

If a man does not keep pace with his companions, perhaps it is because he hears a different drummer.

Henry David Thoreau

Many teachers agree that differentiation is 'a good thing', but haven't a clue as to what it involves or how they might implement it in the classroom. Evidence of the poor development of differentiation comes from the 'exemplar' materials provided by the History department of a **beacon!** school, which lists its strategies of 'differentiation' as.:

- a. Differentiation by outcome - 'The same task will be accomplished at differing levels of expertise'.
- b. Imaginative work.
- c. Self-supported study, and
- d. Lunch-time sessions, History Club and entering external competitions.

None of these, I would argue are differentiation.

The process of teacher application is not helped by the fact that there are many different definitions of differentiation out there, most of which seem to me either to miss the mark, or to latch onto a valid, but individual aspect, thus confusing the issue. Here are some examples of different definitions:

By differentiation the authors mean making changes, from small changes to larger ones, which enable children to learn from the school curriculum, designed for their age group, with their peers in an inclusive schooling system.

<http://www.down-syndrome.net/library/dsii/16/07/>

The best way to meet pupil's different learning needs is to deliver the curriculum in a number of different ways; to differentiate the vehicle by which the skills, knowledge and concepts arrive, as well as presenting a range of tasks. The reason for doing this is because it ensures the maximum amount of pupil involvement, ie pupil planning, pupil assessment and pupil decision-making. In fact, the three can be fitted into a logical progression of teach, practice and assess

'The key to the differentiated curriculum is the flexible use by teachers of a wide range of activities and lesson organisations.'

http://www.pearsonpublishing.co.uk/education/samples/S_494342.pdf

Differentiation is not more class or homework, it is taking a regular curriculum topic and exploring it in greater depth and complexity. This means instead of learning algebraic formulas and practicing them in a classroom setting, through the use of worksheets and the text book, you might apply them to "real life" situations.

http://www.k12.hi.us/~gtstate/the_role_of_the_teacher.htm

Differentiation is the recognition of and commitment to plan for student differences. A differentiated classroom provides different avenues to acquire content, to process or make sense of information and ideas, and to develop products. The goals of a differentiated classroom are to maximize student growth and to promote individual student success.

<http://curry.edschool.virginia.edu/hottlinx/tier1/faq/faq.htm>

Differentiation is the matching of work to the differing capabilities of individuals or groups of pupils in order to extend their learning.

Ofsted

Questions for personal reflection:

1. What is your definition of 'differentiation'?
2. Which of the definitions above best meets your idea of differentiation?

Dimensions of 'Differentiation'

The following sites will give you an overview of the different aspects of differentiation:

<http://www.smcm.edu/academics/EdStudy/d7-Proj/Projects/ResearchSites/acbrowning/index.htm>

is a simple and sensible starting point from a Maryland College

<http://members.shaw.ca/priscillatheroux/differentiating.html>

is a fantastic, clearly-explained introduction, which places the concept in our wider knowledge of brain-learning (see:

<http://members.shaw.ca/priscillatheroux/brain.html>)

<http://www.sp.uconn.edu/~nrcgt/news/spring98/sprng985.html>

is an essential bit of reading, which enunciates the underlying principle: 'that in differentiating the curriculum, teachers are not dispensers of knowledge but organizers of learning opportunities' and then explains Renzulli's (1997) Five Dimensions of Differentiation (the five points at which differentiation must occur):

- content,
- process,
- product,
- classroom,
- teacher

<http://www.austega.com/gifted/provisions/curdifferent.htm>

expands an alternative (Maker, 1982), but similar model of curriculum differentiation:

- Learning environment
- Content
- Process
- Product

http://www.kidsource.com/kidsource/content/diff_instruction.html

is essential reading from Carol Tomlinson - the guru of differentiation - giving short answers to why differentiate, and what differentiation is and is not. The digest includes three vitally-important lists:

- Characteristics of a differentiated class
- How to think about differentiating instruction
- Strategies for managing a differentiated classroom

and links to a useful page of definitions of key words: <http://www.sp.uconn.edu/~nrcgt/news/fall99/fall992.html>

See <http://www.bgf.org/services/gifted/glossary.htm> for another, British (Birmingham City Council) list of definitions.

Also see <http://www.ascd.org/cms/index.cfm?TheViewID=818&flag=818> for a succinct statement of Carol Tomlinson's theory of differentiation - ESSENTIAL READING!

For a summary of/more extracts from Tomlinson, see: <http://www.gifted.uconn.edu/siegle/epsy373/Tomlinson.htm> (particularly her Principles of a Differentiated Classroom):

- Learning experiences are based on diagnosis of student readiness, interest, and/or learning profile
- Content, activities, and products or other assessments are developed in response to differing needs of varied learners
- Teaching and learning are focused on key concepts, understandings and skills
- All students participate in "respectful" work
- Teacher and students work together to ensure continual engagement and challenge for each learner
- The teacher coordinates use of time, space, and activities
- Flexible grouping ensures consistently fluid working arrangements, including whole class learning, pairs, triads, and quads, student-selected groups, teacher-selected groups, and random groups
- Time use is flexible in response to student needs
- A variety of management strategies such as learning centers, interest centers, compacting, contracts, independent study, collegial partnerships, tiered assignments, and learning buddies are used to help target instruction to student needs
- Clearly established individual and group criteria provide guidance toward success
- Students are assessed in a variety of ways appropriate to demonstrate their own thought and growth

Also important for differentiation theory are Tomlinson's five principles of learning:

- Intelligence is varied rather than singular.
- The brain hungers for meaning.
- Humans learn best with moderate challenge.
- Increasing variety in the students we teach.
- The struggle for equity and excellence.

<http://www.ascd.org/pdi/demo/diffinstr/differentiated1.html> (page now dead - but you can see a copy [here](#))

is a good resource of readings and information, including this list of key characteristics of differentiated instruction:

- Teachers and students accept and respect one another's similarities and differences.
- Assessment is an ongoing diagnostic activity that guides instruction. Learning tasks are planned and adjusted based on assessment data.
- All students participate in respectful work -- work that is challenging, meaningful, interesting, and engaging.
- The teacher is primarily a coordinator of time, space, and activities rather than a provider of information. The aim is to help students become self-reliant learners.
- Students and teachers collaborate in setting class and individual goals.
- Students work in a variety of group configurations, as well as independently. Flexible grouping is evident.
- Time is used flexibly in the sense that pacing is varied based on student needs.
- Students often have choices about topics they wish to study, ways they want to work, and how they want to demonstrate their learning.
- The teacher uses a variety of instructional strategies to help target instruction to student needs.
- Students are assessed in multiple ways, and each student's progress is measured at least in part from where that student begins.

and if you do nothing else, download Mary Schmidt's powerpoint presentation, which is fantastic:

<http://www.aea11.k12.ia.us/Curriculum/Losingsightoftheshore.ppt>

Differentiation is a guiding principle of many American schools, and it is worth reading these mission statements from various districts, not only for content, but for their vision:

■ <http://www.elwood.k12.ny.us/pdfs/Differentiation.pdf>

A statement from Elwood, NY Public Schools which brings the philosophy down to its 'brass tacks' (recommended).

■ <http://www.gp.k12.mi.us/ci/diff/diffhome.htm>

This web-page outlines the system of education in the Grosse Pointe Public Schools system, Michigan. It reads like a list of differentiation strategies, but overall it amounts to a philosophy of education.

■ <http://www.southlakecarroll.edu/differentiation/differentiation.htm>

'One size fits all teaching is a thing of the past' - Carroll Independent School District, Texas has set out a programme of staff training by which, by 2005, all teachers will provide teaching that is 'personalised and individualised'. This is American differentiation at its most-consuming. You should also read the Glossary of Continuous Improvement at:

<http://www.southlakecarroll.edu/differentiation/differentiation.htm#Glossary%20of%20Continuous%20Improvement> and you may wish to read the brochure: <http://www.southlakecarroll.edu/differentiation/DI%20Brochure.pdf>

Questions for personal reflection:

1. Have these readings changed your personal definition of 'differentiation'?
2. 'Differentiation is just varying your teaching styles within the classroom.' Do you agree?
3. 'Differentiation is more a philosophy of pedagogy than a selection of strategies'. Do you agree? If so, what would you consider to be the main principles of that philosophy?
4. Do you agree that the US is 'way ahead on differentiation'?
5. What is your gut reaction to Tomlinson's five [principles of learning](#)? What are the implications of each for your personal teaching style?

Doing 'Differentiation'

The following sites will give you an overview of the different aspects of differentiation:

<http://www.cedu.niu.edu/tedu/portfolio/diffclass.htm>

offers a simple grid overview of the issues, which you can use as a checklist.

Learning Outcomes

http://www.kidsource.com/kidsource/content/learner_outcomes.html

- offers advice on differentiating learner outcomes for gifted pupils

Behind most theories of differentiation lies the differentiation of strategies according to Bloom's Taxonomy (where the simplest thinking skill is at the bottom);

- Evaluation
- Synthesis
- Analysis
- Application
- Comprehension
- Knowledge

so that the teacher differentiates the learning outcomes by the pupils' place on the thinking continuum, rather than the next item on the syllabus.

Planning Differentiated Lessons

http://www.tki.org.nz/r/gifted/pedagogy/plan_diff_e.php#top

gives a New Zealand model of planning for differentiation, using a method called 'compacting'

The author distinguishes:

Five levels of differentiation

- readiness differentiation,
- interest differentiation,
- degree of difficulty or skill differentiation,
- instructional differentiation, and
- learning profile differentiation.

Four key questions:

- How am I generating a high level of interest in learning?
- How am I developing the "tools of thought"?
- How am I developing intellectual and creative potential?
- How am I fostering emotional, social, and ethical growth (p182)?

Six principles of good differentiation, which:

- is proactive. In other words, teachers assume that learners are different.
- is more qualitative than quantitative. Teachers adjust the nature of tasks, not the quantity.
- relies upon multiple approaches to content, process, and products.
- focuses upon students. Learning is "engaging, relevant and interesting" (no page given).
- blends whole-class, group, and individual instruction. There is a flow to instruction that creates a rhythmic pattern between whole-class and group and individual learning experiences.
- is organic, simply meaning students and teachers are learning simultaneously.

and involves 6 challenges for teachers:

- an alteration in classroom management style;
- modified recording practices;
- a wider range of resources;
- a reorganisation of the classroom;
- the introduction of alternative teaching practices, like varied, flexible grouping, independent study, and pre-assessment; and
- dissatisfaction with the timetable.

(on 'compacting', it is well worth reading: <http://www.sp.uconn.edu/~nrcgt/sem/semart08.html>).

<http://www.mcps.k12.md.us/curriculum/enriched/giftedprograms/instructionalstrategy.shtm> (this page is now dead, but you can see a copy [here](#)) suggests instructional and management strategies.

Practical Differentiation

I have found very little on the practical down-to-earth, doing-it-in-the-classroom strategies for differentiation, especially in History.

Perhaps the best example of all is that provided by John Simkin for his Medieval Village Project at:

<http://www.spartacus.schoolnet.co.uk/YALDdifferentiation.htm> where he suggests:

- Differentiation by Content
- Differentiation by Activities
- Differentiation by Negotiation
- Differentiation by Support
- Differentiation by Extension
- Differentiation by Response
- Differentiation by Group Work
- Differentiation by Gradation
- Differentiation by Role

which amounts to just about the best workable list of strategies I have found!

<http://www.moraga.k12.ca.us/district/gate%20handbook.htm>

is another American district mission statement (California), aimed at GATE (gifted and talented education), and which requires that 'differentiation of instruction should be provided for all students within the regular classroom', including the following strategies:

- Iconic Teaching – Teachers use Socratic Questioning technique to encourage students to think more deeply about a subject. Students may be asked to evaluate the ethics of a character in a piece of literature, or consider a historical event from another perspective.
- Compacting – Students are pre-tested prior to the introduction of a new unit. If the teacher is satisfied the student has already mastered the material, the student is "compacted out" of this unit and works independently on accelerated or enrichment activities.
- Learning Centers – Students work independently or in small groups through a more complicated project tied to the core curriculum.
- Independent Projects – Students who have a strong interest in a particular subject may work with the teacher or a community mentor to design an independent study of their interest area.
- Tiered Assignments – The teacher designs a variety of assignments around the same key concept. These assignments are developed based on the different readiness levels of students. While there is some choice involved for students, the teacher may direct specific students to choose more complex assignments.
- Contracts – Students who do not completely "compact out" of specific units, may design a contract for learning with the teacher allowing them to work on enrichment activities during class instruction that the teacher agrees the student has mastered.

<http://www.aber.ac.uk/education-odl/diffsen.html>

offers a variety of practical strategies from the MFL dept at Aberystwyth University on how to differentiate the classroom and the work for SN pupils, notably <http://www.aber.ac.uk/education-odl/LessPlanPrep/lpp7.html> and <http://www.aber.ac.uk/education-odl/DiffSEN/diflearn3.html>

Questions for personal reflection:

1. What are the key principles behind my own theory of teaching?
2. How far does my classroom meet the [Principles of a Differentiated Classroom](#) outlined by Tomlinson?
3. Make a list of the issues which differentiate the different pupils coming into your classroom, and which might require differences in your teaching approach to maximise their learning (e.g. gender, concentration span... - how many others can you think of?)
4. Which pupils do I teach who need differentiated teaching - how might I find out their 'readiness level'?
5. What are the implications of what I have read for:
 - what I study with the pupils,
 - how I organise my classroom and the pupils in it,
 - how I plan my lessons and teaching strategies,
 - what materials I place before the pupils,
 - what work I require from the pupils,
 - how I interact with the pupils,
 - how I assess the pupils' work?
6. Think of an instructional strategy you use regularly. How well does each allow differentiation? Think of some other strategies you use and rank according to the 'degree of differentiation' it allows. Could you adapt/change any of these strategies to make them work better as a 'differentiated' teaching technique?
7. How will the role of my pupils in my lessons change if I introduce differentiated learning into my classroom?

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