

Learning Styles Implementation at Tumbarumba High School

Tumbarumba High School is a small isolated school situated in the foothills of the New South Wales Snowy Mountains. We receive federal government funding through the Country Area Program (CAP) - an equity program designed to help overcome the potential problems of isolation and to support students to maximise their learning outcomes.

All CAP schools are required to develop programs which address three criteria: Quality Improvement; Quality Teaching and Learning; and Quality Technology in Teaching and Learning using the nine steps Quality Improvement model.

As part of our planning for 2004 our school successfully submitted a proposal to the CAP District Committee for additional funding to conduct a Learning Styles seminar for teachers from a number of small schools. This was facilitated by Barbara Prashnig. The following is a record of our school's journey to date.

1. Select the Opportunity for Improvement

Successful learning cannot be seen in isolation. Therefore to maximise our students' learning we believed that we had to build a stronger more co-operative partnership between parents, students and teachers, based on how children learn. In so doing we believed that we could provide students with a solid framework for life-long learning and future success.

2. Select the Team

Our school has a small teaching staff (21) with good mix of beginning and more experienced teachers. As in any school there are varying levels of readiness to embrace change. We therefore worked on the concept of establishing a "critical mass", defined as the square root of the organisation, [Langford, 2003] to lead the change.

Following the Learning Styles Seminar, we canvassed the idea of re-establishing our after school collegial group, its purpose being:

- to discuss teaching and learning;
- to share ideas; and
- to provide mutual support and encouragement

This group now meets, fortnightly

3. Study the Current Situation

Over recent years, with the support of CAP, our school has focussed on "Quality Teaching and Learning", initiating workshops to promote alternative approaches to classroom practice. These have included workshops on Multiple Intelligences and Blooms Taxonomy; Thinking Skills; Quality Learning and Quality Improvement; 6 Thinking Hats and other De Bono strategies; Seven Habits of Highly Effective Teens; and The 4-Mat System (McCarthy)

Although there is growing evidence of more teachers using a variety of approaches to teaching, we continued to have difficulty motivating or engaging some students in their learning.

4. Analyse the Causes

We believe there is still a widely held belief that learning success is only achievable by a few. Despite our regular challenging of this philosophy, some of our students are quick to dismiss their lack of success as a lack of ability. We also find that many in our school community have a limited understanding of how to become an effective learner. In addition, the pace of change and the resultant heavy workloads for teachers in a small school, just to keep up with syllabus change, limits the time available to trial alternative approaches to supporting student learning.

Despite these issues, the school is committed to quality learning and continual improvement.

5. Develop a Theory for Improvement

As an isolated community experiencing the countrywide decline in the rural sector, and in particular falling employment opportunities, the size of our school population is gradually decreasing. In order to maintain our curriculum the decision was made to establish a vertical structure for students in years 7 and 8. This had not been done at our school in the past, so presented staff with new challenges. We therefore felt this group of students was a priority for profiling so that teachers could be provided with an overview of their students' learning needs to facilitate their lesson planning.

Our theory for improvement was, therefore, to conduct the initial Learning Style Analysis (LSA) training for all staff, and in conjunction, an information session for parents to help them understand how they could use their child's learning profile to provide support in the home context.

6. Implement a Theory for Improvement

LSAs have been completed for years 7/8 and at a follow-up meeting, group profiles were presented to staff, with an explanation of how to use the Interpretation Manual and profile data to inform classroom practice. In addition, our year 11 students have now completed their LSAs which are being used to assist students to develop an appropriate study schedule, by incorporating strategies which cater for their strong preferences.

As part of our Literacy strategy we operate a special reading group where targeted year 7 students are buddied with an older student mentor. This group reads together each morning when the whole school starts the day with DEAR – Drop Everything And Read. Following our Learning Styles seminar at which we were introduced to Brain Gym, we now have the students complete a series of cross-overs to music before they begin reading. The students have reported that they find this activity has increased their alertness for the rest of the day and the co-ordinating teacher has reported significant increases in the students' reading performance.

Another benefit of our LSA training has been its use to help individual students from outside the target group. When students are referred to me with particularly challenging behaviour, or in need of a study program, I always begin with an LSA. This then forms the basis of advice I provide the classroom teachers about how to better engage the student or to the students to help them better understand their learning needs and thus develop more positive attitudes.

7. Study the Results

In our collegial group we decided that we would initially concentrate on the groups' strong preference until teachers were more confident about adopting a full Learning Styles approach to their lesson development. We have members who teach year 7/8 classes with the follow strong preference profiles i.e. approximately 60% or over:

Group 1	Group 2
(Auditory (external) 33% - talking/discussing) Auditory (internal) 66% - self-talk/inner dialogue	Auditory (external) 64% - talking/discussing Auditory (internal) 78% - self-talk/inner dialogue
VISUAL (words) 58% - reading Visual (external) 66% - seeing/watching VISUAL (internal) 41% - visualising/ imagination	VISUAL (words) 71% - reading VISUAL (external) 85% - seeing/watching VISUAL (internal) 71% - visualising/ imagination
TACTILE (touching) 66% - manipulating/ handling	TACTILE (touching) 100% - manipulating / handling
KINESTHETIC (external) 58% - experiencing /doing KINESTHETIC (internal) 75% - feeling/ intuition	KINESTHETIC (external) 92% - experiencing /doing KINESTHETIC (internal) 92% - feeling/ intuition
(INTAKE 50% - needed)	INTAKE 78% - needed
MOBILITY 75% - movement needed	(MOBILITY 50% - movement needed)
TEMPERATURE 66% - cool	TEMPERATURE 64% - cool
MOTIVATION 83% - self-starting	MOTIVATION 78% - self-starting
CONFORMITY 66% - conforming	(CONFORMITY 42% - conforming)
RESPONSIBILITY 75% - high/strong	RESPONSIBILITY 78% - high/strong
VARIETY 58% - change-oriented	(VARIETY 35% - change-oriented)

We were surprised at the variation in the two groups, when the students had been randomly allocated to their year groups. One member of our group who teaches both classes commented that she finds one easier to work with than the other.

This led us to complete the Teaching Style Analysis (TSA) and examine reasons for the teacher's finding one group easier than the other. Needless to say, one group better matches the teacher's profile. We are now debating whether to complete LSAs before we allocate our in-coming students to classes and trying to match TSAs to class profiles.

8. Standardise the Improvement

Having discussed the types of teaching strategies that are appropriate for each group we are also comparing notes on which types of activity better engage students. Two of the collegial group teach English to the profiled students and one teaches both English and History so we are also comparing strategies which work better in each subject. We have developed the following lesson plan proforma and are looking at ways to further improve this so that teachers can have an electronic proforma which can easily be adapted for different class groups.

Lesson Planning using Learning Styles

Unit Title: Media Unit 1: Newspapers **Class:** Year 7/8 **Date:** _____

Learning Style Preference	Learning Activity <i>I learn new and difficult things best when I can</i>
(Auditory (external))	<ul style="list-style-type: none"> • Read out my letter to the editor • Debate a current issue • Participate in an academic controversy • Use an inside-outside circle to discuss newspaper features
Auditory (internal)	<ul style="list-style-type: none"> • Think - Pair - Share • Use the “comfort zone” to read • Have background music during reading quiet time
VISUAL (words)	<ul style="list-style-type: none"> • Write a letter to the editor • Copy notes from the board or overhead • Work independently using a pre-prepared information booklet
Visual (external)	<ul style="list-style-type: none"> • Use a Venn diagram to compare broadsheet and tabloid newspapers • Study survey data
VISUAL (internal)	<ul style="list-style-type: none"> • Use visual stimuli as a scaffold for my writing tasks • Design the front page of a newspaper
TACTILE (touching)	<ul style="list-style-type: none"> • Enter survey data into a spreadsheet • Cut and paste definitions and search for examples of identified characteristics in newspapers
KINESTHETIC (external)	<ul style="list-style-type: none"> • Conduct a survey on people’s newspaper preferences • Role play a newsroom • Choose a costume to inspire a newspaper feature story
KINESTHETIC (internal)	<ul style="list-style-type: none"> • Describe my emotional reaction to current newspaper report • Debate a current issue from both points of view

9. Establish A Future Plan

Term four is a time when we develop our programs for the new year. Through the collegial group we will evaluate the success of the teaching/learning plans we have implemented, asking both teachers and students for feedback, to determine whether our goal of improved student engagement has been achieved, albeit on a small scale. We can then share our experiences with our colleagues and encourage them to adopt the LSA approach to student learning with some of their classes in the new year. We would also like to explore the development of lesson planning software which links learning style profiles to the New South Wales Quality Teaching Program.

Following our successful working bee to manufacture the soft furnishings for some of our classrooms, we hope to conduct another, this time to construct a selection of learning tools for use in classrooms.

Finally, it is our hope that we are again successful in gaining CAP district funding to undertake additional modules of the Diploma in Holistic Learning course in 2005. Then the cycle will begin again!