

THE IMPORTANCE OF CRITICAL THINKING SKILLS, PROFESSIONAL RESPONSIBILITY, AND OPPORTUNITY DEVELOPMENT IN ONE'S CAREER

La importancia de las habilidades de pensamiento crítico, de la responsabilidad profesional y del desarrollo de oportunidades en la carrera profesional

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ABSTRACT: The article provides a comprehensive overview of how critical thinking skills and professional responsibility can be applied to enhance the lives of people with intellectual and developmental disabilities (IDD) and influence broader systemic change. The manuscript highlights three core critical thinking skills —analysis, synthesis, and transformational thinking— and discusses their importance in driving change and advancing the field. The document underscores the need for professionals in IDD to balance a philosophical approach with practical application, embracing a responsibility to their clients and society. It calls for the use of evidence-based practices, person-centered planning, and active collaboration with individuals with IDD and their families. The field is experiencing a shift towards recognizing the rights and autonomy of people with IDD. This includes adopting a “Shared Citizenship Paradigm” that emphasizes inclusion and empowerment.

KEYWORDS: Critical thinking skills; professional responsibility; opportunity development.

RESUMEN: El artículo proporciona una descripción completa sobre cómo pueden aplicarse las habilidades de pensamiento crítico y la responsabilidad profesional para

mejorar la vida de las personas con discapacidades intelectuales y del desarrollo (DID) e influir en un cambio sistémico de mayor alcance. El manuscrito destaca tres habilidades básicas del pensamiento crítico —análisis, síntesis y pensamiento transformacional— y analiza su importancia para impulsar el cambio y avanzar en este ámbito. El documento subraya la necesidad de que los profesionales en DID alcancen un equilibrio entre un enfoque filosófico y su aplicación práctica, asumiendo la responsabilidad hacia sus clientes y la sociedad. Se reclama el uso de prácticas basadas en la evidencia, planificación centrada en la persona y colaboración activa con las personas con DID y sus familias. El campo de conocimiento está experimentando un cambio hacia el reconocimiento de los derechos y la autonomía de las personas con DID. Esto incluye la adopción de un “Paradigma de Ciudadanía Compartida” que pone énfasis en la inclusión y el empoderamiento.

PALABRAS CLAVE: Habilidades de pensamiento crítico; responsabilidad profesional; desarrollo de oportunidades.

1. Introduction and overview

This award is deeply meaningful to me. It represents the memorable 30 years I have been associated with my favorite University in the world; encompasses the inspiration, mentorship, and fondness associated with INICO staff and University students; and provides me the opportunity to reflect on my 60-year career in the field of Intellectual and Developmental Disabilities (IDD).

As I think back over my 60-year career, and project into the future, two fundamental truisms have emerged. The first is that one's career is not a straight line. Rather, it is an arc that is characterized by: (a) an apparent path above the horizon (i. e., activities and endeavors one can anticipate) and one below the horizon (i. e. those future activities and endeavors that are unknown); (b) a sustained luminous discharge that involves motivation, commitment, optimism, and enthusiasm; and (c) an opportunity to respond to inflection points along the way that effect the arc of one's career.

The second truism is that one's career involves not just a commitment to a field or endeavor. It also involves thinking and acting. This truism provides the framework for this article, which describes how my thinking over these 60 years has involved three critical thinking skills (i. e., analysis, synthesis, and transformational thinking) and an evolving sense of professional responsibility. At the outset, let me define each.

- *Analysis* involves examining and evaluating component parts of a phenomenon. Clinically, analysis is critical in diagnosis; from a policy or practices perspective, analysis is critical in evaluating the current status of an individual or group.
- *Synthesis* involves integrating and organizing information from multiple sources. Clinically, synthesis is critical in classification and planning supports; scientifically, synthesis is critical in developing models and theories.

- *Transformational thinking* involves accommodating to change involving information, attitudes, policies, and social-political conditions, and bringing about meaningful change. Transformational thinking is critical in adapting to change and bringing about meaningful change in individuals, organizations, systems, and society.
- *Professional responsibility* is the obligation to use and be accountable for professional practices, facilitate client goals, and performing professional duties.

My professional career has focused primarily on teaching and mentoring students, developing and evaluating services and supports for people with IDD, and advocating for systemic changes that will improve peoples' quality of life and shared citizenship. As a trained research psychologist, I have endeavored to combine a commitment to the scientific method with the need to be a philosopher, visionary, organizer, and promoter. These roles are not antithetical or contradictory, and indeed I have found that it is possible to walk, chew gum, and publish books and articles at the same time. This holistic approach is reflected in the following sections that provide examples of each of the three critical thinking skills, a description of what professional responsibility entails, and a discussion of the importance of maximizing opportunities.

2. Analysis: Examining and evaluating

The history of people with IDD is not pretty. Historically, people with IDD have been treated inhumanly, have been segregated and neglected, and have been the brunt of negative stereotypes. I came into the field early in my career in the 1970s when deinstitutionalization and normalization became a public policy. Prior to that time, my research had focused on the biochemical basis of what was then referred to as mental retardation, and whether a viable animal model of one cause of mental retardation (phenylketonuria; PKU) could be developed (it couldn't!). By chance, an opportunity emerged to help develop and evaluate a community-based program for people with IDD who were moving from a large institution to communities throughout Nebraska (USA). That opportunity, which was a major inflection point in my career, allowed me to examine and evaluate the process of placing special need students and adults with IDD into the community, and evaluate the effects of that placement on their independence, productivity, and community integration.

During the two decades that I analyzed these processes and outcomes, I published a number of books and articles that summarized the [then current] service delivery system in Nebraska and elsewhere, the history of the community-based movement in Nebraska, ways to assess personal outcomes, and the variables that predicted placement success. Throughout this work and these publications, I described what my colleagues and I had learned from the analysis. These lessons learned were that where one lives and works (and with whom) and how people occupy their time is important; individualized supports are necessary for one's independence, productivity, and

community integration; a continuum encompasses the pattern and intensity of needed supports provided in a natural environment, rather than moving people from place to place; and that positive changes in one's adaptive behavior are related to normal rhythms of life and not regimented regimes or segregated environments.

One sentence in a 1986 publication on the analysis of the predictors of successful community-based placements provided another inflection point in my career. The sentence read, "We had accomplished our goal: we had placed people into more independent, productive, and integrated environments; but we had overlooked a critical factor: their quality of life" (Schalock and Lilley, 1986, p. 673). That sentence was the entry into a whole new way of thinking: synthesis.

3. Synthesis: Integrating and organizing

As defined previously, synthesis involves integrating and organizing a plethora of information from multiple sources. It is a very productive and necessary critical thinking skill in the development of a model or a theory. This is because synthesis underlies concept mapping that is used in model development, and inductive reasoning that is used in theory development. This section provides examples of the use of synthesis in model and theory development.

3.1. Model development

Concept mapping, which is a type of structural conceptualization, was used to develop and operationalize the concept of quality of life (QOL). This work, which began in the mid to late 1980s, involved three activities: (a) generating ideas and listing potential domains and indicators based on the input from focus groups, personal interviews, national and international surveys, and published literature; (b) sorting the potential domains and indicators into groups that made conceptual sense and reflected the values and aspirations of individuals with IDD and community QOL standards; and (c) defining each domain on the basis of measurable indicators.

I, along with valued colleagues from INICO, used concept mapping based on the integration of published literature in the fields of education, special education, intellectual disability, mental/behavioral health, and aging to develop the QOL Model summarized in Table 1 (Schalock and Verdugo, 2002). Subsequent to the model's development, its framework has been used for multiple purposes. These involve the construction of QOL assessment instruments (e. g., Claes *et al.*, 2009; Gómez and Verdugo, 2016; Verdugo *et al.*, 2010); a vehicle for implementing human rights (e. g., Moran *et al.*, 2023); implementing quality enhancement strategies (e. g., Reinders and Schalock, 2014); outcome measurement, planning individualized supports, and organization/systems change (e. g., Baker *et al.*, 2016; Verdugo *et al.*, 2024); and aligning QOL domains with UNCRPD articles (e. g., Claes *et al.*, 2016; Gómez *et al.*, 2024).

TABLE 1. Quality of Life Model

QOL Domain	Literature-Based Indicators*
Personal Development	Education, personal competence, performance
Self-Determination	Autonomy, /personal control, goals and personal values, choices
Interpersonal Relations	Interactions, relationships, supports
Social Inclusion	Community integration and participation. Valued community roles, social supports
Rights	Human (respect, dignity, equality) and legal (citizenship, access, due process)
Emotional Well-Being	Contentment, self-confect, lack of stress
Physical Well-Being	Health and health care, activities of daily living, leisure
Material Well-Being	Financial status, employment, housing

*The three indicators listed for each domain were the most commonly cited indicators across the fields surveyed in the literature review (Schalock & Verdugo, 2002).

3.2. Theory development

A theory as an “integrative construct based on facts and experiences that reflects a set of principles upon which the theory is based and applied, and generates hypotheses that can be tested and used as the basis for explanation” (Schalock *et al.*, 2016, p. 2). The development of a theory: (a) starts with a conceptual model (such as that shown in Table 1) that explains a particular phenomenon, explores the impact of various factors influencing the phenomenon, and provide the basis for its application; (b) involves inductive reasoning that incorporates observation and scientific inquiry; (c) meets theory standards related to utility, testability, feasibility, applicability, and generalizability; and (d) explains how the theory can be applied and used to generate testable hypotheses whose results can be used for explanation and application. In a recent update to the 2016 article Verdugo and Schalock (in press) defined an individual QOL theory thusly:

Individual QOL is a multidimensional phenomenon composed of core domains that constitute personal well-being. These domains are impacted by personal characteristics and environmental/contextual factors. These characteristics and factors operate at the level of the micro, meso, and macro system levels and can be impacted through three theory-based operational components: quality enhancement strategies, moderator factors, and mediator factors.

As referenced in the above definition and depicted in Figure 1, the individual QOL theory has three operational components: quality enhancement strategies, moderator factors, and mediator factors. These three components can impact QOL domains and domain-referenced indicators through: (a) direct action (as is the case of quality enhancement strategies); (b) altering the relation between two variables and thus modifying the form or strength of the relation (as is the case of moderators); and/or (c) influencing the relation between an independent and outcome variable and thus exhibit indirect causation, connection, or relation (as in the case of mediators).

Quality enhancement strategies. Quality enhancement strategies are the vehicle through which QOL domains and indicators can be directly impacted (Reinders and Schalock, 2014). Enhancement strategies involve a number of actions that incorporate QOL principles and systemic change strategies that can be applied across ecological systems. Generally speaking, quality enhancement strategies involve providing services, supports, interventions and opportunities to: (a) enhance the QOL domains listed in Table 1; (b) reduce risk factors associated with biomedical, psychoeducational, sociocultural, and justice conditions that cause either directly or indirectly the manifestation of IDD; and (c) positively influence the moderating and mediating factors summarized in Table 2.

Moderating factors. QOL domains and their respective measurable indicators are also impacted by moderators. A *moderating factor* alters the relation between two variables and thus modifies the form or strength of the relation. A *moderator effect* is an interaction in which the effect of one variable is dependent on the level of the

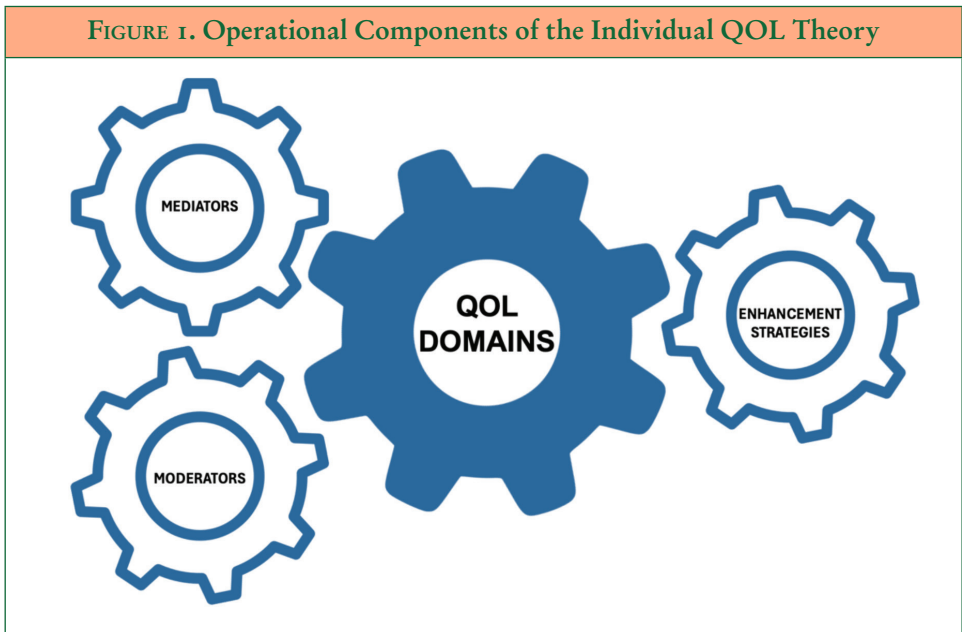


TABLE 2. Quality of Life Moderators and Mediators

<i>Factor</i>	<i>Influence</i>	<i>Variables Studied to Date</i>
Moderator	Alters the relation between two variables and thus modified the form or strength of the relation	<p><i>Personal characteristics:</i> Gender, age, intellectual functioning, adaptive behavior, socio-economic status</p> <p><i>Family-unit factors:</i> Family income, size of family, geographical location, religious preference, family structure</p>
Mediator	Influences the relation between an independent and outcome variable and exhibits indirect causation, connection, or relation	<p><i>Current status:</i> Residential platform, employment status, health status, and level of self-determination</p> <p><i>Organization culture;</i> Level of personal involvement with the client, level of growth opportunities</p> <p><i>Provider system:</i> Type of service, individualized supports</p> <p><i>Community factors:</i> Normative expectations, attitudes, media impact</p>

other variable (Farmer, 2012; Gómez *et al.*, 2020). Based on current literature (summarized in Gómez *et al.*, 2020) a list of potential moderating factors is provided in Table 2 (top row). As noted in Table 2, moderator factors typically pertain to personal characteristics and family-unit factors.

Mediating factors. A *mediating factor* influences the relation between an independent and outcome variable, and exhibits indirect causation, connection, or relation (Farmer, 2012; Gómez *et al.*, 2020). A *mediator effect* is created when a third factor (e. g., residential status, organization culture, type and frequency of supports provided, or community factor) intervenes between the independent variable (e. g., personal characteristics) and outcome variable (e. g., QOL domain and/or QOL domain indicator scores). As noted in Table 2 (bottom row), mediating factors typically pertain to an individual's current status, organization culture, provider system, and community factors.

4. Transformational Thinking: Accommodating to change and bringing about meaningful change

Transformational thinking requires accommodating to change and engaging in creative thinking and problem solving. Transformational thinking facilitates meaningful change that effects positively people, organizations, systems, and society. Additionally, when engaging in transformational thinking, one addresses not just the 'what one does' but also the 'why and how one does it'.

To describe the role that transformational thinking plays in accommodating to change and bringing about meaningful change, this section consolidates a large amount of information regarding: (a) the current transformation and paradigm shift in the field of IDD; (b) how one can accommodate one's thinking to this transformation and paradigm shift; and (c) examples of how transformational thinking facilitates bringing about meaningful change.

5. The current transformation and paradigm shift in the field of IDD

The field of IDD is currently undergoing a transformation in its approach to people with IDD to enhance their autonomy, human rights, and community inclusion. This transformation is characterized by an increased recognition and emphasis on the human and civil rights of people with IDD, empowering individuals and families, the emergence of multiple theoretical perspectives on disability, an increased understanding of the role that one's context plays in human functioning, the application of a person-centered and supports-based approach to services, the measurement of valued outcomes, and an equitable approach to research (Schalock *et al.*, 2021).

The current transformation also encompasses a paradigm shift that blends the characteristics of the transformation just described with the centrality of disability rights, quality of life, and shared citizenship (Schalock, in press). This integrative paradigm has been named "The Shared Citizenship Paradigm" (Schalock *et al.*, 2022) and has been shown to have universal appeal (Luckasson *et al.*, 2022). The Shared Citizenship Paradigm envisions, supports, and requires the engagement and full participation of people with IDD as equal, respected, valued, participating, and contributing members of every aspect of society. Additionally, the paradigm is based on a collective and unifying set of values and concepts; can be used to guide the development of policies and practices; provides the framework for application, inquiry, and evaluation; and re-sets the default for systemic change so that "people with lived experiences are afforded their right to be an equal contributor and a driver of the policies and practices that are intended to impact their lives" (Shogren, 2022, p. 525).

6. Accommodating to Change

Accommodating to the above-described transformation and paradigm shift requires all stakeholders to think and act differently. Specifically, and based on the work of Luckasson *et al.* (2022), Schalock *et al.* (2021), and Verdugo *et al.* (2024), policy makers, service/supports providers, advocates, researchers, professionals, and people with IDD and their families need to:

- *Use precise terminology* related to Intellectual Disability, Developmental Disability, Intellectual and Developmental Disabilities.
- *Emphasize a holistic approach to IDD* that: (a) recognizes the multiple perspectives on disability including biomedical, psychoeducational, sociocultural,

and justice: (b) utilizes systems of support that minimize or ameliorate the risk factors associated with each of the four perspectives; and organizes relevant information into a usable form for making more valid decisions and recommendations.

- *Employ a functional approach to IDD* that encompasses a system (i. e., microsystem, mesosystem, and macrosystem) perspective towards enhancing human functioning. This functional approach integrates human functioning dimensions, interconnected systems of supports, and valued outcomes.
- *Embrace the supports model*. The supports model emphasizes 'the fit' between people and their environments, and conceptualizes disability as the expression of limitations in individual functioning within a social context. The model posits that: (a) disability is neither fixed nor dichotomized but rather can be fluid, continuous, and changing, depending on the person's functional limitations and the supports available within a person's environment; and (b) one's disability can be mitigated by designing interventions, services, and supports based on consumer participation and an understanding of disability that comes from experience and knowledge.
- *Use evidence-based practices*. Evidence-based practices are interventions and supports that are based on current best evidence that is obtained from credible sources that used reliable and valid methods derived from a clearly articulated conceptual model, theory, or rational.
- *Implement person-centered outcome evaluation*. Both the current transformation and paradigm shift emphasize the need to evaluate valued outcomes. Four guidelines have emerged concerning this needed evaluation. These guidelines are that person-centered outcome evaluation: (a) reflects a collaborative partnership among an individual and an IDD service or supports provider who is committed to the reliable measurement and use of outcome information; (b) involves a team that has the knowledge, skills, and resources to participate in the evaluation; (c) requires a validated conceptual model and measurement framework; and (d) is implemented based on a clear understanding of the use and impact of evaluation information.
- *Empower individuals and their families*. If people with lived experiences are to be afforded their right to be an equal contributor and a driver of the policies and practices that are intended to impact their lives, they must be empowered. Such empowerment: (a) involves individuals and their families in the development, implementation, and evaluation of the individual's Personal Support Plan; (b) assures legal and ethical structures that support their dignity, value and personal autonomy; (c) assists families in advocating for the person with IDD; (d) involves the individual and one or more family member engaging in person-centered planning that incorporates disability rights principles, quality of life domains, and shared citizenship principles; and (e) includes the individual and one or more family member in person-centered evaluation to determine personal goals, the pattern and intensity of support needs, and the provision of individualized systems of supports.

- *Understand context.* Context can act as an independent variable (e. g., personal characteristic) or an intervening variable (e. g., organizations, systems, and society attitudes and policies). The complexity of context is captured through a multi-dimensional model that explains the multilevel, multifactorial, and interactive properties of context (Shogren *et al.*, 2021). The multilevel property includes the ecological systems (i. e., the microsystem, the mesosystem, and the macrosystem) within which people live, learn, work, and enjoy life. The multifactorial property of context includes the independent and intervening variables mentioned above. The interactive property of context includes the variety of ways in which levels and factors influence an individual's support needs and valued outcomes. An example is how the individual's pattern and intensity of support needs interact with the type and intensity of individualized supports provided to facilitate inclusive education, supported employment, or assisted living.

7. Bringing about meaningful change

Change is difficult, given the power of entrenched ideas and attitudes, one's view of the world and related paradigm, the energy and commitment required to bring about change, and the unknowns regarding change. This statement is true whether or not one focuses on individuals, organizations, systems, or society. However, bringing about meaningful change is possible, especially when there are potential change strategies that are seen as feasible and based on observation and empirical information. Three change strategies that meet these criteria are discussed herein: harnessing the power of systems, sustaining best practices that drive systemic change, and promoting valued outcomes.

Harnessing the power of systems. Reference was made earlier to the three ecological systems that impact human functioning and valued outcomes: the microsystem (the individual and family), the mesosystem (organizations and the community), and the macrosystem (the larger service delivery system and society). Each of these systems has conditions, policies, practices, or characteristics that can facilitate human functioning. For example, at the microsystem level, empowering individuals and families will increase their level of co-engagement and co-production, which in turn will facilitate experiential-based change and increase motivation to be a major agent in the change process. At the mesosystem, level, organizations can build capacity to bring about change by focusing on workforce development, using assistive and information technology, entering into partnerships, and maximizing multiple resources such as time management, expertise, and social and financial capital. The power of the macrosystem can be harnessed through the development and implementation of policies and practices that support disability rights, quality of life, and shared citizenship.

Sustaining best practices that drive systemic change. Best practices were delineated in the previous section regarding how one can accommodate to the current

transformation and paradigm shift. In this section, specific examples (expanded on in Schalock *et al.*, 2017; Shogren *et al.*, 2021; Verdugo *et al.*, 2024) of these best practices are discussed in reference to driving systemic change at the microsystem, mesosystem, and macrosystem levels.

- At the microsystem level, systemic change involves implementing person-centered planning and evaluation. This process is encompassed in a "My Support Plan". The Plan involves the person in selecting, implementing, and evaluating the provision of individualized supports, and identifying the specific supports needed to foster decision making, choice making, goal setting, self-advocacy, self-direction, co-engagement, and co-production.
- At the mesosystem level, systemic change involves conducting contextual analyses to identify context-based factors that facilitate or hinder change; ensuring opportunity development and safe and secure environments; providing or procuring systems of supports that involve choice and personal autonomy, inclusive environments, generic supports, and specialized supports; aligning the individual's support needs with the provision of individualized supports and the evaluation of valued personal outcomes; and building organization capacity.
- At the macrosystem level, systemic change involves developing policies that embody the core values of disability rights, quality of life, and shared citizenship; stating and measuring personal outcome indicators associated with human and civil rights, quality of life, and shared citizenship; developing policies that mandate person-centered planning, individualized supports, and person-centered outcome evaluation; and enriching peoples' environments to ensure proper nutrition, clean air and sanitation, freedom from neglect and abuse, and adequate housing and income.

Promoting valued outcomes. Bringing about meaningful change also involves modifying mental models. Mental models are deeply ingrained assumptions, images, and generalizations used to understand and interact with the world. Mental models establish expectations and interactions regarding a group of people and the culture of entities dealing with them. Historical and some current mental models regarding people with IDD have focused on disablement based on deficits and negative stereotypes, an emphasis on segregation, and an application of control and power over the group. The impact of these mental models has hurt people with all disabilities, including those with IDD.

The current transformation and paradigm shift described in this article challenge these historical mental models, and provide a positive framework to bring about meaningful change through the lens of disability rights, quality of life, and shared citizenship. This positive framework involves:

- Recognizing a holistic view of disability that includes biomedical, psychoeducational, sociocultural, and justice risk factors.
- Shifting from zero-sum thinking in which someone wins and someone loses to positive sum thinking that encourages pluralistic values in which everyone

possesses their own specialty, people embrace interdependency, and where human creativity, drive, innovation, and ambition are unleashed.

- Shifting from a controlling to a partnership mentality that emphasizes co-engagement, co-production, and co-benefits.
- Rethinking assumptions regarding the potential of people with a disability, the multiple positive roles they can play in society, and the importance of communality and interdependence.

8. Professional responsibility

Professional responsibility has both a philosophical and an application component. As a philosopher, a professional searches for a general understanding of values and reality, and analyzes fundamental beliefs, concepts, and attitudes toward an individual or group. The concepts of disability rights, quality of life, and shared citizenship discussed in this article are philosophically based. As a practitioner, a professional engages in an occupation that is the result of a structured, specific preparation; employs critical thinking skills and best practices; is guided by respect for the person, professional standards, and professional ethics; and focuses on obligations to others, one's profession, and one's society (Luckasson *et al.*, 2022).

The current transformation and paradigm shift represent an inflection point in the professional careers of those involved in the field of IDD. This inflection point, in turn, challenges professionals whose primary role is education, clinical services, or research to integrate their philosophy and application to align with the current transformation and paradigm shift.

9. For educators

Educators should emphasize and explain the current zeitgeist regarding major characteristics of the transformation in the field of IDD and the components and potential of the integrative paradigm. Additionally, educators should foster critical thinking skills, and show how analysis, synthesis, and transformational thinking can be applied, and how the application of these critical thinking skills can foster and enrich their work and professional career. Finally, educators should emphasize and demonstrate the importance of professional responsibility in meeting one's obligation to one's self, others, profession, and society.

10. For Clinicians

Clinician should focus on using good clinical judgment. As defined by Schalock and Luckasson (2014), clinical judgment "is a special type of judgment built upon respect for the person. Clinical judgment emerges from the clinician's specialized training

and experience, specific knowledge of the person and his/her environments, extensive data, and use of critical thinking skills: (p. 7). As a critical part of one's professional responsibility, clinical judgment is important because when used properly, it leads to more transparent analyses and increasingly logical, reliable, valid, and principled decisions and recommendations. The purpose of clinical judgment is to enhance the quality, validity, and precision of the clinician's decisions or recommendations in situations related to diagnosis, subgroup classification, and planning supports. These three clinical functions are described as follows (Schalock *et al.*, 2021).

- *Diagnosis. Intellectual disability* is characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills. This disability originates during the developmental period, which is defined operationally as before the individual attains age 22. In distinction, a *developmental disability* is a severe, chronic disability that: (a) is attributable to a mental or physical impairment or a combination of mental and physical impairment; (b) is manifested before the individual attains age 22; (c) is likely to continue indefinitely; (d) results in substantial functional limitations in major life activities; and (e) reflects the individual's need for a combination and sequence of special interdisciplinary or generic service, individualized supports, or other forms of assistance that are lifelong or extended duration.
- *Subgroup classification* is a systematic arrangement into subgroups based on: (a) the intensity of support needs; (b) the extent of adaptive behavior limitations in conceptual, social, and practical skills; and (c) the extent of limitations in intellectual functioning. Subgroup classification should occur within an explicit framework and systematic process, serve an important purpose, have benefit to the person, be based on relevant information, and provide a better understanding of an individual's needs.
- *Systems of supports* are an interconnected network of resources and strategies that promote the development and interests of a person and enhance an individual's functioning and personal well-being. Effective systems of supports are characterized as being person-centered, comprehensive, coordinated, and outcome oriented; and encompass choice and personal autonomy, inclusive environments, generic supports, and specialized supports.

11. For researchers

Researchers, acting in partnership with people with IDD, need to take advantage of the research opportunities provided by the current transformation and paradigm shift, for example (Luckasson *et al.*, in press):

- When researchers integrate the four perspectives on disability into their thinking, multiple research opportunities emerge, such as focusing on biochemical, psycho-educational, sociocultural, and justice risk factors; determining

the efficacy of prevention and amelioration strategies associated with each perspective; and determining the best way for multidisciplinary or individual support teams to synthesize and address the effects of risk factors that extend across the four perspectives.

- When context is treated as an intervening variable, contextual factors such as policies, practices, leadership styles, change strategies, and social-political conditions create multiple research opportunities. Examples include conducting pre-post impact studies; conducting cross-cultural implementation and outcome studies; and determining the influence of the integrative paradigm on systemic change.
- When disability rights principles are the research focus, research opportunities emerge related to how best to incorporate principles into actions; what knowledge transfer mechanisms are most effective in developing or changing policies and practices; and how disability principles can best be communicated within a community or society to raise consciousness and increase interdependency.
- When person-centered thinking becomes the research focus, co-engagement and co-production become the operable terms; disability policy evaluation focuses on person-centered outcomes related to the attainment of human and civil rights, quality of life domains, and shared citizenship indicators; and person-centered evaluation incorporates into the potential predictors of valued outcomes personal variables, environmental/contextual factors, and specific supports received.

12. Conclusion: One's career as an opportunity

In looking back on my 60-year career in the field, I have also come to the conclusion that one's career is not just an arc; it is also a journey driven by opportunities and opportunity development. The opportunities provided by the field's current transformation and paradigm shift have provided a forum for colleagues from around the globe to work collaboratively with policy makers, service/support providers, advocates, and individuals with IDD and their families to move away from historic paradigms based on one's defects, negative stereotypes, and segregation to a paradigm based on a social construction and capability model of disability and a rights-based service delivery model that encompasses autonomy, inclusion, empowerment, individualized supports, and self-determination (Buntinx and Schalock, 2010; Nussbaum, 2011; Schalock *et al.*, 2022; Trent, 2021).

How one embarks on a professional journey and maximizes potential opportunities will depend upon a number of factors, including where one lives, the resources available for person-centered services and supports, and the fluidity of one's culture and its attitude towards people with IDD. At the apex of this opportunity triangle are the mental models held by the person embarking on the journey. A number of traits reflecting positive mental models are common among the most productive

and effective colleagues I have had the pleasure of working with over these 60 years. These traits include being a visionary, organizer, and promoter; being well trained, flexible, and involved in life-long learning; being motivated and committed to making an improvement in peoples' lives; believing there are no problems, only opportunities; focusing on not just the pursuit of achievement, but also the search for meaning; and, in the end, realizing that the journey is the reward.

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