International Journal of the Whole Child
2018, VOL. 3, NO. 1

Differentiated Instruction: A Band-Aid Approach for a Flawed System

Sandra J. Stone[a]

[a]Northern Arizona University

Dr. Sandra J. Stone, an author and speaker, is Professor Emerita at Northern Arizona University. She founded the *National Multiage Institute*, an international leader in providing professional development for educators from all over the world. Dr. Stone's publications and research focus on multiage education, play, and literacy. She was past editor for the *Journal of Research in Childhood Education* and for columns in the journal *Childhood Education*. She serves on editorial boards for several international research journals.

In the United States we currently have a system, which was instituted almost two hundred years ago as a result of the Industrial Revolution. This historical event significantly influenced our educational system. Education incorporated the efficiency of a manufacturing model into a way to educate the general populace. While the intentions were well-meaning, they were not based on an understanding of child development or even on how children learn. The assumption was that we could mass educate children by grouping them by age and then create curriculum to match each age grouping (Stone, 2009, 2010).

The advent of a graded education system decried the understanding that same age children are unique with different developmental rates, family backgrounds, cultures, interests, intelligences, personalities, and learning styles. Today many educators realize that the differences among children in each grade are even greater now than they were hundreds of years ago (Gray, 2013; Morgan, 2014; Robinson, 2015; Tomlinson, 2009, 2017; Tomlinson & Imbeau, 2012). There is a common understanding that our current system does not meet the learning needs of *all* our children. In addition, Gray (2013) believes that our current system has contributed to an epidemic of anxiety related conditions among our youth and proposes that today's schools are ultimately not happy places for our children.

Through the years, different approaches have been used to make education more efficient. A significant approach was to use a more scientific method, termed the behaviorist approach, to maximize curricular instruction through lesson plans and objectives (Skinner, 1968; Hunter, 1990/1991). The premise was to make education more systematic through prescriptive instruction, which would result in more accurate curriculum accomplishment by students. Defining the curriculum for each grade level through precise objectives, lesson planning, and outcomes would enable teachers to deliver the grade-level curriculum more effectively. *Curriculum* and *instruction* became an instrumental pair in how education unfolded and still unfolds in our schools today. The advent of standards and standardized tests has added another dimension as well as a burden to an inappropriately designed system.

However, the "elephant in the room" is that our educational system of grouping children by age for one-size-fits-all instruction is ultimately a flawed system. Educators have tried for years to refine, fix, redesign, and reform the existing system to try to make it better for our children and our society. Yet, we keep the same system, the same framework, and the same foundation.

Respected authors and educators have called for us to "throw out the whole system" (Gray, 2013, p. 84); disassemble the manufacturing conveyor belt (Stone, 2010) and pursue radical change from the "old industrial model to one based on entirely different principles and practices" (Robinson, 2015, p. xxiv). The

mechanical, industrial, manufacturing system does not fit with the human, organic dynamic (Robinson, 2015; Thompson, 2014). They do not see our system as "fixable" and envision a revolution to change this flawed system to a completely different system. With the possibilities of inventing a new system, the "Differentiated Instruction" model is examined.

With great respect for the strategy of Differentiated Instruction (DI), it is, however, in the same boat as other approaches, which try to *fix* our current flawed system. DI operates within the existing system of a graded schooling, choosing to modify the *instructional delivery* of the curriculum, but not the grade level curriculum organization. This article seeks to demonstrate how differentiated instruction is simply a "Band-Aid" approach for an educational system that is detrimental to the development and well being of our diverse and unique children. This article proposes that a new and different system needs to be created if we want to meet the needs of ALL our children.

Differentiated Instruction – the Curriculum

First, proponents of differentiated instruction are to be applauded for seeing the inequities of our system and trying to do something proactive to make a difference for our children in their educational journey (Levy, 2008; Parsons, Dodman, & Cohen Burrowbridge, 2013; Pettig, 2000; Scigliano & Hipsky, 2010; Tomlinson, 2017). In addition to our system currently designed as a one-size-fits-all approach to education by age group, is the accompanying view that a curriculum, even high quality curriculum, for each grade level is appropriate. Our current system fits within what is called a "curriculum-centered approach" to learning. This approach is examined in contrast to a "child-centered approach" which, for this discussion, stands apart from the graded system, not within the system. Differentiated instruction is described as an attempt to reform or adapt a curriculum-centered approach into a learner-centered approach situated within the factory model graded system. However, this "Band-Aid" approach cannot truly impact or change a system so deeply flawed. Consider the following:

Curriculum. In a curriculum-centered approach, the *curriculum* is the *center* of schooling. Each grade level has a designated curriculum, which is aligned to standards. Teachers present the curriculum through lesson plans. Grades are used to evaluate success. Standardized tests are the ultimate accountability to see if the children have learned the curriculum and if teachers have taught the curriculum. Even if the instruction is differentiated, the curriculum is still the center of the approach.

In a child-centered approach, the *child* is the *center* of the learning process, not the curriculum. The curriculum is broadly reframed as possible teaching points flexibly scaffolded through strategies by a teacher based on a process approach, which depends on the understanding and development of each child. Thus, a child-centered approach is *process*, not product-oriented. The child enjoys choice and autonomy within the process. Each child is on his or her own developmental continuum across multiple areas of child development. Growth is individual and unique for each child. Children are educated in family groupings of mixed ages, not same age groupings, so a one-size-fits-all curriculum is not pertinent, nor appropriate. Learning is more inclusive of the human dimension (cognitive, social, emotional, moral, aesthetic), instead of a narrow focus on primarily academics. While high quality learning occurs for every child, it is not based on curriculum designed for each grade level. Success is not narrowly defined by mastery of the curriculum, but instead by a child's personal joy and satisfaction in pursuing his or her interests, talents, and intelligences. Success defined as continued development, not in accomplishing set, pre-determined curriculum, is appropriately varied by each child's uniqueness.

In differentiated instruction (DI), the curriculum, not the child, remains the *center* of instruction. Tomlinson (2000b) correctly acknowledges that we are teaching human beings and that children are diverse learners. She agrees that for many teachers the curriculum is a prescribed set of academic standards and the goal of instruction is raising test scores. Tomlinson (2000b) suggests that "curriculum tells us *what* to teach: Differentiation tells us *how* . . . differentiation can show us how to teach the same standard to a range of learners by employing a variety of teaching and learning modes" (p. 8). DI tries to adjust the one-size-fits all curriculum approach of the graded curriculum to fit the inherent diversity of the children. The problem is

that DI tries to use the "same standard," the "*what* to teach." Having a grade-level curriculum or standards does not meet the naturally varied learning needs for even those children born on the same day in a same-grade classroom. A year-by-year curricular plan for the grades does not encompass every child's understandings even when we try to "differentiate" *how* the curricular standard is delivered. In essence, the curriculum by grade level in a DI classroom stays the same, but the instruction is modified to try to meet the diverse needs of the children.

Tomlinson (2000b) agrees, "any education approach that does not invite us to teach the individual is deeply flawed" (p. 11). Yet, without a consideration of developmental differences, one could be led to believe that even a graded, curriculum could be designed to meet the variances in children's learning when in actuality, it cannot.

In regard to schooling, Tomlinson (2000b) believes that a high-quality *curriculum* and *instruction* is essential. She states, "Choose any standard. Differentiation suggests that you can challenge all learners by providing materials and tasks on the standard at varied levels of difficulty, with varying degrees of scaffolding through multiple instructional groups, and with time variations" (Tomlinson, 2000b, p. 9). Tomlinson (2000b) does not believe there is a "contradiction between standards and appropriately responsive instruction," only in an "ill-conceived interpretation and use of standards" (p. 8).

However, a set of curriculum directives no matter how high the quality does not address the range of how children develop. Children naturally develop at different rates and understandings. Even responsive instruction cannot bring about understanding if a child is not in a stage of developmental understanding. For example, the curriculum or standards may require that children are able to solve problems with missing addends. Some children will be able to accomplish the task but others may not, even with differentiation. Some children may not have developed "reversibility of thought" which Kamii (1982) describes as the development of the brain to go both forward and backward in its thinking. Solving missing addend problems requires that a child's brain has developed that flexibility, particularly that the brain can easily go backward in its thinking. Without it, solving missing addends is out of the range of a child's possibility of understanding. A curriculum-centered approach, as a whole, is not designed with the understanding of child development or the unique development of each child.

While *learner-centered* in regard to the curricular focus, DI is on the cusp of being child-centered, but its position within a curriculum-centered, graded approach does not really support *all* children in their natural development; DI resides in a curriculum-centered approach. Even with the term "learner-centered," differentiated instruction is about helping children accomplish the curricular goals. The graded curriculum is the problem, even high-quality curriculum. We still want everyone to have the same knowledge, skills, and understandings even though we are using different approaches, even timelines, to get to the same end. We are still trying to accomplish the objective of the graded curriculum.

Within the curriculum-centered approach, concern is expressed regarding our gifted learners and finding ways to challenge them (Kaplan, 2016; Weber, Johnson, & Tripp, 2013). Questions also arise as to whether DI can meet the needs of at risk or marginal students (Anderson, 2007). In actuality, even with DI, we disadvantage both our highly able and novice learners. Addressing pacing, degrees of challenge, and interest (Tomlinson, 2005a) are not enough. Differentiating a set curriculum cannot truly meet the variance of learning needs or interests for all our children.

However, DI proponents McTighe and Brown (2005) state that "standards-based education and differentiated instruction (DI) not only can coexist, but must function together as two sides of the same accountability coin" (p. 235). McTighe and Brown (2005) believe that an agreement can be made between high-stakes accountability based on rigorous standards and "the very real need to address the individual needs and strengths of the learner" (p. 236). They feel confident that you can address "rigorous content while honoring differences in learners' prior knowledge, interests, and preferred learning styles" (p. 236). Based on Tomlinson's view, McTighe and Brown (2005) state that "helping all learners reach required standards must inevitably involve the tailoring or differentiating of teaching and learning experiences" through tailoring content, process and end products to maximize student achievement (p. 241). They agree that "All learners should be held to the same rigorous standards" and "standards and differentiation not only

can coexist, they must coexist if schools and districts are to achieve the continuous improvement targets imposed on them by" standards (p. 242). If standards-based education and DI are compatible and must coexist, then the ultimate objective of DI is highly questionable. Herein lies the greatest flaw with differentiated instruction. Is our goal to pay tribute, and be accountable, to the arbitrary graded curriculum rather than honoring and respecting each child in his or her holistic development? Which option has the priority?

Accountability and Testing. Accountability to the standards based on standardized tests does not honor the great variances in normal childhood cognitive development. We are still asking by the end of the day for all children to be at the same place at the same time. Not all children, even with a differentiated curriculum, will be able to succeed on the test. Even though Tomlinson and Imbeau (2012) suggest that if children are learning in their preferred ways, they learn the content better and that will increase their confidence when they take the test, we still have a system that creates winners and losers at the end. There will be variance in how well children do on the test. How ludicrous would it be for physical development if we wanted everyone of the same age to be the same height by the end of the school year and the teachers should be accountable for this by providing high-quality food choices?

While trying to avert the dominance of curriculum by differentiating the instruction, we still have the priority of grade-level curriculum for each grade, which children must accomplish. Even with flexibility in a set grade level curriculum provided by DI, it is not sufficient to meet the varying needs and interests of children. However, DI proponents conclude that differentiation is compatible with standardized testing (Brimijoin, Marquissee, & Tomlinson, 2003). Standards, testing, and DI can co-exist as partners in the goal of accountability. If DI can coexist with standards and testing, then DI cannot be considered a child-centered approach.

Grading. Another consideration and concern about differentiation is the continued use of grading children. Tomlinson (2005c) addresses grading based on Marzano's (2000) work as the "assignment of symbolic numbers or letters at the end of a specified period of time" (p. 263). Grades serve to summarize the teacher's evaluation of the students. The information provides feedback to parents and students in order "to support the learning process and encourage student success " (p. 263). She does not believe that there is an "inherent problem with the philosophy of differentiation and grading or reporting" (p. 263). Proponents of DI believe that quality differentiation and grading are fully aligned (Tomlinson, 2005c; Tomlinson, 2017). However, success is narrowly defined as academic success based on *criteria* of curriculum accomplishment (Dobbertin, 2012; Tobin, 2008). In other words, grades are based on every child accomplishing the same goal.

As part of "defensible grading," Tomlinson (2005c) distinguishes grading from assessment. She correctly envisions assessment as "on-going" in order to make instructional decisions helpful to the students' learning. On-going authentic assessment can be a helpful tool in understanding where children are building and understanding, particularly in a child-centered approach to learning. Grading, however, is the "end-point judgment about students' achievement" (Tomlinson, 2005c, p. 264). Grades are based on "a set of pre-established, clearly stated, content-specific learning goals" where required standards "serve as the basis for grading criteria" (Tomlinson, 2005c, p. 264). While Tomlinson (2005c) suggests differentiated instruction provides "multiple routes to accomplishing specified goals, so that each learner can progress to the greatest degree possible" (p. 265) and advises that teachers give students second chances to meet goals, as well as multiple opportunities to practice before they are evaluated on achieving important goals, the bottom line is that grading is used to evaluate how well all students have done in reaching the *goal of the curriculum*. In the DI approach, learning is "assessed using a well-defined set of learning outcomes or standards," and "progress can be both measured and communicated" as "grading and reporting are, after all, an integral part of the instruction process . . ." (Tomlinson, 2005c, p. 268-269).

Grading is devised to be more "child-friendly" in that children are not compared to other students or other extraneous considerations, rather only to the criteria. Grades still measure student success on the *curricular goals* after a unit of learning. A child-centered approach does not need grades to demonstrate growth which occurs on a child's own personal continuum of learning. Children are not *evaluated* on meeting curricular goals. In a child-centered approach, children are *valued* for continual learning based on *process* not

curricular content. Their continued learning is indicated by authentic assessment and displayed in portfolios. Content is not linear by grade level; content is variable and only a function of process. Content is secondary to the primacy of process – learning to read, write, problem-solve, create, socialize, and so forth. Learning is not defined or based on well-defined learning outcomes or standards as suggested by Tomlinson (2005c), which fit within a behaviorist approach to teaching. A constructivist approach to learning is the foundation for a child-centered approach (Brooks & Brooks, 1999, Burke, 2005). A constructivist approach to learning appreciates that . . .

> . . . learning is not linear. It does not occur on a timeline of basic skills. Instead, learning occurs at a very uneven pace and proceeds in many different directions at once . . . instead of learning being 'decontextualized' and taught, for example, by memorizing the parts of speech, it must be situated in a rich context of writing or speaking" (Burke, 2005, p. xiv).

Differentiated Instruction – the Instruction

Because the overarching goal of DI is to accomplish the objective of the curriculum, even though with modifying instruction through differentiating the content, process, and product, the approach is still centered in a graded curriculum. The journey starts with the curriculum and ends with reaching the curricular goals. The goal of DI is to "plan instruction in a differentiated fashion" (Tomlinson & Imbeau, 2012, p. 20). The use of pacing guides and scripted lessons are not discounted, but are recommended as useful guides. As Tomlinson (1999a) states, "the core of *what* the students learn remains relatively steady. *How* the student learns-including degree of difficulty, working arrangements, modes of expression, and sorts of scaffold – may vary considerably" (p. 16). But, the teacher's goal is to increase each student's skill level *within the curriculum*. As Tomlinson (1999a) continues,

> The teacher knows where she wants her students to arrive at the end of their shared learning journey and where her students are along that journey at any given time. Because she is clear about the destination and the path of the travelers, she can effectively guide them, and she varies or differentiates her instruction to accomplish this goal. Further, her destination is not merely the amassing of data but rather the constructing of understanding (p. 16).

Tomlinson (2005b) believes effective differentiation is centered in knowledge. "Lessons are based on the teacher's clear understanding of what is essential in the study unit, and the teacher helps each student build his or her own maps of understanding and skill encompassing the essentials" (Tomlinson, 2005b, p. 10). However, rich learning encompasses more than an accumulation of knowledge, the essentials, or understanding the knowledge or essentials. Knowledge as the ultimate goal sidetracks *knowledge as a useful tool* for the learning process to unfold where children imagine, create, and invent. As Einstein suggests, "Imagination is more important than knowledge" (Issacson, 2007, p. 7). While knowledge is important, knowledge as the ultimate goal of learning diminishes a child's innate curiosity, interests, and pursuit of personal well-being.

Tomlinson (2005b) also proposes that differentiation "is learner-centered. Teachers systematically study learner traits to understand what each student brings to the task, what each student needs to succeed with the task, and what the student needs to support his or her success" (p. 10). While trying to understand the learner and to modify instruction of the curriculum to the learner, the goal is success based on the task. The focus is still helping students to successfully accomplish the curriculum by getting them to the pre-determined end product or goal by attending to each student's readiness, interest, and learning profile (Tomlinson, 1999b, 2009, 2017).

Differentiating Content, Process, and Product. Tomlinson (2017) describes how DI takes multiple approaches to content, process, and product: "(1) content – input, what students learn; (2) process-how students go about making sense of ideas and information; and (3) product – output, or how students demonstrate what they have learned" (p. 7). Content, process, and product can all be differentiated according to children's readiness, interest, and learning profile.

Readiness. Readiness is used to differentiate the content, process and product. For example, *content* reading levels are varied for reading proficiency. The teacher may prepare several tiered tasks based on children's differing abilities. For *process*, assignments are varied for difficulty depending on student readiness. Pacing is also important, as some students will need more time to accomplish task than others. *Product*, levels of task performances, is also differentiated based on student readiness.

While addressing the diversity of student readiness, McTighe and Brown (2005) advise addressing gaps of prior knowledge through instructional interventions, which they believe can be done "without compromising the established standards or the integrity of subject areas" (p. 238). Even though reading levels, for example, may be adjusted, students are still required to accomplish the fundamental curriculum criteria. They believe you can "reinforce rigorous core standards for all learners, and ensure sensitivity to the unique strengths and needs of every student" (p. 239). By focusing on the content knowledge, the process of reading, for example, where a child gets better and better at reading is actually diminished, as the essential knowledge is the goal, not the process of reading.

Interest. Content, process, and product are also differentiated by student interest. Within the *content* of a standards-based unit, students are allowed to pursue topics of interest. For *process*, students may, for example, work alone or in teams. For *product*, the teacher allows students to select from different products and rubrics to provide the criteria for successful task completion. As the teacher allows students to follow interests within the set curriculum parameters, Tomlinson (2017) suggests that the goals of the student (interest) and the curriculum can be served simultaneously" (p. 102).

While choice through interest is offered to students in a DI classroom, it is often what Alfie Kohn (1993) suggests as "pseudo-choice." The teacher has selected, for example, ten projects from which the students can choose. These are teacher-approved projects designed to further the curriculum needs. The choice is not owned by the student or pursued because of the student's passion or personal interest. The curriculum needs take precedence over the child's curiosity.

Learning Profile. DI considers how students learn best by looking at learning styles, multiple intelligences, gender, and culture (Tomlinson, 2017). In DI, the teacher is encouraged to "plan instruction that will allow as many students as possible to learn more comfortably, efficiently, and effectively" (Tomlinson, 2017, p. 110). Tomlinson (2017) believes that addressing a learner's profile will "influence a student's attitude toward and engagement in different types of tasks" (p. 110). Using learning profiles to differentiate content, process and product is another way to accomplish curricular goals. Children are not in charge of their own learning, in their own unique way. The learning profile is a tool for the teacher to maximize the accomplishment of the tasks.

For *content*, the teacher, for example, may provide students who have an auditory preference a way to engage the material through a podcast. For *process*, the teacher may use "Menus for Success" (Tomlinson, 2017, p. 121) which give students options for exploring the content. For example, for a math unit, some students may use manipulatives to understand the math concept while other students may use the math concept to apply to a real-life situation (Tomlinson, 2017). For differentiating *products*, the teacher may use tests, portfolios, or a product assignment where children can demonstrate what they know about the content criteria. Studying and honoring a student's learning profile is a positive endeavor. However, even the learning profile is used to accomplish the curricular goals and tasks. The truly powerful learning children can control and enjoy within a child-centered approach is suppressed within a curriculum-centered method.

Campbell (2009) interprets DI as differentiated content, process, and product, which he explains as "differentiated curriculum, instruction, and assessment. In other words, we can differentiate the resources we use, the ways we ask students to interact with the content, and the ways we ask students to demonstrate their learning" (p. 7). Campbell (2009) suggests, "The formula is a structured, teacher-directed, and content based, but it is student centered and provides students with multiple entry points into the content areas and personal choices based on their individual strengths or learning profiles" (p. 9). Nevertheless, "the primary goal of differentiation . . . is to help teachers develop and use multiple pathways for students to learn whatever they teach, including the content standards" (Campbell, 2009, p. 19).

Readiness, interest and learning profiles are ways teachers can differentiate curricular content, process, and product. The approach is teacher-designed and teacher-directed, not child-designed or child-directed. There is little to no room for children's choice and autonomy to unfold. The ultimate goal is to accomplish the curricular goals while trying to be learner-centered, sensitive to children's readiness, interests, and learning profiles. However, curricular goals are still the priority over the children's needs, interests, and development. Again, DI fits within a curriculum-centered, not child-centered approach.

Becoming Good Factory Workers

Another downside and concern regarding DI is the way the priority of the curriculum unfolds for the children. Our current system was designed on a factory model thus, in many ways children are still envisioned as factory workers. The expectations for factory workers and for our children in our educational system are surprisingly similar.

The goal of DI is the mastery of content and to also help students "form their own identities as learners" (Tomlinson, 2008, p. 26). DI is perceived as the "logical way to achieve the goal of content acquisition" (Tomlinson, 2008, p. 27). Content acquisition becomes the product of the factory workers. When mastery of the content is the goal, then learning is often misconstrued as following directions, getting the work done, following the rubric for curricular success, and demonstrating on-task behaviors. These are admirable factory worker expectations. Is this the identity we want our children to develop as learners?

With DI, the identity of the learner is formed as a "student" playing the "game of schooling" well, not about an "individual" following one's own pathway to understanding, interests and passions (Brooks & Brooks, 1999; Gray, 2013). If students are successful at the game of schooling in elementary and secondary education then they will be well prepared to play the game of schooling in college (Tomlinson & Imbeau, 2012). The element of learning is distorted to mean succeeding at schooling, not true learning, nor life-long learning. The focus is on "educating for *education"* not for life pursuits or personal well-being.

While DI proposes that instruction is "learner-centered," the "center of gravity" is still outside the child as Kohn (2015, p. 34) suggests; the school is organized around the curriculum, not around the child's own projects, problems, and questions. In a child-centered approach, the center of gravity is within the child and his or her interests and purposes (Kohn, 2015). The power in the learning process is within the child, not within curriculum and instruction. Learning as a process cannot be mandated or controlled through instruction, as it is a personal construction. A curriculum-centered approach, even if differentiated, does not represent the unique learning and accomplishments a child builds for himself or herself.

The factory product of schooling becomes successful curriculum knowledge with factory workers demonstrating compliance to the product assembly. Is this really the identity we want our children to form?

Teacher-Directed/Controlled Methods. Because curriculum success is the ultimate goal, the structure of schooling, in spite of modifications, creates a climate of teacher-directed or teacher-controlled methods to motivate students for goal accomplishment. Even though DI suggests its approach is "learner centered," the students are still subservient to the curriculum and instruction, which dominates the process rather than the children being dominant or in control, with the curriculum and instruction subservient to the children and their needs.

Tomlinson (2008) suggests four elements for DI teachers to develop to help students chart their own learning and lives: trust, fit, voice and awareness. Tomlinson makes child-friendly suggestions such as developing *trust* with students so they know the teacher is on their side. The students know the teacher views them as worthwhile, and that they have the capacity to succeed. The teacher makes sure the learning is a good fit, gives students a voice in their learning, and an awareness of how learning works.

If learning is child-centered, all these elements are valuable. However, when situated in a curriculum-centered approach where the goal is accomplishing and mastering the curriculum, the benefits of these attributes fade. The teacher is on your side to help you *accomplish the curriculum* and believes you can do it. The teacher will provide a good fit for each student by providing *different ways to master the curriculum.* The teacher will asks students for input in "developing classroom rules and routines; provide guided choice

for tasks and ways of accomplishing them . . .provide students to review one another's work using clear criteria . . ." (Tomlinson, 2008, p. 29). The students are asked for input in order to *maximize the routines and tasks to accomplish the curriculum*. For awareness, the teacher helps students understand how learning works. However, learning is always defined as successfully accomplishing the curriculum. As Tomlinson (2008) indicates the students

> know how to make sense of text, how to listen, and how to ask questions. They know how to gauge their work based on criteria for success. They know how to capitalize on their learning strengths and how to compensate for their weaknesses. They know how to plan, follow through with plans, modify plans when necessary, and evaluate the effectiveness of their planning. Through these avenues, they come to believe they are captains of their own fate as learners. Teachers who differentiate for student ownership of learning guide each student in developing these abilities (p. 30).

Being "captains of their own fate as learners" only means that they are the ones in control of whether they meet the expected criteria of the curriculum. The diligent factory worker (student) who makes sure the factory work (the curriculum) is mastered is doing a good job of accomplishing the factory work (content mastery). As Tomlinson (2008) notes, to build awareness, teachers

> . . . use rubrics that are carefully constructed to support student thinking about the quality of their work instead of merely awarding points for completed work. They help students analyze their points of entry in the rubrics and set goals for next steps. They have students keep track of their own skill development, feedback, and grades. They give students opportunities to reflect on their work through exit cards, journals, or plus/minus/deltas charts that aid them in thinking about their strengths, their weaknesses, and the changes they will make as they approach future work. Academic awareness builds academic success (p. 30).

Tomlinson (2008) shares how even at age six, children are "learning to position themselves as successful learners by controlling their working conditions" (p. 30) For example, the child may decide to find someone to work with when he or she cannot accomplish a task on his or her own. This is a sad commentary when we see children viewing learning as a "task accomplishment" rather than growing more and more each day and confident in their progressing abilities. For example, when a young child learns how to jump for the first time, it is like we are asking the child to evaluate whether he or she jumped well enough, or if can he or she can do it better. Does the jump fit the rubric criteria for jumping? It is not about the joy of jumping, but about the work ethic to accomplish a task.

DI advocates students becoming skilled workers on the curriculum tasks (George, 2005; Tomlinson, 2008). Are we more concerned with training good "factory workers" who successfully accomplish curricular goals? Is being accountable to the curriculum and diligent work performance what learning is really about? Or, do we want our children to find different pathways and the freedom to follow their interests and passions? Do children's own pathways and interests really count? (Gray, 2013).

Proponents of DI are to be applauded for trying to make schooling more child-friendly, even learner-centered, but it is not a child-centered approach. DI is a misguided approach for so-called learning. It is not about honoring a child's curiosity, internal drive for understanding, creativity, imagination, or personal well being.

Neudecker (2012) relates how Greek Procrustes chopped or stretched travelers to fit the bed of his inn. She relates this to our educational system by suggesting that we are changing the "wrong variable." As Neudecker (2012) proposes

> For decades, we have tried to differentiate learning for our students so they will fit nicely within our educational setting. We have myriad instructional models to address a wide variety of students, settings, educational needs and learning styles. On the surface, the intentions are honorable – to ensure all students achieve to our standards. Yet we continue to expect dramatic changes in student achievement within the same educational framework we have used for more than a century. We talk about accommodating the needs of individual learners, yet we try to implement the changes within

> the traditional classroom, grade level school day and school calendar. Our methods simply may not be sufficient for the 21st century. We no longer can expect our students to be high achievers when we continue to subscribe to a Procrustean approach of establishing a standard to which we expect – and demand- all students conform. . . A one-size-fits-all education is not meeting the needs of our learners nor our society. While we must ensure a quality education for all learners, we must courageously transform our systems to meet those needs (p. 43).

Unfortunately, we are still trying to fit our students to the same educational bed, instead of designing a bed that fits our children's actual learning (not curriculum tasks) and natural development. We are not actively supporting our children to be part of the process of learning, pursuing their own interests and personal well being. We are trying to make our children more comfortable through differentiated instruction by fluffing the pillow, changing the bed spread, and providing warm pajamas. However, the actual bed is nevertheless the same, standardized size. Children still need to fit the curricular bed. The children continue to be managed by instructional procedures designed by teachers. Children are trapped in grade levels, with a grade level curriculum, and the same expectations for all when it comes to accountability and testing even though DI proponents say it is not a "one-size-fits-all" approach. Unfortunately, for our children, the factory model of education is alive and well.

Tomlinson and Murphy (2018) acknowledge that often schools today try to cover the curriculum, so students will succeed on standardized tests which teachers "believe are oppressive and even unjust" (p. 20). Tomlinson and Murphy (2018) advocate for "empathetic schools," which "humanize our work in schools" (p. 20). Even Tomlinson and Murphy (2018) advise that we must "resist pressures to standardize young humans" (p. 27); yet at the same time DI continues to reside in, coexist, and accept, this flawed educational system. While its attempts to invest a sense of respect for the diversity of children and to humanize schooling are commendable, DI cannot give up the trappings of a curriculum-centered approach. DI continues to embrace children meeting the essential criteria of a prescribed curriculum which is often matched to the standards, or the tradition of grading students based on the curriculum criteria, or using teacher-directed and -controlled curriculum approaches, and ultimately reducing children to see learning only as successfully accomplishing curricular tasks, the product on the conveyor belt.

DI proponents believe educators can still make a high-quality curriculum work for varied and diverse learners within our current system if the teaching approach is refined by differentiation (Birnie, 2015; Campbell, 2009; Huebner, 2010; Parsons, Dodman, & Cohen Burrowbridge, 2013; McTighe & Brown, 2005; Tomlinson, 2000a, 2000b, 2005a, 2017; Watts-Taffe et al, 2012). Isn't this ultimately an oxymoron?

We may live in a world where rigorous academic standards are judged by performance on high-stakes test, but we can change this. We do not have to continue to try to bandage a system designed without the working knowledge of human development, in order to make it more palatable for our children. We do not have to train our children to be compliant to curriculum mandates. To do so, we do our children an extreme disservice. Unfortunately, DI cannot truly accomplish meeting the needs, interests, and personal goals of our children within our current system.

While differentiated instruction is to be commended for trying to accommodate the diverse needs of our children, it situates itself within the wrong system. Some of the appropriate measures DI is attempting to do such as ongoing assessment, pursuing children's interests, and recognizing how children learn differently are approaches that could have the freedom to unfold in a different way in child-centered system based on child development, process learning, and the ungrading of schooling (Goodlad & Anderson, 1987). Differentiated instruction, as it exists now, is simply a Band-Aid approach for a flawed system. As Neudecker (2012) suggests, we must "courageously transform" our system of education to meet the needs of *all* our children (p. 43). We cannot allow our current, archaic graded system to continue to dominate education. A new and different system must be invented (Stone, 2010).

References

Anderson, K. (2007). Differentiating instruction to include all students. *Preventing School Failure, 51* (3), 49-54.

Campbell, B. (2009). To-With-By: A three-tiered model for differentiated instruction. *New England Reading Association Journal, 44* (2), 7-10.

Birnie, B. (2015). Making a case for differentiation. *The Clearing House, 88*, 62-65.

Brimijoin, K., Marquissee, E., & Tomlinson, C. (2003). Using data to differentiate instruction. *Educational Leadership, 60* (5), 70-73.

Brooks, J. & Brooks, M. (1999). *In search of understanding: The case for constructivist classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development.

Burke, K. (2005). *How to assess authentic learning*. Thousand Oaks, CA: Corwin.

Dobbertin, C. (2012). Just how I need to learn it. *Educational Leadership, 69* (5), 66-70.

George, P. (2005). A rationale for differentiating instruction in the regular classroom. Theory into Practice, 44 (3), 185-193.

Goodlad, J. & Anderson, R. (1987). *The non-graded elementary school.* New York, NY: Teachers College Press.

Gray, P. (2013). *Free to learn.* New York, NY: Basic Books.

Huebner, T. (2010). Differentiated instruction. *Educational Leadership, 67* (5), 79-81.

Hunter, M. (1990/1991). Hunter lesson design helps achieve the goals of science instruction. *Educational Leadership, 48* (4), 79-81.

Isaacson, W. (2007). *Einstein: His life and universe*. New York, NY: Simon & Schuster.

Kamii, C. (1982). *Number in preschool and kindergarten.* Washington, DC: National Association for the Education of Young Children.

Kaplan, S. (2016). Challenge vs. differentiation: Why, what and how. *Gifted Child Today, 39* (2), 114-115.

Kohn, A. (1993). Choices for children: Why and how to let students decide. *Phi Delta Kappan, 75* (1), 8-16, 18-20.

Kohn, A. (2015). Who's asking? *Educational Leadership, 73* (1), 16-22.

Levy, H. (2008). Meeting the needs of all students through differentiated instruction: Helping every child read and exceed standards. *Clearing House, 81* (4), 161-164.

Marzano, R. (2000). *Transforming classroom grading*. Alexandria, VA: Association for Supervision and Curriculum Development.

McTighe, J. & Brown, J. (2005). Differentiated instruction and educational standards: Is detente possible? *Theory into Practice, 44* (3), 234-244.

Morgan, H. (2014). Maximizing student success with differentiated learning. *The Clearing House, 87*, 34-38.

Neudecker, P. (2012). Differentiated or Customized? *School Administrator, 69* (5), 43.

Parsons, S., Dodman, S. & Cohen Burrowbridge, S. (2013). Broadening the view of differentiated instruction. *Phi Delta Kappan, 95* (1), 38-42.

Pettig, K. (2000). On the road to differentiated practice. *Educational Leadership, 58* (1), 14-18.

Robinson, K. (2015). *Creative schools*. New York: NY: Penguin Publishing Group.

Scigliano, D. & Hipsky, S. (2010). Three ring circus of differentiated instruction. *Kappa Delta Pi Record, 46* (2), 82-86.

Skinner, B. G. (1968). *The technology of teaching*. New York: NY: Appleton.

Stone, S. J. (2009). Multiage in the era of NCLB. *Center for Evaluation & Education Policy, 7* (1), 5, 7.

Stone, S. J. (2010). Multiage: A model of education reform – or invention? *Journal of Multiage Education, 4* (1), 13-18.

Thompson, S. (2014). A paradigm for learning in a world of continuous change. *Educational Technology, 54* (3), 7-11.

Tobin, R. (2008). Conundrums in the differentiated literacy classroom. *Reading Improvement, 45* (4), 159-169.

Tomlinson, C. (1999a). Mapping a route toward differentiated instruction. *Educational Leadership, 57* (1), 12-16.

Tomlinson, C. (1999b). Different learners, different lessons. *Instructor, 112* (2), 21, 24-26, 91.

Tomlinson, C. (2000a). Differentiated instruction: Can it work? *Education Digest, 65* (5), 25-31.
Tomlinson, C. (2000b). Reconcilable differences? Standards-based teaching and differentiation. *Educational Leadership, 58* (1), 6-11.
Tomlinson, C. (2005a). Quality curriculum and instruction for highly able students. *Theory into Practice, 44* (2), 160-166.
Tomlinson, C. (2005b). Traveling the road to differentiation in staff development. *Journal of Staff Development, 26* (4), 8-12.
Tomlinson, C. (2005c). Grading and differentiation: Paradox or good practice? *Theory into Practice, 44* (3), 262-269.
Tomlinson. C. (2008). The goals of differentiation. *Educational Leadership, 66* (3), 26-30.
Tomlinson, C. (2009). Intersections between differentiation and literacy instruction: Shared principles worth sharing. *New England Reading Association Journal, 45* (1), 28-33.
Tomlinson, C. (2017). *How to differentiate instruction in academically diverse classrooms*. Alexandria, VA: ASCD.
Tomlinson, C. & Imbeau, M. (2012). Common sticking points: About differentiation. *School Administrator, 69* (5), 19-22.
Tomlinson, C. & Murphy, M. (2018). The empathetic school. *Educational Leadership, 75*(6), 20-27.
Watts-Taffe, S., Laster, B., Broach, L., Marinak, B., McDonald Connor, C., & Walker-Dalhouse, D. (2012). Differentiated instruction – Making informed teacher decisions. *The Reading Teacher, 66* (4), 303-314.
Weber, C, Johnson, L., & Tripp, S. (2013). Implementing differentiation. *Gifted Child Today, 36* (3), 179-186.