

# Teachers as Mentors, Students as Constructors of Knowledge

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### 1. Introduction

The study discussed in this paper was conducted over a six month period in one suburban school in New South Wales, Australia. The student participants (n=67) were twelve to ten year old students and their teachers (n=3). Although the intervention program was implemented as a whole class activity, only forty of the student participants were included in the results of the main study. The remainder, whilst having given their parents' and their own permission to participate, had incomplete records and missing data and so was excluded from the main findings. These findings indicated that if teachers are able to provide students with the opportunities to know themselves better as learners, have some choice in determining the tasks that best suit their learning preferences and determine their own learning strategies, then the impact on students' capacities to 'learn how to learn' effectively is positive. There are clear implications that if students are provided with opportunities to develop their intrapersonal intelligence as learners, this improved awareness of 'self' as learners can be translated into improved skills in the understandings, knowledge and skills that comprise 'executive function'. [4,8] from a Multiple Intelligences perspective and result in improved learning outcomes as conceptualized by Moran and Gardner [9] in their discussion of the relationship between executive function and the Multiple Intelligences intrapersonal intelligence domain [6]. However, whilst the overall findings of the study were very positive in terms of the students' increased capacities relating to their executive function skills, the responses from the three teacher participants indicated that the benefits of the study were not confined to those experienced by the students. The nature of the intervention program required that the three teachers acted as mentors as described by Moran and Gardner [9] and allowed the decisions related to task choice, completion procedures and modes of product presentation to the students. This created a very different classroom dynamic and it was this context that the teacher participants that the teachers acted as mentors to their students during the intervention program that was the focus of the study.

## 2. The Intervention Program

The intervention program required students to select their own learning tasks from a differentiated program of work which was planned use a matrix formed by the two typologies of the taxonomy of cognitive processes developed as the Revised Bloom's Taxonomy [1] and the Multiple Intelligence domains that constitute Multiple Intelligence Theory [5]. This intervention program was implemented in a dedicated time frame during the part of the day that was timetabled for studying English [2]. Each of the tasks that comprised the differentiated program of work was cross referenced with the appropriate outcomes and indicators from the mandatory curriculum document [2]. The students were also asked to determine their personal strategies for task completion and select the product and mode they would each use to present their learning to their peers and teachers. Their self selected strategies and products were based on their self assessed relative learning strengths and limitations.

The intervention program was designed to give students the opportunities to set their own learning goals, using the tasks from their differentiated program of work and to discuss their choices with their teachers advising in their roles as mentors. In this way students were supported in monitoring their own learning behaviours, in identifying occasions when they needed to seek feedback from teachers or peers and in taking responsibility for clarifying and justifying their task related choices. The intervention program necessitated the teachers to work with the students in two ways. A portion of the English timetable was dedicated to the explicit teaching of procedures, strategies and knowledge related to the conceptual knowledge embedded in the tasks. This was a more traditional teacher role except that the content of these lessons was frequently negotiated with the students in response to their task related needs. The second teacher role was to mentor the students during the remaining lesson time that was dedicated to the completion of the students' self selected tasks It was this second role that afforded the teachers a unique insight into their students and how each of them learned most effectively as individuals. It also provided them with multiple opportunities for authentic assessment of their students' skills, strategies and knowledge as they engaged regularly with the students in one-to one conversations about their tasks that were designed to evaluate and to support the students' independent work. These focused conversations were known as teacher – student conferences.

### 3. The Teacher Evaluations

The teachers were each asked to complete an evaluation task at the midway point of the research project and at its conclusion. The complexities and challenges of intervention program were initially formally noted on the evaluations that the teachers completed midway through the research project. This evaluation tool simply comprised of a chart labelled: Pluses, Minuses and Interesting observations. There were comments about the high level of organisation that was required to implement the intervention program and the demands that placed on the teachers' time and energies and the difficulties of resourcing the diversity of activities that the students had self selected. However, all three teachers were very positive about the students' attitudes to their self selected

tasks, the high level of task engagement and the degree of enjoyment with which the students planned, organised and completed their 'real' tasks. There was also a comment about the students' positive interaction with each other. Their comments included the following statements:

'the students were engaged and having fun and the learning was 'more real' in nature than the disparate activities that are usually implemented as English'

'the students were engaged and were cooperative in helping each other solve problems.'

'the students are really positive and are engaged'

At the conclusion of the research the themes relating to the students' degrees of engagement in, and enjoyment of, the opportunity to work on self selected tasks were again in evidence during each of the individual interviews that were conducted with the researcher. However, there were a number of additional comments that indicated a significant change in the relationships that the teachers had with their students. One teacher commented on the diverse nature of the tasks and the opportunities they afforded students to be creative. She discussed the chances the students had been offered to share their work with others and to develop respect for each others' gifts and strengths, indicating that the students had opportunities to develop a heightened sense of 'self' while remaining members of the class community. The multi dimensional components of the tasks were considered valuable and the teacher felt that this 'added value to the kids' own desire to learn'. She nominated a number of students for whom working on the task cards in the intervention program had made 'a major contribution' to their self confidence, positive attitudes to learning and enjoyment of English activities.

Another of the teachers commented that one of the students who had always struggled in all academic areas 'has produced amazing work. She has been focused and on task, motivated and keen. Such a success.' However, the perspectives of this teacher were captured in the response he gave to one question and illustrated his understanding of teachers as learners [7] and his appreciation of the opportunities that the intervention program had given him to openly undertake this role in his interaction with his students. When asked about the impact the implementation of the implementation program had on his usual role as the teacher he replied 'It was a mess. I needed to restructure my classroom management strategies. But after some reflection I have a need to suit the class needs and now I have....it made me think outside the square.'. Having enjoyed working so closely with his students and restructuring his usual practice to meet the needs of his students, this teacher had taken ownership of the intervention program and for the final three weeks of the study had redesigned the templates, designed a flow chart for the students to follow and explicitly taught the students about organization and planning; a skill he described as 'an ongoing benefit'.

Whilst it not difficult to explain a change in student-teacher relationships when an intervention prompts students to be positive, on task and generally enthusiastic, it was the third teacher who, unprompted, elaborated on the specific interaction that had an empowering impact on all of the teachers and students alike. She felt that the students benefitted from having to make decisions and choices and having to differentiate what works for each of them, as this capacity is directly related to the students' abilities to identify self relevant information. She particularly enjoyed the conferencing with students and having them articulate what they knew. She felt that much of this confirmed her insights about the students' learning and that these times were enjoyable and valuable for teacher and students. This teachers' perceptions that the conferencing sessions were 'valuable' were supported by the validation she offered. The specific benefits of these conferencing times with the students that the teacher nominated were that she could negotiate at least one aspect of each task with the students individually, that she did not have to tell the students the next step - she could ask 'What do you think?' and the students could talk about their tasks. She realized that the students had developed competencies in specific literacy skills such as considerable improvement in their comprehension skills and a much improved understanding of writing a task for a specific audience. They also had become adept at talking about their strategies for problem solving. She felt that there were considerable benefits for the students, specifically in planning their strategies, taking the ownership of their work, their abilities to think independently, their capacities to make choices, the ability to participate in discussions and their plans for how to showcase their work. Her concluding comment was that she 'was privileged to work in this way with such a wonderful group of students'.

### 4. Conclusion

The one- to -one work focused discussions in which teachers engaged with their students over the six month period began to reflect the key components of any mentoring program [3,10]. The collegial interaction, specialist support and respectful negotiation that characterized these 'conferences' allowed the teachers to recognize their students, not only as learners in their classes, but as organizers, strategists and constructors of their own knowledge. Before the end of the research intervention the three teachers were planning their own intervention program for implementation during the following year.

### References

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