Module Title:

**Module 4 – Subject Knowledge and Curriculum Development**

Term and Year taken:

Summer/Autumn Term 2011

**Amy MacLean**

**A critique of two examples of subject/specialist material**

Word count: 3883

**Masters in Teaching and Learning (MTL)**

**Institute of Education, University of London**

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**Masters in Teaching and Learning (MTL)**

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Coursework must be submitted in person, or posted (postmarked no later than the submission deadline), to Room 613, Institute of Education, 20 Bedford Way, London WC1H 0AL.

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**Section A: to be completed by participant**

Participant name: Amy MacLean

Module name: Module 4 – Subject Knowledge and Curriculum Development

Term & year taken: Summer/Autumn 2011

Title of coursework: A critique of two examples of subject/specialist material

Word count: 3883

Submission deadline: Thursday 22nd September

Date of submitting essay: Thursday 22nd September

Number of copies submitted: 2

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**Signed:** Amy MacLean

**Section B: to be completed by participant**

Participant name: Amy MacLean

Module name: Subject Knowledge and curriculum development

Title of coursework: critique of two examples of subject/specialist material

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# London Reach: Participant Self-Evaluation

Name: Amy MacLean Date: 21/09/11 Module/Phase: 4

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| Where I am at the start of the module (or phase 1):I began the module with little clue about how this particular module would contribute both to my development as a G and T coordinator, and also how it would contribute to my development as a classroom teacher. I was excited about critiquing a piece of research however, and even more about a teaching resource as it is unusual in a school context that we would be able to critique either of these resources. |
| What happened during this period to support professional development:I was able to fully appreciate that as a teacher I have a ‘right’ to be critical of new initiatives and where they originate from. Often research is not rooted in any objective evidence but may be more of a sharing of good practice report. Therefore for my professional development it is useful to treat new initiatives with caution and to ensure that any new initiative is trialled in the school context first before being fully implicated.  |
| My summary of professional development and priorities for moving forward:Continue to read articles and to use new research in the area of gifted and talented education. Endorse trialling of new resources and ideas.  |

**Module 4 – Subject Knowledge and Curriculum Development**

**Part 1 – Critique of a research article**

When searching for a research article that would be appropriate in relation to my action plan in Module 3 and something which would be worthwhile to my professional development needs, it became clear that in educational literature there are broadly speaking 3 types of articles which are published. Those which are empirically based, in which there is a systematic investigation using a method such as an experiment or an interview, with data and results which are analysed to support or disprove an alternative hypothesis. Those which are produced by academic groups or organisations that are government funded or non-government funded that are often literature reviews or meta-analyses of a number of studies. And lastly those publications which are simply recommendations for teachers practice, and do not necessarily have any empirical research to back up their claims.

I have chosen the article ‘A Baseline Review of the Literature on Effective Pedagogies for Gifted and Talented Students’ by Hewston, Campbell, Eyre, Muijis, Neelands and Robinson who are part of ‘The National Academy for Gifted and Talented Youth’, a group which was funded by the government and based at the University of Warwick until 2007. This article falls into the second group of types of research and on further inspection it becomes clear that the authors themselves did not carry out any first hand research, but instead analysed that which already existed. Their purpose as an organisation was multifaceted, as not only did they research and write about gifted and talented education, they also ran summer schools for more able students and gave professional advice for those teaching gifted and talented students.

I chose this partly because I am aware of the success of NAGTY, and having studied at Warwick University I was taught by members of the group and had peers who were funded to complete research by NAGTY and was astounded by the level of support the group gave more able of students from across the country. NAGTY released a number of occasional papers, of which this was number 5. I was particularly intrigued because I was unsure as to who the audience would be for this article? Would it be aimed at Gifted and Talented Coordinators such as myself who might be seeking out something which they can review their current policy and practice against? Or was it intended to be read at a much wider level – perhaps for consultants operating within education authorities who may be seeking to amend strategies existing within their context? Or much closer to home, could it have been relevant for parents, whose children attended the NAGTY summer schools and they took an interest in what was best practice for their child? (and of course whether or not their child was getting that at their current educational establishment). The answer is unclear.

As the reader my agenda is as such; to consider what is currently operating in my school against what the authors have found to be the most effective pedagogies for gifted and talented students. From that point I may wish to consider altering or developing practice within the school depending on their conclusions, although this should be carried out carefully. In which case what I might miss is *how* the researchers have come to this conclusion, and on what basis this conclusion has been reached as to what is most effective for identification, provision, enrichment etc. All I will be concerned about as the reader with my purpose, is how the practice at my school differs and what I can do to change it to make it more effective. Most importantly I may miss *where* this research is from, as a reader of a meta-analysis or a literature review such as this one, you are not aware of the subtleties of the individual pieces of research which are being reviewed. As a reader you will not know what methodology they used, what sample size, how reliable or how valid each individual piece of research is that is being analysed to create a whole picture of what is ‘best practice’.

The writer/s set out their purpose as ‘to serve as a baseline analysis of effective pedagogy in gifted and talented education’ (p5, Hewston et al (2005)). They do not specify who would use this baseline analysis, and so in that sense do not have a direct target audience. I feel that this may be somewhat limiting for their piece of work, because it is not obvious who it is aimed at, and as I mentioned previously it could have many potential audiences. In terms of the timing, by this point NAGTY had existed for 3 years, and would only continue for another 2 years, so possibly by this point they had decided that they had enough expertise and had built up a bank of their own research and understanding of the key issues within this particular area to commission such an article.

The article itself splits ‘effective pedagogies’ into 4 sections; identification of gifted and talented students, education of those students, approaches to provision and issues in effective gifted and talented pedagogy. It then discusses for each one, what is seen as best practice across the world and draws a conclusion as to what would appear to be the most effective approach. The authors do not justify the split that they make between the 4 sections, but it seems logical to make these sections separate although it is interesting that amongst those sections not one is related directly to pedagogy.

In terms of the article’s reliability, it uses an amended proforma for the literature review which has been used in a similar review of effective pedagogies in New Zealand in 2004. This is useful because it has adapted a template which has been used previously and has been deemed to be successful. It is also useful that it has such a proforma for analysing the research it has chosen to review, as this makes it more reliable in a review which is being carried out by more than one author.

In terms of how this relates to my practice in school, I found that for the first section in relation to identification of gifted and talented students, the article stated very obvious points regarding the advantages and disadvantages of the various forms of identification and concluded by stating that multi-method approaches were most favoured in recent literature and that any one-dimensional method would only serve to be a reductionist approach to identifying more able students. This was backed up with reference to 6 separate pieces of research, indicating through the volume of opinions that this was a well regarded opinion.

The second section discusses the education of gifted and talented students; and again splits this up into sections covering key elements including differentiation, enrichment, acceleration, mentorship, curriculum compacting and distance learning. Usefully the authors do refer to specific research that has been carried out on each area, and are critical of some of the elements of the research e.g. on p18 the authors acknowledge that a meta-analysis carried out by Kulik and Kulik in 1984 did not measure the longitudinal effects of acceleration after compulsory education had been completed.

This section was of particular interest to me as it relates to some of the fundamental aspects of how a gifted and talented policy operates in a school, and whilst it was useful to read about different approaches and their relevant successes and failures, whilst I was reading it I was continually thinking about my context (the school, students, area, budget etc.) and felt very aware that some of the recommendations would not work within my own context for one reason or another. For example there was much discussion on p18 regarding accelerated learning programmes for gifted and talented students. The research seems to suggest that done appropriately it can be of great benefit to students, but I am aware that in our school we simply would not have the budget or facilities to be able to provide this level of curriculum differentiation.

A useful aspect of the reading was to note elements of good practice which were recommended by the authors that as a school we are already doing. For example it had always been my own feeling that enrichment was an important element of the school and of students’ time at the school, mostly for the social and emotional aspect of the enrichment not just the academic side and that this was just as, if not more important for gifted and talented students. This was noted in the article on p17, and backed up by research from Freeman (1991), whilst the authors also noted that the direct impact that enrichment opportunities have on students is difficult to measure because of the difficulty of excluding the impact of other elements on the student’s progression and development.

In the third section, the authors refer to approaches to gifted and talented provision; special vs. inclusive provision and national initiatives in gifted and talented provision. Within the discussion of ‘special vs. inclusive’ provision, little discussion takes place as the author only commends an inclusive approach to gifted and talented provision, offering no support for a ‘special’ approach to gifted and talented education. It may have been more appropriate to have given both sides of the fence so to speak on this occasion. The next section regarding ‘national initiatives’, contains a lengthy paragraph on the work of NAGTY, followed by two smaller descriptions of London Gifted and Talented and the World Class Arena. The author has no particular reason to include these descriptions, as there is no judgement passed about their provision nor comparison made to other initiatives. It would seem in this case this only served as an advertisement for NAGTY itself to explain its role in gifted and talented provision.

The last section considers ‘issues in the effective education of gifted and talented students’. When I first read this title, I read it with my ‘Gifted and Talented Coordinator’ hat on and presumed that the authors would be discussing the ‘issues’ that I face in my role on a school level e.g. lack of enthusiasm from staff, myths surrounding G and T education, lack of funding, difficulties maintaining an up to date and valid register etc. Instead the authors discuss the lack of any particularly methodologically robust studies on any of the elements they have discussed throughout the article. Their main criticisms are the number of studies (too few), the methods which have been used (lack of empirical methods with control groups) and the use of small samples in specific programmes which are difficult to generalise.

What I have learnt from this article is that research may not always be the way in which you as a practitioner are going to find ‘the answer’ to whether or not your practice is good, and whether it needs improving. Mainly this is because your context governs the answer to whether your practice is good or not, and often there is no literature which is going to reflect your context. Furthermore any research will have its’ own drawbacks and may not be methodologically sound but could have very high validity for the context it has examined, which may not be valid from your perspective. For that reason any research must be treated with caution, and whilst a meta-analysis is useful for providing an overview it can also mask the individual flaws of a singular piece of research. In terms of what I would take back for my own practice is to continue with the practice that is already occurring in the knowledge that this is recommended by research in the literature review. In terms of how it relates back to my professional development and the focus for Module 3, because there was no focus on actual pedagogy, it is not useful to me. The authors noted that research into ‘pedagogy’, where this is defined as being ‘effective teaching’ for gifted and talented students is in essence, not in existence, and therefore although the title of the literature review promises to examine ‘literature on effective pedagogies’, they maintain in their introduction that they will not be able to do this and instead will be looking at ‘structures and organisational arrangements’. The title did not deliver what it had promised to.

**Part 2: Critique of teaching materials or development resources**

This resource which I have selected was given to me by a colleague from a book called ‘More Effective Resources for Able and Talented Children’ by Barry Teare (2001). This copy was given to the school by ‘Excellence in Cities’, a group who worked with inner city schools to promote Gifted and Talented education. The book itself is a compilation of a series of different resources for students from primary and secondary schools, and for a range of subjects both core and non-core. It can also be purchased as a published education book, and his range of books are recommended by NACE. I chose this because of the author’s reputation as he is a founder member of the National Association for Able Children in Education, and is a well-respected professional in the field of effective learning for more able students. Also because the book has a variety of resources, which whilst giving suggestions in certain subject areas, are written in a way that they can be adapted and changed for a particular subject and age group. This book was recommended by a former assistant head teacher at the school, who lead on SEN and Gifted and Talented education, and Barry Teare’s other books are also useful in providing simple but effective strategies for Gifted and Talented students.

The main reason why I chose this particular resource was because it related back to my chosen focus in Module 2, relating to my professional development needs during the MTL. I was appointed the Gifted and Talented Coordinator, and wanted to become the ‘champion’ within the school for this area, and to be able to share ideas and give training to teachers to inspire and strengthen their confidence on effective pedagogy for more able students. This teaching resource appeared to be ideal for this as it was a resource which could be easily adapted to any age group or subject. I also felt it was a simple but powerful resource, and this would have an impact on the relative ease and speed with which it could be implemented, in comparison to some ideas which are more lengthy and complex and require far more time and effort.

The format of this book is also easy to follow, as it will give the resource (which is placed into a chapter of several different themes e.g. literacy, codes, logical thought etc), then it will give potential solutions if relevant and also teacher’s notes. The teacher’s notes are useful as they contain ideas for how the resource can be used, potential pitfalls and suggestions for variations on the resource if you would like to adapt it. This is useful because in my role as Gifted and Talented coordinator, when running training within school often teachers want something which is specific to their subject but actually this is very difficult to achieve with 17 subjects in the school. Having a resource which can be adapted to most subjects and gives details of how to do that effectively is useful to share with other teachers who can disseminate this within their department. Another very important element of the resources that the author presents in this book is that in the preface he states that these resources do not have to be used exclusively with more able students, only that the outcome of the work will differ depending on the ability of the student. This is useful to our context at the school, because most classes are mixed ability and do not necessarily contain students of similar ability.

The resource itself is from the eleventh chapter called ‘Alternative answers, Imagination and Creativity’ (Teare, 2001). The author does not suggest that the resources are created as a particular reaction to a piece of research or a movement within the field of gifted and talented education, we as the reader and teacher are led to believe that the resources are borne out of his 30 years teaching experience. The author does make some reference to the OfSTED criticism of ‘over-directed teaching’ on p219 which these activities in the chapter overcome by being much more open-ended tasks that give able children ‘space and challenge’. This suggests that the author has a rationale behind his composition of the resources, which may not be located directly in empirical research, but has some roots in recommendations from OfSTED.

If the resource did have empirical research to suggest that it was successful in raising progress or in encouraging students to be able to create effective questions then this would validate the resource and make it more reliable. Because it is not something which has been trialled in schools with a particular outcome, it may not seem as reliable as another resource which has. This may mean that teachers would be hesitant to adopt it our use it. For that reason, in terms of this resource being launched as an initiative across the school, it would need to begin as a pilot in a small sample of departments. Once this had been completed, the impact of the pilot would need to be assessed and verified by the departments involved. This would make it more enticing for another department to adopt a resource themselves if another teacher or department could recommend it.

The resource is entitled ‘*The Question Is’* and is described as ‘open ended material that encourages differentiation by outcome’ (p219). In the examples that the author gives, there is a general one with 25 answers ranging from blue, to 10111, SEND HELP QUICKLY etc. Then the author gives three examples, one from science, history and geography with a wide range of answers again. There is a small preface to each exercise for the students informing them why they are doing the task and what the questions could be like (from simple written form or presented as a diagram, puzzle or problem (p222)).

The resource relates back to the action plan for Module 3, as in this action plan I considered the impact of questions and more specifically, how teachers can encourage students to ask questions. I felt that following my observations, not enough students asked questions in lesson and those students that did were only the most able. Therefore one of the points on the action plan was for teachers to allow more opportunities for students to develop their own questions rather than answer them. This may be difficult to do should there be no basis for the questions or teachers may feel there is no appropriate start to this kind of task, but this resource gives the foundation to allow students to start to create questions for simple to more complex answers and for teachers it gives them a starting frame for the range of answers students could be given to encourage the students to begin asking questions.

This resource could be adapted in my subject area of Psychology very easily, by giving students a range of answers such as simple concepts, theories, specific experiments or studies, psychologists and small phrases e.g. ‘this lacks ecological validity’. This would then give a variation in the kind of questions students could ask, and the complexity of the questions. I would use this as a revision activity for a topic, because it would enable students to think about what they have learnt and identify gaps in their knowledge. Also because this resource allows differentiation by outcome, I would expect the more able students to be creating more complex questions and if they weren’t able to do this, I could model some more complex questions. This resource could also be developed as students could swap questions, and see if they get the answer that the question was originally planned for or could work in groups to tackle another groups’ question. This is an added benefit that the resource can be used for either a quick starter activity or can be made into a main activity in its own right within the lesson.

Having discussed this resource with another colleague in my department, she suggested that the resource for sixth form students could actually be turned around once they have tried it three or four times. In this way students in pairs or groups could create their own answers (for a topic they are revising) and then ask other students to create the questions, which would allow them to think about both question and answer from the alternate perspective. This shows that the resource itself has the potential to be embedded into schemes of work, and once students become familiar with it, it can be used in more creative ways and students themselves can have the flexibility to use it.

If this resource was introduced in different departments, those departments may find a use for it other than simply a revision tool. It could be shortened to 5 answers rather than 15 as Teare (2001) suggests, and used as a plenary to check understanding. It could be used as a puzzle that is given as a starter every lesson, and students are given 5 minutes each lesson to try and complete it and can add to it once they have covered more and more material in class.

Whilst there is the suggestion that this could be adapted to your own subject and year group, some teachers may not feel comfortable in doing this and may require assistance for making it appropriate particularly to the age group and ability of the students in their class. Hence the implementation may need to be through a pilot in the first instance. Furthermore this particular task relies on students being able to construct basic sentences with one or more clauses. For some students in a secondary school this may not be possible, or they may need to provide assistance to their students through question starters. Some teachers may only feel that this activity is useful for more able students, rather than as an activity which can be used for all students but allows more able students the chance to ‘open up’ their imagination.

One other issue with any ready-made teaching resource is the relevance that it has to your own context, the school you work in, the students that you teach and the climate of education at the particular time. There may be other educational initiatives which take more of a priority in your school that are driven by either internal or external forces. At my own school, the Gifted and Talented initiative is a key priority for the next year, as part of a three year plan which was launched at the start of the new head teacher’s post. Working to improve teaching and learning for more able students, does of course interact with improving teaching and learning for all students in all classrooms. Therefore it would be within reason to expect that a resource such as this one to be implemented in my current school across all departments.

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