

Using 'Learning Preference Profiling' to develop teaching and learning across the school

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Abstract

Jackie Johnson graduated from the Herts. MEd in Teaching and Learning in 2004. She is now one of the co-leaders of a Teacher Led Development Work group based at Barnwell School. In this article she provides an account of the leadership of a whole school development project using learning preference profiling based on multiple intelligences categories to build a pedagogic dialogue. The article examines the impact of the project on teaching and learning and the way the project has contributed to the school's rapid improvement trajectory in recent years.

I am a middle manager and Advanced Skills Teacher (AST) at Barnwell School, an 11-18 co-educational, comprehensive school in Stevenage. My development work centred on the use of a learning preferences profiling process which played a significant part in the improvement of teaching and learning in my school.

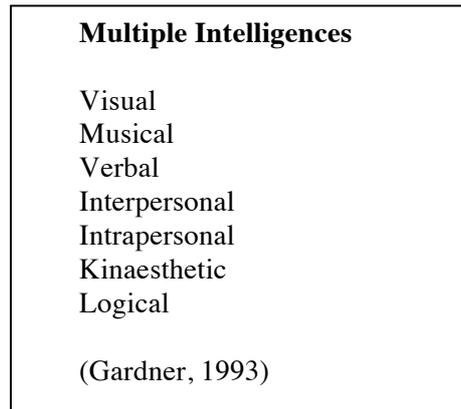
Rising to the challenge

When I first joined the Herts. MEd our school was struggling. Attainment levels were low and, in 2001, the numbers of children achieving five or more A*-C grades in their GCSE examinations dipped below 25%. We fell into the DfES category of 'Schools Facing Challenging Circumstances' (SFCC) which brought with it additional resources but also the challenge of frequent external inspections. Raising standards in teaching and learning became an urgent priority and this coincided with my own personal interest. Because we had been relatively successful in my department it was agreed that I would coordinate the learning preferences project the school had committed to during the previous year. My development work would be the evaluation and development of learning preference profiling as a school improvement strategy (for a full account, see Johnson, 2004).

My school became involved in The Hertfordshire Learning Preferences Project when the Deputy Head heard a talk by Julie Roberts, a fellow member of HertsCam, who had used a learning preference profiling technique. She had asked students to complete a brief questionnaire based upon multiple intelligence categories. The students were then informed of their most preferred and least preferred means of learning. This data was used to generate a dialogue in the classroom about teaching and learning issues. After two years of research, Julie was able to report dramatic improvements in attainment with her GCSE students as well as improvements in students' attitudes to learning and classroom behaviour (Roberts, 2002). Julie's research also included a statistical

comparison of the two most popular sets of learning styles categories: one based on the VAK (Visual, Auditory, Kinaesthetic) and the other based on the idea of multiple intelligences (MI). She concluded that the MI categories provide a more useful discrimination (see *Figure. 1* below).

Figure 1:



The way the project would be structured and managed as a whole school process was discussed with the Senior Leadership Team (SLT). I had been identified as school co-ordinator but, in addition, the Deputy Headteacher would provide a supporting role and two other colleagues identified as ‘aspiring Advanced Skills Teachers’ (AST) would join me to form the strategic team. By introducing these roles and distributing leadership of the project, the SLT provided us with the opportunity to exercise leadership (Frost and Roberts, 2005). We were each allocated three hours each week to support the work of the project, one hour of which was to be used specifically to meet as a team to ensure that the project was running smoothly and to discuss any issues that had arisen during the course of the previous week.

The project was launched with a brief outline during our staff training day at the beginning of September. Interested colleagues were invited to a fifteen minute, after-school meeting. I was surprised when forty three members of staff attended the meeting and with the subsequent level of commitment to the project. Perhaps this reflected the capacity building which had already taken place (Frost, 2005) and may also have been a response to the fact that this initiative was not externally driven but instead was a local, Hertfordshire based research project supported by the University of Cambridge.

The process of learning preference profiling

The first stage of the project was the completion of the learning preferences instrument by all students in Key Stage 3. The multiple intelligences-based instrument originally used by Julie Roberts had been evaluated and developed in the early stages of the Hertfordshire Learning Preferences project. It had forty nine statements instead of the original twenty eight and wording had been carefully revised in response to feedback from pupils in the ten schools which had participated in the project. I also altered the visual appearance of the instrument to make it more ‘user-friendly’. We looked at the

layout of a number of multiple intelligence instruments and then adopted the style where the questions are not enclosed by boxes and each coding box stands alone, thus producing a clear, more professional looking document. The instrument was then printed onto coloured paper in a further effort to make it more attractive.

In September, the students in our project were asked by their form tutor to complete the instrument. Each form tutor was requested to read the same information and instructions to the students in an attempt to ensure uniformity. The instructions printed at the beginning of the instrument were also read out and an example was given to illustrate how the questions should be answered. I asked form tutors to record any issues that had arisen so that we could subsequently refine and improve the instrument. We discovered for example that two of our students struggled to understand the word 'tunes'.

We divided staff into three groups each with an AST link who took responsibility for assisting these colleagues by recording student profiles on class registers, monitoring the progress of the project, disseminating materials and providing additional support when required.

Feeding back the results to the students was accompanied by explanation and discussion at a whole school level. Each AST led an assembly in which they reminded the students of the profiling instrument they had completed at the beginning of term and provided them with an overview of the different learning preferences. Assemblies were a powerful means of reinforcing awareness of the learning preferences idea and stimulating a discourse with students about teaching and learning. In addition, they demonstrated to the students that, despite having previously worked on this area in the relative isolation of their form groups, this was actually a whole school project involving a large number of teachers and all their peers in Key Stage 3. During the same week as these assemblies, each form tutor was provided with a list of their form group's most preferred and least preferred ways of learning, together with brief instructions to help them handle the feedback to students. In their planners, the students had a pre-printed page which read, 'My most preferred way of learning is.... and my least preferred way of learning is....'. Form tutors were requested to help the members of their form group to complete this page. They were issued with a list of the profiles and a brief description of each of the seven categories. This would equip them with basic information and underpin initial discussion. The school PSHCE³ team played a crucial role by teaching a series of lessons to develop students' understanding of the learning preference categories.

In the meantime, we created and published the first edition of a staff resource booklet entitled 'Learning Matters'. This contained information relating to the seven multiple intelligences on which the learning preference profiling categories are based, along with guidance and exemplar material for use in lessons. This was issued to all staff, regardless of whether they were involved in the project or not.

³ PSHCE – Personal, Social, Health and Citizenship Education

Building pedagogic dialogue

Prior to the end of term, we asked colleagues to review the scheme of work they would be using over the next half term and to identify any changes they would make in light of the learning preference profiles of their classes. Once completed, these were photocopied and returned to the appropriate AST.

The strategic team had to make a decision regarding how the data from staff and students was to be collected and analysed. It was important to be able to get field notes of some description from colleagues who had agreed to experiment with learning preference profiling. We issued staff with 'post-it notes' on which they could make brief notes at intervals during their classroom teaching. They were asked to record:

- amendments to their teaching
- dialogue between students and teachers about issues related to teaching and learning
- students reflecting upon their own learning
- students developing a more positive attitude to learning

We gave them a guide sheet printed on brightly coloured paper and asked colleagues to place these in their planners to act as a reminder. We wanted to encourage colleagues to use the 'post-it' notes on a regular basis so we colour-coded them to identify different departmental teams. We could then identify, at a glance, departmental teams who were contributing / not contributing to the data collection process. In cases where data was not forthcoming, the AST link could monitor this and encourage colleagues to use the post-its or offer assistance in the completion of them during their allocated research time.

We needed a method where all staff could access this information whether they were involved directly in the project or not. Paul Barnett, the Deputy Headteacher, proposed an idea used in another school – a 'virtual wall'. We selected a notice board situated in the main corridor leading to the staffroom since this was one place that each member of staff would pass at least twice a day, if not more. The Head of Art painted the notice board during the half term break to represent a wall. It was on this 'wall' that we asked staff to pin their 'post-it' notes.

To inform parents, I organised a carousel activity for a Year 7 Parents Evening which would serve to inform them of the project. It was considered that if parents were aware of their son / daughter's preferred learning style then they may feel more confident engaging in conversations about learning at home or may be able to provide more appropriate support with extended learning.

At this time teachers began posting their observations and thoughts on the 'wall'; I made a record of each item and collated them all under the four categories on the guide sheet. This data was fed back to the strategic team at weekly meetings where we would reflect on it and plan our next course of action. We also monitored the progress of the project to decide whether we needed to provide any additional support for our colleagues.

By Christmas 2003, we had 120 'post-it' notes on our wall. Most of these items indicated changes in teaching strategies; the development of teachers' repertoires was an important aim of the project but we had also been hoping to see evidence of an increase in dialogue about teaching and learning occurring in our classrooms. However, through informal conversations within the staffroom and comments made directly to myself, I was aware that although dialogue had taken place between students and teachers within the classroom it had not been recorded on the 'post-its'. I recorded these conversations in my research journal. It was clear to us that we needed to encourage all the teachers participating in the project to think about ways in which they facilitated dialogue about learning and to share examples of productive interaction through the virtual wall.

At the beginning of the Spring Term a brief meeting for all staff involved in the project was held. This was used to update them on the progress of the project, to explore their questions and to emphasise the need to record instances of dialogue in their classrooms. Colleagues were also issued with a new scheme of work proforma, an additional copy of the guide sheet and a new set of blank 'post-its' to be used during the forthcoming term. It was decided that the visual appearance of the 'post-its' would be altered on a termly basis and these were now brightly coloured 'flash cards'. It was hoped that this would encourage staff to take note of the new items pinned on the 'wall'.

Evaluating the project

In the Summer Term we intensified our data gathering so that we could evaluate the project. We wanted to evaluate the project for two main reasons. Firstly, we wanted to know how to adjust the process and identify further need for support and secondly we wanted to try to assess its impact. The term 'impact' can be problematic as it is often associated with an improvement in attainment. However, we were interested in impact in a wider sense (Frost & Durrant, 2002). In order to reflect upon the impact of the project we were able to draw upon data collected by our project researchers, Katy Redgrave and Sarah Lightfoot, by means of student interviews, staff interviews and classroom observations, as well as the teachers' field notes and my own research journal. A sample of students from Years 7, 8 and 9 were interviewed on a group basis with six students present.

Developments in practice can be discussed under two main headings: *developing teaching repertoires* and *fostering pedagogic dialogue in the classroom*.

Developing teaching repertoires

During the first term of the project, one third of the classroom field notes posted onto our virtual wall were concerned with adjustments that staff had made to their teaching. In order to assess the impact of these strategies it is worth reflecting on the teaching at Barnwell prior to the commencement of the project. Our students were asked for their views of this during the interview process and their responses were all very similar. They indicated that teaching often features '*doing things just one way*' and '*copying stuff*'. These views were extremely alarming to hear. As a conscientious practitioner who had witnessed many examples of good practice at Barnwell, I had had no idea that these teaching methods were still being employed on a regular basis. If this was the type of practice which had been previously observed by inspectors, it was no wonder

we had faced harsh criticism. However, since the implementation of the project, the students have a very different perspective of our teaching and suggest the staff are *'trying to find the best ways of helping everyone'*. Many of the students also said that lessons were now *'more fun'*. One of the teachers interviewed reported that she deliberately focused on developing a repertoire that made learning more fun. This is extremely encouraging as students who are enjoying lessons are more likely to become fully engaged in the learning process. Another colleague reported that the project had had an immense impact upon the enjoyment levels of her students which, in turn, led to an improvement in their attitudes towards learning. This enthusiasm has also been reflected in staff attitudes. One colleague who had been teaching for over twenty years stated that she felt as though she was a *'born again'* teacher and that her passion for teaching had been rekindled.

Fostering pedagogic dialogue

Dialogue about learning was also becoming evident in the classroom where students and teachers were frequently heard discussing why the teacher had selected a particular task, and why certain students might find the activity slightly easier to engage with. It was also evident that increasingly teachers were working with the class to devise strategies to support those who may find particular activities more difficult. In some situations, the students were also allowed the freedom to discuss and select their own preferred means of responding to a given task. During the interview process several of the students commented that some of their teachers were now asking their class for feedback about their lessons and for ideas of how to improve them. One student said that he could now talk to his teachers about the way that they teach, whilst another reported that some of his teachers tell him why they are doing things in a certain way.

Impact on students' learning

Being aware of the ways in which practice is changing is very helpful of course but we also needed to know whether these changes were having the desired effect. It appeared from the students' responses that there were three main areas where the project has had most impact. These can be categorised as:

- attitude towards learning
- developing an understanding of themselves and others as learners
- success in learning

Attitude towards learning

The impact of the project on student motivation and the development of a more positive attitude towards learning has been immense. Previously, Barnwell School had high instances of poor behaviour within the classroom. This not only affected the learning of the individuals involved, but also the learning of the other students present at the time. Although some of these students were frequently sent out of classrooms as a result of their behaviour, this did not address the issue of why they were behaving in this manner and what could be done to remedy this. Since the project began, both students and teachers have reported an improvement in students' attitudes towards learning resulting in less instances of disruptive behaviour in the classroom. For example, one teacher said that she felt the students were much more prepared to try to learn because there was a variety of activities in the lesson. Prior to the project the

school also operated an 'on-call' system whereby middle managers and the SLT would be allocated one period where they would remove disruptive pupils from lessons, at the teacher's request. As a result of the improved attitude of our students this system is no longer in effect at Barnwell. It would appear that we now have a culture where it is not unusual for students to discuss their learning with both their teachers and their peers. One teacher reported that she often hears students talking about what they have done in lessons, how they prefer to learn and what they have found interesting. She finds this exciting as she has never worked with students who are so enthusiastic about their learning.

During the interview process many of our students reported that previously learning had been monotonous. As one student explained, "*It was just reading and writing*". This meant that when faced with a task which they found difficult, the students were reluctant to try it, or simply gave up. Now the situation is very different. When asked how they would feel if they were given a task that was not suited to their preferred way of learning, the students interviewed responded in a very positive manner demonstrating a dramatic shift from the attitudes experienced before, for example, one student commented that he found it a challenge, whilst another student stated that she would, '*try and have a go at it as it was just another way of learning*'.

Some students were enjoying the experience of learning so much that they choose to attend 'fast-track' classes. In selected subject areas students are given the opportunity to participate in additional extra-curricular lessons, with a view to completing their GCSE examinations in either Year 9, or Year 10, rather than Year 11. These classes have grown in popularity over the last year and, for example, we now have 20 students on the 'fast-track' Physical Education programme, compared to 2 students in the year prior to the start of the project. I believe that much of this enthusiasm and motivation originates from our students gaining a deeper understanding of their own strengths and weaknesses as learners.

Developing an understanding of themselves and others as learners

The responses of our students in the interviews suggests a growing understanding of the idea that there are many different ways in which they can learn although there may be ways that they prefer and others which they need help to develop. For example, one student suggested that she had to work harder on her logical way of learning to enable her to complete a set task, whilst another said that he hated visual activities but would have to try and develop these skills as his exams would be presented in a visual format.

There has only been one instance during the project where a teacher recorded a conversation with a student where the student was implying that the task being set had no value at all because he was not that type of learner. The teacher responded by trying to dispel this misconception and suggested that, although this was not his most preferred way of learning, he could still learn in this way but may simply find it a bit more difficult. One of the main criticisms of the use of learning styles inventories is that students can be 'labelled' as a specific type of learner. If this perception is not challenged, it may lead to students' believing there is nothing they can do to become more effective learners or that their learning experience is restricted.

Evidently, our students now also appreciate that there are others in their class whose most preferred way of learning may be their own least preferred way of learning. As a result of this awareness, they know which of their peers can support their learning and, when faced with a task which is not suited to their preferred way of learning, are now willing to work with students who can offer them most help rather than those within their friendship group. For example one student stated, *'I want to work with John because he is good at interpersonal things and I am not'*. This understanding has led to greater empathy within the classroom between learners. They are much more tolerant of each others' weaknesses and now try to support rather than ridicule each other.

Success with learning

Students at Barnwell seem to be experiencing much more success with learning since we began the project. Examples of this include comments from students such as, *'I'm really good at this'*, *'It really helps you remember'* and *'The information is still in your head and you can think about it in exams'*.

During the academic year there were a number of indications that attainment was beginning to show improvement. My research did not depend on the measurement of attainment and I was well aware that any attempt to attribute any improvement to the learning preferences project would be fraught with difficulty. Nevertheless, there were several examples of students being more successful in formal tests. For example, one teacher reported that her 8W class (middle band), her project class, taught in ways that addressed their learning needs, consistently scored higher than her 8R (top band) class – a class not involved in the project. One of the students interviewed also reported that his grades are now higher as he was able to think back to what he had done in lessons.

The learning preferences project continues to have considerable impact on teaching and learning at Barnwell School. The use of learning preference profiling has now become an embedded feature of the teaching and learning process rather than operating on the voluntary, ad hoc basis we began with. In the summer of 2005, the GCSE results showed a very significant rise (from 24% in 2001 to 47% in 2005). It would be questionable to attribute this doubling of this particular measure of attainment to the use of learning preference profiling but I think I can safely claim that the whole school approach to improvement in which learning preference profiling has played a major part, has fostered a positive learning culture which is now evident in measured attainment.

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See also

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