Imagine you are about to meet for the first time a young woman who will be coming to your high school this year. Before you do, the following was shared with you about her.

Kim is a 16-year-old student who has a label of severe mental retardation. The usual battery of intelligence tests and adaptive behavioral evaluations have assigned her an IQ score of 40 and a developmental age of 36 months. She has seizures and sensory impairments. Her motor movements are jerky and uncoordinated, making it difficult for her to get around in small areas, write legibly, or use a computer. She is sensitive to certain environmental stimuli such as bright lights, loud noises, and rough textures in her clothing. She has no conventional way of communicating. She uses facial expressions and random vocalizations to express emotions. When she is frustrated by a task or situation, she runs away or sometimes hits herself or others. She does not appear to be able to read.

How does this information affect her parents’ and educators’ decisions about Kim’s educational program and adult life? Should you assume that these test results, labels, and observations are accurate representations of her current abilities and future learning potential? Do you advocate for her educational program to reflect content learning from the general education curriculum or is it based on teaching functional life skills? Should she be educated alongside students with significant disabilities only or included in a general education class?

In order to answer these questions, you first need to understand the prevailing paradigm, or belief, that governs the way that most people think about intelligence and intelligence testing, the label of mental retardation, and the vision that we have for students with this label. In this article, I want to propose and add my voice to the work of other parents and educators who believe that only by creating a new paradigm, or shared belief, of high expectations based on the principle of the least dangerous assumption can anyone, parent or professional, make decisions about students’ educational programs that will lead to a quality life in school and throughout their adult lives.

In 1984, Anne Donnellan, a respected researcher in special education, wrote that “the criterion of least dangerous assumption holds that in the absence of conclusive data, educational decisions ought to be based on assumptions which, if incorrect, will have the least dangerous effect on the likelihood that students will be able to functional independently as adults.” Furthermore, she concluded “we
should assume that poor performance is due to instructional inadequacy rather than to student deficits.” In other words, if a student does not do well, the quality of the instruction should be questioned before the student’s ability to learn. Thus, for Donnellan, the least-dangerous assumption when working with students with significant disabilities is to assume that they are competent and able to learn, because to do otherwise would result in harm such as fewer educational opportunities, inferior literacy instruction, a segregated education, and fewer choices as an adult.

The Prevailing Paradigm
Thomas Kuhn (1962), a scientist-philosopher, defined paradigms as shared world views. These shared views are so strong and institutionalized that only a sudden and dramatic break from these conventional perspectives can bring on a positive revolution in thinking. What is the prevailing paradigm about disability and competence? It is defined by four ideas:

1. Intelligence is something that can be reliably measured.
2. Mental retardation is defined as low levels of intelligence.
3. Students who experience mental retardation can’t learn much general education content.
4. Therefore, the benefits of attending general education classes are limited or do not exist.

When we aren’t sure that students know, understand, can learn, or have something to say, we presume that they don’t, can’t, and probably never will.

How Does the Prevailing Paradigm Impact Our Beliefs and Actions?
The influence of this paradigm is clear in both our beliefs about students’ abilities and in the decisions that we make about their educational programs.

When people do not assume that students with disabilities are competent and able to learn general education curriculum, educational programs often have the following characteristics:

- Students are not included in general education classrooms. If they are, they participate in functional portions of instructional routines, but not in the discussion of ideas or content knowledge. Usually, students are given different materials and resources than those used by the rest of the class.

- People talk with students as if they are talking with a much younger child. They use words geared to perceived developmental levels or IQ scores as measured by traditional assessments.

- Students are not supported to engage in social activities with same-age peers. Those activities are considered inappropriate or too advanced.

- Planning for students’ futures does not include the choice of a postsecondary education or their interests are not considered over their
abilities. Career options are geared to lower-skilled jobs or sheltered workshops rather than to jobs in integrated workplaces that require higher-order thinking or literacy skills.

A Proposition
As Kuhn said, it is only when we question a prevailing paradigm that we can be open to changing not only our beliefs, but our actions. I propose that believing in the paradigm of mental retardation leads to low expectations for students with significant disabilities. These low expectations result in segregated educational programs, or programs that do not focus on literacy or content learning, and narrow visions for the future. Thus, changing our paradigm about intelligence and mental retardation is central to promoting students' learning, inclusion, achievement, and quality of life now and in the future.

Flaws in the Construct of Mental Retardation
An important step in challenging the prevailing paradigm is understanding the flaws in the idea and assessment of both intelligence and mental retardation. Stephen Jay Gould (1981), an evolutionary biologist, criticized some of the earliest attempts at testing intelligence as being fraught with bad science, politics, and racism that resulted in the mistaken conclusion that people of northern European descent were more intelligent than non-Caucasians. Howard Gardner (1984), an educational researcher, has criticized intelligence testing because the kinds of intelligence measured by traditional I.Q. tests (verbal and language skills and math and problem-solving skills) represent just one part of a complicated, multi-dimensional framework. Based on this logic, let's agree that measuring intelligence is difficult, if not impossible. That means measuring the lack of intelligence is also difficult, if not impossible. If we believe these things, then we ought to view the label of mental retardation with great skepticism.

When we think about people with significant or multiple disabilities, in particular, this skepticism is justified. These are precisely the people who have difficulty communicating, whose bodies move erratically, and who have not been taught the language or skills intelligence and adaptive behavior tests measure. How would you score on an intelligence test if you could not talk, write, or type accurately? If you were not exposed to or taught receptive or expressive language skills? How well would you do taking the test if the sensory environment of the testing situation was stressful or noisy?

Another reason for questioning the prevailing beliefs about intelligence and mental retardation is a body of emerging research that shows that with high expectations, good instruction, and the support of assistive and communication technology, a growing number of people labeled mentally retarded acquire literacy skills and demonstrate intelligence beyond what would have been predicted by their test results (Biklen & Cardinal, 1997; Broderick & Casa-Hendrickson, 2001; Erickson, Koppenhaver, & Yoder, 2002; Erickson, Koppenhaver, Yoder, & Nance, 1997; Koppenhaver et al, 2001; Ryndak, Morrison, & Sommerstein, 1999).
A New Paradigm

If we are seeing more and more examples of people whose experience does not align with the prevailing paradigm—who show, when supported, they have learned more than we assumed they were able to learn, then a new paradigm must be developed that accounts for this. This paradigm would be characterized by the following ideas:

1. All people have different talents and skills.
2. Intelligence is not a one-dimensional construct, nor can it (or its absence) be measured accurately and reliably enough to base students’ educational programs and future goals on test results.

Children learn best when they feel valued, when people hold high expectations for them, and when they are taught and supported well.

Let’s return to the story of Kim who was described at the beginning of this article. If we “walk through” two scenarios that represent very different decisions about her educational program and use Donellan’s principle of the least dangerous assumption to consider the potential impact of each decision, it might help us decide which path would be in Kim’s best interests now and in the future. (See: Scenarios in blue at the end of this article.)

Influence of the New Paradigm on Our Beliefs and Actions

If schools adopt the new paradigm of least-dangerous assumption and the presumption of competence, the following would be evident:

- “Person-first” language is used so that people say “students with autism,” not “autistic students.”
- Language classifying students based on their functioning or developmental level is not used; rather, descriptions of students focus on their abilities and strengths.
- Annual goals on IEPs reflect content standards from the general education curriculum and the functional skills necessary for students to fully participate in the mainstream of school and community life. For example, IEPs would contain priority goals in all of the general education subjects and meaningful functional goals such as learning to use email, asking a friend out on a date, providing guidance to a personal care assistant, and putting on make-up or shaving.
- Students are seen as capable of learning; educators do not predict that certain students will never acquire certain knowledge or skills.
- People speak directly to students rather than speaking to students through a buffer supplied by paraprofessionals or other people who are considered to be assisting the students.
- People use age-appropriate vocabulary, topics, and inflection when talking to students. People do not discuss students’ lack of skills or challenges in front of them unless they are a part of the conversation.
- Parents receive feedback regarding student success rather than highlighting student failures and disabilities.
Staff members respect students’ privacy by discussing the students’ personal care, medical needs, and other sensitive issues out of earshot from others, and only with those people who genuinely need the information.

**Five Reasons Why Our Least Dangerous Assumption Should Be to Presume Competence**

There are at least five reasons why I believe our least dangerous assumption is to presume competence.

1. Human intelligence is a multi-faceted construct rather than a unidimensional characteristic and measuring it with a test is invalid and leads to mistaken conclusions about a person’s capacity to learn.
2. Assessments of students’ I.Q. are seriously flawed when they have difficulty communicating and movement challenges.
3. Research shows that a growing number of children and adults labeled retarded show they are more capable when they have a means to communicate and are provided with high quality instruction.
4. To presume incompetence could result in harm to our students if we are wrong.
5. Even if we are wrong about students’ capacities to learn general education curriculum content, the consequences to the student of that incorrect presumption are not as dangerous as the alternative.

**Deciding on Your Least Dangerous Assumption**

Those of us involved in the educational lives of students—parents, teachers, psychologists, speech-language pathologists, policy makers, and researchers—must decide what our least dangerous assumption will be and whether we can live with the possibility of being wrong. If we are not sure, we might ask ourselves:

- How would I want to be treated if someday I was unable to communicate or demonstrate my competence?
- How would I want others to treat my child if he or she were in the same situation?
- What do adults with disabilities tell us about their educational experiences and how they want to be treated?
- What does research tell us?
- What does history tell us?

Parents and educators of students with disabilities care about and want to do the very best for those students. Using least dangerous assumption as a guide is a powerful tool for keeping alive a vision of a valuable life and quality communities.
Scenario One:

Assumptions
We assume that Kim is not “smart” – that she does, in fact, have mental retardation, defined as significantly sub-average intelligence and ability to learn. How might she be treated?

Educational Setting
First, we might not try to teach her to read or if we did, it would be functional sight words. Second, we would speak to her in language more appropriate to a younger child. Third, Kim would probably spend her educational career being taught functional skills such as dressing, eating, shopping, cooking, and cleaning. In most states she would be educated in a separate classroom alongside other students who also have significant disabilities. If she did join the rest of the student body, it might be during lunch or perhaps a class such as music or art.

Communication Support
The communication vocabulary and supports that we would make available to her would correspond to our assessment of her sub-average intelligence and relate to the functional skills we were teaching. The messages might include “hi, bye, more, bathroom, hungry, break, I feel _____, yes, and no,” instead of age-appropriate social vocabulary and messages that would enable her to communicate about the general education curriculum.

Friendships and Dreams
We would not encourage her to participate in the typical social life of her same age classmates because we would assume that her disabilities were too significant for her to enjoy the same activities. Interactions between her and students without disabilities would be limited to their volunteering to be her peer buddy or helper. As she approached the end of her school career, the possibility of her attending college would not even be considered. Instead, we would plan for her to move into a group home, attend a day habilitation program or work in a sheltered environment, and pursue specialized leisure and recreational opportunities with other adults who have similar disabilities. We would not expect her to have opinions about world events, her future, love, or about anything else considered to be above her cognitive level.
**Scenario Two:**

**Assumptions**
We are not sure about what she knows or might be able to learn in the future...we don’t have conclusive data to guide our decision-making. But this time, we operate from a different set of assumptions. We treat her as if she is smart, because we distrust the validity of her test results in light of her communication and movement difficulties.

**Educational Setting**
First, we use a variety of methods to teach her to read. Second, we talk to her the same way we do other 16 year old students who have no disabilities. Third, we enroll her in general academic classes where we implement her reading program and support her with adapted materials and instructional supports. We take advantage of natural opportunities to teach her the functional skills that are essential for membership, full participation, and learning.

**Communication Support**
We talk with her about current events. We make sure her communication system includes words and concepts that are appropriate for someone who thinks about current events, love, relationships, and her future.

**Friendships and Dreams**
We encourage her to participate in activities that her classmates are involved in and provide communication tools and support for her to be successful. We encourage her to make friendships and assume she is capable of, and interested in, having friends. As she approaches the end of her school career, we prepare for a variety of options including postsecondary education as a graduation option. In addition, we plan for her to move into an apartment, own her own home, work at a real job, or travel.

Which do you think is The Least Dangerous Assumption?
Once you choose, turn the page.
It is now several years in the future. A remarkable discovery has made it possible to determine without question how smart someone is using a simple brain scan. Here are the results.

**Scenario One:**
The brain scan results show, surprisingly, that Kim has an IQ of 100. She does not have an intellectual disability. What are the consequences of our original assumption of a low IQ—of our being wrong? Has any harm been done?
Most people say we lost an opportunity to teach her things she could have learned. We did not include her in the mainstream of general education as much as we could have and she did not develop a wide network of social connections or friendships. She missed out on the regular high school experience. It is possible we negatively influenced her self-esteem by treating her as if she were not smart. We narrowed the possibilities for her future career or post-secondary education. And certainly, we wasted a lot of money pursuing the wrong educational program.

**Scenario Two**
The brain scan results show that Kim has an IQ of 40. She does have an intellectual disability. What are the consequences of our original assumption of her intelligence being wrong? Has any harm been done?
Most people say nothing has been lost. Even though Kim may not have learned much of the general education curriculum, her educational program offered her opportunities to develop life-long interests, to make friends with students with and without disabilities, to be part of the social life of the school, and to truly be part of the community after graduation. Because we took advantage of natural opportunities to teach her functional skills within the natural context of the day, she probably learned and generalized them better than if they had been taught as a discrete skill in an isolated or segregated setting.
1. Cheryl cautions readers to question traditional definitions whenever the words “mental retardation” or “intelligence” are used.

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**References**


