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Research Associate Report

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Shape-shifters

Exploring an alternative approach to learning through the curriculum at Key Stages 3 and 4

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Special series on **Personalised learning**

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Introduction

This study focuses on three elements within the personalisation debate: curriculum entitlement and choice, school organisation, and effective teaching and learning strategies. It arose primarily from dissatisfaction in my 11–19 College with the 11–16 National Curriculum. Why so?

In discussions with governors, staff and students and also from our experience of teaching for the International Baccalaureate Diploma (IBD) in the sixth form, we became convinced that our 11–16 students should experience a curriculum providing the same type of learning experiences or challenges to that of our sixth formers. These should include breadth, choice, and development of the skills of how to think and how to learn.

There was a need to 'shift' curriculum thinking and to 'shape' a different type of curriculum – but what shape should Key Stage 3 and Key Stage 4 take?

Why shape-shift?

There are lots of very important things we do in education which don't appear to be addressed very adequately, things like how people learn to live, how people learn to think ... lots of aspects associated with developing whole people... (school leader commenting on the 11–16 National Curriculum)

The aim of this paper is to take you on a shape-shifting journey, to explore an alternative approach to learning through the curriculum at Key Stage 3 and Key Stage 4, seeking to address some of the 'aspects associated with developing whole people'.

Searching for a suitable 11-16 curriculum model

Having identified that a change in the 11–16 curriculum was needed, how was it best to move forward? To design our own curriculum, or to look for a tried and tested model or framework to use?

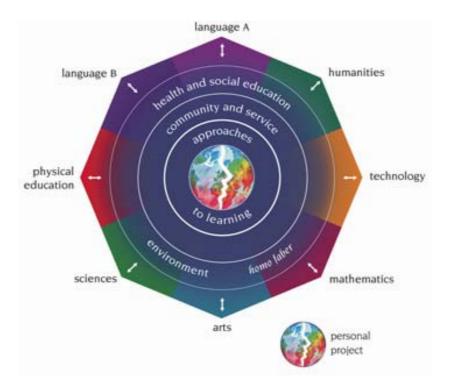
Commencing in May 2004, I organised two Senior Leadership Team (SLT) conferences to start our journey of exploration.

Eureka! How about the Middle Years Programme?

We decided not to design our own curriculum because it would have been too time-consuming to design and pilot it. We therefore needed to look for a curriculum model or framework that had already been tried and tested and was successful. Knowing from experience that the IBD curriculum provides a programme of study

- tailor-made for each student
- opportunities for critical thinking through, for example, the Theory of Knowledge (TOK) Programme
- creative, active and service opportunities through the Creativity, Action and Service (CAS) Programme
- opportunities for independent research through the Extended Essay

we wanted the same type of personalised experience for 11–16 learners. The IBD Middle Years Programme (MYP) seemed to provide what we were looking for. It also offered the type of seamless educational experience that we wanted for 11–19 learners, and was 'in tune' with much of Tomlinson's Report (2004), which we welcomed.



The MYP octagonal curriculum model

(See Appendix 1 for a fuller explanation of the MYP.)

At this juncture it is important to say that although my research is centred primarily on the MYP, it does so only because the MYP seems to offer a teaching and learning vehicle that allows for a personalised approach to learning to occur within a sound pedagogical framework. Given this, I think it is worth sharing with other school leaders the issues that arise from its implementation.

Starting the shape-shifting process

During the period of curriculum review, there was consultation with the college's teaching staff and with some of our student body. Staff meetings were held to discuss possible changes and students in the sixth form who had come from MYP schools presented their views on their MYP teaching and learning experiences to the Middle Management and Pastoral Teams. As staff found out more about the MYP they were keen to take it on board. They were particularly attracted to the 'Areas of Interaction' and the opportunities the MYP gave them to work far more in cross-curricular teams.

Governors were kept abreast of developments and welcomed the curriculum changes that we aimed to implement. At our Open Morning for prospective Year 7 students and their parents, they were informed that we were keen to launch a new curriculum for Year 7 students in September 2005, based on the MYP framework. Parents were supportive and we received no negative feedback.

Some reservations about shape-shifting

As is natural with any change, there were some reservations from teachers about the MYP. For example, there were concerns about

- extra workload
- rewriting schemes of work

- time for review and rewriting schemes of work
- resourcing the new curriculum
- training needs
- parental views
- possible lowering of SAT and GCSE scores as a result of curriculum innovation
- transfer between schools how would it work?

At each stage we addressed the concerns and reiterated that if teachers were unhappy with changing the 11–16 curriculum, we would not go ahead with it – and we meant it. Teachers have to want change and to see it as desirable (see Levin 1999). If any initiative is going to work, there has to be a genuine belief that change is for the better, coupled with commitment, enthusiasm, energy and a sense of ownership.

Research journey

Research schools

For the purposes of this study, the research into personalised learning was based in four state 11–19 schools in the Eastern Region serving approximately 5,000 students, and was carried out between February and July 2005. The four schools were at various stages of MYP implementation.

All four schools taught the IBD programme in the sixth form. Only one school taught purely for the IBD in the sixth form while the other three also taught a mixture of IBD, A Levels, A2 and vocational A Levels.

Headteachers or principals and other members of the SLT were interviewed from each of the four schools. Classroom teachers from the four schools provided views about teaching and learning on an informal basis. Views were also gathered from a random sample of Year 7 students from each of the schools. Year 7 students were used because they were the first MYP cohorts.

Research methodology

Focused interview as a research instrument with school leaders

The principal research instrument with school leaders was the focused interview. Notes were taken at the interviews in addition to each of the interviews being tape-recorded and then transcribed. The focused interview served three main purposes:

- to test/develop hypotheses about the MYP as a vehicle for personalised learning, with the possibility of suggesting alternative vehicles;
- to gather data about the implementation of the MYP;
- opinion sampling from schools that had already implemented the MYP or were considering doing so.

School leaders were asked to reflect on four key questions:

- 1. What was it about the students' learning that prompted the school to change the curriculum?
- 2. What were the most significant aspects of the changes the school had introduced or was intending to introduce with regard to changing the experiences of the individual learner within the context of the personalisation agenda?
- 3. What have been the main implications for teaching and learning?
- 4. What would be the key pieces of advice about implementation of the MYP as a vehicle for personalised learning that the school leader could pass to another school leader?

Focus group interview as a research instrument with Year 7 students

The focus group interview was chosen as the student research instrument because it allowed participants to interact with each other, thus enabling their views to emerge with little intervention from me. I took some brief notes at the interview. The interviews were tape-recorded in situ and then transcribed.

The principal topic was how the students learned best and why. Students were asked to reflect on the following questions:

- 1. What makes learning really interesting for you?
- 2. In what way(s) do you learn best? Explain why.
- 3. What is your favourite learning experience so far and why?
- 4. What is your least favourite learning experience so far and why?
- 5. What, if anything, do you find difficult to learn and why?
- 6. How enjoyable is your Year 7 learning programme in general? Briefly say why.
- 7. Are there any suggestions that you would give to improve the way(s) you are being taught/way(s) you are learning?

Please see Appendix 2 for a more detailed description of the research methodology.

Key findings

School leaders

The main thrust of the interviews with school leaders was to explore in a general sense:

- key drivers for curriculum change
- key changes to the experiences of the individual learner
- main implications for the leadership of teaching and learning
- advice they would give to other school leaders on implementation of the personalisation agenda in general and the MYP in particular.

In the following sections, I discuss each of the above in turn.

Key drivers for curriculum change

Dissatisfaction with Key Stage 3 due to:

- repetition of Year 6 work
- disaffection with content
- slow pace of work.

One school leader described Key Stage 3 as 'a straight jacket' restricting learners in developing their full potential. School leaders cited repetition of Year 6 work as a source of dissatisfaction with learners, staff and parents. There was also dissatisfaction with some curriculum content indicating a clear need for a more personalised, tailored curriculum for learners. It was felt that the pace of work at Key Stage 3 seemed to be geared more towards success in the SATs rather than looking beyond them, thus indicating a need to look at curriculum planning and provision beyond the classroom.

A school leader commented:

A feeling that the set of learning experiences they [Key Stage 3 students] have, has been arrived at in a rather hap-hazard fashion and that although we are very pleased with the curriculum design towards the top end of the College, there hasn't been that much thought given to an over-arching philosophy of the curriculum design in Key Stage 3...

All the schools involved in this study had decided to shorten Key Stage 3 to two years instead of three principally because of a desire to maintain pace in their students' learning, to provide appropriate learning challenges and to 'take advantage of the flexibility' provided by a shorter Key Stage 3. Flexibility was viewed in terms of 'space', providing choice in curriculum planning, for example, a three-year Key Stage 4, a two-year Key Stage 4 or a three-year Key Stage 5.

Dissatisfaction with Key Stage 4 due to:

breadth and balance seeming to be options and not there for every learner.

One school leader said that although Key Stage 4 was not as 'mechanistic' as it had been, he thought that it had 'moved away from breadth and balance for everyone to breadth and balance as options'. This suggested that curriculum content, in terms of entitlement and choice, should be addressed as indeed was being done by shortening Key Stage 3 to two years.

... it seems that where we are in the National Curriculum has been basically driven by what is subject-specific interest, and so whilst in a particular subject area you might have come up with the curriculum for that particular subject which those experts have thought most appropriate, there isn't very much in the way of either overarching principles or attempts to link together learning experiences.

IBD Programme at post-16

Experience of running the IBD Programme in all the schools surveyed indicated that the IBD components, in particular the mandatory components, that is, Theory of Knowledge (TOK), Creativity, Action and Service (CAS) and Extended Essay, provided learners with personalised learning experiences that school leaders wished to extend to learners at Key Stage 3 and Key Stage 4.

One of the school leaders commented that in his school he wanted to 'bring the advantages [they] saw in the IBD Programme down to the main body of the school'.

Experience of running the Diploma programme has been a very important one for developing staff perceptions and there is a feeling that the IB Diploma programme gives a coherence to the study of students that isn't necessarily there elsewhere in the school.

Three features of the IBD that all school leaders found attractive and desirable for 11–16 learners were:

... the learning to learn approach prompted by our interpretation of the Theory of Knowledge course, the development of autonomous learning through the Extended Essay and the CAS programme which gives a link between what students do in the extracurricular programme and also outside school to the mainstream curriculum.

The school leaders interviewed concurred that elements of personalisation such as a wide learning experience, learning beyond the classroom, opportunities for choice of study and learning in a community context are highly desirable for 11–16 students.

School leaders agreed that the MYP framework provided these opportunities for personalised learning, and more particularly, encouraging learning how to learn and developing emotional intelligence.

Organisational evolution

All the school leaders cited organisational evolution as an important leadership and management issue. It was regarded as essential to positively engage stakeholders in teaching and learning, to energise teaching staff, to avoid complacency and continue school improvement.

...I think organisations all the time have to be evolving, changing ... as soon as you become content with what it is that you're doing, you're going to go backwards fairly rapidly.

School leaders were keen to create a culture for change that would

... get people thinking that they've got something to do, something to work towards, to achieve, rather than we're doing okay, let's just keep on doing what we're doing so far – so there's that need in an organisation for development to make you continue to get better.

Schools in a competitive market

In order for schools to continue attracting clients and consequent funding or resources, school leaders commented that schools had to build on their core strengths and uniqueness. As one school leader said:

... whether you like it or not, [being in] a market situation and one of the things that both staff, parents and possibly students find attractive about what we do, is that it's different.

... I think you have to think of ways of building on what's already unique about your establishment because, if you don't build on your core strengths, whatever your niche is perceived to be, you become less attractive as an organisation to stakeholders and those in the market.

Key changes to the experiences of the individual learner

According to the school leaders surveyed, an alternative curriculum framework such as MYP provided the following opportunities for individual learners:

- coherent curriculum linked far more to 'real life' situations:
- students 'learning how to learn';
- 'active' learning rather than 'passive learning' linked to Assessment for Learning and to the development of pupil voice;
- learner autonomy and development of independent learning skills and emotional intelligence;
- development of transferable skills such as independent research, problem solving and working in teams.

In terms of personalisation, these changes would enable teaching and learning experiences to be far more relevant to learners and should, incidentally, have a positive effect on behaviour and attendance.

... they are in this school to develop as a human being but also as a citizen of the world.

... there's much more to education than getting good academic qualifications, because although they give you choices, the determinants of your future success and happiness are more likely to be associated with people skills, the extent to which you can function in a team, be a leader, be a nice person...

School leaders strongly felt that the MYP provided opportunities for the individual learner, such as, for example, the development of interpersonal skills, that are not sufficiently or systematically addressed in the National Curriculum.

... we don't really address those in a systematic way, assess them and report on them and so I think what we've got at the moment is too traditional subject specific and there is an insufficient broad philosophy to hold the whole thing together and some important aspects are neglected.

One school leader did not have a preconceived idea of one or other changes that accessing the MYP could bring about in the students, but ventured that:

... you'd like to think that the curricular experiences were most appropriate for the individual. You'd like to think that you were taking more and more advantage of the opportunities associated with technological developments such as ICT [Information and Communication Technology].

This particular school leader was keen for students to develop skills in, for example, problem solving, which would be useful to them in the future:

You'd like to think the youngsters were 'seeing' a particular experience, ... where they almost subconsciously are picking up lots of skills and attitudes [through] doing things which motivated them a lot.

Students 'learning how to learn' and learner autonomy were major points raised by school leaders underlining the importance of Assessment for Learning within the

personalisation agenda (and integral to the MYP). A focus on these areas should enable greater independent learning and preparation for future pathways.

... the MYP gave us that vehicle to allow the students to have a framework but get within it to allow the students to do things their own way ... to have some time where they can choose the direction they are going and sometimes to work on fairly unstructured tasks.

Transferable skills and life-long learning

Development of transferable skills such as independent research, problem solving and working in teams was seen to be important for learners. The development of these skills should improve transfer to post-16 pathways and provide a strong basis for life-long learning.

... we teach for excellence but in some respects we don't really prepare them for what they'll be doing when they leave here ... when they'll be interconnecting everything and using all their expertise in different ways.

I would hope that they feel that they have more of a degree of ownership of their learning ... and skills that they gain are transferable across lessons, and consistent over subjects.

The Personal Project [in the MYP] allows students to use the skills they've gained elsewhere and do something that interests them ... to do something independent...

Main implications for the leadership of teaching and learning

- Change in the perception and role of 'teacher' from transmitter of knowledge to one of guide and facilitator.
- Change in the perception and role of 'learner' from 'passive' to 'active' learner.
- Change in the perception of 'school' from where children are taught to one of a learning community.
- 'Unlock' teachers from their own subject-specific boundaries in order to encourage or enable them to work in cross-curricular teams.
- Invest substantially in continuing professional development (CPD) in order to deliver the personalisation agenda in its totality rather than just paying lipservice to it.
- Develop teacher knowledge, understanding and ability to employ different teaching and learning styles, for example, visual, auditory and kinaesthetic (VAK).

Changing the shape of 'teachers' and 'schools'

A major observation made by school leaders about the implications of personalisation for teaching and learning was a need for change in the perception and role of 'teacher'.

If you want to change students and the way students learn, you have to change the way teachers think, and also they way that teachers perceive their roles...

Given this statement, it suggests that schools embracing the personalisation agenda need to become learning organisations in a community context, with teachers acting as guides, facilitators and mentors.

School leaders in their statements highlighted that this shift in the perception and role of 'teacher' and indeed in terms of 'school' has organisational and financial implications for workforce remodelling and general resourcing of the curriculum, both in human terms and in terms of buildings and fabric.

Teaching and learning

School leaders strongly recognised that CPD was a very important factor to be considered in terms of developing teaching and learning. The majority of school leaders commented that teachers delivering the National Curriculum worked in their own subject-specific boundaries and rarely had the opportunity (or the need) to work in cross-curricular teams, to step outside their subject-specific boundaries and therefore realise the interrelatedness of students' knowledge and understanding.

School leaders were 'committed to the idea of a learning community' and tried 'to make sure that all the teachers are learners'. All school leaders wanted to ensure that their teachers were 'intellectually stimulated by looking at practice elsewhere'.

School leaders also commented that there had to be a more acute awareness of teaching and learning styles in order for personalised learning and the MYP to be realised:

... it does require a shift [in teaching and learning styles]. People normally come with a specific subset of teaching skills that are normally subject specific ... that's quite a challenge because of the way people have already been measured in their own education and training...

This school leader commented that some staff would feel uncomfortable working outside their subject specific boundaries and that this could pose

... quite a significant potential constraint on developing the curriculum in the way in which we'd want to because, with the best will in the world, you could have a particular philosophical view as to what would be best but if you don't have the practitioners to realise that, they would be less efficient and effective...

Once again, this emphasises the need for teachers to develop greater knowledge and understanding of teaching and learning styles so that they can meet the challenges of the personalised learning agenda.

VAK - but not in a vacuum

In three of the four schools there had been a good deal of staff training in VAK teaching and learning styles.

... that awareness [of learning different styles] is very helpful and likely to influence your own teaching style and also lead to a greater degree of understanding and empathy if you are either working together or if the youngsters are working in non-subject specific areas as to what are the most appropriate tools that the teacher has to develop to make those learning experiences as effective as they can be.

Shape-shifting: main implications for school leadership

The following are recommendations from the respective school leaders with regard to adopting an alternative curriculum. Suggestions for SLTs contemplating curriculum change at Key Stage3 and Key Stage 4 are offered under two subheadings:

- Considering change
- Implementing change

Considering change

- Have a clear focus and clear aims of where you are going and where you want to get to.
- Work out what the issues and challenges will be.

- Know your teachers, talk to them, listen to them and empower them: teachers have to want change and see it as desirable and thereby have ownership of change.
- Encourage and develop a culture of risk taking and not being afraid to explore alternatives.
- Do not be constrained by existing models of pedagogical practice, for example, Key Stage 3 in three years, but be prepared to experiment with different curriculum models and methods of teaching and learning.

Implementing change

- Visit others and network.
- Develop initiatives gradually so teachers know where they are going and can see the 'big picture'.
- Invest a large proportion of funding in CPD.
- Encourage ownership of (curriculum) change by stake-holders.

However, what is right for one school will probably not be right for another. The MYP is just one vehicle for the delivery of personalised learning – but it is an established curriculum framework well worth exploring.

CPD and working in collaboration: practice what you preach

I have referred to the importance of investing a large proportion of funding in CPD, providing time and resources to allow staff to work on curriculum innovation, visiting other schools and networking as some of the main implications for school leaders contemplating shape shifting their curriculum at Key Stage 3 and Key Stage 4. What follows is a brief summary of the CPD implemented at my own college.

During the course of the academic year 2004/05, visits were arranged to two UK state schools that I knew were going down the MYP route and in their first year of implementation of the new curriculum. Strong links were formed with these schools and there was much exchange of emails and sharing of documents.

Some of my colleagues and I were subsequently invited to one of their MYP training days and then to their evaluation day at the end of the first year of MYP implementation. It was extremely helpful to work in collaboration with these schools and to share our thinking on curriculum and teaching and learning.

I also contacted the International Baccalaureate Organization (IBO) in Geneva to arrange for further training. An experienced MYP trainer from the International School of Eindhoven ran our staff training day in January 2005. It proved to be extremely successful and quelled many of the concerns teachers had had about, for example, completely rewriting their schemes of work. In practice, teachers had to review their schemes of work in the light of the MYP framework but there was no need for complete rewriting.

Other in-house training days were run during the course of the year where teachers worked in teams on schemes of work and assessment, designed cross-curricular days and produced an MYP student handbook. In June 2005 faculty and department heads went to Basle for a week's MYP training.

Cultural shifts and risk taking

In all the schools that participated in this research the respective school leaders said that to effect change teachers have to want to change things and be prepared to take risks. This again points to probably one of the most important factors in school leadership, that is, building (and sustaining) a culture of openness, honesty and trust

where risk taking is seen to be a positive way forward in terms of effecting institutional and curricular change (see Levin 1999).

As one school leader said.

There is a connection between risk taking and the potential value of what you do.

He described that connection very much in terms of developing (and sustaining) a school culture:

As an organisation you have to have a culture within which people are/feel that they're encouraged to take risks, to do different things and there's an expectation that in doing those sorts of things some of those things that we do are going to be wrong but in that same process you're going to discover things which actually work fantastically and far better than you ever would have imagined.

Teachers, curriculum change and personalised learning

With regard to teachers viewing change as desirable within a personalised learning context, one school leader commented:

The extent to which they overtly would be doing so because they subscribe to a greater degree of personalisation is a moot point I think, but I think what you need to do is to get a recognition in your organisation, as you do with any change, that a change of some sort is desirable.

Specifically with regard to the personalisation agenda in schools, the school leader said:

I think the concept of personalisation could be thought of as one of a number of reasons why you would want to change and improve the way that you do things rather than it be a prime motive for you and your organisation doing something. I think it ought to be one of a number of factors to take into account in both reviewing your current practice and modifying what you do.

This school leader concluded his points about curriculum change by saying,

I think not to be afraid, to feel constrained by existing paradigms, and to go for it actually makes the job far more interesting and exciting for everyone.

One size does not fit all

What is right for one school organisation may not suit another school organisation because of the different contexts in which they find themselves. However, the MYP as a vehicle for the delivery of personalised learning was seen as worthy of consideration because, as one school leader commented.

I think basically its existence over a period of time and what people have learnt from it, does facilitate curriculum design appropriate to an individual school and to the needs of individual students in a whole set of contexts, and that's a whole set of international contexts.

As one school leader said, if one has a curriculum model that is adaptable 'to the needs of both people in Bangladesh and Kensington, then it implies that you can adapt it to particular local contexts of schools and students'.

Key findings

Students

Student focus group interviews: The main thrust of the student focus group interviews was an exploration of how students like to learn and why. Students most enjoyed active and participative learning.

Make learning 'real'

Although students could reflect intelligently on the necessity of studying from books and teacher-led classroom practice, they liked variety in their lessons where active or creative learning with a 'hands on approach' was incorporated into their lessons.

All the students interviewed found it easier to learn and understand subjects, using, for example, drama, role-play and conducting experiments. They enjoyed problem solving either in pairs or groups where they could share ideas and test them out on each other. Students also enjoyed taking part in trips and activities because this brought their learning to life.

You learn when you play.

- ... we are learning but we're just doing it in a different way. It's kind of like we're back at nursery again, but it's advanced nursery.
- ... sometimes you want to learn whilst you're doing it ... not just have all this information chucked at you.

Developing emotional intelligence

An interesting point made by one of the students about learning styles is worth quoting at this juncture. It summed up for me the powerful social effect and development of emotional intelligence experienced by this student as a result of working on learning styles:

If the teachers taught us to [learn about] other people's learning styles as well as our own, rather than just concentrating on this one point, maybe we could understand the way other people learn better.

An example of practice: from medieval dance to wheelchair basketball

In one of the schools surveyed, the students had taken part in two cross-curricular days as part of their MYP (Areas of Interaction) – a Medieval Day and a Disability Day. The Humanities and Performing Arts Departments ran the Medieval Day. It focused on the following Areas of Interaction: approaches to learning, community service and *homo faber* (the human being as creator and maker). All the students dressed in medieval costume and participated in medieval dance, drama, song and role-play.

Medieval Day culminated in a Medieval Fair where over £200 was raised for a local hospice. This event incorporated aspects of creativity, enjoyment, citizenship education as well as development of knowledge.

The Physical Education, Design Technology and Science Departments ran the Disability Day. In terms of the Areas of Interaction, the focus was primarily on health and social education, but one can also see where elements such as community service, environment education and citizenship education were also being addressed.

Learning experiences included working with students from a visually impaired unit, making and reading Braille, learning sign language, exploring how technology could help disabled people and manoeuvring around the school in wheelchairs to assess access to the school. A wheelchair basketball team came into the school to give a demonstration match and spoke to the learners about the Paralympics. Disability Day culminated in an assembly where the students sung and signed 'What a Wonderful World'.

What the students learned

When asked about what they learned from these interdisciplinary days, the students spoke of the benefits of learning together, of 'doing' rather than just copying out of a book:

When you're with other people you can actually experience what it's like, like at the Disabled Day we had ... there were times when you were in a wheelchair going around the school ... and on Medieval Day we all got to dress up as medieval people and go around the Medieval Fair and it seemed a lot more easier to understand what was going on.

They enjoyed the cross-curricular learning experience because:

Collapsed days ... are like one big mind map and you've got things branching off ... disabilities ... from deafness, blindness, physical disabilities ... it all fits together and you make your own links.

Students' experience of teaching and learning styles

In the schools where the MYP was in its first year of implementation, students had been taught about VAK teaching and learning styles and knew their preferred way of learning. They could speak knowledgeably about VAK and in which classes teachers were explicitly using different pathways into learning.

Students were very aware that not all people learn in the same way but that all people should experience different styles of teaching and learning in order to develop different ways into learning. They were very keen to state that their preferred way of learning should not dominate how they were taught because that would be to the detriment of other ways of learning. They all agreed that it was important to understand how one learned best, but that they also had the opportunity in their classes to develop, as one student said, 'other ways of learning you're not so strong in'.

On learning styles, students commented:

... a learning style label helps because you know what others [VAK] you need to improve on.

I don't think about my learning style consciously – if you don't think about it, it just happens ... like breathing.

Surprisingly few students spoke in any detail about ICT until specifically asked about it. I concluded that this was because ICT was so much a part of their lives that it was taken as read as part of their day-to-day teaching and learning experience. The students who took part in the research concurred with this view.

In summary: how students like to learn

- active/creative learning
- 'hands on' approach
- drama, role-play and experiments
- problem solving in pairs or teams
- sharing ideas and testing them out on each other
- trips and activities

Students enjoyed learning in these ways because it brought learning to life and made learning relevant to them as people. These ways of learning are integral to the MYP and are central to the delivery of Areas of Interaction.

Coming together

Findings about personalised learning and the MYP: school leaders and students

The following points act as a summary of what school leaders and students perceived learning through the MYP promoted:

- school as a learning community for all those involved in the educative process
- learner at the centre of the educative process
- learner autonomy developed within a clear curriculum framework
- active rather than passive learning
- teacher as guide and facilitator
- learners as constructors of their own knowledge

Personalisation, the MYP and pedagogy

Is personalised learning (and by implication or association, the MYP) merely 'a ragbag of soundbites and good intentions' (Claxton 2004), without any pedagogical substance?

Based on my research, it is my contention that personalised learning and the MYP is underpinned by an approach to knowledge that gives emphasis to individual learners as constructors of their own knowledge – what is commonly known as 'constructivism'. The main features of constructivism are:

- learners actively involved in the construction of knowledge
- learners play an 'active' role in the construction of knowledge rather than being passively 'initiated' into bodies of pre-existing knowledge
- emphasis in the learning process is placed on the meaning and significance of what the learner discovers with the guidance of a teacher
- the teacher's task is to stimulate learners to explore the world for themselves and to enable them to make sense of it in their own terms rather than to transmit knowledge to them

Constructivism does not advocate unstructured learning. On the contrary, constructivism propounds the notion that learners assume a structured approach to learning by building on prior knowledge and accommodating new knowledge into their existing schemata (see, for example, Rogoff 1990; Henderson 1996; Levin 1999; Terwel 1999; Howe and Berv 2000).

However, all learning is constructed in a social context whatever pedagogy the teacher uses. It is fair to say that the most effective teaching will recognise and work with this, building on the constructions which learners bring with them into the classroom

Constructivism and personalised learning

What does personalised learning have in common with constructivist pedagogy? I suggest three key points of similarity:

- learner's role
- teacher's role
- school culture

The central and perhaps most important similarity is that the learner is actively involved in their learning, developing skills of inquiry, problem solving and making (informed) choices so that they can make sense of the world.

The teacher's role is one of guide and facilitator within a structured approach to learning.

In order for both the role of the learner and the role of the teacher to be realised within this type of pedagogy, school culture must aim to be that of a learning community.

Conclusions

Shape-shifting: some considerations for school leaders

The MYP is not the only vehicle through which personalised learning may be delivered, although it is attractive with regard to its holistic view of education (which is less than apparent in our current National Curriculum).

In the MYP the framework for learning clearly places the learner at the centre of their learning experience, reflected in the Areas of Interaction as a unifying concept. However, as one school leader commented:

I don't think at all it's the only way in which you could model the curriculum to make the curricular experience more personalised and there may well be others. It is particularly useful to actually devise your own solution to the problem in terms of the curriculum; to be able to have a well thought out curriculum which has already been put into practice by numerous other people and yet within which there's considerable flexibility for the organisation.

The existence of a curriculum framework that has already been tried and tested has its attractions in that schools can learn from the previous experiences of other schools and, to quote one school leader,

I think if you were just completely modifying your own curriculum, it would be more difficult to identify points of reference to what other organisations were doing.

I actually think with the whole system of curriculum development you can't throw up everything into the air and change everything. There are far too many variables that would be unhealthy, so I think it's desirable to start off probably by modifying something that either you already have or that other people already have.

Can the personalisation agenda be realised? What might be the implementation issues?

There are going to be some pragmatic issues which mitigate against a highly personalised curriculum for our young people, for example:

- · school organisation eg timetable, workforce reform
- resources (both financial and physical)
- subject-specific bound teaching styles
- national examination system.

These issues in themselves raise important questions for school leaders and their SLTs about the extent to which the personalisation agenda can be realised within the current structure of schools and schooling.

There are other issues to consider, for example, the (necessary) organisational structure of a school and the possible barriers, at least at the beginning, of teachers being retrained to work outside of their subject-specific boundaries. This requires exploration of alternative approaches to school organisation, for example, creative timetabling to facilitate the sort of personalised educational experiences that enable learners to engage with learning in an exciting, stimulating and far more appropriate way then they do with our present National Curriculum.

The problem is whilst [personalised learning] sounds an ideal very few people could find a fault with, the problem lies in how you do actually organise the lessons and in organising just the fact that you're in an organisation means that inevitably to some extent, you've got

to make your students fit some sort of structure, whilst the ideal would be the structure fits the individual student.

Having to 'fit' students into a structure was a major issue for this school leader:

... that's a huge issue and inevitably, in my view, there's going to be some degree of compromise to the extent to which the learning experiences for that individual are the most appropriate for them – but that's true I think of almost everything, certainly true of groups of people learning together in an organisation.

What are the advantages of shape-shifting at Key Stage 3 and Key Stage 4?

Despite the drawbacks, what is extremely important about the personalisation agenda and the MYP as a potential vehicle for it, is that it encourages school leaders and their teams to reflect on:

- their respective school as a learning community
- the 'shape' ie structure and content of the curriculum
- the learner's position in their respective educational experience.

As one school leader commented:

It challenges you to change the potential structural barriers and whilst I think it's very, very difficult to make it as personalised as you'd want to in school, I think that you can effect changes that make the curricular experiences more personal.

Of the MYP as a vehicle for personalised learning, another school leader commented:

The MYP is not a bandwagon to jump on. It is a philosophy and it is a way of looking at enhancing teaching and learning, allowing individuals to succeed which is where personalisation comes into it ... it encourages natural links ... partnerships you may not have been aware of will develop and the unexpected will happen, and that's nice.

So ... why personalise learning?

In the process of conducting this research and reflecting on the very rich data that it produced, the importance of personalised learning emerged as a key item that should be on each and every school's agenda and in each and every school's Development Plan. It is important because personalised learning is central to the development of personhood, because *every child matters* and deserves the very best we, as educators, can give them.

Further research

Further research should be carried out to explore in greater depth the teaching and learning experiences and subsequent student attainment within the national curriculum compared with those following the MYP, in order to provide educators with greater knowledge about teaching, learning and understanding.

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Websites

For further information about the MYP please refer to: www.ibo.org.

Appendix 1: The International Baccalaureate Diploma Middle Years Programme (MYP)

What is the MYP?

The MYP is a curriculum framework that emphasises the education of the whole person. The International Schools Association (ISA) produced the first draft of the MYP curriculum in 1987. It was implemented in 1992 and shares much of the educational philosophy and underpinning of the IBD programme (for a comprehensive study of the IBD see Rataj-Worsnop 2001).

The MYP is a five-year programme of study for students 11–16 years of age. It is underpinned by three fundamental concepts:

- intercultural awareness/citizenship education
- holistic education (principally through the Areas of Interaction)
- development of skills in communication ('mother tongue', acquisition of a foreign language and competence in ICT)

The MYP curriculum model is composed of three key components that form a cohesive and balanced curriculum:

- Areas of Interaction (core)
- eight subject groups
- Personal Project

The MYP shapes teaching around learning, empowering young people as learners and balancing entitlement with personal relevance. As a curriculum model it may be described as embracing and yet transcending the traditional school subjects, showing the interrelatedness of learning.

Areas of Interaction

The five Areas of Interaction form the core of the MYP octagonal curriculum model with their focus on approaches to learning, community and service, health and social education, environmental education and *homo faber* – the human being as creator and maker. These Areas of Interaction are not directly assessed but pervade the whole programme of study. They are addressed through the subject areas throughout the five-year programme. Additionally, they are addressed through interdisciplinary teaching, whole school activities and in the Personal Project (where they are indirectly assessed).

Subject groups

Eight subjects form the octagonal curriculum model. These are studied in each of the five years. They are:

- Language A: the learner's 'best language' usually the school's language of instruction
- Language B: a foreign language, for example, French, German, Spanish
- Humanities: History and Geography (Religious Education may also be included in the Humanities)
- Sciences: General Science, Biology, Chemistry, Physics
- Mathematics
- Arts: Art/Design, Music, Drama

- Physical Education
- Technology

Personal Project

A Personal Project completed in Year 11 shows the learner's appreciation of the Areas of Interaction. The Personal Project may be an essay or an artistic expression that is accompanied by a written piece.

Assessment

There are no externally assessed examinations. Using criteria established by the IBO, teachers carry out all assessments. However, there is a rigorous process of external moderation of each school's assessment procedures, which is carried out by the IBO. Although not mandatory, an IBO MYP school may register candidates for the MYP certificate that acts as a document ratifying individual performance.

The MYP provides a curricular framework and guidance on teaching the programme and its components. It deliberately does not provide schemes of work or content but prescribes aims and objectives that are largely skills-based. The MYP teachers compile the detail of the curriculum thus having ownership of it. In a sense this process is a form of personalised learning for the school as a whole.

For further information please refer to: www.ibo.org.

Appendix 2: Research methodology

Focused interview as a research instrument with school leaders

The principal research instrument with school leaders was the focused interview. Notes were taken at the interviews in addition to each of the interviews being tape-recorded and then transcribed.

The interview, as a research method, has been defined as:

... a two-person conversation initiated by the interviewer for the specific purpose of obtaining research-relevant information, and focused by him [sic] on content specified by research objectives of systematic description, prediction, or explanation. (quoted in Cohen et al 2004: 269)

As a research instrument, the interview serves a number of purposes (see Cohen et al 2004: 268). For the purposes of this research, the interview served three main objectives:

- to test/develop hypotheses about the MYP as a vehicle for personalised learning with the possibility of suggesting alternative vehicles
- to gather data about the implementation of the MYP
- opinion sampling from schools that had already implemented the MYP or were considering doing so

Although there are different types of interview (see Cohen et al 2004: 268), I chose the focused interview for the purpose of exploring the respondents' subjective responses to 'a known situation in which he [sic] has been involved...' (Cohen and Manion 1989: 310), namely that of the personalisation agenda in general and the MYP in particular.

The focused interview also allows for testing the validity of a certain hypothesis because the respondents have some knowledge of the issue(s) being investigated. In my case, this was with regard to the hypothesis that the MYP provided a tenable vehicle for personalised learning. The focused interview also allows for any unanticipated responses that arise during the interview to be considered which could give rise to further hypotheses.

In my research, the focused interview allowed me to do three things that for example, the structured and non-directive interview would not have allowed me to do so readily. They were:

- to play a more active role in the interview
- to control the type of questions I was asking
- to limit the interview to explore certain points about personalisation (at points where I thought necessary)

As I conducted more interviews with school leaders I cut my initial list of 14 questions to four key questions, which provided ample opportunities for the respondents' reflection. The four key questions were:

- 1. What was it about the students' learning that prompted the school to change the curriculum? (I was exploring the drivers for change, teaching and learning, examination results and views on the national curriculum.)
- 2. What were the most significant aspects of the changes the school had introduced or was intending to introduce with regard to changing the

- experiences of the individual learner within the context of the personalisation agenda?
- 3. What have been the main implications for teaching and learning (an exploration of how teachers may have had to change their practice)?
- 4. What would be the key pieces of advice about implementation of the MYP as a vehicle for personalised learning that the school leader could pass to another school leader?

Focus group interview as a research instrument with Year 7 students

I chose the focus group interview as the student research instrument because it allows for the participants, in this case a random sample of Year 7 students, to interact with each other in such a way that

... the views of the participants can emerge – the participants' rather than the researcher's agenda can predominate. It is from the interaction of the group that the data emerge. (Cohen et al 2004: 288)

For this research, the principal topic was how the students learned best and why. At each focus group interview I gave the same set of 'warm up' questions on an A3 chart to each individual student. As a group we read them through together first for understanding. Students were then given 15 minutes to provide their written responses in bullet or note form. The questions were:

- 1. What makes learning really interesting for you?
- 2. In what way(s) do you learn best? Explain why.
- 3. What is your favourite learning experience so far and why?
- 4. What is your least favourite learning experience so far and why?
- 5. What, if anything, do you find difficult to learn and why?
- 6. How enjoyable is your Year 7 learning programme in general? Briefly say why.
- 7. Are there any suggestions that you would give to improve the way(s) you are being taught/way(s) you are learning?

Once the students had finished their written responses, there followed a group discussion that was tape-recorded and transcribed at a later date. I also took some brief notes at each focus group interview.

Validity and reliability

The interview is a highly subjective technique and so one of the main dangers is bias. Thus, two main problems are associated with the interview in general as a research method. They are validity and reliability.

Validity

The traditional interpretation of validity in research refers to what extent the research method(s) being used really measures what the researcher intends to measure. However, as Cohen et al (2004) state:

... more recently validity has taken many forms. For example, in qualitative data validity might be addressed through the honesty, depth, richness and scope of the data achieved... (Cohen et al 2004: 105)

With regard to this research, I was testing the validity of the hypothesis that the MYP is a good vehicle for personalised learning – and if so, why.

Although there are several types of validity that are outlined by Cohen et al (2004), validity in research in a more general sense refers to the extent to which one can

trust and rely on the published findings. To achieve this recognition of general validity involves precision in argument supported by evidence and citing the methodological issues and objections with regard to the research.

It must be noted that it is immensely difficult to achieve validity in research in the social sciences because, for example, of reliance on the social setting and the relationship(s) established at one particular moment in time. This in turn affects the notion of objectivity.

However, one way of achieving greater validity is to be aware of the amount of bias that can creep into an interview situation and to minimise bias in so far as possible (see Cohen et al 2004: 119). This can be done in a number of ways, for example, by careful construction of questions and piloting of them; by interviewer awareness of bias; and by using triangulation in the research.

I was certainly very conscious of my capacity for bias towards the MYP as a vehicle for the promotion of personalised learning. Clearly, the school leaders interviewed must have had a bias in the direction of the MYP because they had opted to introduce it in their schools. Nevertheless, I felt that I had constructed a good set of (piloted) questions and established trust and respect with the respondents so both parties were aware of the issues surrounding bias. Indeed, in a number of interviews the school leader would reflect quite openly on their bias towards the MYP and how in order to 'check' their bias they had taken 'soundings' from their staff, governors and students about that particular curriculum framework. One could argue that in these schools the leaders were using something akin to triangulation.

As Gronlund (1981) says, 'validity should be seen as a matter of degree rather than as an absolute state' (quoted in Cohen et al 2004: 105). Thus a researcher's aim should be to work towards minimising invalidity and maximising validity.

Reliability

Reliability refers to the extent to which another party could exactly replicate the research over time, using the same research instruments and the same type of respondents. Again, this poses problems in research in the social sciences because of the human element involved. It would indeed be difficult to wholly replicate this research into personalisation and the MYP framework. However, Kitwood, as cited in Cohen and Manion (1989), makes a valid point when he says that:

Where increased reliability of the interview is brought about by greater control of elements, this is achieved, he argues, at the cost of reduced validity. (Cohen and Manion 1989: 318)

Cohen et al (2004) state that there are three principal types of reliability – stability, equivalence and internal consistency – but these may not be attainable when working in the field of qualitative research. It is important to recognise that there are fundamental and important differences between quantitative and qualitative research, but this not to say that qualitative research cannot 'strive for replication in generating, refining, comparing and validating constructs' (Cohen et al 2004: 119). The importance of truth, honesty and comprehensiveness (see Cohen et al 2004: 120) enable reliability to be reached in so far as possible.

A possible solution to the problem of validity and reliability

Some type of solution to the problem of validity and reliability may lie in a 'judicious compromise' (Cohen and Manion 1989: 318). It must be noted, however, that with the notion of a 'judicious compromise...' reliability and validity become 'redundant notions' for 'every interpersonal situation may be said to be valid, as such, whether

or not it conforms to expectation, whether or not it involves a high degree of communication, and whether or not the participants emerge exhilarated or depressed' (Cohen and Manion 1989: 318).

I would contend that the research findings in this paper were as valid and reliable as they could be principally because of awareness of bias and the internal validity of the research.