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Authentic Assessment and Instruction and Students with Significant Intellectual Disabilities[1]

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Authentic assessment requires arranging for a student to function in an authentic/real environment, activity and context and then empirically validating the nature of his/her repertoire as she/he functions therein. If acceptable performance is empirically validated, so be it. Empirically validated refers securing evidence that can be seen, heard, touched, felt or otherwise sensed. Authentic Instruction refers to clearly defining the skills that are actually needed for functioning effectively in authentic environments, activities and contexts, attempting to teach them and then empirically validating progress toward their realization or the lack thereof. There are thousands of ways authentic assessment and instruction can enhance the functioning of individuals with significant intellectual disabilities in integrated schools, homes, work places, recreation/leisure environments and general community settings. Consider the teacher who constructed a five item picture list of food items Jon's family typically buys in the market they use most often. Then she took him to the market, gave him the list and assessed how well he could complete the required skill sequence (authentic assessment). He did not perform the actual sequence acceptably, so the specific skills he needed to learn, the materials needed, the performance criteria appropriate for the setting, the adaptations, the needed commitments for

[1] "Individuals with significant intellectual disabilities" refers to the lowest intellectually functioning 1 - 2 % of a naturally distributed population. Most have been ascribed such labels as severely/profoundly developmentally disabled, autistic, multiply handicapped, cognitively disabled, mentally retarded or their synonyms. Emphasis here is placed on students, school personnel and services. However, the information is also relevant to instructional and related services provided adults with significant intellectual disabilities who are being prepared to live, work and play in integrated society.

practice responsibilities, etc. were decided upon and arranged. Some of the needed skills could be best taught or approximated at school and followed by generalization checks and instruction the actual market, if necessary, until acceptable performance was realized. Matching a picture of a box of cereal to an actual box in a classroom is an example. However, skills such as using a card that contained a picture of a particular box of cereal to find the actual box from among forty others on a real food market shelf and pushing a cart up and down busy aisles without interfering with others are probably best taught in actual markets (authentic instruction). When he successfully performs the sequence in accordance with the minimally acceptable standards of the food market, parents and family members can assume their agreed upon practice responsibilities, items could be added to the list, he could be taught to shop in a pharmacy, etc. These and similar skill clusters can be learned, accumulated and performed in authentic settings and contexts throughout his life.

The Americans with Disabilities Act of 1990 requires that individuals with disabilities be afforded reasonable opportunities to function in integrated settings. In 2012, the state of Oregon was found out of compliance with important mandates of this act by the US Department of Justice, Office for Civil Rights for confining far too many adults with significant intellectual disabilities to segregated workshops and thus not affording reasonable access to integrated work settings. In addition, Oregon public schools were found to be systematically tracking students with significant intellectual disabilities to segregated settings at school exit, even though they were legally and educationally entitled to receive services designed to prepare them to function in integrated settings. (IDEA, 2004; Lane v Brown, 2015; Musgrove, 2012). In 2013 Rhode Island was found to be engaging in essentially the same school and post school segregative practices as Oregon (Perez, 2013). Both Oregon and Rhode Island agreed to start removing their adult citizens from segregated workshops and to provide school services designed to prepare for functioning in integrated work settings at school exit. In 2015, Georgia was found to be engaging in essentially the same segregative practices as Oregon and Rhode Island (Gupta, 2015). Investigations of other

states will result in similar anti segregation findings and pro integration settlement agreements.

The vast majority of, but not all, adults with significant intellectual disabilities are segregated in sheltered workshops or confined to their residences all day. After school exit some have real jobs. Why? Little is due to intellectual capabilities. Much is due to poorly trained school and adult service personnel, extremely limiting service delivery models, inhibiting school policies, practices and procedures, inadequate and irrelevant instruction, outdated and overly protective attitudes, low expectations and the absence of long term extra supports. However, each year increasing numbers are being taught to function effectively in integrated work and related settings as components of their school careers (Brown, 2012; Certo et al. 2009; Wehman et al. 2013). Each year the knowledge and experience needed to engender success in integrated workplaces accrues. Mounting legal, economic and humanistic pressures are charging school officials with the responsibility of preparing the individuals of concern to function in integrated vocational and related settings at school exit and charging post school service and relevant funding agency personnel with the responsibility of arranging for them to function therein throughout their working lives. These evolving responsibilities require that thousands of school and adult service personnel acquire the information, skills, attitudes and values necessary to produce integrated realities. Authentic assessment and instruction can substantially increase the percentage of individuals with significant intellectual disabilities who function effectively in the real world of work.

Intelligence, however defined, is not distributed equally across individuals. What many can do with their intellectual abilities is wonderfully helpful to society and worthy of many differential opportunities and rewards. The lowest intellectually functioning 1 - 2 % of our population is different. Space does not permit delineating how they function in relation to all intellectual factors, but several that are extremely important to effective authentic assessment and instruction must be addressed (Brown & Toson, 2015).

The Number of Skills That Can Be Learned. Individuals with significant intellectual disabilities can learn many skills, but less than 98 - 99 % of all others. Thus, only important skills they can and really need to learn should be selected for instruction. Selecting unimportant skills: those that individuals really do not need; those that will never be practiced and will therefore be forgotten; those that will be obsolete or chronological age inappropriate soon after they are acquired; those that will not be generalized appropriately to or that are not useful in noninstructional settings, activities and contexts; those that otherwise waste valuable time and other resources, etc. is untenable.

Difficulty Range. If asked to learn skills that are too simple, a student will not be challenged and will underachieve. If asked to learn skills that are too complex, the same student will not learn them, will become frustrated and will underachieve. It is best when skills selected for instruction are important and near the upper ends of personal difficulty ranges.

Instructional Trials. Only a few individuals with significant intellectual disabilities learn some skills simply by observing the actions of others or after receiving a few instructional trials. The vast majority need many more instructional trials to learn a particular skill than all others. Thus, the individually required instructional trials needed to learn important skills at the upper ends of difficulty ranges must be provided. If they are not, acquisition and accumulation will be extremely limited, if realized at all.

Practice. Without practice individuals with significant intellectual disabilities forget more and take longer to relearn what was forgotten than all others. This requires that we do not teach skills that will not be maintained with individually needed practice. Knowing forgetting will occur and then allowing it to happen is harmful and irresponsible. Two important kinds of practice are vertical and horizontal. Assume we teach Jo to count five things. Then we teach her to count ten things. This operationalizes vertical practice because in the process of learning to ten count things she is practicing counting five. A major problem with vertical

practice is that individuals with significant intellectual disabilities reach the upper limits of their difficulty ranges quickly. Horizontal practice offers important options. Assume we teach Jose to count five things and that we assume the responsibility for not allowing him to forget how to do so. We then engineer horizontal practice by arranging for him to count five sit ups in his physical education class and at his fitness center, to set his dining table at home for five family members, to put five bananas in his cart at a grocery store, etc. When skills that are useful in a variety of settings, activities and contexts are taught, practice can be operationalized by others, forgetting can be minimized, additional skills in a difficulty range can be taught and knowledge can accumulate.

Generalization. Individuals with significant intellectual disabilities have substantial difficulties generalizing skills learned across similar but different conditions. Assume I taught your daughter to stop her electric wheelchair in front of a tape line on the floor of the school gym. Now I would like your permission to take her to busy streets and see if she stops at curbs. What would you do? You would refuse permission or require that authentic assessment and instruction in real traffic conditions be provided. If artificial/instructional conditions are used, they should be as close as possible to authentic/real conditions. However, even if artificial conditions are used, performance under authentic conditions must be validated empirically or developed. We cannot continue to rely upon generalization abilities we know, or should know, are not operative (Brown, Nisbet, et al, 1983; Wehman, Schall et al, 2013; Wehman, 2011).

Synthesis in Context.

> At school Charlie was taught to fasten and unfasten the Velcro straps on his new shoes. At home he fastens and unfastens the straps fifteen to twenty times per hour seven days per week. At school Sara was taught to pick up three crayons from a desk and put them in a basket. At the grocery she puts three of every kind of produce she can fit in a cart. At school Bill was taught to cut out pictures of foods he would like to eat from magazines. At home he cuts out all pictures from all magazines, newspapers and family

scrapbooks and albums. Obviously the three students generalized skills learned at school to other settings. This is encouraging, but not sufficient. Now school personnel must teach or otherwise arrange for them to be performed in authentic contexts.

The more intellectually able you are, the better you are at fusing, clustering, combining, synthesizing disparate bits of information and producing unique, helpful and lucrative outcomes. Scientists, artists, business leaders, inventors, authors and many others are remarkably good at doing so. Individuals with significant intellectual disabilities are not. We know how to teach them many important skills in their difficulty ranges, but we also know they will rarely generalize, synthesize and perform them in context constructively. Adults in authority are responsible for engineering synthesis in context by teaching or otherwise arranging for them to do so. Dan was taught a math skill at school and how to ride a public bus to his integrated work training site. Then he was taught to buy a snack at a grocery store and to eat it at work. Then he was taught to perform these "splinter" skills in clusters in authentic settings and contexts. Specifically, on the way from his home to the bus stop he used some of the math and communication skills he learned at school to purchase a snack. Then he used his math, travel and communication skills to ride a public bus to work. During his break he ate the snack he bought on the way to work. He will probably perform this skill cluster, or one quite similar, in authentic settings and contexts for many years.

Observational Learning. If a person cannot or does not learn by observing, the models to which she/he is exposed have no effect on subsequent actions. However, if a person can learn by observing, the models to which he/she is exposed can have profound effects on subsequent actions. The individuals of concern possess, or are capable of acquiring, rudimentary observational learning skills, including those necessary to imitate; i. e., to match or approximate some of the actions of models. This makes it extremely important that they function in the presence of the best possible communication, dress, work, social and behavior models over long periods

of time. It also makes it extremely important that functioning in the presence of inappropriate models is minimized or avoided.

Repertoires at School Exit

Study the lives of adults with significant intellectual disabilities from ages twenty five to thirty. Determine the skills taught when they were in school that are now not needed and those that are needed now that were not taught when they were in school. Alternatively, or additionally, compile a list of the skills a student with significant intellectual disabilities will likely need and is capable of learning in order to function effectively in a reasonable array of integrated residential, vocational, recreation/leisure and general community environments, activities and contexts at school exit.

> Then consider her/his learning and performance history and generate a reasonable estimate of the number of skills she/he actually learns in a typical year.
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> Then delineate the skills he/she learned and actually performs appropriately in authentic settings, activities and contexts during her/his first year of high school.
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> Then determine which of those skills actually learned are and are not on the list of those needed for effective integrated functioning at school exit.
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> Then record a judgment as to whether or not she/he is making reasonable progress toward developing the repertoire actually needed for effective integrated functioning at school exit.

If she/he is accumulating and maintaining the actual skills needed at school exit, continue what you are doing the next year. If he/she is not developing a reasonable repertoire of skills that will actually be needed in authentic settings, activities and contexts at school exit, changes in your instructional strategies are in order. If your changes are effective, the next year he/she will learn, accumulate and maintain through practice a reasonable number of the skills he/she will actually need to live, work and play as best she/he can in integrated society at

school exit. Concomitantly, he/she will be exposed to fewer experiences that do not enhance, or that actually interfere with, functioning in integrated post school life. If this strategy is followed, reasonable progress toward an integrated life at school exit should be empirically discernable. Four of many possible options and combinations thereof related to authentic assessment and instruction are addressed below. Only Option # 4 is endorsed here.

Option # 1 - No Authentic Assessment and Instruction.

Far too many Special Education and related service personnel claim they are not responsible for directly preparing individuals with significant intellectual disabilities to live, work and play in integrated society at school exit. Specifically, they claim they are not responsible for providing authentic assessment and instruction. Several reasons they offer follow.

> Some consider authentic assessment and instruction "training" rather than "education." Training should be provided by parents, job coaches or others, not by certified and licensed teachers and therapists.
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> Many admit they do not know how to provide authentic assessment and instruction and are not interested in learning how to do so. However, they offer that if the school district provided additional personnel for such purposes, they would gladly release their students to them.
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> Some report that they spend more than one hour per day traveling to school and more than one hour traveling home. They are not interested in traveling to and from nonschool settings for instructional purposes between those times.
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> Some report that it is too cold or hot out; that it is too dangerous in the neighborhoods in which their students live; that they cannot control their students in integrated nonschool settings; and/or, that they simply do not have the energy.

> Some say their contract hours are from 8 AM to 3 PM. If they do not get back to the school by 3 PM, they want overtime pay. The district will not provide it, so they will not leave school grounds.

If such attitudes, values and practices resulted in individuals with significant intellectual disabilities functioning in a wide array of authentic environments, activities and contexts at school exit, they would be professionally, economically and otherwise defensible. They do not. Thus, they are indefensible. What if we decide not to try to develop the skills students actually need for integrated functioning at school exit and try to teach only those: that are convenient to address in school classrooms; that are closely linked to or "mirror" grade level academic content that is clearly out of difficulty ranges; that do not involve enough practice opportunities to be maintained when learned; and, that will not be generalized, synthesized and performed in context acceptably? Trela and Jimenez (2013) offer provide examples.

> "As students learn the principles of solving math problems on area and volume, they may also be working alongside peers to determine the best shape and size of a school garden; a high school class may read an adapted version of Hamlet, then share the stage with a drama class to present selected scenes to their school and community audience; after a unit on plate tectonics, students may engage in a fund raiser for victims of an earthquake in another part of the world; and a middle school student may share an adapted version of Call of the Wild with his parents, allowing them time to discuss topics like taking care of animals or knowing the difference between needs and wants."

Several extremely important vocational related skills and attitudes are delineated below. Some argue they can be developed on school property. However, the ubiquitous and well documented intellectual characteristics of the students of concern, particularly generalization and synthesis in context difficulties, renders that position absurd, wasteful and harmful.

They can only or most efficiently be developed from many experiences over extended periods of time in authentic settings, activities and contexts.

Stamina. The vast majority of students with significant intellectual disabilities are in substantially less than good physical condition. In addition, the activities in which they engage at school are primarily sedentary and are notorious for not building much needed stamina. When they exit school, it is extremely helpful if they can travel, work and otherwise function effectively out of their homes for at least 6 - 7 hours per day. If they have not developed the stamina necessary do so, the risks of having to stay at home or being segregated in post school years are great. The kinds and amounts of stamina needed to function in integrated work related activities and contexts can only or can most efficiently be developed over extended periods of time in authentic settings and activities.

Quality Standards. At school, quality standards are highly individualized. At work, they are not. At school almost any level or kind of performance is accepted or tolerated. At work, employers understand that a worker may not be able to complete some tasks or otherwise behave perfectly, but all have minimally acceptable performance standards. If a worker cannot meet them, they must function elsewhere. It is extremely important that students with significant intellectual disabilities understand that they must complete work and related tasks and otherwise behave in ways that earn the respect, appreciation and approval of coworkers and supervisors.

Many individuals with significant intellectual disabilities cannot or otherwise do not comprehend the contingent relationship between work and money. Indeed, many do not understand or appreciate how the money they earn affects their lives. To them money has little value as a reason for working. However, the same individuals can and do comprehend and appreciate the respect and social approval of coworkers and supervisors that results from manifesting “a good work ethic”; i e, maintaining acceptable productivity over extended periods of time. It is extremely important for them to learn that completing work and related tasks acceptably and reliably will produce the respect and social approval they sense and appreciate.

Context Cues. At school, students are dominated by performance cues provided by teachers, therapists and paraprofessionals. Indeed, too many are actually discouraged from acting in the absence of cues provided by adults in authority. This often results in individuals who do not act unless someone directs them to do so. Some ask for assistance too often and/or when they really do not need it. This usually interferes with the productivity and enjoyment of coworkers or supervisors or requires the unnecessary involvement of teachers, paraprofessionals, therapists and job coaches. Some do not ask for assistance when they really need it. This usually results in work products of low or unacceptable quality, wasted money and having someone else correct or complete unsatisfactory work.

In authentic settings, workers are often required to act without a person directing or reminding them to do so. Knowing when and how to ask for valid assistance are skills that enhance productivity, improve work quality and afford important opportunities to develop naturally supportive relationships. Unfortunately, the actual skills needed cannot be determined and developed at school. Even if they could, it is extremely doubtful that they would be generalized acceptably to authentic work and related settings and contexts. The students of concern can and must be, taught to respond appropriately to the valid directions of coworkers, supervisors and anonymous customers. Finally, the fire, tornado, intruder and other drill protocols of schools are often very different from those commonly practiced in integrated workplaces. As workplace safety has become a high priority, the ability of a student/worker to follow local workplace protocols is essential. Where are the best places to learn these? How many instructional trials are necessary?

Transitioning Across Settings and Activities. Authentic workplaces require naturally occurring transitions. Often times, a worker is required to finish Task A, replenish salt and pepper shakers and then start completing Task B, rolling silverware in napkins. Sometimes, a worker is required to function in Setting A, the office, from eight to 10 AM, then to go to Setting B, the break room, for about fifteen minutes and then to go to Setting C, the warehouse, until lunch time. They must be taught to use context, rather than person provided, cues to make some

such transitions. Acquiring the skills and developing the adaptations such as timers and picture checklists needed to make context cue transitions can be only or most efficiently developed in authentic settings. In fact, teachers, paraprofessionals and therapists are rarely aware of the context cues operative in authentic work and related settings or understand how important functioning acceptably in response to them is for success therein.

Interfering Conditions. Some individuals are extremely sensitive to, distracted or incapacitated by and/or uncomfortable or pained in the presence of specific workplace conditions. Loud and/or sudden noises, the movements and/or proximities of others, bright lighting and constant changes are examples. Decrements in effective performance results. In school settings these difficulties are addressed by controlling the lights in a classroom, keeping a student away from others, allowing few, if any, changes in the setting, etc. Integrated workplaces are different. There are two major ways to address conditions that interfere with effective functioning. First, the student can be taught to function acceptably in the presence of the personally uncomfortable stimuli. This almost always requires many teaching and/or desensitization trials over extended periods of time and the use of adaptations that minimize the offending conditions. Ear buds or head phones that reduce noise are examples. Second, a work setting that does not contain stimuli that engender difficulties can be arranged. This is a key element of the process of matching a student to an authentic work setting. However, even with careful student to work setting matching, it is rare that all conditions that cause difficulties can be eliminated. Teaching someone how to cope with uncomfortable conditions while staying on task is often quite difficult and requires frequent and sustained experiences in authentic settings over extended periods of time.

Property Rights. Unfortunately, individuals with significant intellectual disabilities are sometimes ejected from integrated work settings because they do not respect the property rights of others. Coworkers without disabilities quite often will ignore, understand or tolerate an array of atypical actions. However, they rarely, if ever, tolerate someone who takes their money. Quite often property rights violations do not involve cash or items of significant monetary value. Consuming

the lunch or soda of a coworker and taking personal coffee cups or trinkets from desks are examples. Unfortunately, some students do not realize the social stigmata and emotional distress their not respecting the property of others causes until it results in ejection. Teaching students to honor the property rights of others can be accomplished only or most efficiently in authentic work and related settings over extended periods of time.

Nonwork Activities. Birthday celebrations, pot luck luncheons, holiday parties, etc. are common occurrences in most workplaces. Experiencing these kinds of activities over extended periods of time is critical for learning the skills needed to participate effectively which engenders important opportunities for social interactions and therefore social integration.

Dress and Hygiene Codes. The dress and hygiene codes operative and tolerated at schools are often dramatically different from those operative and tolerated in authentic workplaces. In many instances it is not poor work skill performance that results in failure and ejection, but inappropriate dress and hygiene. Poor hygiene practices and not adhering to required dress codes can also be detrimental to making social connections and achieving social integration. Unfortunately, few teachers or therapists are aware of the hygiene and dress codes of actual businesses. Not only must they learn them, but they must be able and willing to teach their students to act in accordance with them or employment opportunities will be seriously jeopardized.

Teaching the students of concern to successfully complete actual work tasks is generally much less complex, time consuming and difficult than developing the important work related skills and attitudes delineated above. Unless developed and practiced in authentic work settings, the likelihood that these essential skills and attitudes being parts of the repertoires of students at school exit is greatly diminished. It is then quite likely that they will sit at home on waiting lists for post school services or be confined to segregated workshops like their predecessors who were not provided authentic assessment and instruction. Option # 1 - No Authentic Assessment and Instruction - does not produce the post school

integrated work and related outcomes that are realizable and better than the most likely alternatives. Thus, it must be rejected.

Option # 2 - Only If Individuals without Disabilities Are With Them.

Some define "Inclusion" as individuals with significant intellectual disabilities attending the same schools and functioning in the same classrooms and classes they would if they were not disabled. To many of them it is acceptable for school personnel to provide authentic assessment and instruction in nonschool settings and activities during school days and times, but only if classmates without disabilities are with them. If this strategy resulted in functioning effectively in a reasonable array of authentic environments, activities and contexts at school exit, we should use it and celebrate the outcomes. However, functioning from this definition of "Inclusion" is problematic. Individuals without intellectual disabilities can and do learn much from field trips and other in frequent and episodic nonschool experiences. Individuals with significant intellectual disabilities cannot or do not. In order for them to learn to function effectively in integrated nonschool environments, activities and contexts, many instructional opportunities over long periods of time under real life conditions must be experienced. Intellectually able high school individuals take courses on university campuses and individuals with significant visual impairment benefit from authentic mobility assessment and instruction in real streets, workplaces, busses, etc. Should these important and individually appropriate nonschool experiences be denied because classmates without disabilities do not go with them? Of course not.

Option # 2 - Allowing students with significant intellectual disabilities to leave school grounds for instructional purposes only if accompanied by classmates without disabilities may be long on inclusive ideology, but it is short on producing important and valuable integrated post school outcomes. Thus, it must be rejected.

Option #3- Yes, But Only During Years 18 To 22.

Some argue that once classmates without disabilities exit school, it is then acceptable for students with significant intellectual disabilities to receive

authentic assessment and instruction until their legal and other entitlements to school services end. If such policies and practices resulted in living, working and playing in integrated society at school exit, we would be morally, fiscally, professionally and otherwise bound to implement them. Option # 3 is better than Options 1 & 2 because it acknowledges the validity of authentic assessment and instruction, but is rejected because it affords too little too late. Consider the following.

> From ages fourteen to eighteen the students of concern are taught many skills they will not need at school exit (Browder et al. 2012; Hunt, McDonnell & Crockett, 2012; Jimenez et al. 2012). As a result, many skills that will actually be needed are not developed, practiced, maintained and accumulated.
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> Consider the limited range of skills that can be learned on the physical property of schools and the inherent intellectual difficulties of the students of concern, particularly generalization and synthesis in context. Then, consider which and how many of the skills learned at school will actually be performed appropriately in authentic nonschool settings. Too few.
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> Given the relatively few important skills the students of concern can actually learn in one year, three years is simply not enough time to develop those needed in order to function effectively in integrated society at school exit. Providing authentic assessment and instruction for seven years may not be enough either, but it is better.
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> Schools have trained teachers, therapists and paraprofessionals, low instructional ratios, large budgets for transportation, instructional materials, assistive technology and many other resources. Post school service agencies are notorious for being poorly funded relative to schools and most are noninstructional in nature. That is, if an individual does not have a skill repertoire appropriate for functioning in integrated settings at school exit, it is substantially more difficult to develop one in post school life. Those who are trying to move thousands of adults with significant intellectual disabilities out of segregated workshops are dominated by this

reality. Indeed, when they exit schools and stay at home all day or are restricted to segregated settings, they almost always lose many skills they once had and acquire others that are less than appropriate.

Option # 4 -The Systematic and Longitudinal Use of Authentic Assessment and Instruction.

Individuals with significant intellectual disabilities should attend the same schools and function in the same classrooms and classes in which they would function if they were not disabled. Further, they should receive authentic assessment and instruction during school days and times when their classmates without disabilities do so. When they enter high school or no later than age fourteen, instruction in home schools and in general education classrooms and classes must be gradually reduced. Authentic assessment and instruction that is driven by the quest for successful integrated post school outcomes must be provided. Some argue that age fourteen is too early to start individualized authentic assessment and instruction, even though it is legally and otherwise permitted (Musgrove, 2012; Wehman & Kregel, 2004). Those who ascribe to Option # 4 argue that it is better to be too early than too late. When not in integrated classrooms and classes in home schools, instruction in the integrated environments, activities and contexts in which they will or will likely function at school exit should be provided. Consider integrated work as an example. One integrated nonschool work and related training experience for one or two half days per week should be provided each semester for the first four years of high school. Additional integrated work and related experiences should be arranged during summers. As time passes, integrated experiences on school grounds should be systematically reduced and integrated experiences that are the most preferred and appropriate at school exit should be provided. If individuals remain enrolled in school after chronological age peers graduate, virtually all of their instruction should be provided in the integrated and related environments, activities and contexts in which they will or will likely function at school exit.

In each vocational training setting video records of acquisition and performance should be made. These video records across time, settings and tasks are excellent

empirical verifications of cumulative competence and can be used as powerful reasons for subsequent employers to allow access to their businesses. At the end of each vocational training experience, the testimonials of employers and coworkers about the performance of the individuals should be recorded visually, auditorally and in print. These testimonials should address factors that are important to employers. Manifesting a reasonable work ethic, reliability, stamina, honoring property rights, staying on task, meeting minimally acceptable performance standards, adhering to required dress and hygiene rules, noninterference with the productivity or enjoyment of coworkers and completing relatively simple tasks that release coworkers to perform those that are more complex and economically valuable are examples (Brown, Kessler & Toson, in press).

Summary

If preparing individuals with significant intellectual disabilities to function effectively in authentic environments, activities and contexts at school exit is not considered an important responsibility of school personnel, authentic assessment and instruction is unnecessary. That is, it is then acceptable to confine instruction to the physical property of schools. However, if preparing them to function in integrated environments, activities and contexts at school exit is considered a major responsibility of school professionals, it simply cannot be accomplished without systematic, comprehensive and longitudinal authentic assessment and instruction.

Are there examples of individuals with significant intellectual disabilities who were provided authentic assessment and instruction during their school careers, yet who did not function in integrated environments, activities and contexts after school exit? Yes. The systematic and longitudinal use of authentic assessment and instruction during school careers does not guarantee functioning in integrated environments, activities and contexts after school exit, but it substantially increases the probabilities of being able to do so (Brown, Shiraga and Kessler, 2006; Certo & Luecking, 2006; Certo et al. 2009; Wehman, Schall, et al. 2013). Are there examples of individuals with significant intellectual disabilities

who were not provided authentic assessment instruction during their school careers, yet were taught to function in integrated environments, activities and contexts after school exit? Yes, but very few. Not providing authentic assessment and instruction in integrated environments, activities and contexts during school careers does not guarantee the inability to function in integrated environments, activities and contexts after school exit, but it does minimize the probabilities of being able to do so.

Currently, at school exit the vast majority of individuals with significant intellectual disabilities spend their days in their homes on waiting lists for services or in segregated workshops and interacting only with family members, others with disabilities and persons paid to be with them. Assume authentic assessment and instruction is provided a student with significant intellectual disabilities for seven years. Assume that a world class team of teachers, paraprofessionals, therapists and others delivered services of the highest known qualities. At school exit the student would still be significantly disabled intellectually, but would have a better chance at a decent life.

References

Americans with Disabilities Act, (1990) P L 101 - 336, 104 Stat. 328.

Browder, D. M., Trela, K., Courtade, G. R., Jimenez, B. A., Knight, V., & Flowers, C. (2012). Teaching mathematics and science standards to students with moderate and severe developmental disabilities. The Journal of Special Education, 46, 26 - 35. Doi:10.1177/0022466910369942

Brown, L. (2012). Educational Standards for Individuals with Significant Intellectual Disabilities. TASH Connections, 38 (4) 7 - 21.

Brown, L, Kessler, K, & Toson, A. (In Press). An Integrated Work Skill Analysis Strategy for Workers with Significant Intellectual Disabilities. Journal of Vocational Rehabilitation. A version of this paper is presented on the Inclusion Campaign website of Disability Rights New Jersey - www.inclusioncampaign.org and on the website of Lou Brown - www.website.education.wisc.edu/lbrown.

Brown, L., Nisbet, J., Ford, A., Sweet, M., Shiraga, B., York, J. & Loomis, R. (1983). The Critical Need for Nonschool Instruction in Educational Programs for Severely Handicapped Individuals. Journal of the Association for Persons with Severe Handicaps, 8 (3), 71 - 77.

Brown, L., Shiraga, B., & Kessler, K. (2006). The Quest for Ordinary Lives: The integrated post-school vocational functioning of 50 workers with significant disabilities. Research and Practice for Persons with Severe Disabilities, 31, 93 -121.

Brown, & Toson, A. (2015). Intellectual factors as Determiners of IEP Objectives for Students with Significant Intellectual Disabilities. A version of this paper is presented on the Inclusion Campaign website of Disability Rights New Jersey - www.inclusioncampaign.org and on the website of Lou Brown - www.website.education.wisc.edu/lbrown.

Certo, N., & Luecking, R. (2006). Service integration and school to work transition: Customized employment as an outcome for youth with significant disabilities. Journal of Applied Rehabilitation Counseling, 39, 29 - 35

Certo, N.J., Luecking, R.G., Murphy, S., Brown, L., Courey, S., & Mautz, D. (2009). Seamless Transition and Long Term Support for Individuals with Severe Intellectual Disabilities. Research & Practice for Persons with Severe Disabilities, 33 (3), 85 - 95.

Gupta, V. (2015). United States' Investigation of the Georgia Network for Educational and Therapeutic Support, D.J. No. 169 - 19 - 71. A Report of findings to Governor Nathan Deal and Attorney General Sam Olens from Vanita Gupta, Principal Deputy Assistant Attorney General, US Department of Justice, Civil Rights Division.

Hunt, P., McDonnell, J., & Crockett, M. A. (2012). Reconciling an ecological curriculum framework focusing on quality of life outcomes with the development and instruction of standards based academic goals. Research and Practice for Persons with Severe Disabilities, 37, 139 - 152.

Individuals with Disabilities Education Improvement Act (2004), PL 108 - 446, 20 U.S.C. xx1400 et seq.

Jimenez, B. A., Browder, D. M., Spooner, F., & DiBiase, W. (2012). Inclusive inquiry science using peer mediated embedded instruction for students with moderate intellectual disabilities. Exceptional Children, 78, 301 - 317.

Musgrove, M. (2012). A letter from Melody Musgrove, Director, Special Education Programs, Office of Special Education and Rehabilitative Services, U.S. Department of Education, Washington, DC to Jeff Spitzer Resnick, Beth Swedeen and Lisa Pugh of Disability Rights Wisconsin.

Lane et al. v. Brown et al. (September 8, 2015). US District Court Case No. 3:12 - cv - 00138 - ST. United States' Investigation of Employment and Vocational Services for Persons with Intellectual and Developmental Disabilities in Oregon Pursuant to the Americans with Disabilities Act. A settlement agreement between the State of Oregon and the Civil Rights Division of the U. S. Department of Justice, Washington, DC.

Perez, T. (2013). A Report of the Americans with Disabilities Act - Title II Investigation of the City of Providence regarding the Harold A. Birch Vocational Program at Mount Peasant High School. An Interim Settlement Agreement Between the US Department of Justice, Civil Rights Division and the State of Rhode Island and City of Providence. Case No. CA13 - 442L.

Trela, K. & Jimenez, B. (2013). From Different to Differentiated: Using "Ecological Framework" to Support Personally Relevant Access to General Curriculum for Students with Significant Intellectual Disabilities. Research and Practice for Persons with Severe Disabilities. 38, (2) 117 - 119.

Wehman, P. (2011). Essentials of transition planning. Baltimore: Paul H. Brookes Publishing Company.

Wehman, P., & Kregel, J. (2004). Functional curriculum for elementary, middle, and secondary age students with special needs. Austin, TX: Pro - Ed.

Wehman, P., Schall, C., McDonough, J., Kregel, J., Brooke, V., Molinelli, A. & Thiss, W. (2013). Competitive employment for youth with autism spectrum disorders: Early results from a randomized clinical trial. Journal of Autism and Developmental Disorders. Advance Online Publication. Doi: ten.ten07/sten803 - 013-1892