

## **Whole school approaches –“An integrated system for maximizing student achievement and Professional development of teacher based on approaching the student as an individual.”**

It is acknowledged that students come to the classroom with significant differences in cultural backgrounds, aptitudes, interests, abilities, and achievement levels which must be accommodated through adaptations to curriculum content, instructional strategies and the learning environment if all are to benefit equitably from the approved curriculum

Faced with the perennial issue of raising standards of learning, the school decided to begin a project on the premise that the more individualized a students education became the more successful they could be.

Marshall, (1995) just stated that the more individualized the Ss' education become, the more successful they could be.

Robert Slavin in his book educational psychology – theory and practice says

What are some ways of individualizing instruction? The problem of providing all students with appropriate levels of instruction could be completely solved if schools could simply assign each student his or her own teacher. Not surprisingly, studies of one adult-one student tutoring find substantial positive effects of tutoring on student achievement. One major reason for the effectiveness of tutoring is that the tutor can provide individualized instruction, tailoring instruction precisely to a student's needs. In addition, educational innovators have long tried to simulate the one-to-one teaching situation by individualizing instruction. Teachers have long found ways to informally accommodate the needs of different learners in heterogeneous classrooms.

In his article Responding to Ethical Dilemmas Dr. Iouri Zagoumenov, says that

Educational leadership development ...is challenged by the following dilemmas:

1. Focus on meeting each individual student's educational needs versus focus on meeting standardized requirements set by the central authorities.

The new assumption suggests that each student is capable and will be successful if the educational environment is fitted to the student's needs, interests, and personality. It is based upon the belief that every student has the potential to learn. Every student will succeed in learning if the educational environment, which includes school and non-school settings, is designed to build on the natural interest of the student to learn. The learning style of the student needs to fit with the teaching style of the educational environment. The curriculum should reflect a balance between what the individual student needs and wants to learn with what the society needs to transmit ...

Dewey's democratic theory (1916) which places primary emphasis on the chance for everyone to develop their talents, and the inseparable responsibility we each have to adjust our lives (classrooms) in order to ensure this chance for everyone. Dewey's call for mutually shared interests (to create societies appropriate for universal individual development) does not undermine individuality but rather helps ensure this for all. Dewey

Barry Kanpol – postmodernist approach to education places an emphasis on difference – differences between individuals- kanpol altered this to a focus on “similarity within difference” – by that rational by focusing on individuals we can further whole school policy – it creates a schools own richness by focusing on individual students.

If we acknowledge and respond to the fact that our classrooms are full of individuals it will significantly improve the richness of our shared school experience.

Of course Dewey's and Kanpol's work focused on a broad general educational policy / philosophy. I took the spirit of the two and sought to apply it directly to learning from a school administrative position – our curriculum focuses on diversity, democracy and the needs of the individual in terms of a cross curricular character education program, so why shouldn't our implementation of the curriculum reflect that.

We celebrate richness and try to prevent stereotyping, we talk about gender equality but these things needed to be addressed in our system as well. What were we doing about the fact that girls outscored boys, why teacher applying one size fits all style lessons and curriculums?

The same could be said of assessment- all our assessment was in terms of individual performance in a controlled condition – our group work needed to be cooperative language learning based- students need a chance to perform as part of a group- group work needed to be reinforced and as I will show later it was when it was included in the Hive project.

This presentation will look at an integrated system for maximizing student achievement and professional development of the teacher based on approaching the student as an individual. The session will look at reasons, implementation and success of a project carried out in the speaker's school and how it can also be adapted to suit specific purposes

And let us not forget Blooms work on mastery language and its message that everyone can learn given the right circumstances. Bloom also identified the taxonomy of learning and indicated that tutoring had proved as a successful way to remedy any shortcomings in the students taxonomy.

- How/why the scheme was created

The whole project began three years ago when we adopted a system of classroom assistants to provide support to reflect the different developmental stages of children's learning ability (Vigotsky) for both high level and low level ability students.

Individual students needs also refer to their specific preferred learning styles (Gardner) and their use of knowledge (Bloom) and we identified a need for a system to make sure individual students were getting the correct range of materials and teaching styles from the teacher.

- Shifting responsibility from class to individual students within the class to accommodate for diversity.
- We already accommodated for ability by streaming- this system further refines the process of giving a truly individual cased education

While all our teachers were aware of common educational theory and the departments aim ( an emphasis on the individual learner"- there needed to be a system whereby the teacher could formally reflect on their individual students and the head of department could look for trends in order to formulate effective policy and initiatives (similarity within difference).

Similarly we also identified that individual student's motivation and attitude towards school changed fro student to student-through our own student questionnaires we were able to see that motivation directly corresponds to success in our particular subject. Therefore we needed to monitor and update individual student's interests and specialized areas early- not only what motivated that student but how they were motivated: (Maslow (1954) Weiners attribution theory (1994, 2000) ability, effort, task difficulty, and luck locus of control (Rotter, 1954)- . Locus of control or self-efficacy can be very important in explaining a student's school performance)

Not just what motivated the student but how they were motivated. Later through statistical analysis I will demonstrate that students' motivation improved directly as a result of the systems applied.

In short we needed to create a system to manage each individual child's education with the ability to constantly update shape and evolve the direction and style of the students learning as their needs and specifics changed. These constant updates should not be used by one teacher alone – they must be made available to all teachers – therefore a centralized system needed to be set up to access up to minute information.

At the same time we wanted the system to have a dual purpose: not only to benefit the students but also aid the Professional development and efficiency of the teacher's role in applying the curriculum, including the learning of new skills and reflection on their own teaching.

By making teachers accountable for collating and interpreting data for individual students they were forced to research themselves – photocopying slips doubled the first week teachers were asked to record how their lessons included certain multiple intelligences

As our own research showed teachers believed there was a gap between their knowledge of key educational theory and their application of it- teachers were not aware of the gap though and or reluctant to express their concern. Our student results showed that this was an area for significant improvement.

At this point I began to apply the principals of total quality management to the project.

Internal customers (our teachers) expectations and our external customers (students and parents) expectations were different – teachers satisfaction with the methods of the class ere in stark contrast to the results.

Kanji and Asher 1993 definition of quality is "satisfying agreed customer requirements

Kanji and Asher 2002 whether you are supplying products or services the people you supply internally are as real as your external customers they also require speed efficiency or accurate measurement

The role of managers within an organization is to ensure that everything necessary is in place to allow people to make quality – this in turn begins to to create an environment where people are willing to take responsibility for the quality of their own work.

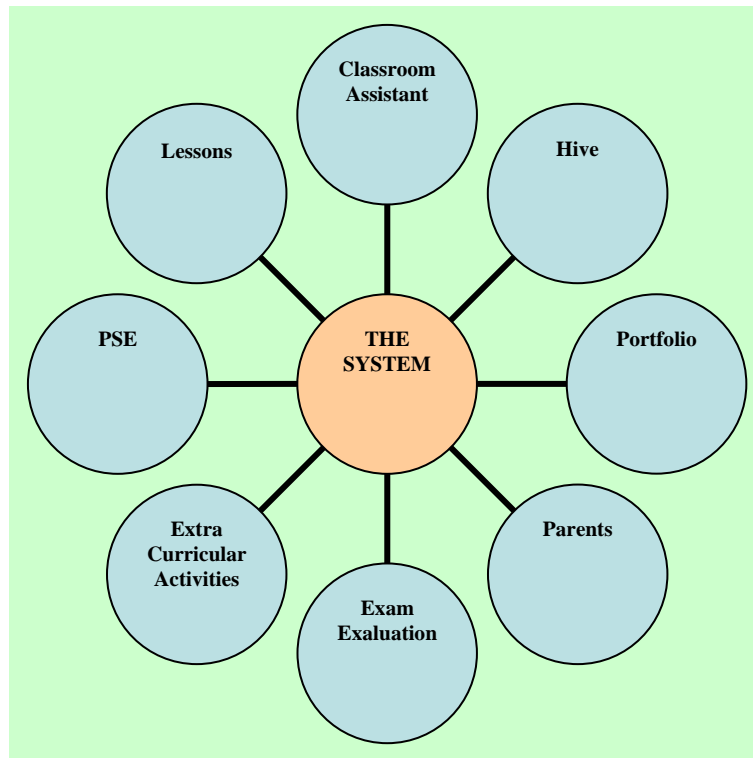
It became clear that I needed to be able to check the quality of educational approaches being offered to the students. To do this I would need a complete breakdown of the methods teachers applied to each individual student.

The hive lesson entries would provide me with that element of control along with lesson observation – lesson observation could be greatly improved as I would need only to check the hive entry and select the appropriate lesson in order to evaluate whatever my focus would be.

It also meant I could make sure the teacher was offering a range of strategies to students- and I could easily spot any deficiencies within a class (e.g. a lack of pair work) of course there may be reasons for a certain deficiency and by having the teacher explain it became clear that they were offering the beginnings of an individualized approach to instruction.

- What did the scheme involve

The diagram below serves to provide a loose outline of our system and its subsystems:



The system relies on several sub systems and their interactions on the diagram above.

I can briefly outline how each sub system operates in the system

#### 1. PSE

The school counseling service provides a range of information on students including preferred learning styles, extra curricular, special needs, family background necessary for storing on the hive and necessary for the teacher to plan for the individual student need.

#### 2. Classroom Assistant (resource- strategy checklist)

We support students with support personnel to supplement the differing levels of development – the system is not designed to improve them only to offer support for them while they need it.

#### 3. Hive

Two different parts – Each teacher has there own hive file- the whole put together provides a whole school record of students individual profiles , curriculum and instruction.

1- stores all information regarding students

2- Lesson planner

By putting these two concepts together we increased teachers reflection time and started the association between student information and lesson planning – a core concept of individualized instruction

#### 4. Extra curricular

*Alexander M. Sidorkin<sup>1</sup> suggests that we can overcome the problem of event deficiency in our schools by paying serious attention to the nonacademic side of school life. (In the Event of Learning: Alienation and Participative Thinking in Education Educational Theory Volume 54 Issue 3 Page 251 - August 2004)*

## 5. Lessons

Rather than being viewed as an "add-on", the project needed to be viewed as an essential ingredient that permeated curriculum and instruction.

A particular student may be able to achieve some curricular objectives through general instructional approaches, while requiring adaptation to curriculum content, instructional practices, and/or the learning environment to reach other objectives.

Another student may require some form of adaptation in order to achieve curricular objectives in all content areas.- greater kinesthetic input or differentiated worksheets

Adaptations to curriculum, instruction, and assessment practices may require changes in resource requirements, support personnel requirements, and classroom organization.

It is understood that system and the necessary adaptation takes into account the student's developmental level, the specific needs, the interests, and the learning styles of the learner, the demands of the particular learning task (aims of the lesson), the significant aspects of the learning environment, and the knowledge, skills, and abilities of the teacher.

Teachers are regarded as the professionals who have the authority and the responsibility to make adaptations to curriculum, instruction, and the learning environment to meet the needs of all students.

In a sense the departmental system empowers the teacher to take control.

It is expected that teachers' decisions regarding adaptations will be based on current knowledge and understanding of research-based educational theory and practice- therefore to utilize it effectively teachers must be responsible for their own professional development. It is the teachers' responsibility to present the head of department with their training requirements.

The refinement of decision making (emphasis on small changes- refer to presentation on tipping points) as the teacher shifts the focus of attention from the whole class to small groups and to individual students.

The individual decision-making process outlined in Figure 4 suggests that teachers begin by using a wide-angled approach to classroom instruction, uniformly applying decisions about curriculum content, instructional practices, and the learning environment to all students. Whole class instruction affords the teacher an

opportunity to make some initial decisions concerning the needs of students in the class.

Some students may require no adaptations because the curriculum content, instructional practices and the learning environment are appropriate to their needs. As a result of initial assessment, the teacher has an opportunity to make adjustments for those students who require an adaptation.

Through the decision-making process a teacher might decide to make adaptations in order to enrich, extend, reinforce, or teach differentially toward formally stated foundational objectives for small groups of students.

A teacher might also decide it is necessary to make adaptations for an individual student. In such a case the teacher enriches, extends, reinforces, or teaches differentially toward formally stated curricular objectives based on individual needs, interests, or abilities. These adaptations are also expected to be varied, flexible, and of the appropriate duration to achieve the objectives of the adaptation.

A model for teachers using the system

The Approved Curriculum		
Target Population	Focus	Decision Emphasis
Classroom as one group	Broad focus on all students (assessment for adaptation occurs here)	<ul style="list-style-type: none"> <li>• decisions about curriculum, instruction, and environment are uniformly applied to all students</li> <li>• standard curriculum is used</li> <li>• emphasis is on mastering predetermined and common curricular objectives</li> <li>• full repertoire of instructional approaches is employed</li> </ul>
Target	Focus	Decision Emphasis

Population		
Small Group	Narrower focus (refinements are based on similar interests, needs, or abilities)	<ul style="list-style-type: none"> <li>• curricular, instructional, or environmental adjustments are selectively and purposefully applied to similar interest, need, or ability groupings</li> <li>• emphasis is on enriching, extending, reinforcing, or teaching differentially to stated curricular objectives</li> </ul>
Individual Students	Narrowest focus (refinements are very specific to individual needs)	<ul style="list-style-type: none"> <li>• curricular, instructional, or environmental adjustments are selectively and purposefully designed to meet individual student needs</li> <li>• emphasis is on tailoring the content and instructional approach in the context of individual needs so that the student achieves the objectives outlined in the approved curriculum</li> </ul>

#### 6. Portfolio

Acts as a type of parallel system to the hive and collects together students' pieces. Its main importance is as a system of assessment but it becomes a metaphor for the student as an individual.

A diagnostic tool practical- it is the perfect expression of individualism and should reflect that.

#### 7. Exam Evaluation

This is individualizing students education at a diagnostic level and highlights their strengths and weaknesses as a 2<sup>nd</sup> language learner so the teacher can make the necessary adjustments in their plans

#### 8. Parents

Research overwhelmingly demonstrates that parent involvement in children's learning is positively related to their achievement and therefore highly desirable. (Cotton and Wilkelund .... A synthesis of forty one different studies on the subject)

All types of parental involvement are recorded on the hive – when they visited when they helped their kids when they were telephoned when they were w trained or involved in school decision making

Bloom lecture april 1987 ACSCA says home environment is the major key for elementary success after k6 only a small percent recover

I would briefly recap the desired effects of the system

- Focus on creating individualized instruction Refine the teachers approach to suit individual students learning needs
- Target Population Focus and Decision Emphasis
- Increase in teacher student interaction
- Students attitude towards learning- motivation
- Students achievement
- Maximizing professional development
- Increasing teacher cooperation
- Applying the appropriate teaching strategies in the lesson.

Statistics

We used a questionnaire for teachers and one for students

Pre – test was in June

Post – test was in January of this year

We analyzed the results in two ways

One in terms of age groups and one in terms of proficiency level (from year 5 English development begins to slow down and student are streamed)

The first question we analyzed was focused on teacher interaction- I ask the teacher if I need help

1-3 was ok and research shows this age group is the most involved in their own education. It got worse as the students got older. There were many reasons including a history of failure or being embarrassed in the lesson. We felt that this showed a desire on the part of the student to be treated as an individual rather than as part of whole class.

In fact our findings were in line with Blooms work on mastery research where he said self concept drops grade by grade for the bottom 20% while it rises year by year for the top 20%.

It also became clear that teacher student contact time needed to increase.

Similarly in terms of proficiency levels beginners who were weak didn't want to bring attention to the fact that they were weak.

Post test results showed a significant improvement

The next question concerned attitudes to learning

- Analysis and implementation of the scheme

Now we have outlined the systems we will show how they interact by using a short student case study

Show diagram again and demonstrate that it is the teachers' use of Hive that facilitates individual learning

Conclusion – having individual info improves learning – because results improved in the year and we were able to analyze or conclude how to improve.

Implications

One of the main implications became teacher accountability for individual learning- ultimately accountability erodes relationships of responsibility argues Gert JJ Biesta in his article Education accountability and the ethical demand (Educational Theory aug 2004) who goes on to suggest that we take responsibility for our responsibility One teacher is put in charge of a students learning through our system but that is not necessarily a bad thing- each student gets a personalized educational manager.

- accountability may erode relationships of responsibility
  - personalized educational managers
  - Student input into their own educational process
  - Apply the concepts of Mastery Learning Benjamin Bloom's Learning for Mastery model, with refinements made by Block
- 
- Teachers accountability and time management- will decrease as time goes by

Why whole school

- Wider range and amount of evidence with which to assess and determine the appropriate individualized action plan for each student?
- Balance between the 4 language disciplines
- Other subjects' contribution to the development of student's language skills- common assessment and collection of evidence: common area for collecting and referring to the info- computer sharing of info less time consuming than meetings – computer use actually saves time.
- Moderation meetings

Small class size is desirable.

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