

Reconceptualizing Training as Professional Formation

in the Fields of Autism and Infant Mental Health

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The teaching and helping professions continually evolve in their discernment of effective models of pedagogy (teaching) by considering models of epistemology (learning). Two principal questions must be answered: *“How do we best teach about our discipline?”* and *“How do learners come to know what they know.”* This chapter questions common methods of professional development which often rely heavily on “training” which emphasizes transmission of core knowledge, viewed as fundamental to the discipline, and on the development of skills, viewed as derivatives of that core knowledge. This approach fails to adequately recognize and apply the science of interpersonal processes and the affective and interpersonal context of our work and learning.

Keywords:

Formation, interpersonal neurobiology, paradigm, professional development, reflective-practice, relationship-based, training, wonder, world views

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*“What matters is not methods or techniques but a sensitivity to problems,
and a consuming passion for them; or as the Greeks said, the gift of wonder.”*

Karl Popper (1963/1989)

Use of language and pronouns in this chapter. The author alternately uses male and female pronouns (he/she, him/her) as a convenience. In discourse about autism, the author employs person-first language (“PWD”-person with disability), “individual with autism”. The author also honors the language of many self-advocates in which “autistic individual” is preferred, reflecting autism as a unique expression of neurodiversity.

The teaching and helping professions must continually evolve in their discernment of effective models of pedagogy and epistemology, by attempting to answer two principal questions: “How do we best teach our multidisciplinary workforce about our discipline?”, and “How do learners come to know what they know.”

In this chapter, common methods of professional development are challenged as being inadequate at best, and ineffective at worst. These approaches to professional development frequently rely on “trainings” that focus on the transmission of knowledge which is viewed as fundamental to the discipline. Such trainings also seek to develop skills that are viewed as derivatives of that core knowledge.

Delineating the Scope of this Chapter on Formation

Before we begin, it is important to acknowledge some limitations in this chapter. We will address in a limited way, the distinctions among the different scientific perspectives or “world views” in our fields (e.g. DeWitt, 2011, Overton, 1984, 2013, Pepper, 1942/1970, Popper, 1959). Such a deep discussion about the many perspectives that spawn different ideas, research, methods and interventions (which constitute the field of “philosophy of science”) demand a much fuller exploration than we can cover in this chapter. These different “world views” generate different metatheoretical beliefs and suppositions about human development, and in the fields of infant mental health and autism, generate different theories, methods and ideas about research, education, remediation and intervention. Costa and Witten (2009) examined the different underlying beliefs, concepts, methods, theories and practices in the field of autism. These differences are noted and they must be addressed in any comprehensive discourse about professional development, because knowledge and skills, as well as the ways in which research and therapeutics are conceptualized, are significantly different depending on one’s underlying metatheoretical views. Nonetheless, core philosophy of science will be presented as constituting the larger context of discourse in professional development in infant mental health and autism.

This is clearly evident, for example, by contrasting how the nature of autism is understood and how individuals with autism are supported and treated in Applied Behavioral Analysis (ABA) approaches (e.g. Lovaas, 1981, Cooper, Heron and Heward, 2019), and the Developmental, Individual-difference, Relationship-based (DIR) framework (e.g. Greenspan and

Wieder, 1998, 2006). For professional development, these implications are profound because the differences in what is viewed as core knowledge, skills and process of change, lead to vastly different professional development goals, content of educational curricula, related “trainings” and required experiences. Scientific inquiry is quite different depending on one’s “world view”. With regard to education research, Thomas (2012) argued for a new “science of education” and lamented that educational research, and education about the field, have taken a turn towards a “narrow view” and as he quotes Lagemann (2000), “excessive quantification” (Thomas, 2012, p.26).

While, the field of infant health encompasses significant differences in how infancy and socio-emotional development are examined (e.g. think about the different literature addressing “socio-emotional development” vs. “social-emotional learning -SEL”), most would agree that there is a high degree of agreement on what constitutes the major concepts and practices in the field. For example, the author is currently working with a team of editors on a book of multidisciplinary contributions about the ways in which “Infant Mental Health” (clinical origins) and the “Pyramid Model of Early Care and Education” (educational origins) can be seen through a common lens. (e.g. Nenide, Wasserman, Costa, Corso and Horen, In Preparation). With more than 35 years in the fields of infant and early childhood mental health and autism, the author asserts that the level of unity and agreement in infant mental health is significantly greater, than is the case in the field of autism.

Accordingly, there is no “one way” to teach about autism, and this simple truth has resulted in decades of contentious debate and confusion among the multidisciplinary sciences,

advocates, legislators, funders and mostly families. (e.g. Broderick, 2009, Claypool and McLaughlin, 2017). There is no question that any examination of professional development, and on how we best prepare a multidisciplinary workforce, must address the underlying philosophical, metatheoretical, theoretical and applied differences that exist in the field. This has been addressed in other works (e.g. Overton, 1998, Overton and Reese, 1978) and continues to be needed as we apply these insights in the fields of infant mental health and autism.

There are a number of challenging questions to pose amidst the contention in the field of autism: Does the education of multidisciplinary professionals in one way of “knowing” and “doing” to the exclusion and denigration of others, constitute education? Propaganda? Indoctrination? Can we understand how the uses, and perhaps misuses, of the terms “science” and “evidence” further complicate the discourse? Is there a way to discern common ground so that each professional development provider can convey the same knowledge, skills and, as we will ask, result in the same “formation”? Can we understand the ways in which different “world views” and approaches have created economic and political differences that have both interfered with and formed scientific process? (e.g. see Kuhn, 1962/1970 for a broader examination of the shifts in scientific “paradigms” in history).

These questions are raised as necessary topics in the larger context of **what** we teach and **how** we teach. Here, we will discuss current practices that have, unfortunately in Thomas’ (2012) words, “narrowed” the process and goal of professional development.

Reconceptualizing professional development as “formation” is one way to widen the discourse about how we prepare professionals.

In this chapter we will critically examine the adequacy and effectiveness of training approaches that primarily focus on “knowledge” and “skills”. An argument will be made and justification offered, that such approaches fail to adequately recognize and apply the science of interpersonal processes and the relational context of education in professional development. In so doing, the development of the “full person” is thwarted. Professional development that focuses on knowledge and skills will alone never be sufficient.

Introduction to Formation

The concept of "Formation" is proposed and explained as a model that expands and extends the importance of “knowledge” and “skills” in professional development, to include the critical importance of relationships and “being-with” as essential to the professional development process, and as a necessary component of multidisciplinary work in infant mental health and autism.

Costa (2016) and Costa and Mulcahy (2015, 2018) discussed this notion of “formation” as intrinsic to professional development. Use of this term “formation” originates from fields outside of the usual social sciences. A Google search of the term “formation” is revealing. A search conducted on August 22, 2020 yielded nearly 1.5 billion hits, with the song of that name (“Formation”) by the American artist Beyonce (2016), and references to geological formations as the top “hits”. When the search is expanded to “Professional Formation”, the most common

sites refer to “knowledge” and “skills” (e.g. Society for Education and Training: <https://set.foundation.co.uk/professionalism/qtls/professional-formation/>). While “personal development” and occasionally “reflection” were sometimes mentioned, the most notable “hits” were seen in two areas: 1) “Faith and Clergy Formation”, and a 2) series of studies conducted by the Carnegie Foundation that will be reviewed below. These come closest to the meaning of “formation” proposed in this narrative. Both areas reflect the need for development beyond “knowing” and “doing” – and in fact address the critical importance of personal “unfolding” and relationships!

As formation will be described here, professional development and the goal of professional “training” will be understood as involving a full integration of what is known by the professional, what “doing” by professionals entails, and “who and how” they are - their ways of “being-with” and relating. (The significance of “how you are” in infant mental health work was the title and topic of a seminal monograph by Pawl and St. John, 1998).

In this regard, professional development is inseparable from personal development. “Formation” requires that professional growth involve the development of the whole person such that education integrates their intellectual prowess, life experiences, and the many layers of “self” that humans are. Self-reflection is part of the process which brings the professional to an understanding of how his ***whole self intersects with the learned materials and her work with infants, children and families.***

Ultimately, an education focused on formation encourages students and professionals to discover who they are called to be, and to have the foundational capacities necessary to live out that vision. Kohut and Seitz (1963/1978) said this eloquently “In actual (clinical) practice (however), the theoretical knowledge of the experienced psychoanalyst has become so fully

integrated into his total observational attitude that he is usually no longer aware of a dichotomy between theory and observation..." (p.341). Kohut might have stated this as a principle: *If you are thinking about your theory and knowledge when you are with your patient, you are not thinking about your patient!*

In a series of studies sponsored by the Carnegie Foundation and published beginning in 2007, the concept of "professional formation" was examined within certain professions, including "lawyers, engineers, clergy, nurses and physicians." (Cooke, Irby and O'Brien, 2010). In the forward to the Cooke et al. (2010), Shulman (2010) wrote, "The most overlooked aspect of professional preparation was the *formation* of a professional *identity* with a moral core of service and responsibility." (italics added, p. v). The connection among the listed helping professions and "clergy" formation is not accidental. The notion of "formation" therefore, presupposes that our work in the fields of infant mental health and autism need to be guided by a deep sense of mission, integrity and service, and relies on the development of personal well-being and a clear sense of identity in the provider – articulated above as the "...formation of a professional identity with a moral core of service and responsibility".

Within the field of Infant Mental Health, a long-standing requirement of providing support, education and intervention to families with infants, children and families, is the requirement of "reflective practices" – a specialized kind of self-awareness, reflection, introspection and discourse that necessitates the practitioner to examine their own subjective responses to the work and the relationships they form with infants, children and families – and themselves. (e.g. Fenichel, 1992, Shahmoon-Shanok, 2009, Costa and Sullivan, 2009). This necessity emerged from the strongly supported assertion that affect (feelings) and ideas

(intellect) and actions (behavior) are inextricably linked, and cannot be separated, but can be understood. (e.g. Siegel, 2010a 2010b, Greenspan and Shanker, 2004).

Costa (2006) quoted a frequent admonition by a valued supervisor, Dr. Davis Peters, “We need supervision to save our patients from ourselves.” (p.127). Thea Bry, another supervisor’s reminder was more colloquial: “Get in Cahoots with yourself.” Michael Trout (1988), reflecting on the field of infant mental health, moving into the 21st Century, proposed that infant mental health specialists must consider a personal psychotherapy to ensure that their personal material not intrude on the efforts to help their clients. Trout wrote, “ (I)t is critical that we offer assessments, engage in treatment, conduct our research, and do our teaching free of uncontrolled contamination by our own unresolved childhood experiences, our idealizations, our needs for control: in short, that we be truly open to the data and truly available to the families. ...(A) call is made for careful transdisciplinary training, supervision, individual psychotherapy, and collegial monitoring for infant mental health clinicians, researchers, and educators, alike. “(p. 191). Adding gravitas to this conviction, he observed that Donald Winnicott, pediatrician, turned psychoanalyst and author, proposed that all pediatricians be psychoanalyzed; an idea likely met with resistance. So here we see the connections among what we know, who we are and how we act – all necessary domains for examination in formation.

For this reason, the field of infant mental health has emphasized the importance of “reflective practice”, the integration of affect and intellect and the requirement to ensure that services to families are not weakened by the failure to pay attention to these practices. This

creates an obligation that the field must focus on professional “formation”, not just “training” (knowledge and facts) or “skills” (what to “do” with an infant, child or family).

In this chapter, a proposal is offered that professional education and “training” are better conceptualized by the concept of “FORMATION”. As part of the Carnegie Foundation initiative, Hamilton (2011), wrote about professional formation in the legal profession with a similar focus on one’s internal landscape and personhood: “Professional formation refers to the fostering of students’ formation of an ethical professional identity. This change from a focus on educational inputs like a course on professional responsibility to a focus on clearly-articulated learning outcomes relating to each student’s ethical development that are assessable is a major paradigm shift in legal education.” (P. 765, underscoring added)

From this perspective, “formation” conveys the notion of a personal unfolding, reflects a way of becoming, of being, and of “being with”, and implies that knowledge and affect are intertwined. It emphasizes the transactional and experiential nature of development – not only training as transmission of knowledge or teaching skills, but an expectation that the learner be actively engaged, and that authentic growth of “self” – personal development and awareness – are fundamental to creating an intuitive sense of service to others.

This notion of formation, therefore addresses three interrelated “ways” of developing: *Knowing, Doing and Being With.*

Ways of Knowing

This represents the traditional focus of training programs. Knowledge from theory, research and practice MUST occur. BUT, in and of itself, such knowledge is insufficient, and is tantamount to the practitioner becoming a “technician” – a skill builder, not necessarily a

promoter of human development, as human engagement, particularly with infants and young children is fundamentally affective and relational. Equally important as the accumulation of knowledge, is the adoption of a *“posture of wondering”* in the infant, child and family worker. This suggests that the process of coming to know and understand a child must involve an awareness that many forces influence what we observe and encounter. These forces are within the child and his/her life AND within the worker. If we fail to “wonder” and search for possible factors involved (hypothesis-generation), we run the risk of “prematurely closing” on answers, “confirming” that we are correct, applying what we “know”, and indeed we may miss the mark. Authentic knowledge from science and practice is essential in all practitioners, but alone it is inadequate.

Ways of Doing

When professionals, at all levels and across disciplines, attend trainings and workshops, the goal expressed by many participants is often some variation of, “Just tell me what to do!”, or “I have a child who hits and bites. How should I handle that?” or, “I have a child with autism in my class who runs and screams. I have tried everything. I think she does not belong in my class. I need to find a way to convince our program director.” In these cases, staff are looking for the “magic” technique that applies to any child with apparently similar behavior. In fact, many training programs are wonderful at teaching “techniques” and “skills” to manage behavior, but since similar behaviors originate for varying reasons, these strategies often fail to help children, and staff often complain that the technique “didn’t work”.

Here is where professional formation must engage not in the endless search for tactics of techniques (as the opening quote by Karl Popper states), but to develop the suspension of

judgement and impart the gift of “wonder.” It is certainly important to support the development of a range of observational, assessment and education/interventions skills, but if these skills are viewed as the agents of therapeutic or change (e.g. the method is the effective agent) then whomever and however the method, or tactic or technique is delivered should not matter! But consider “how” a technique is delivered and imagine it was implemented in a way that is insensitive to the individualized needs of a particular child, or in a way that is without regard to the child’s availability or readiness for growth, learning or change. To press this issue *reductio ad absurdum*, imagine it were delivered with a harsh, emotionless and frightening way, we might predict that it is likely to fail. In fact, the argument being made here is that the “doing” of an intervention by a provider is *never void of human delivery*, certainly in the psychological and developmental sciences. Further, and this is an assertion we will revisit later, “how” the intervention is delivered can be conceptualized as a variable worth study – and if a researcher chooses only to research a “technique” (e.g. as in a reinforcement paradigm-ABA) and does not look at the “how” it is delivered (the interpersonal space), the possibly of discerning the value of the technique is obscured by the failure to unconfound the other potential agents of effectiveness outside of the ‘technique’. To state the logical conclusion: if a practitioner or researcher fails to examine the host of variables, the actual outcome may be due to reasons *other than* what is postulated. The “technique” in question is, in fact, rendered unexamined. The point here is to recognize that the intrinsic interrelatedness among the ways of development that are being examined, require that both our professional development programs, as well as our research and intervention protocols recognize the context within which research and intervention occurs.

So, if the “right” words and techniques are used, but are delivered with a harsh and angry affect, “mean” voice, impatiently delivered and in a rushed, punitive and demanding way, the negative response to the non-verbal context will far outweigh the intent and possible success of the words and technique employed. More on this later.

This means that emphasis on “solution-focused” therapy and the preoccupation with educational testing and measurement, are iterations of the larger emphasis in the field on “doing” and the emphasis on “products” and “justification”, rather than the context and process of “discovery.” The associated focus on intervening and developing strategies, tactics and programs to address problems in development, learning and behavior, are only part of the context.

This preoccupation with methods and technique has been accompanied by a failure to wonder about the nature of the problem, and instead places emphasis on “fixing” it. This has generated a volume of “empirical” research that iteratively demonstrates that certain procedures (e.g. ABA in autism) leads to behavioral change. In fact, an assertion like, “consequences change behaviors” can be regarded as an indisputable statement and a tautology. The assertion has nothing to do with the nature of the behavior being modified – that is, the underlying causes and functions of the behavior.

The focus on “doing”, then conducting “research” that examines the effects of such “doing”, has led the field to regard a “method” (e.g. ABA) as a “discipline”, and in fact, universities now offer doctoral degrees in Applied Behavioral Analysis (e.g. Caldwell College in New Jersey, USA). These patterns have violated critical tenets in “philosophy of science”, by emphasizing the “context of justification” (Pepper, 1942/1970), where researchers brand their data collection as

“empirical”, or as the only empirical approach. However, the critical nature of scientific inquiry, deeply held guiding principles in philosophy of science, the sense of wonder and the “context of discovery” (Reichenbach, 1951, Popper, 1959) have been abandoned. There is little authentic inquiry into the wide multidisciplinary literature that should inform “discovery” and dialectically transform “justification”. When we focus on “doing”, in line with the wish that many practitioners voice about wanting to “know what to do”, the process of discovery and wonder are inhibited.

Ways of Being-With: The Orphan of Professional Development

Consider this oversimplified, and admittedly artificial illustration: Imagine that I (the “teacher”) wanted to instruct you (the “learner”) on how to “act”, not a role in a play or a movie, but as a human being. Imagine that I were to insist that you emulate what I do and say, and that when you were behaving in a way that I considered right or “normal”, I would encourage you – give you a tangible reward, a smile and praise, or an embrace. Now suppose the plot thickens, and I try to teach you how to show “care” – the desire to help someone. Maybe I would direct you to give food to a child who is hungry, give a hug to someone who is upset, and teach you about “good actions” that have effects on others who are in need. Soon, you begin to behave in ways that I planned for, and you show care when someone is in need, and do so even when I was not present to prompt you.

A fair question is, “What were the mechanisms that resulted in this change?” The argument could be made that you began to “know” what behaviors were acceptable, and how to “do” those things considered “caring” by others. So, were the mechanisms of change, the *knowing* of what is expected and learning the *doing* of actions that reflect that knowledge? In

the case of “care”, were the mechanisms, seeing someone in distress, knowing this as a trigger for caring and then doing the actions that were learned? There are, in fact epistemological formulations that, in the interest of parsimony would suggest these are sufficient explanations (e.g. “mechanistic” models, Overton and Reese, 1973). Nothing is inferred about “internal” processes, such as a cognitive state like “intentionality” (e.g. “I showed care because I intended to.”), or emotional states like “empathy” (e.g. “When I saw that child crying, I felt distressed as if I could feel what the child was feeling.”). If there is more going on as discovered in the sciences, isn’t there an obligation to address more than what is observed?

This analysis is artificial because thinkers of all epistemological approaches acknowledge there are “feelings” that humans have, in addition to what they know and do. But does that acknowledgement actually show up, and are internal states considered in their theory and epistemology? So, this simplified analysis illustrates an important inquiry central to this discussion on “formation”: Can we promote development of multidisciplinary professionals in the fields of infant mental health and autism, primarily through imparting knowledge about the field and promoting the development of “skills” that involve learning and practicing strategies, techniques, tactics and prescribed, even protocolized interventions? Are these ways of developing (Knowing and Doing) sufficient? Can professional development authentically happen when the internal experiences of the teacher and learner are not attended to?

Now, let’s expand the meaning of “internal states” to include knowledge from the multidisciplinary sciences about cognitive, emotional, biological (neurosensory, neurodevelopmental, stress systems), and social/interpersonal studies. Exclusion of the growth and findings in these multidisciplinary sciences over the last quarter century, could now be seen

as significant omissions from the science of inquiry. Surprisingly, an argument can be made that this is often what happened, especially in the field of autism – where the internal features (cognitive, emotional, biological, stress and individual differences) of the teacher and learner are not a focus of inquiry and education, particularly in the dominant paradigm of applied behavioral analysis.

Continuing the analysis of the above illustration, the omission of any consideration of internal states and interpersonal processes (examined later) renders the analysis inadequate at best, and in the worst, obscures the identification of actual change agents. Drawing conclusions about change when significant domains of the multidisciplinary sciences are excluded, ensures the inadequacy of scientific inquiry. Furthermore, without exploring other domains, the findings are confounded by unexamined variables. So, in the example above, instructions in knowledge and doing are offered as the agents of change, but it is quite possible that change occurred due to reasons *other than* those articulated in the illustration. *In therapeutics, the intervention may work and help due to variables other than those proposed in the theory and therapeutic protocol.* The variables which were left unexamined, may be the actual potent mechanisms.

Forgive this limited analysis of a complex process in logic and science, but let's consider another example: Suppose you go to your car one morning and it fails to start. You call your local mechanic and she arrives, raises the hood of your car, looks around and declares the problem is a dead battery. She recommends a new battery and you pay \$130 (USD). She installs the new battery – and your car starts up! All is fine with the world and the process of diagnosis and treatment (of your car) were flawless! Ah! Not so fast to that conclusion. Why? Suppose the “real” problem was the acid corrosion that developed on the wires that attached

your car battery to the starter of your car. In the process of changing your battery, your mechanic cleaned the terminals on the battery and the wires to the car. Your car may have re-started with your old battery if the terminals and wires were cleaned! What happened? A diagnosis was made without examining all of the relevant variables, and an intervention was mounted which accomplished the desired effect. But NOT for the reason the mechanic identified! *The intervention was effective for a reason other than the one described!* This is an example of a common error in all areas of life: the “confirmation error” (e.g. Wason 1960, O’Brien, Costa and Overton, 1986). If an outcome is consistent with what was predicted, individuals erroneously conclude that this is “proof” that the method or intervention worked! It may be so, but it may not be as well! This “confirmation bias” occurs in science, education, therapeutics, in parenting, and very obviously in politics – we tend to interpret as “evidence” a finding that is consistent with one’s theory or belief. Costa (1988) found that when domains were more familiar and the content better known, confirmation bias is significantly reduced.

When the author was growing up in a small city in New Jersey (USA), he learned a wise lesson via a local political saying: *“If you drop a coin in the middle of the block, you don’t look for it on the corner where the light is better.”* This can be adapted as a truism in science: You tend to look where you shine your light. If your inquiry (light) does not look at certain domains of human development, those will never be available as agents of interest and change. The mechanistic (ABA) paradigm, has been looking on the “corner” based on a long-standing paradigm in philosophy and in theories and frameworks in psychology and the behavioral sciences that originated at least in the late 19th and mid-20th centuries. (e.g. Thorndike (1898, 1901), Skinner (1953) and Lovaas (1981).

Ideas and Instruments – Opening the Multidisciplinary Inner Domains

Since that time, new conceptual frameworks and the findings from the multidisciplinary sciences, have made the primary focus on knowledge and doing, and the omission of internal (unobservable) processes, functionally inadequate. In the last three decades, two important forces long critical to the unfolding progress in the sciences, have continued to challenge the dominant ways of understanding the nature of autism. These forces are the two critical “I”s: **Ideas** and **Instrumentation**. Similar to the revolution in science that followed Galileo’s use of the telescope to explore space, our understanding of autism has grown through the development of new ideas and new instruments.

Two ideas that support interest in “ways of being with” as essential to formation are illustrated by the field of interpersonal neurobiology (Siegel, 2010a, 2010b, Schore, 2019) and Polyvagal Theory (Porges, 2011). These “ideas” have been supported, even made possible, by the development of new *instrumentation*, notably in the brain sciences (CAT Scans, MRIs, PET Scans, and others) that have lifted the artificial veil of preoccupation only on what can be seen and observed with the eye. The artificiality of attending to only what can be seen and observable has long been abandoned in medicine where temperature and blood pressure measurement, and X-rays have been available for decades. Lister (1867), identified the need to protect patients from unseen bacteria and “germs” over 150 years ago. We cannot rely only on what can be seen with the eye, so instrumentation in the “hard” sciences (e.g. medicine, astronomy, and physics) have contributed to the revolution of thought for centuries.

Consider how we “see” light: A simple glass instrument (a prism) permits us to see the spectrum of light, including ultraviolet and infrared at the ends of the spectrum. We would not

deny the existence of ultraviolet light simply because we cannot see it with the naked eye, in the same way we know there are frequencies of sound that humans cannot hear. Reliance only on what can be observed, limits the science by the limitations of the human senses. That is the proverbial “tail wagging the dog”. We need other ways to observe, and this has not occurred in the field of autism as organized by the dominant paradigm.

We will examine two ideas that make the “Ways of Being With” an essential ingredient of formation.

Interpersonal Neurobiology

The field of interpersonal neurobiology examines, and documents the anatomical, physical, chemical and functional changes that occur in the brain when two living beings interact with each other (e.g. Cozolino, 2014). Nearly two decades ago, Schore (2001) examined the empirical connection between attachment style and the development of the infant’s orbito-frontal cortex, finding that the organization of the cortex was enhanced through a secure relationship with the parent. In a much earlier series of studies and publications, Giacomo Rizzolatti and his colleagues (Rizzolatti, Fogassi & Gallese, 1996,2001, Rizzolatti & Craighero, 1994, Rizzolatti, 2005) described the functioning of a certain set of brain cells, they first discovered in the motor cortex of monkeys nearly 25 years ago, which they named “mirror neurons”. Rizzolatti (2005) wrote, “Mirror neurons are a particular type of neurons that discharge when an individual performs an action, as well as when he/she observes a similar action done by another individual.” (P..419). (This was first discovered when one of their monkey subjects underwent parallel brain changes when the animal observed a lab assistant eating a peanut), so it seems to occur cross-species at least in mammals.) Siegel (2010a), refers

to “mirror neurons”, as “sponge neurons”, and he describes “resonance” or “we” circuits (p.60), which are activated when two individuals are in proximity, and where the observer actually infers intentionality in the actor. While unable to explore here, the deeper implications of these phenomena, it is sufficient to note that we are changed by mere observation and more so by interactions with others – and these occur at the neurological level and are largely below our level of awareness, on “autopilot” (Eagleman, 2011, p.5), meaning that the neurological and unconscious processes actually lead to behaviors of which we are not fully aware.

In the field of infant mental health, Schore (2001) described the mother’s limbic system as communicating directly to the infant’s limbic system (subcortical system associated with emotionality and responding to danger) – akin to Rizzolatti’s mirror neuron system and Siegel’s (2010a) “resonance circuits. Trevarthen, Aitken, Nage, Delafield-Butt and Vanderkerckhove (2006) described a “Protoconversation” between the mother and preverbal infant as “Synrhythmic regulation...(a) mutual psychological engagement by exchange of expressions of interest and emotional feelings”, and the “synrhythmic frontier” between them as the “living ‘socio-emotional space’ between the expressive actions of the two human beings and their minds” (p. 49-50). The multi-modal expressions in voice, facial expressions, movement, and pacing, are seen as kind of “musicality” (Trevarthen, 2009) that changes both – in brain, mind and emotion. Similarly, Tronick’s (2007) “Mutual Regulation Model” describes the reciprocal, interactive process between parent and infant that serves to connect and modulate the connection to its optimal level.

So why is this important to our discussion of “being-with” in formation? Because the consensus in the developmental brain sciences is that we need to pay attention to what the

“autopilot” is leading us to think and do, and *feel*! In my earlier illustration, there was no room in the analysis for this inquiry – neither in the “teacher” nor the “learner”. Now anyone with a rudimentary understanding of psychoanalysis and general psychodynamic theory, will infer from what I have said, that these processes were part of psychological theories for most of the 20th century – known as unconscious process, and in clinical work as the operation of “transference”, “countertransference”, and of “projection”. But these are now understood as also having a neurobiological component in the “hard” science or neurology, and cannot be ignored as unworthy of study or as an inconvenient notion that does not fit into more positivist views. These findings can be regarded as the kind of evidence in the history of science that Kuhn (1962/1970) would suggest will eventually result in a “paradigm shift”.

It is sufficient here to argue that the history and philosophy of science, the influence of underlying paradigms and world views, and the *existence* of differing models of thought aside from the dominant paradigm which determine the nature of research questions, the nature of what are regarded as “data” and “evidence”, and the frameworks of intervention, *must* be part of the WAYS OF KNOWING and wondering in professional development. With regard to our discussion of “Ways of Being With”, we have argued that in professional formation, we must explore the workings of what happens within us and between us, both teacher and learner, similar to the need for supervision that is reflective for the practitioner and his mentor.

Polyvagal Theory

We will examine one further theory about interpersonal processes: *Polyvagal Theory* (Porges, 2011, 2015). Polyvagal Theory was developed by occupational therapist and

neuroscientist, Stephen Porges. The theory assigns new interpersonal functions to the 10th cranial nerves – the Vagus nerves. Porges states that “co-regulation” (the capacity for an individual to help calm activation and stress in another) begins with the mother-infant relationship and extends throughout the lifespan with other significant partners. In mammals, the vagal pathways originate from a part of the brainstem that regulates the heart but also regulates the striated muscles of the face and head – a face to heart connection, that “...forms an integrated *social engagement system* that provides and senses signals of safety.” (Porges, 2015, p.4). This allows mammals (humans) to convey physiological state *via facial expression and prosody (intonation of voice), enabling facial expression and voice to calm physiological state*. Physiological state is signaled by changes in the face and voice, and this happens often below our level of awareness (neuroception vs. perception). Think “autopilot”. Furthermore, Porges (2015) theorizes that in the evolutionary transition from reptiles to mammals, *social behavior* emerged as the “prepotent regulator of physiology”. (p.3, italics added).

Stated plainly, mothers can calm fussy babies with a smile, soft voice and touch -and these are psychological and physiological changes. We have known this from eons of being human. We know that our affect, voice, movement, pacing – and of course words – can co-regulate or co-escalate another’s demeanor. Surprisingly though, in interactions conveying the social and emotional meaning of an exchange, and safety, *words* are the least important! In an oft reported analysis of the relative importance of verbal and non-verbal factors when individuals communicate feelings and attitudes, Mehrabian (1972, 1981) reported that 55% of the communicative intent is conveyed by facial expressions, 38% by vocal tone and only 7% by the words themselves. So, when a message is “inconsistent”, the non-verbal cues win out. This

is particularly the case for infants (especially pre-verbally), but in fact Porges proposes that the functions of the many (“poly”) nerves of the Vagus system convey safety and co-regulation, throughout life. Shanker (2016) refers to the regulatory capacity of the relationship as the “interbrain”, similar to Trevarthen’s notion of the “living ‘socio-emotional space’ between the expressive actions of the two human beings, cited earlier.

Porges goes further in Polyvagal Theory by proposing that the most primitive need humans have from birth is to feel safe, and that with the emergence in evolution of social behavior as the primary regulator of stress, that human have a “biological imperative” of “connectedness”. He wrote, “...(H)umans are on a quest to calm neural defense systems by detecting features of safety. This quest is initiated at birth when an infant’s need to be soothed is dependent on the caregiver” (Porges, 2015, p. 2). Porges asserts that our nervous system needs to feel safe, and that from birth we seek and expect features of safety to be present, such as caring face-to-face interactions with warmly modulated voices. If these are not detected, our “safety” brain (the fight, flight or freeze response) becomes activated, and this deactivates our “thinking” brain; we become “defensive” and this limits learning, growth and restoration. He notes that in all cultures, “... prosodic acoustic stimulation, whether vocal or instrumental, is an effective strategy for signaling safety and calming infants. (p.6). Building on the foundational importance of “regulation” as the first requirement for emotional, social and cognitive development (e.g. Greenspan and Wieder, 1988, 2006, Shanker, 2016), Porges add the critical need for *safety*, and in the formulation proposed here, Porges argues that the first task of social interactions is to feel safe. The “teacher” must help the “learner” feel safe. The “practitioner” must help the “client” feels safe. This is the first and foremost responsibility of

the teacher and practitioner. However, the important take-away from our discussion about influential ideas is that *safety and regulation are conveyed interpersonally*, pre- and non-verbally, and are driven both by the mind (intention and purpose) and the “autopilot” of the brain.

Shanker (2016) builds on MacLean’s model of the “triune” brain (MacLean and Kral, 1973), segmenting the brain into three hierarchically organized “brains: the “reptilian” (“brown”) brain, the “paleomammalian” or “limbic” brain (“red”) and the “neocortex” (“blue”) brain (p.14-17). Shanker proposes that we do our best when the “red” brain is relatively calm (meaning the “red” brain is needed for excitement and passion, but it must not lead to chronic activation of the stress systems) and the “blue” brain is fully available and engaged. What helps the “red” brain stay calm, is the “interbrain” – the connected, co-regulating other. This, of course, adds to the premise of why we must attend to “ways of being with”.

In the ending summary of this chapter, the author will present a framework called “A.G.I.L.E.” to remind the practitioner of the affective and interpersonal forces, the pre- and non-verbal forces at play, that are frequently ignored in science, theory and practice.

Before ending this section, Stern’s (1995) notion of “a schema of being with” as the experience of an infant in relationship to his mother, was a clear influence in the selection of the language and concepts underlying the “Ways of Being With” described in this chapter on “Formation”.

Putting The “Ways” Together as Formation

Five conclusions emerge from this discussion:

1. This chapter proposes that we need to replace the term, Professional Development” and similar terminology, with the concept of “Formation” in the multidisciplinary helping sciences and practices.
2. Arguments have been offered that, especially in the field of autism, there is no one way to “teach” and intervene. The current dominant “mechanistic” paradigm has for some time ignored the multidisciplinary and neurodevelopmental sciences which have challenged as untenable, key features of the ABA expression of that paradigm, notably the failure to attend to the interpersonal processes between practitioner and client, and the reliance on observable phenomena when new ideas and instruments offer ways of thinking, observing and measuring. The implication for growth is that these must also be considered in the formation of the professional.
3. Three “ways” of promoting professional growth under the umbrella of “formation” are offered: Knowing, Doing and Being-with. Efforts to cultivate “ways of knowing” must include educating the multidisciplinary workforce in infant mental health and autism, in the multiple ways of understanding, researching and intervening, that are represented by different “world views” and paradigms. Such an education in the “Ways of Knowing” must include an examination of “Philosophy of Science” (e.g. DeWitt, 2010, Kuhn, 1962/1970, Pepper, 1942/1970, Popper, 1959, Reichenbach, 1951).

4. Professional “Development” is often conflated with terms like, training, skill-building, education, problem-solving, etc., and these are often seen as focusing on knowledge and skills that derive from that knowledge. The interpersonal process is omitted. The development of intervention “skills”, strategies, techniques and tactics is insufficient in the preparation of the multidisciplinary workforce, because interventions are delivered by humans, whose inner lives and neurology must be the subject of understanding and development, as these are significant influences to the development of attitudes, beliefs and ideas that are formed “below the radar”- our “autopilot”. Skills, even those which are standardized and protocolized, will necessarily be delivered in differing ways reflecting the inner life and individual histories of the practitioner.
5. We must identify the necessary experiences in professional growth and the three interrelated ways of development can serve as a model for the development of curricula and “formative” offerings and programs.

The developmental/relational paradigms (e.g. Overton, 2013) offer alternate perspectives, and the multidisciplinary sciences have been shining the light in a growing number of areas that matter in human development including:

- developmental/ relational interventions that address the missing areas in the above discussion (e.g. Greenspan and Wieder, 1998, 2006, Solomon, 2016, Solomon, Van Egeren, Mahoney, Quon Huber and Zimmerman, 2014),
- neurosensory systems and sensory processing (e.g. Miller 2014),
- stress systems in autism (e.g. Whitman, Shanker, 2016) and,

- the motor sciences (e.g. Trevarthen and Delafield-Butt, 2013, Torres, 2018.)

Torres (2018), for example, developed a range of biometric sensors that detect subtle movements indicating intentionality in individuals with autism who do not demonstrate responses in any observable way (new “instruments”)

For years in the field of autism, the dominant paradigm promoted a discourse which diminished interest and value in non-dominant frameworks (e.g. Broderick, 2009, Claypool and McLaughlin, 2017) and in the multidisciplinary sciences. We have examined this before but the omissions include the advances in developmental neurobiology of autism (e.g. Courchesne, Campbell, and Solso, 2011), Khan, Keown, Datko, Lincoln, and Müller, 2015), and frameworks that examine the comprehensive ecological and environmental forces that form the larger context and discourse of autism (e.g. Herbert and Weintraub, 2012.) These perspectives have broadened the relevant content and discourse on which to shine the light of inquiry. These are absent in most autism curricula. The “light” simply does not shine in these areas, so what is unexamined is then omitted from thought and ideas, and what is taught is based on an implicit demarcation of limited concepts.

“Ways of Being-with” address the capacity to form attuned, empathic, contingent, co-regulating, caring relationships with the infants, children and families to whom professionals provide service. This is the “how you are” with families in addition to the “what you know and do”. A repeated theme in this chapter has been that services are provided within the context of relationships. The author argues that this is now indisputable – even if many approaches ignore relationships! But we cannot ignore relationships in the development of our multidisciplinary workforce!

The necessity to support awareness of, and growth in “ways of being-with” are essential to the development of professionals in infant mental health and autism. This means that the nature of the teacher-learner relationship must also be a primary focus of professional growth.

Formation

The concept of “formation” embodies a perspective that requires that the practitioner be fully integrated, as Kohut (1984) suggested, and in so doing, provide a “corrective emotional experience” (p.153) through the nature of “being with” (author’s interpretation) the client, integrating what the practitioner knows and does. Of course, it comes as no surprise that the “self-psychological” perspective of Kohut with his psychoanalytic roots (a world view quite different from the dominant paradigm) would lead him to focus on the inner life of the practitioner and client, but it appears that this is exactly the message coming from the interpersonal neurosciences as well. The language and interpretations that Kohut would employ are, of course, quite different, but in this attempt to articulate the essential elements of “formation”, we are “landing” in a similar place.

“Formation” here is being used as a term encompassing the development of the fully human practitioner! This means that the “ways” of knowing, doing and being-with, are actually experienced and expressed as inseparable. The practitioner, *in the moment of interaction* with her client is NOT thinking about what she knows and does, and even may be unaware of what is “going on inside”. These of course are “grist for the mill” of reflection and supervision. True formation is about being *fully present in the moment*, and this includes “presence” and “attunement”, carefully articulated and illustrated by Dan Siegel (2010b). This is not at all to

suggest that the process of intervening is mindless. It is just the opposite: what the practitioner knows and does, and their awareness of “being with” has been cultivated through education, reflection and supervision, so that what occurs in the practitioner’s relationship flows together. This is of course an idealized vision of the therapeutic relationship, but it is what we strive for, in *formation*.

So “formation” implies that our goals are to support professional and personal growth, and the later includes growth of our awareness of, and care for, our “inner life”, our “well-being”, and our neurobiological “autopilot” – a practice Siegel (2010a) calls “mindsight”. Formation calls us as practitioners to promote personal “unfolding” meaning that as we developmentally and professionally become who we are, our knowledge, actions and experiences “unfold” and become integrated.

The journey of formation entails at the least, four components of preparation in the “teaching” and “learning” about the fields of infant mental health and autism. These are:

1. The development and delivery of a curriculum of “knowing” as described earlier that covers not only the dominant paradigms and approaches in the fields, but a deep education about the philosophy of science and its implications. Such a curriculum should promote knowledge and understanding about the historically different metatheoretical ideas and theories, the definition of data, the varying models of change, the articulation of research methods, the identification of what “data” are and “evidence” is, and the varying explanation on human development and interventions. Maddi, (1968, 1980, 1995) offers an extraordinary framework for comparative analyses of approaches, and Overton

and Reese (1973) and Reese and Overton (1970) 1970 present a comparison of the philosophical traditions that undergird present developmental theories. Costa and Witten (2009) applied these frameworks to the field of autism.

2. The identification and implementation of *critical experiences* that create an interest in new ways of thinking about development and autism. In an initial formulation of these experiences that grew out of a *Post Baccalaureate Certificate in Developmental Models of Autism Intervention*, rooted in this formation framework at the Center for Autism and Early Childhood Mental Health(Montclair State University, New Jersey/USA (<https://www.montclair.edu/center-for-autism-and-early-childhood-mental-health/>), developed by them, Costa and Catalano (2014) presented a representative list of Five such critical experiences. These included: **1) An exploration of the learner’s “sensory” systems through an experiential survey.** This served as a portal to explore the “hidden” autopilot of what happens “inside”, **2) Reading of “first person” literature: autobiographical account of individuals with autism.** *Carly’s Voice* (Fleischmann and Fleischman, 2012) was particularly vision-changing for the learners. *Look Me in the Eye* (Robison, 2007) was equally effective in challenging notions about autism only being seen as a disability, and the need for education by individuals with autism. For example, John Robison (2007) wrote, “All those child psychologists who said John prefers to play by himself were dead wrong. I played by myself because I was a failure at playing with others” (p. 211). These efforts to create “disequilibrium” in the learner by challenging what they “knew” about autism, also broadened the discourse to include an understanding of an emerging perspective in disabilities in general and specifically in autism, about “neurodiversity” (e.g.

Silberman, 2016). **3) View Ed Tronick's "still face" experiment video and discuss.** This now famous experiment (see Tronick, 2007 for a review of the history and research program that emerged from this research that began in the 1970s) serves as a model of what occurs when a relationship is changed by the unavailability of one partner. In the "still face", a parent of a young infant (usually between 3- 8 months) interacts playfully with the child, and is then asked to become silent and to create a "still-face" with no gestures and movement. This results in almost immediate distress in the infant. The learner is asked to reflect on, *"What if the baby is the still face?"*, opening the discourse into the interactive and interpersonal processes that occur in all human relationships. The "still face" offers a view on the parent's perspective and encourages an understanding of the interpersonal process that is changed in a child with autism. **4. Examine Stern's (1984) notion "of Affect Attunement"**. This critical experience reveals the deep connectedness between the field of infant mental health and autism, rooted in the awareness of the importance of reciprocal processes. In examining the "feeling states" of a child with autism, who might have limited or no language, what might occur when the child's "feeling" cannot be attuned to or "felt with" by the parent? Students are asked to explore the "meanings" of certain behaviors often seen in individuals with autism, especially those without language (e.g. gaze aversion, and-flapping, screaming or running). This critical experience offers the learner to wonder about the inner life of the child with autism, not just the observables. Often such behaviors are viewed in the dominant paradigm as noncompliant and unacceptable behaviors, and this exercise offers the learner the opportunity to reflect on what might happen if she had a feeling or idea

that could not be expressed and could not be shared and “attuned to” another. In Shanker’s (2016) formulation, the “misbehavior” might better be understood as “stress” behavior (p.2). **5. Explore science as a field of inquiry, guided by different “paradigms”.**

This has been addressed in earlier sections. Catalano, Fives, McKeating, & Barnes, N. (2020), using these critical experiences developed in the “Developmental Models of Autism Intervention” (DMAI) graduate program at Montclair State University (see earlier section) examined self-efficacy and views on autism among preservice teachers. They reported higher levels of self-efficacy for teaching in general and more specifically, for teaching children with ASD in inclusive settings. They also reported a significant reduction in regarding children with autism as different from how children in general should be regarded.

3. **A rigorous commitment to exploring interpersonal/relational processes that are involved in all therapeutic relationship.** This includes the necessity of reflective supervision and consultation for all multidisciplinary professionals during formation, and therapeutic experiences as part of clinical training.

Figure 1. offers a framework of conceptualizing the many aspects of human experience building on the idea that we can consider each individual as having three levels of “self”: The “Public Self”, which is the “you” that you live out in public as you meet others in casual, everyday settings. The “Private Self” is the “you” that those closest to you, your family and close friends, who come to know you more deeply. Then there is the “Secret Self”, the inner self that others, and even “you” do not always have access to.

Insert Figure 1 about here

In Figure 1, these “Three Selves” are seen as emerging from the “self” that you and others “know” and the that “self” you and others, don’t know. This 2 X 2 grid produces a unique area for exploration and reflective process, consistent with the critical importance of understanding “ways of being-with”.

- The “self” you know and that others know, constitutes the “Public Self” we described above. In a real sense this is our “lived life” moment-to-moment, often on “autopilot” and with a minimal of reflection and introspection. Ways to cultivate formation here, can occur by openly discussing yourself with others and acknowledging your style, appearance, habits, and behaviors
- The self you know that others don’t know. We have referred to this as the “private life”. The formative tools we have are: cultivating introspection and self-awareness, working on seeing yourself as others might (“observing ego”), disclosing with candor and comfort, things about yourself that you either try to change or accept.
- The self that you and others don’t know. We have labeled this the “secret life”. (Note that in cases of early childhood experience and trauma, an individual might not recall events that happened while others might. This is considered in the final fourth cell of the grid). This is an area of great opportunity in Formation, because through an

examination of the secret life, individuals, explore, contain and alter, those unconscious and “autopilot” forces that can lead them to feel and act in ways that might not be helpful. Activities including “Reflective Practices”, cultivating mindfulness, practicing “mindsight” (Siegel, 2010a) and engaging in psychotherapy. These are all paths to examining our secret lives, and address a set of influences that are often ignored and disregarded. Yet they constitute an essential component of promoting “ways of being-with”.

- Finally, the fourth cell refers to the self that you don’t know about yourself, but others might know. We have labeled this the “Knowable” self. Ways to develop in this domain can be cultivated by supervision, reflection and self-wondering, safe conversations, and developing insight.

The cultivation of an informed, educated, sensitive and responsive multidisciplinary workforce is the goal of Formation. All of us choose our work, professions, and careers do so on the basis of ALL THREE selves! Formation MUST engage all three!

4. The opportunity to engage in supervision, within and cross-disciplinary experiences guided by mentors who themselves are in a reflective supervision. This requirement emerges from our discussion above. This is a variant of the admonition: “Physician, heal thyself” (New Testament, Luke 4:23), and was echoed in Winnicott’s recommendation mentioned earlier that pediatricians should consider psychoanalysis. It is important to note that psychoanalysis was not only viewed as a treatment for mental illness, but also as a recommended method of self-exploration and self-understanding. So, while Winnicott undoubtedly did not regard pediatricians as a class of physicians as pathological, his

insistence that the helping professional must be committed to rigorous self-examination and self-awareness was evident. This view is consistent with the formation framework discussed throughout this chapter. In his chapter on “Training for Child Psychiatry”, Winnicott (1965) wrote, “It is generally accepted that the case conference is of no value unless afterwards someone carries over into a *personal relationship* the new understanding that that discussion has brought. *New understanding does nothing by itself.* (p. 194, italics added). In other words, knowledge (i.e., understanding) in and of itself is meaningless until it is reflected in a change in the “personal relationship” between the clinician and the client – in the “doing” and “being with” the client. So, *formation, must engage all three selves*, as stated earlier, and psychoanalysis/psychotherapy is a journey worth taking for those of us in the helping professions.

Closing

Our premise throughout this chapter has been to consider the best ways to prepare the multidisciplinary workforce to understand and work in the fields of infant mental health and autism, and to honor the ways that learners best grow as a result of professional development efforts. Understanding and responding to infants, children and families and individuals with autism, must be rooted in its relationship to “ways of knowing” (What does the broad, multidisciplinary field and sciences lead me to know and how can I cultivate a sense of “wonder” so as not to see my “theory” when I am with my client?), “ways of doing” (What can I do to be of most help?) and “ways of being- with” (How can I understand the nature of my relationship with the client, including what I am feeling and how can I best use my “self”).

Figure 2. presents these three “ways” of development that must be attended to in formation. The domains mutually influence each other as we develop through our continuous encounters and growth. This figure employs a colloquial way of considering professional growth and helping by the integrated employment of our “Head” (knowing), or “Hands” (doing) and our “Heart” (being-with).

Insert Figure 2. about here

Summary

In this chapter, a framework for professional development has been described that cultivates growth in the multidisciplinary workforce in three interrelated ways: Knowing, Doing and Being -with, together conceptualized as *Formation*. Those who are responsible for the professional development of the multidisciplinary helping workforce, must grapple with two essential “knotty” – complex, intertwined, cross-disciplinary - questions about our educational endeavors:

1. What are the educational and experiential encounters that are foundational for staff at all levels and in all disciplines, to form their capacities for empathy and care in the fields of infant mental health and autism; how can we best form the capacities for professionals for educating and *forming*, their multidisciplinary charges?
2. Is emphasizing acquisition of knowledge and skill, enough, and if not, what else must be attended to in *Formation*?

This chapter offered answers to these questions, and challenges those charged with the responsibility to grow and educate our multidisciplinary workforce, to create transformative educational experiences.

In the end, most professionals who have been engaged in professional development know of the importance of “knowing” and “doing”, although the discussion about these “ways” of development here considerably broadened we hope, the meaning and scope of what they entail. However, while the field of infant mental health is rooted in “relationship-based” approaches, it is largely absent in the discourse about autism in the dominant mechanistic paradigm. Developmental/relational approaches are growing, and the science in interpersonal neurobiology and interpersonal processes clearly demand attention to the nature of the helping relationship and what happens “inside” the practitioner and the client.

As a tool to support the sensitivity to the nonverbal dimension of relationships in multidisciplinary work, Costa (2020) developed an “A.G.I.L.E.” framework to help practitioners “in the moment” as they are working with children and families. This is not meant in any way to circumvent the required experiences that constitute Formation, but merely as a memorial aid to support reflection about the operation of the practitioner’s “inner life” and autopilot.

The AGILE framework is presented in Figure 3., which was developed as a laminated “pocket card”.

Insert Figure 3. about here

The AGILE acronym stands for:

- Affect – This is what a child experiences first and most!
- G- Gesture – Modulate and be attuned in face, hands, movement and pacing
- Intonation – Modulate the tone of your voice as this conveys affect
- L- Latency (Wait) – Wait and allow the child time to “take you in”
- E- Engagement – Before you continue, be sure you have engaged the child

Collectively

Sullivan, Colby, Wegner, Bond, & Shulman, L. (2007), writing about lawyers in the Carnegie Foundation reports on professional formation, stated clearly what is regarded as the key conclusion of this chapter on Formation. They wrote, “Identity formation trumps information transmission.” (p.6).

We cannot be satisfied with transmission of knowledge and skill alone. We must consider who the individuals are that we are being called upon to FORM! Professional development must engage what is often regarded as personal and private domains – not requiring disclosure of personal narratives, but recognizing that they exist - because they INFLUENCE how we are and what we do.

Formation requires that those who “form” others must do so through a relationship that is felt as safe. We need to cultivate a shared sense of wonderment, self-awareness and the capacity for reflectivity.

There are also aspects of our multidisciplinary work that involve authentic human engagement and care. This is expressed when the practitioner holds a deep sense of modesty

and connectedness to human frailty, the capacity to suspend judgment, and a deep sense of caring.

As we have described “formation” as an integrated expression of the three interrelated ways of knowing, doing and being-with, it emerges as a unified expression of the unfolding personhood of the practitioner. It becomes both a mind and a brain process. Knowledge is integrated and expressed in “ways of doing” with others, and “ways of being-with. It integrates affect and intellect, and as Mary Gordon (Gordon, 2009) said about “empathy”, it is not “taught” as much as it is “caught” in the formation process.

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Self		
	Others Know	Others Don't Know
You Know	The "Public" (Lived) Self <ul style="list-style-type: none"> • Discussion • Acknowledge • Adaptation 	The "Private" Self <ul style="list-style-type: none"> • Observing "ego" • Disclosure and change • Self-acceptance
You Don't Know	The "Knowable" Self <ul style="list-style-type: none"> • Supervision • "Wondering" • Inquiry and discourse with others • Adaptation • Insight 	The "Secret" Self <ul style="list-style-type: none"> • Reflective Practices • Psychotherapy • Mindfulness • Mindsight

Figure 1. Aspects of the "Three Selves" and Strategies for Formation

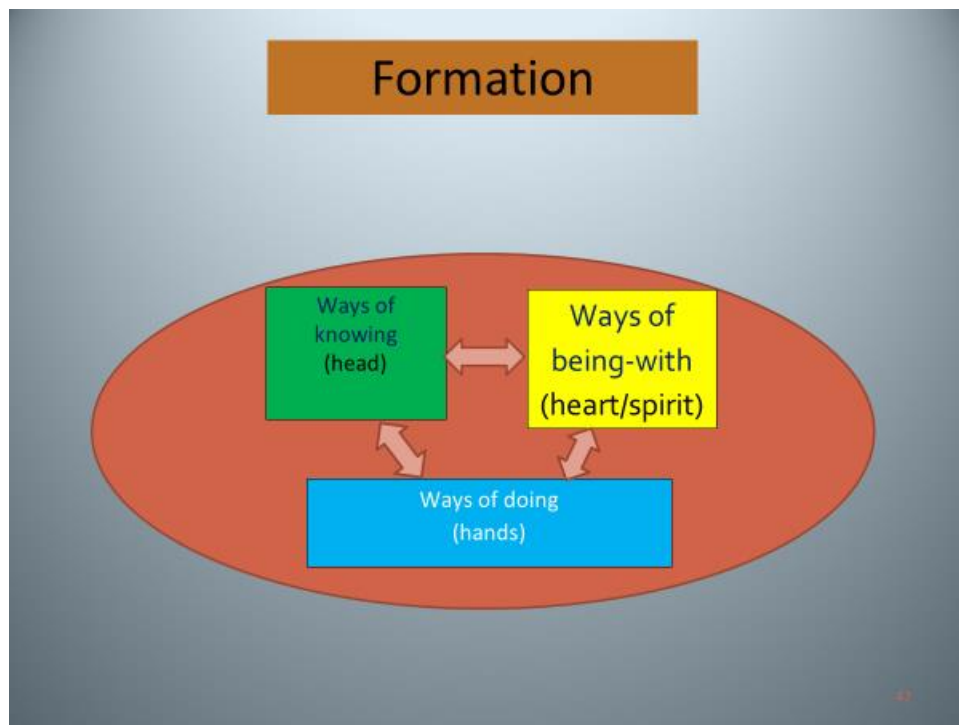


Figure 2. An Integrated Framework for Formation

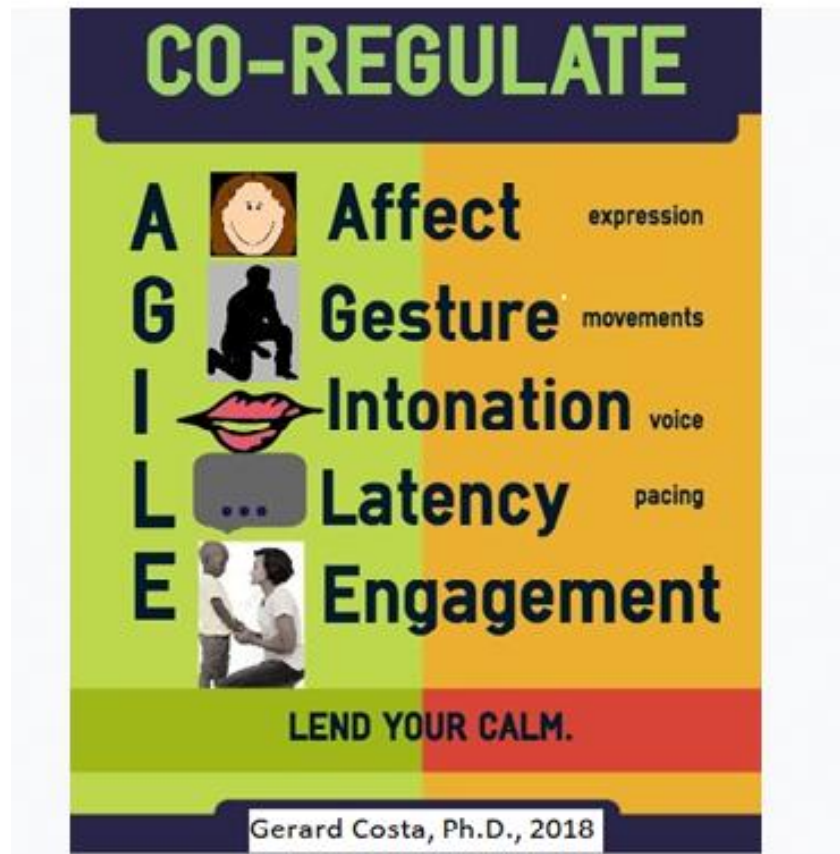


Figure 3. The “AGILE” Framework for Interpersonal Process