successfully applied to family considered as a community of practice (CoP). The knowledge achievement process in such a family is working by “*learning to learn to know by doing*” through a mutual engagement that leads to a joint enterprise and a shared repertoire, as a extrinsic active approach in a balance with the “*learning to understand to be by living with others*” intrinsic reactive knowledge approach, by promoting a high level of collaboration without compromising individuality. From the three kinds of family identified in the paper, assertive, behavioral and collective, only the assertive family is recognized to be a community of practice (CoP). In a family as community of practice (CoP) there is a symmetry between the children’s participation through communion and apprenticeship and the parents’ authority in authenticity, integrity and excellence, the focus being on relationships and knowledge, on learning and understanding, in the end leading to a shared understanding and new resources, having a positive influence on action and creativity by insuring a high performance through competition and adequateness in innovation in a synergistic communicational context.

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