Four Conceptual Clues to Motivating Students:

Learning from the practice of effective teachers in low decile, multi-cultural schools

Jan Hill and Kay Hawk

Institute for Professional Development and Educational Research
Massey University : Albany Campus

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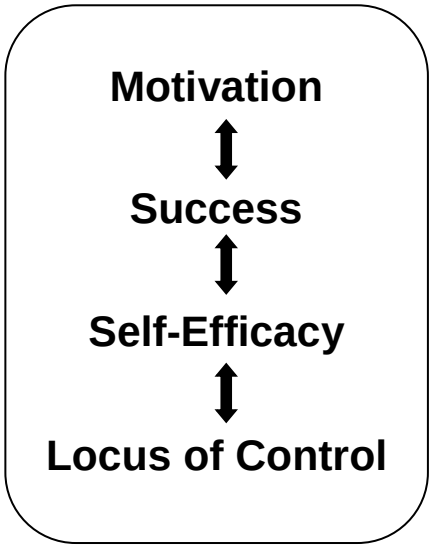
The researchers acknowledge the contribution made by the AIMHI schools to much of the knowledge and understanding of the issues explored in this paper. In particular, they wish to thank the teachers and students involved in the 1999 study of effective classroom practice who welcomed them into their classrooms and participated so honestly in the interviews and group discussions. AIMHI is a project in low decile multi-cultural high schools. It is a partnership between the AIMHI Forum, representing nine secondary schools, and the Ministry of Education.

Introduction

In 1996 when we began our research in the AIMHI Project[1], teachers constantly asked the same questions: How can we motivate these students? How can we get them to want to learn? Four years of research in the AIMHI schools, supported by the development work in assessment in the AIMHI schools and a number of other low decile secondary schools has helped us to unravel some of the critical factors involved in helping these student achieve success and to become motivated learners. The literature tells us that motivation is inextricably linked to success. A student will not be motivated to learn if they constantly experience failure and are convinced that their academic performance will never improve. Rather than put energy into learning, the students who experience failure over and over again 'down play' schoolwork and do not see achieving as 'cool'. Over time, their attitudes and behaviours become self-fulfilling and the decline in their learning is exacerbated. They begin to 'wag' class, truant and avoid being involved in learning in a number of ways.

Intrinsic motivation has long been seen as a key factor in becoming a life-long learner. Learners who attribute their success, or failure, to factors within their own control are more likely to succeed than those for whom the attribution of success is due to external factors located beyond their influence. This means that the locus of control for learning must be with the students. They must have ownership of the learning process and must be given the knowledge, understanding and skills to be able to take control of that learning. They need to know how to succeed. A further important factor in motivating students is the notion of self-efficacy or a self-belief that you can learn and that you are capable of improving on your personal best. It differs from self-esteem which is about the person and feelings of self-worth. Students need visible evidence that their efforts are being rewarded and that they are making progress with their learning and as they gain in confidence, the greater the chance they have of experiencing success. Success motivates and motivation leads to success.

The following diagram outlines the key concepts discussed above.



Although it is set out in a linear fashion, the reality is that all four concepts are inextricably linked and there is no single starting point. For example, if a student experiences success, this will increase their sense of control over their learning and their ability to learn. On the other hand, if a student is given the opportunity to 'own' their learning, this will increase their self-efficacy and their level of engagement and, in turn, their level of motivation.

[1] The AIMHI Project is a School Support initiative set up to raise the achievement of Maori and Pacific Island students in eight (now nine) low decile secondary schools. The project began in 1996 and since that time major collective and individual school developments have taken place alongside a comprehensive research programme.

This paper describes the research carried out in the AIMHI schools in 1999[2] and explores how the teachers involved in the research integrated the four concepts, outlined above, into their classroom practice. It will show that, sometimes, quite deliberate strategies were used to promote the concepts. In other instances, it was the personal attitudes and attributes of the teacher that made the difference.

How the data were collected

In 1999 the AIMHI schools requested that the research focus on 'best classroom practice'. The 1996 baseline research[3] had already identified a number of qualities and skills that were described by both teachers and students as either contributing or creating barriers to achievement. The data for this initial study were collected during interviews with teachers and group discussions with students. By extending the methodology in 1999 to include full classroom observations, it was possible to examine what teachers and students perceived as occurring in the classrooms (espoused practice) and what the researchers observed (actual practice). 100 lessons were observed involving 89 teachers and 1,645 students.

Each school was asked to select up to twelve teachers whom they regarded as effective. An effective teacher was defined as having credibility with their colleagues and with students for the quality of their classroom management skills as well as the quality of their classroom instruction and their social and teaching and learning interactions with students. Each observation was followed by an interview with the teacher and a group discussion with approximately six students from the class. The number of students who participated in the group discussions was 600, representing 36% of the total number of students observed.

The single most important factor in the selection of the teachers to be observed was effective practice. The cross-section of staff observed mirrored the gender and ethnic percentages of teaching staff across the eight schools[4] and represented the full range of subjects. When the observations were completed, a comparison was made between the type of training received by those observed and that of all the teachers from the eight schools. There was a slight increase in the number of primary trained teachers observed but, when compared with those that were secondary trained, the number was not statistically significant.

The next sections of the paper outline the practices of the teachers that encouraged motivation and success, promoted student self-efficacy and created opportunities for the shared locus of control.

The relationship between the teacher and the students

It is to be expected that the relationship that forms between a student and a teacher is important. If the relationship is sound, interactions will be enjoyable and there will be a greater willingness for the student to engage in the learning process. An important insight resulting from the research is just how critical that relationship is for the students in low decile schools. It is our opinion, from the work we have done in a wide range of school types, that students in higher decile schools will continue to learn even when they do not like the teacher and are likely to achieve regardless of the relationship. In contrast, it is our conclusion that for students in the AIMHI schools, a positive relationship with the teacher is a **prerequisite** to learning. These students will not be motivated and will not succeed unless they can work with a teacher with whom they have a special relationship.

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2 Hill, J. and Hawk, K. (2000) ***Making a Difference in the Classroom: Effective practice in low decile, multi-cultural high schools***. Wellington: Ministry of Education.

3 Hawk, K. and Hill, J. (1996) ***Towards Making Achieving Cool: Achievement in multi-cultural high schools***. Wellington: Ministry of Education.

4 Although there are nine schools in the AIMHI Forum, one of the schools did not join the project until the beginning of 1999. The research in this school had a different focus for 1999 and was not involved in the observations.

There are a number of critical components to that relationship. Many of the teachers we observed had a very good **understanding of the worlds of the students**[5]. They understand the differences between the values and expectations of the different worlds and how the students manage the tensions and conflicts associated with living in those different worlds. These teachers make an effort to ask and talk with the students about their lives outside of school and most of the students are happy to share that with them. The teachers also have a good knowledge and understanding of, and empathy with, the cultural worlds of their students. They pronounced names and words correctly and they readily incorporated words, concepts and every day experiences from the different cultures into their lessons.

Probably the most important dimension of the relationship is **respect** and it is one that both teachers and students talked about, although they described and demonstrated it in different ways. Students said that these teachers treat them as people and adults rather than students or children. This 'treatment' includes what teachers say and do and how they do it. It is reflected in their body language and the tone of their voice as much as their actions. The teachers did not articulate respect to the researchers as much as demonstrating it, although many talked about valuing the contribution of students. They listened with interest and attention when a student spoke. They enjoyed the company of the students and regarded them as having valid knowledge and perspectives to contribute. They were friendly and were not defensive when challenged by a student. Both the students and the teachers were aware of the importance of mutual respect and how directly it related to student motivation, effort and confidence.

Another key component in the relationship between a teacher and student is **fairness**. Students need to trust that a teacher will be fair to them and to everyone else in order to have respect for them. The students gave examples of teachers who favour and give preferential treatment to *the bright kids, the scholars, the girls, the ones with no reputation, the dumb kids* or *the boys who are good at sport*[6]. The students want teachers who will not give up on any of them and treating them fairly is an important and visible demonstration that this will not happen. It means giving all students in the class attention and affirmation and signalling very clearly to them that all of them are valued.

Many of the teachers observed have a very positive approach to life which was evident in all interactions with the students. Most smiled easily and spontaneously and there was obvious energy in all they did. They enjoy their job, their school and their students. Because of their **positivity**, and the frequent positive feedback they receive from their colleagues and students, they perform with a confidence that gives the students confidence in them and in themselves. This does not mean that they do not face problems or frustrations, or that they do not have 'down times'. It does not mean that they are uncritical or unchallenged. When these difficulties arise, however, they generally approach them in a constructive way with a view to seeking positive outcomes rather than putting up barriers to progress.

This positivity extends to the teachers believing they can, and are, making a difference for their students. They, at times, have same concerns that other teachers have about getting the students to the levels required to achieve external qualifications. But these teachers know they are making a positive difference to student learning and well-being and, most importantly, they frequently tell the students about their **optimism**.

Students are very appreciative of, and enjoy, teachers joining in with class activities. Not all teaching activities lend themselves to this but it is not the frequency that matters. For the students it demonstrates teacher attitudes towards them and their learning. The following paragraph is a greatly abridged example of a student group discussion that demonstrates the effect on them of teacher **participation**:

> *We were learning about bacteria and she got us into two groups but before we had to be bacteria, she showed us how to be one. She was flinging her arms around and then she lay down on the floor and wriggled her legs.* (Lots of laughter and body language) *We all really got into it after that. When she has a go, then we have a go --- and we remember all the things in the lesson because it was so funny.*

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[5] The students live in a number of different worlds - the world of their family, their school, their culture and their peers. Many also live in the worlds of church and the workplace. This is described fully in the 1996 Report.

[6] All words in italics are the words of the students.

Teachers were observed helping the class tidy up or preparing for an activity and actually doing some of the class work as a means of demonstrating various outcomes. Teacher language also indicated that they perceived themselves as part of the class. For example, many of them used 'we' when they were talking about activities the students were doing. In participating, they are modelling a willingness, not only to be a part of the class, but also indicating a model of classroom leadership based on power with, rather than over, the students.

As described at the beginning of this section, the successful establishment of a relationship with most of the attitudes and behaviours described above is, for most of these students, a pre-requisite for learning to take place. Students work on a relationship of **reciprocity**. If a teacher respects them, they will respect the teacher. A similar approach applies to other aspects of the relationship. The data suggest a very strong link between the relationships students have with their teachers and their motivation to learn. These relationships encourage the honesty needed as a platform for students to develop self-efficacy and for students to take control of their own learning.

Relationships between students

Although the relationship with the teacher is far more crucial, the relationships within the class and the development of class cohesion and co-operation are also very important to student motivation. The benefits were obvious and readily described by the students and most of the teachers. When positive relationships were actively encouraged between students, an environment was created in which they felt safe to take risks. This enabled them to engage more fully in the learning process, to gain in confidence and build on their feelings of self-efficacy and success.

For many of these teachers, cohesive classes were the result of **a planned process**. They believe that the positive outcomes warrant putting time and energy into building the class climate and they do so from the first lesson they have with the class. Most classes spent time at the beginning of the year agreeing on ways of operating together and there were a number of examples where the class actively participated in monitoring adherence to those ground rules. The teachers gave the researchers examples of how they planned activities for each class that deliberately got the students working together, especially at the start of the year, and how they take time to help repair relationships which are getting in the way of learning.

As well as wanting to shift the individual locus of control from the teacher to the individual student, these teachers worked in a planned way to achieve high levels of class-based control for classroom behaviour, student support and learning interactions. When **group locus of control** was evident, class members took over roles such as handing out work, setting up groups, monitoring class progress on a task, managing inappropriate behaviour, affirming each other, and engaging in peer assessment. These classrooms were not teacher-dominated or controlled. Rather, there was shared control where teachers worked with students to take joint responsibility for running the classroom.

The teachers wanted to encourage their students to take risks and try new challenges in their learning. They worked hard to create an environment in their classrooms where it was **safe to take risks** and where students could engage in **safe competition**. Many of the students are afraid of trying something new in case they 'fail' or show themselves up as inadequate in front of their peers, especially when they do not know the other students in the class, or do not know them very well. Teachers talked about the importance of taking risks and that to do so demonstrates a level of respect for each other. The class is coached in how to respond to each other during an activity. They are taught how to encourage and support activities. 'Put downs' are dealt with immediately. A group of students recalled one of their teachers stopping a class when a student behaved in an unsupportive way and they all spent the rest of the period working through the issue. Teachers described ways they had gone about building this safe environment and the students, themselves, were aware of the process and could give examples of things they had done in the class that they had felt nervous about at the beginning of the year. Some teachers were very active in participating themselves and modelled risk-taking and supportive behaviour. There were a number of instances when students described the time their teacher was the first to give a speech or to act out the activity they wanted the class to do.

Lesson structure and classroom dialogue

The learning experiences need to be purposeful, stimulating and, more importantly, designed to meet their specific learning needs. This poses a real dilemma for secondary school teachers. Because parents base a school's reputation on its performance in external exams, the teachers in schools like those in AIMHI, invariably feel pressured into covering the curriculum and teaching to the exams rather than putting a programme in place that meets students' real learning needs. When real needs are not being met, the students become demotivated and embark upon a cycle of failure. Many of the teachers described a desire and a need to **'do less better'** and to plan their lessons to allow for **quality time with groups and individual students**.

All of the teachers had effective strategies that they used to structure their lessons. Not all of the strategies were observed in any one lesson but, overall, were observed many times. The strategies were used across all subjects and year levels. None of them were subject specific and all could be transferred to, or adapted to suit, any other learning area. Each teacher had their own individual style and used the strategies in different ways that fitted with their particular style of operating and the needs of the students they were teaching. The strategies helped the students organise and understand what they were learning, actively engaged them in the process and helped them take ownership of their learning. The students described these strategies as helpful and motivating.

In many of the classes, the teachers had **a set routine for starting a lesson** that was very familiar to students. As soon as they reached the classroom they knew what they had to do. For example, one teacher always begins with an informal quiz. Another always has a 'brain teaser' up on the whiteboard and another has two or three points for the students to write into their books. A number of teachers are using a 'Do Now' exercise that is written up on the board in advance and which students start work on immediately. These initial activities reinforced prior learning, gave the lessons a sense of purpose and focussed the students on learning from the moment they walked into the room.

There were a number who always had **lesson outlines** on the board. These outlines recorded what would be happening in the lesson and, very often, what students were expected to learn. Most teachers talked the class through the outline at the beginning of the lesson and then did not expect to have to keep telling the students what to do. They simply referred them to the board. There were examples where students were able to move from one task to the next without waiting for the teacher's instruction because the outline told them what to do. For these teachers it was another deliberate strategy to encourage the students to take responsibility for their own learning.

Many of these teachers demonstrated high levels of energy and the ability to work very hard. From the moment the students entered the classrooms until they left at the end of the period, these teachers were interacting with students as a class, in a group or with individual students. None of these teachers sat down during a lesson unless it was to sit beside a student to discuss their work. They were highly mobile and moved around the entire classroom engaging in continual talk about what was being learned. There was **a sense of urgency** about what was being learned - not a hurriedness - and a sense that the time and topic were valuable. These teachers modelled hard work and provided a classroom learning culture that was focussed and purposeful.

The importance of clear and organised direct instruction has been well documented in a number of extensive studies about how children learn[7]. One of the ways teachers in this study did this was by making sure that when there were new and important concepts for the students to learn, they carefully constructed the process for the students. This kind of 'explicit teaching' comprises presenting material in **small steps**, pausing to check for student understanding and requiring the active participation of all students. These teachers helped the students to take small steps and build bridges in their learning by questioning, providing good explanations, giving many examples, taking time to work on vocabulary and giving students time to practise each step rather than expecting them to absorb several steps at once and then practising. As they gained success with

[7] Hattie, J. (1999) ***Influences on Student Learning***. Paper presented as an Inaugural Lecture. Auckland, August 2, 1999; Wang, M.C., Haertal, G.D., Walberg, H.J. (1993/1994***) What Helps Students Learn?*** Educational Leadership, December 1993/January 1994.

each step, the teacher and the students would move on to new learning. Taking small steps helped to draw the students into a topic, to gain their participation and to motivate them.

The earlier AIMHI research (Hawk and Hill, 1996) documented the importance of teachers' attitudes towards giving **clear and relevant explanations**, their skill in providing them and their ability to engage student in the process. The crucial importance of these attitudes and skills was very evident in the classrooms. Many teachers demonstrated infinite patience when interacting with the students. They had created a climate in their rooms where it was safe to seek help if they were 'stuck' and where teachers would take the time to respond to questions and give further explanations. They constantly sought ways of engaging their students in the discussion. There were examples where teachers had taught a unit of work before or anticipated which concepts and words the students might struggle to understand. They had ready-made transparencies or key messages written up on the whiteboard and had designed special activities, as one teacher put it, to ensure 'comprehensible input'. In addition to these planned strategies there were many, many examples where teachers used impromptu, 'off-the-cuff' techniques with the whole class or a group or individuals to help the students grasp the meaning of key concepts and words and to make links with previous learning. They used stories, diagrams, items in the room, classroom displays, role playing and demonstrations to get the message across to the students.

There is common agreement amongst educationalists that asking the right **questions** is about getting students to think. As one of the AIMHI teachers commented:

> *Questions are so important but you've got to remember to ask, "Why?" You've got to remember to ask, "How did you get that answer?" Otherwise it's just about getting the right answer.*

There were teachers who deliberately made sure that as many students as possible had an opportunity to have their say and who constantly used their knowledge of the individual students to make decisions about what questions were asked and who answered them. They asked questions that everyone could answer as well as those that they knew only a few could respond to but which were important to building the discussion. They made it safe for students to respond and to give an incomplete or incorrect answer and made sure that they used that response to get across a teaching point. In a few of the classes the students did not feel safe to respond, some were never chosen to answer, some students answered all the time, others did not get heard in the chorus of responses or gave the wrong answer and are made to feel *stink*. When this happened their body language in the lessons or comments in the group discussions clearly indicated that they did not feel good about it. The ability of a teacher to use questions to help students through a learning process and to make it safe for students to ask questions and to make responses is crucial to students' feelings of success.

Feedback, feedforward and self-assessment

Black and Wiliam's (1998)[8] examination of research in assessment demonstrates the importance of formative assessment practices on student motivation and success. Hattie (1999) reinforces this in his meta-analysis of research on the influences on student learning where he states that the single most important prescription for improving education is 'dollops of feedback'. The distinction is being made here between the giving of marks and grades associated with summative and end-point assessment and the formative assessment that occurs in an ongoing way, both through dialogue and in written form, in every lesson and throughout a unit of work. Three aspects of formative assessment - feedback, feedforward and self-assessment - are seen as being particularly important to student motivation and success.

There were many, many instances of teachers giving **feedback** and students experiencing success as a result. There were also examples where students were not afraid to make mistakes or were not devastated by a poor result because they knew they would get feedback (if it was not already recorded) and be given strategies and support to improve. Not all teachers had a common definition of feedback. For some, feedback was synonymous with praise and was

[8] Black, P. and Wiliam, D. (1998) ***Inside the Black Box: Raising standards through classroom assessment***. London: School of Education, Kings College of London.

indicated with comments like 'well done', 'excellent work', 'good effort' or at the opposite end of the scale with comments like 'not as good as last time', 'careless work' and 'poor effort'. For others, there was confusion between feedback and direct instruction. For example, an explanation of how to complete a task was sometimes described as feedback. There were also examples where checking for the right answer, indicated by a tick or a cross, was deemed to be giving feedback. Feedback needs to be specific to the task, in both the positive and the critical, it should be descriptive rather than judgmental and should involve the learner wherever possible to improve the chance of it being understood and acted on.

There was less awareness shown of the importance of **feedforward**. This involves the recording of, or a discussion about, the next steps that a student needs to take in their learning. It should be directly related to and should build on the feedback that has been given. Typically, assessment is associated with some form of written response. Formative assessment and, in particular, a focus on feedback and feedforward, highlights the importance of teacher/student dialogue. This, in turn, invites teachers to critically examine the talk that goes on in their classrooms and to think about whether they are giving genuine feedback and feedforward or whether they are giving dollops of praise or direct instruction or simply checking work for the right answers.

Another aspect of formative assessment that encourages self-efficacy and student ownership of their learning is **self-assessment**. This is not an easy process for students to grasp, or adults for that matter, and teachers need to be aware of the developmental needs of their students in this area and to plan self-assessment tasks that are pitched at that level of development. Students need to be taught the skills quite systematically and be given exemplars of quality work on which to model their responses. Consideration needs to be given to the timing of the self-assessment. Some teachers time the self-assessment task for the end of the unit which stops the students from getting the opportunity to improve their work and embed their learning as they go. A number of self-assessment formats were lists of tasks or steps in a process that the students ticked on completion. These checklists rarely contained criteria for evaluating the quality of the work and if they were prepared for every unit, became a repetitive and *boring* activity for the students.

Making the relevant links to students' experiences

Many teachers were observed incorporating the students' experiences into their classroom programmes. This was reflected in the **contexts** teachers selected for their units of work, the **examples** used to illustrate a teaching point or provide an explanation and in the **resources** they prepared. For example, one teacher role-played two girls having an argument to help illustrate different levels of anger. He used a high-pitched voice and student slang to illustrate his point and created a great deal of laughter and subsequent discussion. In the group discussion that followed the observation the students said that, because they related to the role play and the laughter, this and the learning it generated were their strongest memories of the lesson. Reflecting the everyday lives of these students in classroom programmes gives meaning to and a sense of ownership of their learning.

Learning also takes on meaning when teachers spend time investigating **students' prior knowledge** and actively affirm and build on that knowledge in their teaching and learning programmes. Teachers and students are not starting with a blank slate at the beginning of the year, at the start of a unit or at the beginning of a lesson. As students' knowledge and understanding is recognised and valued and as they are supported to make links between what they already know and the new learning, student self-efficacy increases.

Some teachers made relevant links with students' experiences by speaking the students' **ethnic languages** or, at least, using key words. The researchers saw this knowledge used to good effect in helping the students to understand particular words or concepts. Sometimes, teachers who did not know the languages asked the students to come up with synonyms for important words from the different languages used in the class. The students' enjoyment of this was obvious. There were times when students spoke their own languages when they worked in pairs and groups. The researchers did not observe any teacher discouraging this practice and most regarded it as normal. Some teachers actively encouraged it and deliberately sat some students together, if they spoke the same language, so that they could help each other.

Conclusion

Students are motivated by success. We are not talking about the kind of success associated with external exams but day-to-day feelings of success and visible evidence that they are making progress with their learning. Success is more likely to happen if students have the self-efficacy to actively engage themselves in the learning process and if the locus of control is shared with the teacher. This will happen in classrooms where students' prior learning is acknowledged and the curriculum is relevant to their experiences. It will happen in classrooms where programmes are not driven by rigid prescriptions but are tailored to meet students' needs and where opportunities are provided for students to receive quality feedback and feedforward. It also requires that teachers encourage positive relationships between students and use strategies that promote a cohesive and co-operative classroom climate where students feel safe to take risks. Above all, and a prerequisite to learning for these students, is a positive relationship with the teacher based on reciprocity, respect and teacher self-efficacy. They believe they can, and are, making a difference to student learning.