

## Chapter 5: Knowing Your Curriculum

If the first key to differentiated instruction is knowing your students, the second is for the teacher to gain a deep knowledge of the curriculum that he or she will be teaching. This, of course, begs the question of what constitutes a “curriculum” and what it means to “know it”.

Back when Bill interviewed for his first English teaching job in a public high school in the New York City suburbs, “knowing your curriculum” was synonymous with subject area mastery. Bill recalls an hour-long interview in the early 1970’s during which the principal (who was remarkably well-read) rattled off a list of English and American authors to which Bill was supposed to respond by indicating which works he had read and what he thought of them.

There is no question that teachers need to know the content of what they are to teach. Jones & Moreland (2005) describe the perils of implementing a new curriculum for which the teachers do not have sufficient pedagogical content knowledge. Their study describes learning “activities” that had little or no conceptual substance, and teachers who were unable to give feedback to students beyond praise-based responses. It is clearly important for a teacher of English to know the various genres of literature or for a social studies teacher to understand how the great thinkers of one century influenced the events of the next. But mere content knowledge can no longer be synonymous with

“knowing your curriculum”. The specific content of an academic discipline, no matter how interesting or seemingly important, can be likened to the specific physical features of a landscape – for example a pond or meadow, a cluster of oak trees or the path of a stream. All of these are important physical features of a specific landscape, but none of them, in and of themselves, give us the big picture of the geography of the region. As teachers we need to be able identify the metaphorical geography of our academic discipline. We need to be able to construct the big picture -- to identify the primary concepts or enduring understandings that we want our students to take away from our classroom. We need to be able to synthesize what is truly important for students to know, to understand and to be able to do, and articulate these major learning outcomes and plan learning activities that are aligned to them. We also need to collect data and evidence that will indicate how successful our students are in achieving these learning outcomes.

This is not a simple or easy task. It is intellectually demanding. It requires time and energy. It also requires collaboration with valued colleagues. It is, in short, what we mean by “knowing the curriculum.”

A paradigm shift in how we think about curriculum has come about in part because of the constructivist revolution.

Less than two decades ago, Brooks & Brooks (1993) described what the research suggested was the status quo of most American classrooms. (We suspect that there would have been similar findings in other countries and in many of our international schools). Five major points emerged.

1. Classrooms were dominated by teacher talk. Teachers were perceived to be the dispensers of knowledge and students the consumers. Student-initiated questions and student-to-student interactions were atypical.

2. Most teachers relied heavily on textbooks in lieu of a thoughtful, clear and coherent curriculum. Information was often presented from a single (non-controversial) perspective.
3. Most classrooms structurally discouraged cooperation and required students to work in relative isolation.
4. Student thinking was devalued in most classrooms. When teachers posed questions to students, more often than not they were not asking students to think through complex issues, but rather trying to determine if students knew the “right” answer.
5. Most schools had curriculum documents predicated on the notions that there was a “fixed world” that the learner must come to know. The emphasis was upon the students’ ability to demonstrate mastery of conventionally accepted understandings – not on the construction of new understandings or connections (p.6-7).

Perhaps “revolution” is too strong a word to describe the impact of constructivism since there are some schools, perhaps many around the world, in which these descriptions still offer an accurate window into how teaching and learning are taking place. However, where it has been embraced, constructivism has radically altered how we think about the curriculum.

At the risk of oversimplifying a complex topic, constructivism is a theory about knowledge and learning. It suggests learning is not the passive absorption of information – the so-called “coverage of the curriculum” but rather the active search on the part of the student for intellectual connections that will promote the “construction” of personal meaning.

Three central tenets of constructivism impact profoundly on our understanding of curriculum.

*First, all knowledge is tentative.* We need to be prepared that whatever we teach as truth to our students today may be declared a falsehood tomorrow. There was a time

when the very best minds believed that the earth was the center of the universe, that monarchs ruled by divine fiat, that people with darker skin pigmentation were inherently inferior, that women had prescribed domestic duties, and that children with disabilities were better educated in isolation from their “normal” peers – to name just a few.

The idea that knowledge is temporary has several profound implications for curriculum and instruction. First of all it suggests that knowledge is not a noun but a *verb*, an exciting and stimulating process, an intellectual adventure that generation after generation engage in and build upon. Even more importantly, the tentativeness of knowledge allows us to give equal time to what *we don't know* – those intriguing mysteries that never fail to captivate the curiosity of our students. It allows us to talk about how we tolerate and perhaps even come to appreciate uncertainty – a quality that Elliot Eisner (1998) finds woefully unappreciated in most schools. It also suggests that we need to approach our work as teachers with a degree of humility – always a good idea.

*Secondly, there is altogether too much content to be taught.* The rate at which human knowledge is expanding is nothing short of breathtaking. Experts estimate that the wealth of human knowledge is doubling in less than a year. (Other experts estimate that human ignorance is also expanding at a similar rate – particularly in the field of wisdom). Certainly the knowledge we have acquired in the last decade about the human brain and how learning takes place is much greater than that accumulated in all the rest of human history combined. There is now simply too much content to fit into a curriculum. Therefore, it becomes vitally important that we critically prioritize what goes into the curriculum and be willing to make thoughtful judgments about what needs to be

expunged. This is easier said than done as we always seem to be adding to the curriculum, but only very rarely weeding our garden.

The conclusions reached by a recent ACT National Curriculum Survey 2005-2006 would seem to agree. While state-mandated curriculum standards may help high school teachers focus their coursework, the university faculty responding to the ACT Survey reported a “significant gap” between what high school teachers teach and what university professors think entering students need to know. “States tend to have too many standards attempting to tackle too many content topics...High school teachers are working very, very hard at following and teaching their state standards, but college faculty felt it was more important for students to learn a fewer number of fundamental but essential skills” a spokesperson for ACT concludes (*USA Today*, April 11, 2007).

*Thirdly, the structure of the curriculum affects its outcome* (or in the words of Marshal McLuhan ‘the medium affects the message’). If one of the goals of the curriculum is to promote an inquiry-based approach to learning, it would stand to reason that the curriculum would be designed around *questions* as opposed to knowledge statements, and that these questions would be central to what we want children to learn. In other words, the curriculum needs to be both thoughtful and thought-provoking. Very few students can resist genuinely thought-provoking questions.

So, how does a constructivist approach to learning mesh with a standards-based curriculum and where does differentiation fit into all of this?

In fact, differentiated instruction and a standards-based curriculum are not only complementary but are essential to each other’s integrity and efficacy. A standards-based curriculum without differentiation renders what happens in the classroom merely

standardized. The emphasis is on quality control and accountability, not on meeting the needs of the learners – particularly diverse learners. The voice of the student is lost no matter how thoughtful and thought-provoking the curriculum. This represents one of the many problem's associated with the No Child Left Behind (NCLD) legislation in the United States.

On the other hand, differentiation without clear learning standards is a journey without a destination – a cordial invitation that doesn't provide a date, time or venue. Without learning standards, either classroom instruction become “activities-based” without conceptual substance or lesson plan objectives are individualized out of existence. Either way, the curriculum loses rigor and credibility. Rather than success for all, we have confusion and mediocrity for many.

Clear and coherent learning standards need differentiation and vice versa. They support each other's integrity. High quality curriculum insures that what we are focused on in the classroom is worthy of student time and attention; that the content is meaningful and relevant; and that our approaches are intellectually challenging. Differentiation, on the other hand, ensures that the invitation to access the high quality curriculum is extended to *all* learners.

Tomlinson & Allan (2000) write: “We need to stress continually what best-practice curriculum and instruction look like, and then help teachers learn to differentiate it. Differentiation as a magic potion loses much, if not most, of its power, if what we differentiate is mediocre in quality... Excellent differentiated classrooms are excellent first and differentiated second (p.81).”

In conversations with colleagues, we have come to understand that at least part of the seeming conflict between a rich and stimulating curriculum and differentiation comes out of some conflicting ideas that teachers hold about student success. Many teachers perceive student success in school as monolithic. In other words, some teachers may be willing to concede that ‘one size may not fit all’ in terms of intelligence preferences or learning styles, but the successful outcome for a unit of study must look the same for all children. Equality (treating all children in exactly the same manner) is further reinforced when it becomes emotionally associated with a misguided sense of fairness. Our preferred definition of fairness is to provide each child with whatever he or she needs (eye glasses, hearing-aid, extra-time on tests, large print books, voice recognition software, etc.) that will allow them to achieve individual success.

In fact, this standardized vision of student success can actually prevent teachers from perceiving individual student growth. The worrying deficit in a child’s achievement can actually blind us to a child’s accomplishments and strengths. In some cases, particularly where a student is not meeting grade level benchmarks, individual student success literally needs to be *unmasked* in order to be celebrated.

Not unlike the other professions, teaching creates its own false dichotomies. Perhaps one of the most pervasive in our international schools is that since our curriculum is more often than not college preparatory, we do not have an appropriate program for students with learning disabilities or for students who are still struggling with basic skills. The pundits justify their selective admissions policies with platitudes such as “we can’t be all things to all people”. Such “either/or” analysis tells us more about the limited thinking of the individual than about the potential of schools to meet the

needs of diverse learners. Certainly one of the greatest challenges, perhaps the greatest, that schools have faced in the last hundred years is to balance the demands for *excellence* and *equity*. Some schools choose to perceive these as conflicting demands, as mutually exclusive opposite ends of the spectrum. This is shallow thinking. Schools that deny access to students on the grounds of preserving excellence abrogate a moral responsibility to equity.

A number of international schools are moving beyond this exclusive mental model. One such school is the International School of Brussels with its 1400 very diverse learners. Its motto: *Everyone included, everyone challenged, everyone successful – 1400 ways to be intelligent.*

So, what are some of the implications of the marriage of a high quality, standards-based curriculum with differentiated instruction?

We see four dimensions to this integration: backward design, teaching to primary concepts, framing curricular objectives as questions, and clarity about what can be differentiated (and what should not be differentiated).

### **Backward Design**

Backward design comes to us from the work of Wiggins & McTighe (1998) in their book *Understanding by Design*. It frames a logical three step process of lesson planning that starts with the outcome in mind. Steven Covey (1989) writes that “to begin with the end in mind means to start with a clear understanding of your destination. It means to know where you’re going so that you better understand where you are now so

that the steps you take are always in the right direction.” Wiggins & McTighe identify three stages in backward design:

1. Identify desired results.
2. Determine acceptable evidence.
3. Plan learning experiences and instruction.

The first stage may seem obvious, but our experience has shown that it is not a given in all classrooms. Many teachers start their planning with a textbook chapter, old-favorite activities or lesson plans that have been taught many times before. This often results in an activity-based learning experience that has little conceptual substance. This can also be the case when the integration of subjects (social studies, science, math and language arts) is artificially forced.

Critics of linear models of lesson planning (John, 2006) such as backward design suggest that such models do not reflect the inherent complexity and dynamism of the classroom and that ends and means are isolated into successive steps rather than being seen as part of the same situation. Again, this criticism would seem to us to represent a false dichotomy. There is no necessary contradiction between a logical step-by-step approach to lesson preparation and the iterative, simultaneous creativity that is part and parcel of the real world of teacher unit planning. The former provides us with structure and accountability; the latter allows us to cater for the context of our specific classroom and our specific students.

It is hard to argue with the logic of starting the planning process with the end in mind.

Teachers often have more difficulty with the second stage and find it counter-intuitive. For most teachers, once a learning goal or objective has been identified the next logical step is to design a learning activity that will allow us to achieve that outcome. However, Wiggins & McTighe (1998) counsel that it is important for us to think of the assessment piece as an embedded component of the planning process and not simply as a summative event that occurs at the conclusion of the unit. We need to ask ourselves how we will know that students have achieved the desired results. What will we see our students doing that will indicate that they have mastered certain skills? What will we hear our students saying that will indicate understanding? What evidence will we come to accept as valid for the outcome of our unit of study? By placing the assessment evidence before the planning of the actual learning experience, we force ourselves to visualize the outcome of the unit, which in turn increases the likelihood of alignment between learning goal, assessment and actual instruction.

What follows as Figure #1 is a model of Unit Planning for Diversity. It follows the backward design structure and provides a meta-cognitive script for teachers. The script suggests questions that teachers might be asking themselves about the intersection of a high quality curriculum and the actual intelligence preferences, learning styles, strengths and weaknesses and content interests of an actual class of students. The model is presented in a linear format. However, teachers are encouraged to use it recursively so as to capture spontaneous ideas and capitalize on creativity, but at the same time not losing sight of the structure of the whole.

**Figure #1**

<b>METACOGNITIVE SCRIPT</b>	<b>UNIT PLANNING FOR DIVERSITY</b>
<p>What is the big concept I want to teach? What is the enduring understanding?</p> <p>Why is it important for the student to know this 20 years from now?</p> <p>What question guides my planning? (Essential Question)</p>	<p style="text-align: center;"><b>CONCEPT</b></p>
<p>What are my learning goals and content objectives for teaching this concept?</p> <p>(Learning goals &amp; content objectives should be linked directly to big concept/enduring understanding)</p>	<p style="text-align: center;"><b>CONTENT</b></p>
<p>What do I want my students to know and understand?</p>	<p style="text-align: center;"><b>DECLARATIVE KNOWLEDGE LEARNING GOALS</b> (specify one or two only)</p>
<p>What do I want my students to be able to do?</p>	<p style="text-align: center;"><b>PROCEDURAL KNOWLEDGE GOALS?</b> (specify one or two only)</p>

<p>How will I know that I have achieved my objectives?</p> <p>What criteria are most important to assess?</p> <p>What feedback will I use to monitor that the lesson is working?</p> <p>What will my rubric look like?</p> <p>Will students be able to access the language of the rubric?</p> <p>What formative assessment will I use?</p> <p>What tools will I use to judge whether students have learned what I set out to teach?</p>	<p style="text-align: center;"><b>ASSESSMENT OF STUDENT LEARNING?</b></p>
<p>How will I activate students' prior knowledge about the content?</p> <p>How will I make the content meaningful and relevant to the students?</p> <p>Are there particular pre-teaching activities I need to consider for any special populations (ESL, LD, Highly Capable)?</p>	<p style="text-align: center;"><b>PRE-TEACHING? ACTIVITIES?</b></p>
<p>What special populations do I have in my class (ESL, LD, Highly Capable)?</p> <p>What specific learner needs (learning styles, social needs) do I need to remember and consider in my planning?</p>	<p style="text-align: center;"><b>DIVERSE LEARNER CHARACTERISTICS?</b></p>
<p>How does the task ensure that all learning goals are included?</p> <p>How have I ensured that a wide range of talents, interests and intelligences are required?</p> <p>How have I planned to engage all students in active learning?</p> <p>How do I anticipate the most "challenging" students in the class to respond to this activity/lesson?</p> <p><u>Check List for Task:</u></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> open-ended</li> <li><input type="checkbox"/> interesting</li> <li><input type="checkbox"/> challenging</li> <li><input type="checkbox"/> there is more than one way to address it</li> <li><input type="checkbox"/> involves reading &amp; writing</li> </ul>	<p style="text-align: center;"><b>DESCRIPTION OF INSTRUCTIONAL ASSIGNMENT</b></p>

<p>What are the verbatim instructions that I will give my students for this task?</p> <p>(Having re-read my instructions to the students, what is the likelihood that students will be confused by lack of clarity or ambiguity?)</p>	<p><b>INSTRUCTIONS</b></p>
<p>What materials will I need?</p> <p>What materials will students need?</p> <p>How will student learning be monitored during the assignment?</p> <p>How will student work be graded?</p> <p>What is the timeline for this assignment?</p> <p>In what way will grouping be formed?</p>	<p><b>WORKING GUIDELINES</b></p>
<p>How will I synthesize and bring closure to the lesson? In what way will I return to the essential question or enduring understanding?</p> <p>What homework will I assign?</p>	<p><b>BRINGING CLOSURE</b></p>

## REFLECTING QUESTIONS

How did the lesson go? (*summarize impressions*)

What connections are you seeing between the lesson you planned and the one you taught? (*analyze causal factors*)

What are some ideas that you want to take away from this teaching experience? (*construct new learnings*)

How will you apply these new ideas? (*commit to application*)

What I have learned from this planning/teaching/reflecting process?

Backward design is structured to ensure clarity of learning objectives and alignment of assessment and instruction to that learning objective (coherence). The importance of these elements was underscored in recent research undertaken in Germany.

Seidel, Rimmele & Prenzel (2005) set out to measure clarity and coherence of learning objectives and to determine whether there were correlations to the development of student motivation and achievement. Clarity and coherence of lesson goals were measured by analyzing videos of physics lessons and rating the criteria on a Likert scale using specific indicators.

The researchers found a strong correlation between clarity and coherence of lesson goals and: 1) student perceptions of supportiveness of the learning conditions; 2) students' learning motivation; 3) types of cognitive learning activities; and 4) the development of student competence in physics over a one year period.

### **Teaching to Primary Concepts**

Structuring curriculum around primary concepts is a critical dimension of constructivist pedagogy and an essential aspect of the Understanding by Design process. Structuring curriculum around primary concepts also provides for the possibility of differentiation.

By primary concepts we mean those “big ideas” that lie at the heart of the discipline. Wiggins & McTighe (1998) suggest a model for the structure of knowledge that involves three nested ovals or eggs. In the largest oval, they place knowledge that is “worth being familiar with”. In the second concentric oval is knowledge that is “important to know and do”. In the smallest oval resides what Wiggins & McTighe call the “Enduring Understandings”. These Enduring Understandings are the primary concepts or big ideas that Brooks & Brooks (1993) call the “quest for essence”.

Most students find whole-to-part learning easier and more meaningful than a part-to-whole approach. Teachers facilitate student leaning when they present explicitly the big idea. “When concepts are presented as wholes...students seek to make meaning by breaking wholes into parts that *they* can see and understand. Students initiate this process to make sense of the information; they construct the process and the understanding rather than having it done *for* them (Brooks & Brooks, 1993).”

The understanding of a primary concept is enduring. It is not something that is simply memorized for a test. It makes sense to the student and a connection is forged to prior knowledge. Therefore, the student does not need to memorize meaningless, fragmented information.

Several years ago, Bill made a presentation to the parents of elementary school children on why the math curriculum was structured around understanding of primary concepts as opposed to the memorization of algorithms. At one point in the presentation, he asked all members of the audience to stand if they currently used algebra in their daily lives. About a quarter of the audience stood. Bill’s comment was that those parents who used algebra in their daily life probably learned it conceptually. Their conceptual understanding was both *enduring* and *transferable*.

Teachers sometimes have difficulty identifying “teachable concepts” as opposed to “topics to teach”. There is a critical distinction here that is vital to differentiation. Topics to teach might include *Lord of the Flies*, green plants, World War Two, or ratios and percentages. The content of each of these topics is unquestionably important. However, when we teach *topics* we don’t connect the content with the reason for learning it. In our

workshops, we encourage teachers to move from teaching *topics* to teaching *concepts*.

Figure #2 illustrates this movement from topic to concept.

**Figure #2**

<b>ISOLATED TOPIC</b>	<b>TEACHABLE CONCEPT</b>
Butterflies, frogs, green plants...	Life cycles – What similarities are there in the development of living things
The Industrial Revolution	Human Progress – Who are the winners and losers of industrialization?
Pollution	Interdependence – What are some of the relationships between humans and their environment?

We suggest that teachers “test” the big idea or enduring understanding for its worthiness and teachability against Wiggins & McTighe’s (1998) four filters for understanding. The first filter is that the concept has enduring value beyond the classroom. We liken this to the twenty year test. What value will this understanding have for students in twenty years time? If we struggle to answer this question, it may mean that the concept we are exploring is not worthy of student time.

The second filter asks us whether the concept resides at the heart of the discipline. For English, a concept that might reside at the heart of the discipline could be that “literature is manufactured” – meaning that novels, short stories and poems are crafted by authors who have specific purposes and are using deliberate strategies and literary devices in order to achieve those purposes.

The third filter asks us to evaluate to what extent the concept requires “uncoverage”. By this, Wiggins & McTighe (1998) are asking us to assess the potential that the big idea has for engaging students in analysis and deep critical thought. In order for students to translate isolated and fragmented information into personally meaningful

knowledge they must engage in such higher order thinking. We also need to ask ourselves what aspects of the concept will the students have difficulty in grasping? What may be counter-intuitive? What are some common misconceptions?

Finally, the fourth filter asks us to what extent the concept has the potential for engaging students. The big idea does not need to have ready-made student interest. Not all students arrive at the classroom door interested the French Revolution, baroque music or conjugation of future tense verbs. However, skillful teachers can mediate relevance “by having student encounter big ideas in ways that provoke and connect to students’ interests (as questions, issues, or problems) (p. 11).” For example, the question “How do we recognize justice?” not only serves as an essential question for a number of topics in social studies (the American Revolution, colonialism, racial persecution etc.) but also connects with the intrinsic preoccupation of Middle School and High School students with fairness and fair treatment.

In terms of differentiation, teaching to primary concepts opens up many more opportunities to differentiate for content, process, product, student interest and readiness, learning styles. *It is virtually impossible to differentiate the teaching of topics such as “green plants” or “The Industrial Revolution” or “Pollution” because the actual learning objectives are so vague as to make the desired results of the lesson nebulous or non-existent.* Differentiation is a means to an end. If the destination is unclear, the journey is at best confused. However, if we look at primary concepts, or as Wiggins & McTighe (1998), refer to them as Enduring Understandings, the possibilities for differentiation are many. If we are teaching “life cycles” the content can vary broadly.

Students can produce different products to demonstrate their learning and these products can reflect their interests, learning styles and readiness levels.

We believe another critical aspect of teaching to primary concepts is that the process that the teacher goes through in identifying the enduring understanding (testing the teachable concept against Wiggins & McTighe's four filters) actually makes explicit to the teacher *why the topic is worthy of student time and attention* and as a result liberates within the teacher the energy and motivation for dynamic classroom implementation.

### **Framing the Curriculum around Questions**

If the curriculum is to produce genuine inquiry on the part of the students, it must be framed around questions. Wiggins & McTighe write: "Only by framing our teaching around valued questions and worthy performances can we overcome activity-based and coverage-oriented instruction, and the resulting rote learning that produces formulaic answers and surface-level knowledge (p. 27)."

Since questions are the most common instructional tool of teachers, we often have a tendency to take them for granted. Skillfully crafted questions don't just happen and are rarely the product of spontaneous classroom discussion. Not all questions are created equal and we need to give time and attention to crafting *valued* questions about which we can frame our curriculum and units of study.

A very counterproductive questioning practice stems from a misunderstanding and misuse of Bloom's Taxonomy. Bloom and others (1956) identified hierarchies of

thinking skills. At the lowest level of most of these taxonomies are cognitive processes such as recall and rote memory. At the highest level are processes such as comparison, evaluation, synthesis and prediction. Some teachers mistakenly assume that students with processing difficulties, learning disabilities or students who are simply struggling with basic skills will find questions that rely on recall and rote memory “easier” and more accessible than those that demand higher order and more complex thinking. However, recall and rote memory questions usually have a single right answer. You either know it or you don’t. Questions that embrace higher order thinking are often open-ended and have multiple entry points which students can access at their particular readiness level. For example, the question “Who discovered America?” requires a single right answer. You either know it or you don’t. Whereas, the following question has multiple entry points: “If you were planning a voyage of exploration at the end of the 15<sup>th</sup> century, what might be some of the things you would want to consider?” A student can choose to address such a question at his or her own level of readiness (e.g. on a concrete level in terms of food and water needs or on quite an abstract and sophisticated level focusing on navigational difficulties – the lack of latitudes and longitudes or sailor morale on such a long voyage).

Bloom attempted to use “degree of difficulty” as the criteria for distinguishing between levels in his taxonomy. However, the higher levels are not always more difficult (Costa, 2001). Sousa (2001) perceives this difference as being between *difficulty* and *complexity*. We do well to remember that *arduous* tasks (tasks that require more effort or time) are not the same as *rigorous* tasks (tasks requiring more complex thought at high levels of Bloom’s taxonomy (Dodge, 2005; Kusuma-Powell & Powell, 2000).

The other even more disturbing misconception held by some teachers is that students must master the basic skills of reading and writing *before* they engage in higher order thinking. Students who are struggling with basic skills have, just as much – *if not more* -- need for intellectual stimulation as their apparently more school successful classmates.

Wiggins & McTighe suggest that curriculum should be framed around Essential Questions. These questions have seven characteristics:

- “Have no one obvious right answer;
- Raise other important questions, often across subject-area boundaries;
- Address the philosophical or conceptual foundations of a discipline;
- Recur naturally;
- Are framed to provoke and sustain student interest; and,
- Have embedded in them enduring understandings.” (p.10-11)

We would add that in our experience the most successful Essential Questions are ones that we took as teachers into the classroom without knowing the answer ourselves.

### **What can, should and should not be differentiated**

Parents often ask us whether differentiation doesn't “dumb-down” the curriculum.

The question hinges on what it is that we choose to differentiate.

There are some things in school that are non-negotiable. For example, every student who leaves high school should be able to write a well-organized and coherent essay. Learning to read is another non-negotiable. With all our advances in technology

and our so-called “digitally native” children, basic literacy and numeracy will continue to be the currency of individuals who successfully navigate the complexities of the 21st century.

As a general rule, the learning standards and instructional goals should not be differentiated<sup>1</sup>. Every student deserves the richness and stimulation of the enduring understandings and essential questions.

However, the content that we use to achieve those enduring understandings can be differentiated. When social studies teachers look at the sources of human conflict, students can study the Chinese Revolution, the American Civil War or the genocide in Rwanda and Burundi. When students come to explore “life cycles”, they can focus on frogs or butterflies or human beings.

In addition to the content, the skills that we select to focus on can also be differentiated. One of the benchmarks for Ochan’s Grade Eight Humanities class was writing a well-organized five paragraph essay. Several of her students were still working on constructing a well-organized paragraph. One student, who had a severe learning disability, was working on a well-organized sentence. The skill focus was differentiated in accordance with individual needs, but the standard (the five paragraph essay) remained the same for all. The fact that we do not differentiate the learning standard allows us to put our hand on our heart and tell parents that differentiation does *not* dumb-down the curriculum.

Assessment of student learning can be differentiated. We can invite students to demonstrate their learning in different ways. Some students can show their learning

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<sup>1</sup> An exception to this might be for a severely disabled student for whom the learning standards were clearly inappropriate.

through a written piece of work; others can perform their learning through a skit or musical presentation; still others can show their learning graphically through a poster or in a piece of art work; and still others can build a model that shows their understanding. We know that the medium in which students work affects the quality of their demonstrated learning. Allowing students to use their strengths often produces much higher quality work. We are also aware that some media can be so anxiety producing that students put all their attention into the process of production and little into the content itself.

Again a caveat is in order: if the desired result is a quality piece of writing, it makes no sense to permit students to demonstrate their learning by way of a poster or a skit. In order to learn to write, students need to write.

While assessment can be differentiated, the criteria by which we evaluate the assessment should *not* be differentiated. We need to hold all students to the same high standards. For example, it is possible to have students demonstrate their understanding of photosynthesis by way of an essay, a model, a graphic design or a skit. However, the rubric that is used to evaluate each of these different learning products should be the same, because the enduring understandings that we are looking for are the same.

Finally, the learning experience itself should be differentiated. We need to build into the learning activities that we design for our students aspects of differentiation based on content, process, product, learning style, student interest and readiness level.

We close this chapter with Figure # 3 which suggests some observable indicators of both high quality curriculum and differentiation in the classroom:

### **Observable Indicators of High Quality Curriculum & Differentiation**

- Units of study reflect a coherent design. Primary concepts (big ideas), enduring understanding and essential questions are clearly aligned with assessments and learning activities.
- There are multiple ways to access and explore ideas.
- Students are permitted to demonstrate their learning in various ways.
- Assessment of understanding is anchored by “authentic performance tasks”, calling for application and explanation.
- All assessment (teacher, peer and self) includes clear criteria of evaluation. The teacher and the students share a common understanding of “high quality”.
- The design of the curriculum or unit of study enables students to revisit and rethink important ideas in order to deepen their understanding.
- The teacher and students use a variety of resources which reflect different cultural backgrounds, reading levels, interests and approaches to learning.

*Adapted from Tomlinson & McTighe, (2006),  
Integrating Differentiated Instruction and Understanding by Design*

**Figure # 3**