REVISITING CLASSIFICATION AND IDENTIFICATION

Barbara K. Keogh

BARBARA K. KEOGH, Ph.D., is professor emerita, University of California Los Angeles.

In his invitation to contribute to this special issue, LDQ Editor David Scanlon suggested I discuss issues of classification and identification. I am pleased to do that as I think some of the continuing controversies about learning disabilities (LD) are related to those topics. More specifically, I suggest that many problems have to do with confusion between the two. Despite years of effort and an extraordinary increase in the number of individuals considered as having LD, we continue to grapple with vagaries and inconsistencies in classification, definition, and identification. We continue to face critical challenges about “what is LD?” “who is LD and who isn’t LD?” and “how do we know?”

Our problems are in part related to a lack of clear boundaries between LD and other conditions. They also relate to definitions that serve political, legislative, advocacy, or intervention needs as well as research or “scientific” purposes. To muddle the problem further, classification problems are compounded by limited and often inadequate or inappropriate operational methods of identification.

Problems and confusions in classification and identification are not new, and they are not limited to the field of LD. Over 40 years ago, Zigler and Phillips (1961) published a seminal article titled “Psychiatric Diagnosis: A Critique,” in which they examined problems in classification and identification of psychiatric conditions. For those of us in the LD field the article is as relevant today as it was in psychiatry then. Zigler and Phillips argued that “Reduced to essentials, diagnostic classification involves the establishment of categories to which phenomena can be ordered” (p. 608).

Such efforts result in a map or a taxonomy that systematically describes a field. In this sense, classification is fundamental in organizing any field, and LD is no exception. In contrast to classification, identification refers to the assignment of individuals or exemplars to classification categories and, thus, relates to operational decisions, methods, and measures. Who is included and who is not included as LD is a function in part of what measures, procedures, and criteria are used. Which psychometric tests? Where are the cutoff points? How large must a discrepancy be? As fisherman have long known, the size of the net affects the size of the fish that are netted.

Zigler and Phillips argued that three criteria were essential in determining the adequacy and utility of a classification system: homogeneity, reliability, and validity. In their analysis, homogeneity refers to the similarity (or lack of) of those included in a category. Reliability refers to the degree of agreement when placing individuals in categories. Finally, validity refers to how well category membership informs prognosis or treatment.

Applying these criteria to classification in LD, consider first the question of homogeneity. There are different definitions of LD and there have been changes over the years (see Kavale & Forness, 2000, for discussion). The LD classification is defined as much by what it isn’t as by what it is, and it is accompanied by a long list of exclusions, for example, learning problems due to generalized cognitive limitations, to social/cultural conditions, or to instructional inadequacies. The result is a broad band of learning problems gathered under the LD rubric, thus posing a challenge to homogeneity.

In Zigler and Phillips’ discussion, reliability raises the question of consistency of identification. Specifically, is there agreement about who should be included or who should be excluded from the category? In LD, decision rules about inclusion and exclusion differ widely, and identification may be influenced by a number of extraneous conditions. For example, where you live and go to school and your cultural and familial status, in addition to the nature and degree of your learning problem, may determine whether or not you will be identified as LD. School districts using the
aptitude-achievement discrepancy model of LD differ in what tests are used and in how large a discrepancy must be for students to be eligible for services. Response-to-intervention (RTI) provides a model of identification that differs from the traditional discrepancy model, but ultimately confronts the same question: After sorting out instructional effects, who should be considered LD and who should not? On what basis do we make that decision? These are important questions as countless individual students are affected, some become eligible for needed services while others are denied the same services. Because the “rules” that define eligibility and the operational procedures used to identify who is and who is not LD vary, the reliability of identification is questionable, thus threatening the meaningfulness of the classification.

Finally, validity in classification has to do with the kind of information classification provides, the nature of the correlates of the classification. Applied to LD, what does class membership tell us except that an individual has a learning problem? Even when individuals are reliably identified as LD, as in psychiatric diagnosis, Zigler and Phillips noted that “class membership conveys … little to the solution of the pressing problems of etiology, treatment procedures, prognosis, etc.” (p. 612). Said directly, classification as LD does not necessarily direct treatment responses and may not lead to appropriate decisions about what to do. There is a striking range of intervention programs for individuals with LD, some emphasizing educational techniques, others aimed at changing underlying processing problems, still others treating LD within a psychodynamic framework. Unfortunately, some interventions are based primarily on strong beliefs rather than on evidence of effectiveness. Sometimes, too, intervention decisions are a function of advocacy and availability rather than of individual characteristics and needs.

THE NEED FOR CLASSIFICATION
Up to this point the discussion has painted a rather dismal picture of the state of the LD field, and that is somewhat justified. Despite decades of effort, we still struggle with questions and problems of classification and identification, leading some to ask if there really is a condition called LD. My answer is that LD is real and that it describes problems that are distinct from other conditions subsumed under the broad category of problems in learning and achievement; that is, generalized and pervasive cognitive deficits or instructional inadequacies. Because LD is only one possible reason for learning problems, any overarching classification of learning problems must allow for other categories. That does not minimize the importance of a classification system within LD itself; that is, a system of classification based on what we know about LD in terms of etiology, expression, and prognosis across the developmental spectrum.

It is time to have serious discussions about what LD is, rather than what it isn’t. As a start, I suggest we separate the condition from how it is operationalized. That is, that we separate classification and identification, and that we focus on the conceptual organization of what we think constitutes LD rather than building a classification system based on already identified individuals and measures.

When focusing on LD as a classification issue, we know a lot about various aspects of LD. There are both behavioral and academic expressions. LD may be expressed in different academic or content areas: reading, arithmetic, spelling, or any of the areas specified in the definition proposed by the U.S. Department of Education (1997). Indeed, it is the specificity of the problem that in part defines LD, and that is a point to be emphasized. The last 10 years of research in reading has resulted in important steps in understanding reading acquisition and reading problems. For example, we have solid evidence about the importance of phonological processing and its correlates in early reading, and we have evidence of effective intervention techniques directed at that particular problem. But reading disability is only one aspect of learning disabilities. Thus, many questions are still unanswered.

Linking intrinsic processing deficits to specific problems in academic achievement and behavior provides a promising direction for developing a classification system that is clear and conceptually defensible. We can expect that there will be different views about the nature and specificity of the processing problems. See, for example, Torgesen’s and Swanson’s discussions of phonological processing and working memory and the responses to them in Identification of Learning Disabilities, Research to Practice (2002) edited by Bradley, Danielson, and Hallahan. While different, these approaches present reasonable arguments that specific LD can be differentiated from other problem conditions both conceptually and empirically.

It is encouraging that consensus is beginning to emerge on several points: LD is real and is intrinsic to the individual; the expression or evidence of an LD is related to specific processing deficits; and specific processing deficits are different from general cognitive delays or deficits. However, we continue to face the difficult task of operationalizing the constructs due to issues of measurement, which in turn lead to issues of reliability in the identification of individuals. A further unanswered and controversial issue has to do with intelligence and its role in classification and identification of LD. Note that I refer to intelligence, not to IQ. The
limitations of IQ, especially in the controversial aptitude-achievement discrepancy identification model are well known. Certainly there are problems in how intelligence is operationalized, measured, and applied in the identification of individuals. There are also continuing questions about the role of intelligence in the classification in LD.

Finally, what is required in a classification system in LD? At the least it must differentiate LD from other problem conditions. It must be comprehensive, covering the many expressions of LD. It must take into account the hierarchical organization of classes and subclasses. It must be equitable, ensuring equal opportunity for individuals to be included or excluded. It should inform instruction and treatment/intervention. Hopefully, it would also inform prevention. And, it must satisfy the requirements of homogeneity, reliability, and validity.

The development of a classification system and the specification of identification procedures is not a simple or easy task. It requires careful and critical thinking and discussion, and a great deal of empirical work. Classifications and methods of identification will likely change over time as we learn more. Yet, they remain important to the survival of LD as a field. It is time we confront them with reason and with evidence. To return to Zigler and Phillips, “Systems of classification must be treated as tools for further discovery, not as bases for polemic disputation” (p. 616). Good advice.

REFERENCES


Swanson, H. L. (2002). Learning disabilities is a specific processing deficit, but it is much more than phonological processing. In R. Bradley, L. Danielson, & D. P. Hallahan (Eds.), Identification of learning disabilities: Research to practice (pp. 643-651). Mahwah, NJ: Lawrence Erlbaum.

