# DOGMATIC INSULARITY IN LEARNING DISABILITIES CLASSIFICATION AND THE CRITICAL NEED FOR A PHILOSOPHICAL ANALYSIS

**Stefan C. Dombrowski,**
**Don Ambrose**
**and**
**Amanda Clinton**
*California State University*

*The recent revision of the Individuals with Disabilities Act (Individual with Disabilities Education Improvement Act; IDEIA) in the United States (U.S.) has created the opportunity for an unprecedented change in the way in which learning disabilities (LD) are identified. As a result of this revision, intense and often polarizing debate has surfaced regarding models and methods relevant to classifying learning disabilities in children. This paper presents a philosophical/worldview framework developed to facilitate discussion among and limit dogmatic insularity within the field of LD diagnosis as it attempts to further delineate LD identification procedures. Identification of LD is discussed in relation to four root-metaphorical world views: mechanism, organicism, contextualism, and formism. Application of world view principles to discussion and debate regarding proposed LD classification models might help the field avoid entrapment within dogmatic, insulated, and limited perceptual frameworks that tend to marginalize competing models while magnifying strengths and minimizing (or inadvertently ignoring) weaknesses of a favored LD diagnostic model. This discussion is critical because learning disabilities comprises 51% of all special education diagnoses in the U.S.; yet, consensus has not been attained regarding the most appropriate LD diagnostic parameters.*

The issue of learning disabilities (LD) diagnosis requires broad, expansive thinking to ensure that theorists, researchers, and practitioners in the field are not inadvertently operating from within dogmatic, insular perspectives. Philosophical analyses of tacit influences on the major assumptions in a field can enable professionals in that field to perceive the possibility of their own entrenchment in limited perceptual frameworks. This paper suggests that the field of LD classification/diagnosis could benefit from a philosophical analysis that employs deep-level, metaphorical constructs.

With the reauthorization of the Individuals with Disabilities Education Improvement Act (IDIEA), revised parameters concerning learning disabilities (LD) identification have been established for public school systems in the U.S.  The field now has the option of predicating LD diagnosis on a comprehensive evaluation, rather than the LD discrepancy model.  In addition, the field is afforded the option of using a process that determines if the child *responds to scientific, research based intervention* (i.e., response to treatment).  In light of changes to the federal regulations, the field of LD classification now has the opportunity to pause, reflect, and examine the accumulated research evidence to determine a viable LD classification model.  The overwhelming majority of research clearly indicates that the discrepancy model should be cast aside (Aaron, 1997).

Questions remain, however, about which LD diagnostic model should supplant the discrepancy model. The LD roundtable report, sponsored by the Division of Research to Practice, Office of Special Education Programs, U.S. Department of Education, recommends a comprehensive individual evaluation using a variety of assessment tools and strategies to gather relevant functional, developmental, and academic information (U.S. Office of Special Education, NJCLD, 2002). Furthermore, the Roundtable Report indicated that decisions on eligibility must be made through an interdisciplinary team, using informed clinical judgment, directed by relevant data, and based on student needs and strengths.  Another proposed diagnostic option receiving considerable attention is the Response to Treatment model whereby a student's progress is carefully monitored and the child is determined eligible if he or she fails to make progress in the face of additional intervention (Gresham, 2001; Gresham et al., 2004).  A third proposed model requires functional impairment as documented by a dual deficit in academic performance within the context of a comprehensive evaluation (Dombrowski, Kamphaus, and Reynolds, 2004). Finally, the American Academy of School Psychology (AASP; 2004) offers a perspective regarding learning disabilities diagnosis that calls for the use of tests of intelligence and cognitive abilities as part of a comprehensive evaluation of learning disabilities.  All groups are in agreement that the discrepancy model should be cast aside.

Recent articles within journals and professional publications (e.g., Dombrowski et al., 2003; Gresham et al., 2004; Hale, Naglieri, Kaufman  & Kavale, 2004) highlight the debate over which LD classification approach is most appropriate.  This debate has been, at times, contentious with little consensus attained.  There are numerous parties to this debate each offering varying insight into what they perceive as the most viable approach to LD diagnosis.  Those who advocate for a Response to Treatment approach to LD classification (e.g., Gresham et al, 2004) have a different perspective from those who advocate for the inclusion of the intellectual, neuropsychological and cognitive processes (e.g., Hale, Naglieri, Kaufman, and Kavale, 2004; Kavale, Kaufman, Naglieri, & Hale, 2005) as part of the LD diagnostic process.  Still others propose (Dombrowski, Kamphaus & Reynolds, 2004) a dual deficit functional academic impairment model and cite the need for one of the fundamental tenets of classification—a uniform and nationally standardized diagnostic algorithm that limits idiosyncratic diagnostic decision-making and allows for increased communication among psychologists, school systems, states, and diagnostic taxonomies (e.g., educational; IDEIA and clinical; *Diagnostic and Statistical Manual of Mental Disorders*; *DSM*).

Nonetheless, it appears that some parties to this debate might be entrenched in their particular world views regarding LD assessment and diagnosis?  When this occurs, consensus and compromise over the most appropriate diagnostic option may be difficult to attain without a better understanding of the larger world view context within which these perspectives are framed.  The field of LD diagnosis would be well served by an exploration of the dimensions of its own philosophical, world-view perspectives.  A philosophical/worldview understanding will help to contextualize the seemingly divergent perspectives and perhaps move the field toward a more unified position that reduces conflict, allows for creative scholarly exploration, and leads to innovative practice.

Years ago, scholars in special education engaged in a brief, big-picture discussion of the Newtonian-mechanistic paradigm and its limiting effects on thought in the field (see Dickman, 1990; Heshusius, 1989). We are unaware of any similar, recent attempts to cast the arguments surrounding LD diagnosis within a broader, conceptual/world view lens.   Perhaps this lack of philosophical, world view perspective contributes to the present paradigm wars and disparate perspectives within the field?  A philosophical, world view perspective is critically needed to frame the present dialogue because the number of children served through the Individuals with Disabilities Education Improvement Act (IDEIA) for specific learning disabilities accounts for about 50% of all children in special education (U.S. Department of Education, Office of Special Education Programs, 2003).  Following a discussion of world views as they relate to LD diagnosis, we introduce the four root philosophical worldviews that might assist in contextualizing the often contentious debate surrounding LD diagnosis.   These metaphorical worldviews include mechanism, contextualism, organicism, and formism.  The intent of this discussion is to initiate more open-minded dialogue about the merits and limitations of various proposed LD diagnostic approaches; it is not intended to be a review of all the nuances of the myriad proposed LD diagnostic models.

**World views as lenses for analysis of arguments and conflicts in LD classification**
Psychological thought and action can often occur at several levels of analysis, each of which can be conceptually isolated from the others (Ambrose, 1998b, 2003). Metaphorically speaking, each level conforms to the height from which a professional chooses to view the conceptual terrain of a field. For example, in the field of school psychology, at the grounded level of practical application, school psychologists carry out the details of data-based decision making and problem-solving (e.g., assessment, intervention, and consultation).  Hovering just above ground at the level of research, investigators peruse the practitioners' terrain manipulating variables or seeking qualitative patterns that can reveal more effective ways for school psychologists to carry out their work (e.g., developing a new achievement test; developing curriculum-based assessment methodology). Elevating somewhat higher above ground at the level of theory, scholars trace out conceptual patterns and develop propositions that can guide both researchers and practitioners (e.g., discussing the legal, ethical, empirical, and economic implications of learning disabilities diagnosis). Finally, at the lofty level of philosophy, scholars tease out tacit assumptions in large-scale thought frameworks that implicitly influence the work of theorists, researchers, and practitioners (e.g., understanding the influence of behavioral theory or neuropsychological theory in the assessment and intervention of learning disabilities). As professionals elevate themselves conceptually through these levels of analysis, from practice, through research, through theory, and finally into the level of philosophy, their perspective becomes more panoramic and less fine-grained. Detail falls away and larger patterns remain.

Arguably, the practitioners' grounded, fine-grained level is most important in LD diagnosis because that is where children feel the real-world influence of practitioner's thought and action. Nevertheless, each level is vital and navigation through all four is necessary for the provision of most effective psychoeducational services. Those involved with LD classification who remain unaware of research findings, oblivious to promising new theoretical frameworks, or ignorant of their own entrapment within a confining philosophical perspective run the risk of robotically repeating ad infinitum some ineffective or even harmful approach to assessment, diagnosis, and intervention. In contrast, those professionals who learn to *telescope* upward and downward through these levels of analysis learn to appreciate new options in LD diagnosis while clarifying their own frames of thought (Ambrose, 1998b, 2003).

In light of new IDEIA regulations concerning LD diagnosis, this telescoping perspective is essential if the field is to avoid perpetuating decades of poor LD diagnostic practice through an uncritical adoption of a new, yet problematic, diagnostic heuristic.  Unfortunately, given the polarized positions of various researchers in the field, a broad-based perspective toward LD diagnosis may be difficult to attain. Recent presentations (e.g., Alan Kaufman's keynote address at NASP 2003) and articles in professional publications (e.g., the *Communiqué* and the *School Psychologist*) and journals (e.g., *Professional Psychology: Research & Practice; Journal of Learning Disabilities*) suggest that positions are fairly entrenched.

We encourage those affiliated with the field of learning disabilities diagnosis to attend to the panoramic philosophical level of analysis and consider their possible entrapment within particular philosophical frameworks. Those who open-mindedly consider philosophical analyses of LD diagnosis will be less likely to dogmatically entrench themselves and engage in unproductive arguments, joining paradigm wars in which the discussants talk past one another instead of engaging in productive, dialogic synthesis.  The field of LD diagnosis can discover even larger metaphor-based philosophical perspectives that shape their work. Extensive investigation in cognitive science, psychology, and philosophy has revealed the profound shaping influence of metaphor on human thought and action (Ambrose, 1996; Boyd, 1993; Haack, 1997; Harmon, 1994; Kuhn, 1993; Lakoff, 1993, 1995; Lakoff & Johnson, 1980, 1999; Sternberg, 1990). Metaphor is an essential tool for investigators and the lay public who attempt to grasp the essence of very complex, nuanced phenomena such as LD diagnosis.

*Root-philosophical/metaphorical world views*
In view of the strong influence of philosophical thought on psychologists, and the tacit influence of metaphor on conceptions of complex phenomena, it would be wise to seek out philosophical-metaphorical world view influences on the thought and action of the field of LD diagnosis. Philosophical analysts have discerned some very large-scale patterns in our metaphorical conceptions of complex phenomena. Several philosophical, metaphorical world views implicitly shape scholars' beliefs about the nature of appropriate investigative methodologies, and about the very nature of reality (Ambrose, 1996, 1998a, 1998b, 2000; Gillespie, 1992; Overton, 1984; Pepper, 1942).

A world view is a broad conceptual lens based on a root-metaphorical filter through which an individual perceives reality. Each world view provides a unique perspective for investigation and interpretation, highlighting some aspects of phenomena while obscuring others. Philosophical insularity arises when scholars or practitioners do not adequately appreciate the viewpoints of colleagues whose world views differ from their own. The four root-philosophical/metaphorical world views include mechanism, organicism, contextualism, and formism. Each is briefly described below. Examples of the influence of each world view are shown in terms of the effect it has on conceptions of one of the more complex systems in the universe: the human brain-mind system.  We also include discussion of these world views in relation to LD diagnosis. Awareness of these four world view perspectives should help to shift the field from potentially dogmatic and insular perspectives to a more panoramic vantage point regarding LD diagnosis.  Most of the debate regarding LD diagnosis can be framed within the first three world views—mechanism, contextualism, and organicism.

Mechanism, based on the metaphor of the machine, encourages reductive analyses of phenomena in efforts to predict and control events through discovery of cause-effect relationships. Scholars and psychologists who are strongly influenced by mechanism tend to believe that all phenomena can be reduced to their component parts for analysis and manipulation piece-by-piece without loss of meaning. Consequently, mechanistic investigators employ hypothetico-deductive, experimental-quantitative studies in search of the predictable and controllable mechanisms of the phenomena they study. Mechanistic conceptions of the human mind are based on assumptions that the brain is essentially a very complex computational machine (Changeux, 1985; P. M. Churchland, 1984, 1995; P. S. Churchland, 1986; P. S. Churchland & Sejnowski, 1992). In an oversimplified paraphrase of mechanistic mind theories, which dominate cognitive science, the electrochemical mechanisms and neuronal hard wiring of the great cranial-contained meat machine generate the epiphenomenon of consciousness.  As related to LD diagnosis, an example of a mechanistic conception would be a very specific and operationally defined diagnostic algorithm that determines categorically whether or not a student qualifies.  The discrepancy model of assessment, in which specific test scores and the extent of difference between them, serves as an example of mechanism in school psychology practice.

Contextualism, based on the metaphor of an on-going event within its context, emphasizes social interaction; shared meanings; and the unpredictably evolving, contextually shaped, holistic nature of events. Investigators influenced by contextualism may employ ethnographic methods to study the unpredictably unfolding, contextually influenced events in specific locales. Contextualist conceptions of mind come from theories that cognition is socially constructed in large part; hence, it is somewhat extra-cranial (e.g., Bateson, 1980; Cicourel, 1995; Descombes, 2001; Gillespie, 1992; Lakoff & Johnson, 1999; Weizenbaum, 1995). Accordingly, human thought and action largely derive from very complex, nuanced, and inescapable ecological influences reaching into the mind from local and distant cultural, socioeconomic, political, and historical dimensions of our reality.  In the case of LD diagnosis, nuanced, contextual factors other than a mechanistic algorithmic approach to diagnosis must be considered.   For instance, multicultural influences and socioeconomic status might enrich understanding of the reasons for a child's academic struggles well beyond the insights provided by a specific LD diagnostic algorithm. Similarly, everything from major historical events or crises to even very minor everyday happenstance would fall within the scope of Contextualist theory.

Organicism, based on the metaphor of a growing organism developing through predictable stages toward a particular end, highlights the coherence and totality of systems, the integrative connections among the elements of those systems, and the integration of subsystems into larger systems with different properties emerging at higher levels. Consequently, organicist scholars look for teleological, integrative explanations guided by frameworks such as Piaget's (1977) stage theory of development. Organicist influences on conceptions of mind are evident in Clark's (1986) conception of the emergence of giftedness and talent in the development of the *whole* child: the integration of cognitive, emotional, and physical subsystems into a stronger whole.  Continuing with the LD example, diagnosis from an organicist perspective would consider all of the child's subsystems (cognitive, physiological, emotional) and the ways in which they intertwine, instead of limiting the analysis to a specific cognitive/academic process.  It is quite plausible that an emotionally disturbed child might qualify for LD services under a mechanistic framework, yet the underlying emotional condition might be undermining the functioning of his or her otherwise powerful cognitive subsystem.  From an organicist perspective, LD classification requires a more comprehensive assessment of children to account for variables that may be overlooked by a more narrowly defined diagnostic algorithm.  This would lend

support, for instance, for an assessment of cognitive processes such as phonological awareness, memory, and processing speed (Siegel, 1999) which may be contributing to a child's struggles with a particular academic area. Furthermore, it also might lend support for a greater understanding of the ecological characteristics (e.g., classroom and school environment) that contribute to a child's academic struggles (Pianta, 1999).

Formism, based on the root metaphor of similarity, emphasizes patterns of correspondence in diverse phenomena. For instance, at the theoretical level, complexity theorists are discovering patterns of similarity in the behavior of human brains, animal populations, chemical interactions, ecological networks, immunological responses, and other complex, adaptive systems (for examples, see Axelrod, 1997; Camazine et al., 2001; Holland, 1995; Jervis, 1997; Kauffman, 1995; Prigogine & Stengers, 1984; Pullman, 1996). Such cross-disciplinary pattern finding is generating new research trajectories in a variety of fields. Formism is evident in conceptions of mind based on complexity theory (Kelso, 1995) and in metaphorical notions of mind because metaphor is a primary tool for perception of similarity across diverse phenomena.  A formist lens enables analyses of a child diagnosed with LD in a much more expansive fashion.   For example, the diagnostician would be sensitive to cross-disciplinary patterns of similarity. Such sensitivity could lead to discovery of intriguing patterns in the traits and behaviors of some children who struggle academically but go on to contribute great achiements as revealed in the creative studies and philosophy of science literature. The asynchronous development displayed by many great scientists and artists can remind the psychologist that a child may harbor considerable hidden abilities. More specifically, the young Picasso combined precocious spatial intelligence with his weak scholastic abilities (Gardner, 1993), and the eminent physicist Ernst Mach *was a good mechanician, however he was a deplorable philosopher* (Einstein, cited in Miller, 1996).  Formism, then, can remind the those involved with LD classification that the cognitive and academic profile of a child may be very complex, possibly hiding significant *gifts* that should be investigated and nurtured.  This perspective emphasizes the importance of maintaining awareness of broader patterns and typological profiles with respect to LD diagnosis, as well as attempting to discern potentially uncovered unique qualities.

A single world view provides a valuable and unique perspective on the world. Nevertheless, the scope of each world view can seduce an investigator or practitioner into thinking that his or her preferred vision of the world is the only valid perspective on reality. Overton (1984) also made the point that different world views are incommensurable, lacking common standards for comparison, and agreement on terminology. Consequently, when they are not in conflict, adherents to competing world views tend to talk past each other without appreciating the value of their opponents' positions. Those who adhere too strongly to the tenets of a single world view while disdaining or remaining ignorant of other world-view perspectives suffer from dogmatic insularity (Pepper, 1942). This severely constrains their thinking, causing them to ignore some intricacies and nuances of complex problems and issues. It also prevents them from understanding the weaknesses of their own favored world view.

Such world view conflicts frequently occur in academia (Ambrose, 1996, 1998b, 2003). They may arise in interdisciplinary symposia such as the field of LD classification where school psychologists, neuro-psychologists, special educators, reading specialists, child clinical psychologists among others engage in discussion and debate. No single world view (i.e., behavioral, neuropsychological or cognitive processing), in and of itself, provides an adequate representation of a complex phenomenon. Taken together, however, they can provide broad and deep understandings by giving multiple perspectives on complexity (Ambrose, 1998a, 1998b, 2000; Gillespie, 1992; Overton, 1984; Pepper, 1942). The more complex the phenomenon of interest, the more necessary it is to consider contributions from multiple world view perspectives, in spite of the incommensurability of those world views. Each perspective has sufficient breadth of scope to provide a useful explanation of a particular dimension of a complex phenomenon but it cannot adequately address some other dimensions, and it certainly cannot capture the essence of the entire phenomenon without significant distortion.  A comprehensive understanding of complex phenomena and issues requires a form of meta-triangulation that synthesizes contributions from diverse analysts who see things in very different ways.

When one world view dominates thought in a profession (or for that matter a culture or society) both its benefits and harmful effects are magnified. In the field of LD diagnosis, while it may be acceptable to analyze a specific issue or phenomenon through the lens of one world view only (i.e., a mechanistic, behavioral perspective), it may be a mistake to assume that a single world view provides adequate scope for analysis of this very complex psychoeducational issue. For example, it may be appropriate at

times to use a highly mechanistic diagnostic test to analyze a child's problems with a specific algorithmic basic skill. However, it would be a glaring conceptual error to assume that the mechanistic world view provides the only correct way to analyze, predict, and control very complex issues such as the nature of student learning and academic achievement.

**Is consensus attainable?**
The current discussion in the field of LD diagnosis has varying positions and perspectives that must be fully considered prior to the widespread adoption of an LD diagnostic framework.  Those who proffer LD diagnostic approaches, and those who would adopt these approaches, are encouraged to be mindful about their own particular world view entrapment.  To do otherwise might just serve to perpetuate myopic thinking, a unilateral approach to complex issues, dogmatic insularity, and a recapitulation of poor diagnostic practice.  In the case of LD diagnosis, several organizations, researchers, and roundtable groups have proposed approaches to LD diagnosis, and each proposal should be carefully considered.  It is hoped that this paper will facilitate further dialogue among researchers and practitioners alike regarding the most viable approach to LD assessment and diagnosis.  In this way, one approach toward LD diagnosis does not surreptitiously dominate the field, ultimately adversely influencing decision-making and allowing for a recapitulation of a poor diagnostic model. (The field suffered this fate with the ubiquitous adoption of the discrepancy model over thirty years ago). The key for the field will be to attain consensus in a more eclectic, panoramic fashion so that the classification approach ultimately adopted operates synergistically, rather than antagonistically.

**Conclusion**
In the end, the field will be in a better position to ultimately adopt a particular classification approach model once it has reflected upon its possible philosophical, world view entrapment and broadened its critical analysis to a more panoramic level.  To date, several proposals including the AASP assessment model (AASP, 2004), the Dual Deficit Functional Academic Impairment model (Dombrowski, Kamphaus, & Reynolds, 2004), Response to Treatment (e.g., Gresham et al., 2004) and the comprehensive evaluation model (e.g., U.S. Office of Special Education, National Joint Committee on Learning Disabilities, 2002) have been proffered.  The field should fully consider these models for LD assessment and diagnosis. Overall, it is hoped that this discussion will allow the field to move beyond dogmatic, insulated, and entrenched positions so that the perspectives of other scholars and practitioners both inside and outside the field can be heard.  This will increase the likelihood of moving toward consensus and crafting a model of LD classification that meets the needs of children who struggle academically.

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