

How does a school promote effective differentiation for its learners?

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Abstract

This paper takes an investigative approach to explore the pedagogy of differentiation. It is based around an ethnographic case study of a secondary school and uses discourse analysis of literature, observation and interviews to identify and reveal one school's search for effective differentiation. An heuristic is thus devised through four enquiries to aid schools and teachers in negotiating their own approaches to differentiation. The macro level explores a binary of didactic and democratic differentiation, while teachers are invited to negotiate through three key variables of social inclusion, shared practice and teacher attitude.

Introduction

The notion of 'differentiation' originated out of the Labour Government initiative of 'Personalised Learning', which constitutes 'an education system where assessment, curriculum, teaching style, [...] are all designed to discover and nurture the unique talents of every single pupil'¹Its essence is to move away from teacher-centred (even didactic) learning; towards student-centred learning that maximises engagement and the acquisition of knowledge and understanding. Within differentiation, students are 'continually engaged in setting their own targets, devising their own learning plans and goals, choosing from among a range of different ways to learn' (Maguire, 2013 p.326). Teachers tailor lessons towards the personal profiles of the learners; that is, adopting a pluralistic provision of the content, process and product; that is, diversification of the topic-knowledge, the activities for internalising this and the method of assessment (Tomlinson, 2001 p.51).

I find the concept of differentiation intriguing, in the dialectical tension between its individualistic connotations and the orthodox, holistic-classroom provision. This catalysed my research aim of exploring how a school implements **authentic effective** differentiation, as opposed to merely 'ticking the boxes'. I initially sought to reflect on effectiveness via lesson observations and informal interviews with staff and pupils. However, as I began to plan my case study, a void was emerging, whereby it was difficult to framework my study because I could not operationalise what '*effective*' differentiation was.

This led me to alter my research to an investigative approach of exploring the pedagogy of differentiation, in an attempt to conceptualise what constitutes 'effective differentiation'. I therefore adopt a discourse analysis, whereby an exploration of existing literature unveils a nexus of dialectical tensions that problematise the practical application of differentiation. I debate such tensions through four key enquiries that integrate a literature review and an ethnography of lesson observations and informal interviews. The purpose of this is to attempt to negotiate what 'effective' differentiation may constitute and thus offer a heuristic for novice (and experienced)

¹ http://www.new2teaching.org.uk/tzone/education/yourteaching/individual_needs.asp

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teachers, that may their aid understanding of how to achieve this.

The case study school, 'School A', was my first PGCE placement school, which is a non-selective mixed-sex school in a small urban unitary authority. This provided the optimal conditions for exploring differentiation, whereby it reflects a pluralistic socio-economic and ethnic demographic. From my personal experience within this school, differentiation was fundamental, whereby one class would often contain diverse pupils with English as an Additional Language (EAL), students on the Special Educational Needs (SEN) spectrum and a vast range of abilities.

Therefore, although differentiation is not explicitly outlined as a concrete focus within 'School A', it is an integral part within the 'School Improvement Plan 2014-2015' which is hinged upon overall grade improvement; 'improving the quality of teaching in order to raise the achievement of all students [...] by: Ensuring that teachers always give students work that is demanding enough and engages their interest'. I hoped this correspondence with my research aims would increase the appeal of my study to the school.

Methodology

The methodology I have employed in this research is an interpretive approach, whereby I sought to unveil hypotheses, regarding the pedagogical dimensions of 'differentiation'. This epistemological approach is complemented by a case study, whereby I measured my enquiries against a tangible school setting. A case study was appealing because it offers a *sui generis* value of intensively investigating a specific context (Rubin and Babbie, 2009 p.220). This subsequently gives my discursive analyses a tangible application, which avoided professing mere abstract ideas.

An ethnographic case study was adopted, whereby I sought to immerse myself within 'School A' to 'generate rather than test hypotheses' (Cohen, 2003 p.137). This offers a valuable insight into reality, whereby through a naturalistic setting, I could 'embrace and build in [...] uncontrolled variables' (ibid p.184). I adopted a triangulation method in an attempt to increase the reliability and validity of this interpretive (and thus subjective) research. Covert observations and informal interviews are used in order to negotiate what aspects of differentiation-discourse, may constitute '*effectiveness*'.

However, despite the efforts of triangulation, reliability and generalisability are an irrefutable issue; specific context makes the representativeness of the findings difficult, as there are extraneous variables for '*effectiveness*' at 'School A'. This is hinged upon a general limitation with ethnographic research, whereby '...in studying situations that emphasise how highly context-bound they are, this might neglect broader currents and contexts' (ibid p.157). In addition to this limitation of generalisability, I had to be cautious of sustaining neutrality, whereby my existing relation with the school did not cause me to 'go native' (Best, 2014 p.128), whereby objectivity and reliability of findings could be jeopardised.

However, undertaking an ethnography in a setting within which I had already established a status was also advantageous. For example, my existing rapport aided gaining access for observations and participants for interviews, which appealed to purposive sampling, whereby I approached those I anticipated would be interested. There was however a risk of validity being jeopardised by reactivity to my researcher presence; conceptualised as the 'Hawthorne Effect' (Cohen, 2003 p.156). This may result in teachers presenting an inauthentic lesson, due to knowledge of research aims, or pupils behaving differently. However, to counteract this limitation, there was an ethical strength in purposive sampling, whereby many pupils came from backgrounds of child protection issues and could consequently be anxious in dealing with a research setting; thus I had a personal conception of which pupils would be suitable.

My ethical responsibility was heightened due to the delicacy of some pupils; thus my familiarity was mutually beneficial, whereby a rapport could make pupils comfortable and open; subsequently increasing validity. Furthermore, it was mutually agreed between myself and the 'gatekeepers' (staff) of the pupils (being under 18 years of age) that assent would be favoured over consent, whereby minimising the formality of the research could prevent anxiety. This also favoured informal interviews, whereby an informal converse could be more relaxed.

I gained consent from teachers via an email that briefed them of the aims and purpose of my research and offered the right to withdraw any information, in addition to assuring anonymity. I also noted that confidentiality could not be ensured, due to my ethical responsibility to report anything concerning with the participants under the age of 18. Within this email, I asked to debrief the class at the end of the lesson, in order to increase validity.

I feel that the use-value of this case study appeals as a 'step to action' (ibid p.184), whereby the findings can contribute to the professional development of myself and other practitioners.

Results

Contextualising the Enquiry- 'The premise for a qualitative investigation'

The essence of my enquiry can be contextualised through reflecting on the following study by Sebba et al (2007), which (in a somewhat shallow field of research) has been referenced as one of the most substantial studies on differentiation. It involved the collation of data from questionnaires in 347 schools, along with case studies of 13 schools rated as having 'effective' differentiation. The overall statistical results illustrated that '69% of all schools researched used open-ended learning challenges, while 64% indicated that pupil autonomy and choices are encouraged at their school' (Prain, 2014 p.47).

Although there is value in providing a quantifiable reflection of how pervasive differentiation is in schools, such findings do not provide an insight into its impact. This is not to devalue quantitative research; however, from an ethical stance, I feel that educational research has a responsibility to measure the effectiveness of policies, in order to ensure that their objectives are reflected in the outcomes on the front-line. Rogers (2013) states, we need 'a rich account of the values, goals, processes, and outcomes of personalised learning' (ibid p.48); it is these qualitative characteristics that I wish to appeal to, in the four enquiries presented in the following results section, whereby I seek to investigate what may constitute 'effective differentiation', through the integrated analysis of dialectical tensions *and* ethnographic findings.

Enquiry 1- The paradox of selective-differentiation

The first tension I have theorised concerns the juxtaposition of teachers selectively implementing differentiation, which somewhat undermines the essence of differentiation as a provision of equity for *all*. This contention has been problematised in Marxist literature, which claims there is a danger that overt differentiation can be divisive and reinforce the social inequalities it aims to depreciate; it 'recasts education as a market for exploitation by knowledgeable consumers who operate on self-interest and informed private choice thus continuing or exacerbating undemocratic educational disadvantage' (Prain, 2014 p.45).

I do believe that there is value in this claim, as pupils are susceptible to labelling and stratification; thus teachers have an ethical responsibility to sensitively apply differentiation. Furthermore, this moral obligation of the teacher demands that differentiation does not encourage pupils to premise individualism and narcissism over attributes such as altruism and cooperation; as these are vital skills for students to develop in their SMSC (Spiritual, Moral, Social and Cultural) development.

This tension resonates with an inference from a year 7 maths lesson observation: here there was a highly visual differentiation of tasks, whereby there were two sets of 10 questions on the interactive board. Attached to each set was a list of pupil-initials, by which lower ability pupils were given simplified equations, compared to harder questions for the pupils on the opposite list. I initially thought the method of ascribing tasks by initials was astute, as this did not demand the time of the teacher to tell individual students which questions to answer; thus enabling her to offer one-to-one assistance instead.

However, in consideration of the above critique, I was intrigued to explore pupil's views on this; for example, 'Pupil A' claimed that 'it helps as I don't have to do the harder questions but I don't like everyone else in the class knowing that I'm doing the easier questions as it makes me look thick'. Although this view was not shared by every pupil I spoke to, I felt that for those who did express a similar view, this signified an important area of concern within **formal** differentiation, in terms of stigmatisation and labelling. Explicitly overt strategies may lead lower ability pupils to develop a demotivating self-fulfilling prophecy; internalising a negative self-concept of subordination. This may also occur with higher ability students who feel they are unfairly exploited in their increased capacity, by being given extra work in challenges; thus 'there is a fine line because 'too much' differentiation is not motivating. Some pupils will sometimes complain [...]. In a sense they are insulted by what might be called over-differentiation' (Galvin, 2013 p.5).

This issue of over-differentiation and the negative consequences of labelling could be counteracted by making differentiation in the classroom as covert as possible; to the extent that an intrinsic 'spirit of differentiation' (Sherrington, 2014 p.75) pervades lessons, rather than explicit stratification. However, if an informal, nuanced approach to differentiation is more ethical, this problematises how teachers can formally assess 'effective differentiation'. This tension will be explored in Enquiry 2.

The aforementioned lesson observation also resonated with further literature, whereby the two lists of abilities creates a void of 'middle achievers'. This is concerning, as this may cause such pupils to stagnate in their progression, as they are neither perceived as high ability and requiring challenge, nor low ability and needing assistance. This is becoming an increasingly common aspect within differentiation literature, with this biased stratification even being linked back to political motifs. For example, research undertaken by the London Institute of Education reported that 'four in 10 teens are "overlooked" by Coalition government' This cohort of neglected 'middle-achievers' has become exacerbated by the 2010-2015 Coalition government's focus on high-achieving pupils according to the report, whereby 'the present government "has its sights firmly set on the top 30 per cent", and is also focused on those at the bottom, the NEETs (not in education, employment or training)'². In this view, the Coalition's intentions to streamline the education system may have served to merely reinforce the inequalities that differentiation aims to reduce.

However, we must be cautious, as there is a strong political basis to the claims of this report and a somewhat left wing tone, which raises questions over its validity. Despite this limitation, this was a longitudinal study carried out over the course of three years, which thus offers a trajectory observation of educational provision.

At a general level of inference, the findings do suggest that there is *potentially* a macro level of inequality being infiltrated through the government's educational policies. This leads to the

² <http://www.ioe.ac.uk/66726.html>

premise that *'effective'* differentiation resides in the equity of *all* pupils receiving a personalised provision, which is tailored to their profile. Although potentially idealistic in considering the practicalities of providing this (with a ratio of one teacher to thirty pupils), this must exceed the level of abstract idealism, in order for differentiation to be authentically effective and not infiltrated by 'top-down' political intentions.

Enquiry 2- Formally assessing an informal initiative

This concerns the tension between implementing this above ideal of a more ethical, nuanced form of differentiation and the need to formally assess learning within this. This contention resonates with the claim that with many educational policies, one initiative 'lies alongside other, sometimes competing, sometimes overlapping policy imperatives' (Prain, 2014 p.336). This is particularly poignant in considering how evidence of academic attainment is key within the current climate of high-stakes testing; thus if informal differentiation is adopted as a key learning strategy, how can teachers formally assess the progressive (or regressive) effects of this?

I feel that a recent initiative by 'School A' commendably synthesises this tension, whereby the SENCo department of the school formulated 'Differentiation Plans' in the form of 'Subject Provision Maps' for each subject-department to complete. This involved outlining the differentiation strategies used by the department and then evaluating the effectiveness of these against pupil progression. This is split into four areas of differentiation specialism; 'Cognitive and Learning', 'Communication and Interaction', 'Social, Emotional and Mental Health' and 'Sensory and/or Physical Medical Conditions'. This is then divided into three levels of provision, whereby there are different gradients of intensity from minimal provision to specialised provision- depending on pupils needs; 'Wave 1 intervention= Good differentiation in class- teacher led', 'Wave 2 intervention=Teacher led- with use of support' and finally, 'Wave 3- Specific and Targeted support, managed by SENCo with direction in class from teachers'.

There is a column of 'Student Examples' within the 'P.E Subject Provision Map', which I feel signifies a valuable potential for integrating formal assessment with informal differentiation. For example, the department records an improvement as a result of the differentiation implementation of the iPad. This pupil adopts a 'coach' role in PE lessons due to his medical marginalisation from practical tasks; 'previously, the role as coach was more challenging to fulfil as Pupil A struggled to offer explicit feedback. Now he has visual evidence to support his judgements on performance'

I feel this mode of reflection encompasses assessment potential; however, one criticism I do pose concerns that such maps are SEN dominant; rather than presenting differentiation strategies of *all* pupils. When I raised this bias with the SENCo leader, he replied that 'the initiatives feed into general good teaching practice that can target all pupils from high to low ability'. Although I resonate with this justification, I will profess that I feel the effectiveness of these maps can be maximised by extending their scope to individual classes, so that the class teacher can specialise the map for all pupils; including columns for challenging higher abilities. This will congruently serve as a guide for teachers to check their differentiation against and a means of formally assessing differentiation techniques against individual pupils.

Enquiry 3- The oxymoron of an inclusive and differentiated classroom

This dialectical tension has some resonance with 'Enquiry 1', whereby there is a contradiction in how differentiation has the potential to be divisive. It concerns the question of how teachers can simultaneously negotiate personalised learning *and* social integration in the classroom. At a discursive level, the individualistic connotations engendered in 'differentiation' appear to contradict the homogeneous essence of inclusion; 'personalisation is sometimes regarded as individualisation [...], and is thereby devoid of collaboration and a social dimension' (Hartley, 2012

p.86).

This tension is exacerbated by the fluidity of the term 'inclusion', whereby discourse promotes differentiation as an integral component of inclusion; 'Differentiating instruction is said to be the essential ingredient necessary for inclusion' (Westwood, 2001 p.5). However, this conceptualises 'inclusion' in terms of accessing the curriculum, which consequently undermines inclusion in the social sense. This was illustrated in a number of observations whereby EAL (English as an Additional Language) pupils were overtly excluded from the class; both academically and physically.

An example I can draw upon from my observations concerns a year 9 maths lesson I observed, whereby an EAL student who had recently joined the school had a sufficient amount of differentiated material given to him. For example, he had separate tasks that used the visual and sensory stimuli of building blocks, to aid his learning. This was commendable in terms of a tangible illustration of formal differentiation; however he worked at the back of the class with a Learning Support Assistant, which meant he was physically separate for the entire duration of the lesson.

When asked their thoughts on this EAL student working separately, 'Teacher A' replied that 'he is so behind in his basic skills that it wouldn't be beneficial for him to partake in the main class activity'. This corresponded with 'Teacher B', who stated that they found EAL differentiation problematic, claiming 'EAL pupils need to join mainstream classes with foundational English ability. For us teachers who are not bilingual, to differentiate and include them at the same time is pretty impossible'. 'Teacher B' then went on to cite the causality of this within the deficiency in remedial provision for EAL students. This suggests that perhaps in a school such as 'School A' whereby the EAL populace is so dense, their remedial provision needs to be invested into, in order to enable such pupils to be differentiated (socially) inclusively.

I would therefore propose that at a pedagogical level, the conceptualisation of 'inclusivity' needs to be expanded beyond mere academic access, to also include social integration as a vital component of successful differentiation. For pupils to be excluded along the lines of class or ethnicity is not only ethically concerning, but also opposes the SMSC development of pupils. I thus profess that 'effective' differentiation does not merely reside in making the curriculum accessible to all pupils; but fosters both personalised learning *and* a socially inclusive classroom, whereby pupils are interacting with one another; embracing their socio-cultural and academic differences.

Enquiry 4- Democratic Differentiation versus Didactic Differentiation

The complexity of 'effective' differentiation led me to enquire into whether existing literature had explored any methods that could alleviate this demand on teachers; without jeopardising the quality of their differentiation. I discovered the model of 'democratic differentiation' (Waterman, 2013 p.4) whereby pupils adopt a more active role in producing their personalised learning. This is a notion of shared-practice between teacher and pupil, whereby 'asking students to choose standards-based activities based on their *self*-knowledge is superior to asking teachers to understand, at high levels, all the aspects of each student in order to plan differentiated instruction' (ibid p.5) This is premised to meet those more informal dimensions to pupil profiles, that the teacher may not be able to realistically access with the demands of the profession; such as cultural dimensions and personal interests.

There are elements of appraisal in this approach, such as the dualistic benefit of alleviating the workload for teachers *and* encouraging motivated learners. This latter point is professed within brain-based research, such as Deci (1995), which suggests there is a positive correlation between choice and motivation; 'students are intrinsically motivated if they are given chances to make

choices' (Waterman, 2013 p.4). The independence and responsibility in this shared-practice aids pupils in understanding how the internalisation of information is a scaffolding process; it 'helps students develop an understanding of metacognitive processes (learning about learning) that foster independent and lifelong learning' (ibid p.4).

This model does however harbour connotations of idealism, whereby a paradigmatic shift of significant proportions would be required, which is somewhat unrealistic in the respect that didactic learning is conventionally ingrained. I therefore wished to seek how both teachers and pupils would feel about this shift to education. I hypothesised that within 'School A', replacing didactic teaching with independence and choice may be destabilising and catalyse behavioural issues. This view was supported by 'Teacher C', who responded to this model by claiming 'the classroom would be chaos; even when I have a highly structured lesson, behaviour can still be an issue. It would probably work in a grammar school where the academic competitiveness would suit the element of personal choice'.

Furthermore, it is especially important for caution to be exercised in cases such as 'School A', as for a large cohort of pupils, the stability and security offered in school counteracts the absence of such areas at home. When I proposed this model to the SENCo, he claimed that 'school is the only source of constant stability for many of our pupils and to unsettle this could be harmful. The guidance and support from teachers is almost a harness for them to stay in school and complete their GCSE's'. This suggests that the notion of choice and responsibility for such adolescents may be a hindrance to progress, as opposed to a help.

Some pupil responses confirmed this hypothesis, including 'Pupil B', a year 8 pupil, who stated 'I wouldn't like working more on my own as I like that things are the same in each lesson, where we come in and do our starter and then Sir tells us each bit we need to do'. 'Pupil C', a year 10 student, was slightly more positive towards the idea, claiming 'I like the idea of being able to choose what work I want to do, as I like having debates rather than writing [...]. Although I'm not sure I like the idea of doing separate things from my friends as I like working together on things'. I found this point particularly interesting, as her appeal to 'democratic democracy' (Waterman, 2013 p.4) was counteracted by anxiety towards exclusion from peers.

The effectiveness of the approach a teacher adopts in their differentiation, is thus highly contextually-determined. The general populace of the pupils is the main variable upon which this rests; whereby academic and pastoral needs are integral. For example, in a school such as School A, a large amount of pastoral support is intrinsic within the very structure of a didactic classroom, which has a direct correlation to academic attainment. Teachers therefore need to negotiate the variables of academic and pastoral support, in establishing whether the pupil-directed democratic differentiation (Waterman, 2013 p.4) or teacher-directed 'didactic differentiation' is the best form of practice.

Conclusion

The initiative of differentiation is commendable in its assimilation with the broader societal shift to (post) modernity, whereby there is a fundamental need for the education system to prepare students for the societal context of their post-compulsory education years. Philosophers profess that we now live in an epoch characterised by fluidity and change, whereby contra to the structured family relations and longitudinal employment of traditional society, life is becoming more pluralistic. This means personhood is becoming more malleable, whereby the lay individual is subjected to constant decision-making regarding aspects such as identity, career and family; 'The 'project of the self' requires identities to be constructed and re-constructed with the products and services that the market provides' (Maguire, 2013 p.325). This thus appeals to

the personalisation within differentiation, as this familiarises pupils with notions of choice, plurality and independence- all skills and attributes that dominate much of (post) modern living. I thus perceive this paradigm shift in learning, as both an academic-provision *and* life-skill preparation.

However, the negotiation of *effective* differentiation is a highly complex process and of utmost importance is deciphering between authentic and inauthentic differentiation; identifying what is genuinely beneficial to learners. The concept of 'differentiation' epitomises its own problematisation; as learning needs to be personalised to the pupil, so there is no 'one size fits all' form of differentiation. It instead needs to be personalised to the specific school, which consequently makes it difficult to construct a generalisable theorisation of what '*effective differentiation*' constitutes.

I thus conclude by proposing a framework of variables that 'effective differentiation' may be negotiated within. This is professed at two levels; firstly at the macro-level of the whole-school approach to differentiation, in terms of deciphering whether a 'didactic' or 'democratic' style would be most beneficial for the general populace and ethos of the school. The second level is at the micro-scale, personalised provision by the teacher, whereby I have professed **three key variables** against which appropriate learning and teaching strategies should be considered.

The first variable is '**social inclusion**', whereby the differentiated classroom must not be divisive; teachers should constantly be *reflexive*, making sure integration is simultaneously forged between pupils and that differentiated instruction does not overtly label students. This includes making sure that there are at least three tiers to differentiation, to ensure the void of 'middle achievers' does not occur. The second variable I have conceptualised is '**shared practice**', whereby whether didactic or democratic differentiation constitutes the whole-school approach, teachers should use their pupils to measure the validity of their differentiation; asking pupils whether they are content with their personalised methods. Making sure pupils are content and progressing is a fundamental measure of '*effective*' differentiation. However, this should be complemented by an objective measure of progress such as the 'Differentiation Maps' at 'School A'.

The final variable is '**teacher attitude**', embracing the paradigmatic shift of 'differentiation'. From my ethnographic immersion and personal experience, it is evident that its implementation can be destabilising and demanding. However, to be genuinely effective, practitioners on the front-line need to strive for differentiation that is as authentically effective as possible; as opposed to merely implementing methods to 'meet' teaching criterion. This is not to contest that teachers should not be *cautious* of how differentiation is implemented; as effectiveness ultimately rests upon a delicate process of negotiation and specialisation. However, as the primary drivers of this initiative, I believe that as teachers, we encompass an ethical and professional responsibility to embrace the challenge of differentiation; both for the benefit of our learners and to modify the British Educational system in accordance with (post) modern living.

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