

Your classroom as an orchestra: Practical differentiation strategies

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Keywords: Achievement, choice, differentiation, effective learning, gifted education, professional development, student wellbeing

Every child needs a champion

In 2013, Rita Pearson reflected on a conversation she had with a fellow teacher. The teacher claimed that she wasn't paid to like the children she taught; she was paid to teach. Rita replied "... kids don't learn from people they don't like" (Pearson, 2013, May). Recalling this conversation was the introduction to Rita's viral TedEd talk, which has gained over 13 million views to date. Pearson, who at the time of the TedEd talk had been a professional educator since the 1970's, reminded educators that "Every child deserves a champion, an adult who will never give up on them, who understands the power of connection, and insists that they become the best that they can possibly be." As Christians, we know that God is our "champion", who has written our names in the palms of His hands; "[our] walls are continually before [Him]" (Isaiah 49:16 English Standard Version). But how can we connect deeply with our students, especially in the high school where we teach multiple classes, with students of different abilities? How can we realistically be their "champion"? The answer lies in knowing, understanding and catering to the learning of students through quality differentiated teaching practices. Although the research evidence regarding differentiation is sound (Smale-Jacobse et al., 2019), it's unfortunately not always well understood. Delisle (2015) commented on differentiation in relation to gifted learners, stating that "differentiation does not work" (para. 2). His comments were rebuffed by Tomlinson (2015) and DeWitt (2017), with the latter stating that differentiation is not the issue, but rather "the actual issue is the lingering remnants of the factory model/mindset of education still largely ingrained in our educational system" (para. 9). DeWitt (2017) explains his viewpoint through the analogy of a train heading to a station, i.e. all students learn at the same pace and in the same way, and through the analogy of a conductor leading an orchestra, i.e. students have different abilities and require specific

instruction on using these abilities through quality differentiated practice.

What differentiation is, and is not

Effective differentiation relies on a teacher's ability to understand that each student in their classroom differs from each other (Hertberg-Davis, 2009). Fundamentally, this concept is clear to all teachers, however the difficulty in implementing this understanding is often fraught with misunderstanding. For teachers to understand differentiation and the elements required, there needs to be a whole school approach. However, teachers also need to understand the process of differentiation and the required elements, as most curriculum documentation does not explicitly provide guidance within this model. Carol Ann Tomlinson (2012) elaborates on what differentiation is and is not. She succinctly describes that "teachers who differentiate provide specific alternatives for individuals to learn as deeply as possible and as quickly as possible" (p.4). Tomlinson (1995) further assures teachers that differentiation is not individualised instruction, homogenous grouping, chaos or making minor additions in a learning activity, but it is proactive, qualitative, student centred and allows students to demonstrate their learning through different approaches to the content that is being taught, the process of learning and the final product demonstrating a student's learning.

Differentiation is a symphony

In using DeWitt's (2017) analogy of a teacher using quality differentiated practice, similar to a conductor leading an orchestra, we need to be mindful that differentiation is "a sum of all its parts" (Smale-Jacobse et al., 2019; p.3). Just like an orchestra playing a symphony, the performance is only one part of the planning, practice and organisation of the performance. In-class differentiation is similar, with a number of important steps which are imperative for the successful operation of a differentiated classroom.

The first step in the implementation of differentiated practice, is asking the question: What

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do I want my students to know (K), understand (U) and be able to do (Do)? These KUDo's turns the content from "edu-babble" (Heacox, 2017) to clear learning intentions. Great KUDo's will include what students should be able to do independently by the end of the learning experience, considering their zone of proximal development (ZPD) (Vygotsky, cited in Kanevsky, 2011). It also includes the crucial skills and processes, incorporating critical and creative thinking, which is imperative for students to be successful in the 21st century. Figure 1 shows a KUDo's table developed for a Year 9 History (Mandatory) unit on the Industrial Revolution. The "Know" section uses facts, vocabulary, dates, people, places and events as basis, with the "Understand" section including concepts, principles and bigger ideas which students need to consider. Lastly, statements in the "Do" section consider independent skills, with each skill statement beginning with a verb,

usually using Bloom's Taxonomy (Heacox, 2017). The table clearly incorporates the required NESA outcomes for Stage 5 History, ensuring compliance.

Once teachers have asked the KUDo question, the focus can shift to understanding what students in the class already know, understand and do through pre-assessment. Pre-assessment is a crucial component of differentiated instruction (Heacox, 2017), with differentiation without assessment described as a random educational act (Tomlinson, 2012). The results of the pre-assessment and any information regarding student learning needs, for example student Individual Learning Plans (ILPs), will be used to inform educational planning to ensure that the content and activities in a unit of work are within the ZPD of students in this class. Differentiation will occur through content, process, product, affect and the learning environment, based on their readiness, interest and learning profile (Tomlinson, 2012) to

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Figure 1: Year 9 History

KUDo's Topic 1: Making a better world? The Industrial Revolution		
Know	Understand	Do
<ul style="list-style-type: none"> Vocabulary, assembly line, capitalism, colonisation, communism, cottage industry, enclosure movement, imperialism, nationalism, Marxism, middle class, socialism, urbanisation The technological innovations that led to the Industrial Revolution Conditions that influenced the industrialisation of Britain and Australia Key features of the agricultural revolution in Britain The main reasons why the Industrial Revolution began in Britain The growth and extent of the British Empire from 1750 to 1900 The population movements and the changing settlement patterns during the Industrial Revolution 	<ul style="list-style-type: none"> Key inventions and innovations during the Industrial Revolution and the social, economic and political impact The experiences of men, women and children during the Industrial Revolution, and their changing way of life The short and the long-term impacts of the Industrial Revolution, including global changes in the landscapes, transport and communication The positive and negative consequences of the Industrial Revolution 	<ul style="list-style-type: none"> Analyse sources using the acronym OPVL (origin, value, purpose, limitations) Use source analysis information to investigate experiences, impacts and consequences of the Industrial Revolution Demonstrate detailed knowledge of the content and concepts of change and the Industrial Revolution by using descriptions, explanations and examples to support knowledge Synthesize knowledge from English and History to inform inquiry into narrative writing and source analysis, in order to create a narrative set during the Industrial Revolution Develop a focused research question that is closely related to the Statement of Inquiry Demonstrate self-regulation by providing evidence of planning, note taking and self-evaluation Create an accurate reference list of sources (following the APA 7th edition convention)

Figure 2: Year 9 History Unit Pre-assessment – Task 1

Year 9 Industrial Revolution Pre-assessment	
Student name: _____ Teacher: _____	
Task 1: Read the quote below.	
Source A	
<i>“society is industrial and based on mass production, mass distribution, mass consumption, mass education, mass media, mass recreation, mass entertainment, and weapons of mass destruction. You combine those things with standardization, centralization, concentration, and synchronization, and you wind up with a style of organization we call bureaucracy.”</i> Alvin Toffler	
Complete the table below, using your knowledge of the Industrial Revolution and Source A.	
<p style="text-align: center;">CONNECT</p> <p>How does Source A connected to what you already know about the Industrial Revolution?</p>	
<p style="text-align: center;">EXTEND</p> <p>How does Source A extend or push your prior knowledge about the Industrial Revolution?</p>	
<p style="text-align: center;">CHALLENGE</p> <p>What is still challenging or confusing for you, considering the Industrial Revolution? What questions, wonderings or puzzles do you now have?</p>	

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ensure gifted learners make continuous progress and extend their learning.

Figures 2 - 4 demonstrate the use of a concept under the “Understand” section of the KUDo’s sheet, for students to demonstrate links to other subjects and prior knowledge. The use of the connect/extend/challenge visible thinking framework (Harvard Project Zero, n.d.) provides additional information on critical thinking skills and student interest, as the “challenge” section encourages students to indicate what they would like to know about the topic, allowing student interest to influence curriculum planning.

Differentiation is student-centred and provides multiple approaches to content, process, product, affect and environment (Tomlinson, 2012). The choices offered to students are controlled as it links in with the content and skills covered in each unit. Students are given the opportunity to incorporate their interests through the selection of a topic, focus area and product creation through a number of differentiation strategies, which can be adapted to all year levels and subjects. Figure 5 is an example of a RAFT (Role-Audience-Format) choice board. According to Heacox (2017), choice boards follow the

essential features of quality differentiated practice as students benefit from both control and choice. The activity offers engaging and interesting choices for students. In addition to differentiating for gifted students through choice, the task will be formatively assessed through student selected criteria using peer-feedback. Involving students in their achievement by supporting their input in substantive criteria, positively influences their results (Andrade, 2012). Supporting students to provide feedback to each other, can promote self-regulated learning through meta-cognition for both the student being assessed and the student providing the assessment feedback (Andrade, 2012).

Another practical differentiation strategy is the use of tiering. Tiering keeps the focus of an activity the same for all students, but it provides alternate routes of access at different degrees of complexity which will maximise student engagement and challenge. Through pre-assessment, teachers will be able to group students into tiers. Tiering for the activity used in Figure 5 is based on degree of challenge and the level of complexity (Figure 6). Challenge and complexity are supported using

Figure 3: Year 9 History Unit Pre-assessment - Task 2

Task 2:

Consider Source B and Source C. In an extended response, using PEEL [Point, Evidence, Explain, Link] identify specific changes and provide reasons for these changes. In what way would these sources be valuable for historians? Use lined paper below.

Source B

<http://webs.bcp.org/sites/vcleary/ModernWorldHistoryTextbook/IndustrialRevolution/PreIndus.html>



Source C

<https://commons.wikimedia.org/w/index.php?curid=2031783>



“Through pre-assessment, teachers will be able to group students into tiers. Tiering for the activity used in Figure 4 is based on degree of challenge and the level of complexity.”

Figure 4: Year 9 History Unit Pre-assessment - Task 3

Task 3: Demonstrate your understanding of the changes brought on by the Industrial Revolution, by completing the table below. You can use key words, phrases or sentences.

Innovations	Political Change
Social Change	Economic Change

Bloom's Taxonomy (Anderson & Bloom, 2001) and the William's Model (Gross et al., 2001), as students are expected to analyse the sources and evaluate their conceptual understanding of change considering the sources. The final level of the Bloom's Taxonomy is reached for Tier 3 students through their creation of a concept map and an analogy, which provides the opportunity to reveal their depth of knowledge and evidence of how they "see the big picture" (Brulles & Brown, 2018, p.70).

Don't forget the conductor, (or the Theatre Board)!

To support teachers in effective differentiation, a "systematic and continuous" (VanTassal-Baska, 2018,

p. 360) implementation plan is required. Professional development (PD) should incorporate the elements and focus of differentiation, demonstrated through a "myriad [of] models to construct curriculum" (Kaplan, 2009; p. 258). In addition to long term planning through the development of a detailed scope and sequence for all grade levels, the scope and sequence and core curriculum differentiation should be aligned with ACARA and NESA outcomes, to include too the explicit teaching and incorporation of psychosocial skills (referred to as Social Ability Continuum by ACARA (n.d)). The final requirement of "instructional leadership" (VanTassal-Baska, 2018, p. 360) by the school executive is the final component in building teacher capacity and demonstrates the

“students are expected to analyse the sources and evaluate their conceptual understanding of change considering the sources”

Figure 5: Year 9 History RAFT choice board

ROLE	AUDIENCE	FORMAT	TOPIC
Karl Marx	Future generations	A letter	The class struggle
A child labourer	Factory Owner	Vignette	Working conditions
A doctor	Self	Journal entry	Diseases in the slums
A single mother who moved to London for work when her husband passed away	Her children	A conversation	Living conditions in the slums and the position they are in
Inventor	Self	A memoir	Financial and class change due to his invention
A suffragette	Government	A one act play	Women's right to vote

Figure 6: Year 9 History source analysis using tiering

	Tier 1	Tier 2	Tier 3
Source material	Sources demonstrating life before and during the Industrial Revolution.	Sources demonstrating life before and during the Industrial Revolution.	<ul style="list-style-type: none"> • Quotations from futurists, related to the change in the 1st to the 4th industrial revolutions. • Two infographics related to the 1st to the 4th Industrial Revolutions.
Activity	Groups create a poster to visually demonstrate life before and during the Industrial Revolution.	Groups create a comparison table on life before and during the Industrial Revolution.	<ul style="list-style-type: none"> • Groups create a concept map to show their understanding of change during the four Industrial Revolutions, considering the supplied source material. • Students individually create an analogy on change.

commitment of the school to move education away from the industrial era one size fit all approach, to a wonderful symphony where the orchestra plays their part with passion and finesse, under the guidance of the conductor. A conductor who is a champion for each of the musicians, knowing their strengths and areas of development.

As Christian educators, our duty is not just to focus on content and subject, but to demonstrate our faith through knowing and caring for each of our students, following the instructions of our ultimate “conductor”; Christ’s leadership and guidance in our lives and the important work we do.

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