

# **Making connections: Insights from the implementation of the Course in Applied Vocational Study Skills project**

**Susan Bates, Western Australian Department of Education and Training, Australia**

The Course in Applied Vocational Study Skills (CAVSS) was developed in 1999 by the Western Australian Department of Education and Training (WADET) and is now in its fourth year of delivery, in most Western Australian Technical and Further Education (TAFE) colleges and in Victoria and Tasmania. CAVSS is a nationally accredited curriculum for providing literacy support for students in industry training courses. It has transformed the way that literacy support is delivered in industry training, and in doing so, is transforming the way that industry students engage with learning processes.

## **Setting the scene: Vocational Education and Training in Australia**

In Australia, the Vocational Education and Training (VET) sector services industry by training and credentialling current and prospective workers. These services are provided by public and private Registered Training Organisations (RTO). Publicly-funded TAFE colleges operate in every state, and continue to provide most of the apprenticeship and traineeship training in the sector. RTOs are accredited to deliver training and assess against nationally-agreed competency standards, including those prescribed by industry Training Packages. While funding for VET services is managed by individual state governments, systems for quality management and credentialling are nationally consistent.

In most states, adult literacy services consist of non-credentialled training delivered in the community sector, either by qualified, paid teachers or volunteers, and accredited general education courses delivered by TAFEs, which are comprised mainly of literacy and numeracy learning outcomes and generally recognised as having equivalence to secondary school leaving certificates for Years 10 and 11. Over the last decade increasing national awareness of the degree to which language, literacy and numeracy (LLN) impacts on the effectiveness of industry training has focused attention on students undertaking industry training and their need for LLN services.

In this paper, the terms 'industry trainer' is used to refer to those who teach and assess competencies related to industry and workplaces, and 'literacy teacher' to those who specialise in teaching literacy and numeracy skills who are usually qualified primary or secondary school teachers. The 'CAVSS teacher' is a literacy teacher. Unless other denoted, the term 'literacy' refers to English language, reading, writing, comprehension, oracy, numeracy and/or maths skills.

## **The Course in Applied Vocational Study Skills (CAVSS)**

CAVSS is a model for integrating literacy support within the content and delivery of industry courses, so that literacy and numeracy processes are taught in direct application to the industry tasks. Rather than withdrawing students from class to attend remedial maths or literacy tutorials, the literacy/numeracy specialist teacher spends several hours each week in the industry classroom or workshop, taking turns with the trainer to teach the group, revising and reteaching literacy and numeracy processes. The aim is to bring together two separate sets of specialist knowledge: the trainers' knowledge of industry skills and workplace culture, and the literacy teachers' knowledge of how to identify, revise and teach literacy and

numeracy processes as they manifest and are demanded by industry training activities, using the actual industry activities as the context for teaching.

### **An example of CAVSS in action**

For example, Apprentice Floor and Ceiling Fixers might be asked to put together a quote for a tiling job, including calculating overall area, calculating the number of tiles needed, and costing all materials, including percentages for wastage and taxes. The activity involves the application of several maths and literacy processes. To deliver the lesson, the industry trainer might first introduce the tasks, and talk about some of the trade issues including professional and legal aspects of preparing a quote, pitfalls to avoid and examples of formats for presenting quotes to prospective clients. The trainer might then call on the CAVSS teacher to revise metric terminology and formulas for determining area, estimation and calculator use with the group, as they develop their quotes. There are plenty of questions and discussions involving both instructors and all of the students. As well, the instructors move around the room, offering advice and discreetly making sure that all of the students know what to do. Students understand that both instructors are there to help everyone.

The CAVSS curriculum can be applied to any industry course, at any qualifications level. It has been delivered successfully in a wide range of industry courses including Applied Nursing, Horticulture, Cultural Guiding (Indigenous Tourism), Hairdressing, Bricklaying, Community Health and Disability Service courses, Hospitality, Electrical Engineering, Plumbing, Cabinet Making and Joinery and Business courses. CAVSS was developed to meet the needs of mainstream students, including apprentices, but has proven to be very effective and popular with Aboriginal Language speakers in remote communities, with newly-arrived non-English speaking migrants engaged in Employment Pathways Programs, and with students with intellectual disabilities. It is currently being trialled in prisons in Western Australia.

### **An old problem needing a new solution**

Literacy has always created barriers for industry students. Many leave school without being able to apply the maths and literacy skills they learned (or part-learned) there. Many struggle with industry training tasks that require the use of literacy skills, such as transposing formulae, calculating volume or reading Occupational Health and Safety information. As well, the trend for independent learning/assessment strategies such as module workbooks, 'self-paced' learning materials and computer-based learning and assessment procedures is increasing the literacy demands made on every student, often in excess of the literacy demands of their workplaces.

Although industry trainers have always known most of their students struggled with aspects of the course because of literacy, until now, literacy support strategies have only been directed at meeting the needs of the small number of individual students who have very limited skills. Those students would usually be withdrawn from workshop lessons to attend remedial literacy tutorials. These strategies were rarely successful. The remedial teacher taught in isolation from the industry trainers and retaught 'generic' skills, which left students still having to guess at how to select and apply appropriate processes when they returned to their course. Students resented missing out on their industry course and because of the stigma and shame associated with being withdrawn for remediation many of those students would stop attending the remedial sessions and often drop out of the course. These strategies failed to take into account effective teaching and learning practices associated with literacy, and ignored the significant factor of how being publicly identified as 'deficient' impacts on motivation and learning. CAVSS was developed as a better way to help industry students achieve their goals, where there was immediate, industry-relevant literacy support for every student, where no student would be singled out as needing it and where literacy support would be a normal, unremarkable part of the industry course.

### **The emerging effects of collaborative teaching**

CAVSS was developed to increase the number of students who successfully complete their industry training and it has been very successful in achieving that aim. Industry trainers report consistently improved student outcomes and improvements in students' capacity and confidence to tackle industry activities that involve the application of complex maths, reading and writing skills.

The team-teaching delivery mode is central to the CAVSS model because it is a mechanism for ensuring that literacy skills are taught in direct application to the training tasks that students need to undertake to complete their course. However, as increasing numbers of students have access to CAVSS, some unexpected, very positive outcomes are emerging.

A Trades Manager from Great Southern TAFE in Albany said that having CAVSS support for a group of automotive engineering students 'not only meant that the two or three students they knew would otherwise have dropped out or failed, actually stayed and passed the course, but all of the behaviour problems disappeared as well.'

A Fire Protection trainer from the Royal Melbourne Institute of Technology (RMIT) said that he noticed that the three groups of pre-apprentices that he has been training ask questions and discuss aspects of the course in a way that he has never seen before. He said that 'not only do the students keep on asking questions and being fully involved with whatever activity they're undertaking, even when the CAVSS teacher is not in the room, but as well, when they finish their work, the first thing they do is look around to see if any of the others need a hand.'

A group of third year apprentice stonemasons from Perth, Western Australia who have had CAVSS support throughout their apprenticeship described some of the ways that CAVSS had created a special dynamic in their classroom and workshop lessons. One apprentice commented that it was 'great having Gordon (the CAVSS teacher) here because he's mates with Ken (the industry trainer) and so we all end up having really good discussions, usually about stonemasonry, and it makes the whole learning process a lot more fun.' Another apprentice described how 'everyone gets involved and we've got two teachers to ask questions from, instead of just one, and sometimes it really helps to have things explained from a different point of view.' Their industry trainer had his own theory about why CAVSS seemed to improve the students' motivation. 'They love having someone around who isn't in the industry and who genuinely admires the work that they do. They get a big kick and a lot of pride out of that and it seems to spur them on.'

Literacy teachers who have been delivering CAVSS describe the pleasure that they get teaching literacy and numeracy in application, with a sense of solidarity with the industry trainer, and acceptance from the students. One CAVSS teacher from the remote north of WA said that 'teaching in high school is like being in a war zone much of the time. CAVSS is a chance to acknowledge the potential of every student, even the ones who are a bit rough around the edges, without being regarded as some sort of traitor.' A CAVSS teacher from RMIT commented that 'being able to witness and be part of the special bond that industry trainers have with their apprentices restores her faith in humanity.'

It is interesting to consider these comments in relation to two of the main elements that underpin CAVSS: the negotiation and collaborative problem solving that the two instructors model in front of the students every CAVSS session and the capacity of literacy teachers to relinquish the authority of their academic qualifications and their academic language and literacy practices, and demonstrate their genuine respect for non-academic cultures, endeavours and achievements.

### **Team-teaching**

Students demonstrate a very clear understanding of the CAVSS teacher's role, and that the team-teaching arrangement is used to assist them to pass their course. It may be that this explicit commitment to the students' success is a factor in the change that CAVSS is making to their behaviours. As well, CAVSS has the effect of opening up the whole issue of learning, so that processes for learning and demonstrating competencies are explicitly taught along with the course content. The CAVSS teacher gets involved with both theoretical and practical aspects of the course, continually drawing students' attention to strategies for analysing and organising the task, and selecting and applying relevant literacy and numeracy processes.

Before CAVSS, it was not unusual for students to be very private about their course work, only seeking out assistance just before, or after, exams. It was as though owning up to not understanding, or needing to ask the same question several times over was too big a risk to take in the classroom environment. It is interesting to consider how the issue of intelligence is widely misunderstood to be related to academic success, and how that notion can make any admission of needing help a risky business. CAVSS has changed the way that many industry students behave in the classroom. The support gives them more skills, which in turn increases their confidence in the classroom, and their motivation and interests grows from there. No student is left to silently fall further and further behind the others, and there is little reason for anyone to use disruptive behaviour as a distraction or a defense. Industry trainers have described the way that their students sometimes arrive at TAFE shattered by the school experience. Part of what a CAVSS teacher can do is offer students new perceptions of themselves as being good at using literacy and numeracy as they find that the maths they never understood at school suddenly makes sense to them.

### **Being unteacherly**

There is nothing new about team-teaching, but the idea that the team incorporate two different sets of expertise through being comprised of an industry trainer (often without teaching qualifications, often from a trade background) and a literacy teacher (usually with an academic background and at least one degree) has crossed some fairly well-defined divides in TAFE where so-called academics rarely crossed paths with the blue-collar students or their trainers.

To be successful in delivering CAVSS, literacy teachers have had to find ways to fit in with industry cultures, and to learn, teach and value literacy and language practices that are generally undervalued by schools. They have had to let go of being the expert and actually become learners in new and foreign industry culture, usually very different from the academic workplace cultures they are used to.

CAVSS teachers say that part of being accepted into the industry training environment is to demonstrate a willingness to be unteacherly, and to be able to listen to students talk about some of their school experiences. Many industry trainers were initially hesitant about CAVSS because they were concerned that students would object to having a schoolteacher in the room. Some industry trainers said that they had been concerned to protect students from having their skills, goals and aspirations judged as second-rate, and some said that they were worried that the CAVSS teacher would be making judgements about their own literacy or teaching skills.

It can be difficult for some teachers to accept that for a significant number of students, school is not a friendly and supportive environment. Not all literacy teachers make good CAVSS teachers, but increasing numbers are finding that being able to teach collaboratively with plumbers, electricians, chefs and hairdressers has given them a chance to make real and significant differences to their industry students' achievements and careers, and enjoy a more varied and stimulating work environment where they are constantly learning new skills.

### **Professional Development strategies**

Clearly, one of the central strategies for implementing CAVSS has been to provide professional development for literacy teachers, to assist them to adapt their professional practices, or in some cases, recognise that their values and beliefs would not accommodate CAVSS. For example, a small number of teachers have felt strongly that to accept less than 'correct' language use, or to not encourage students to strive to 'improve' their language practices, would undermine standards of literacy in the country. It is interesting to consider the extent to which some literacy teachers remain unaware of ideas to do with literacy as social practice, and the ways in which literacy and language practices operate within processes that reproduce inequality in society. While the rhetoric of valuing diverse literacies is often heard, CAVSS is providing a means for literacy teachers to actually experience and understand issues to do with that diversity and recognise the legitimacy and richness of language cultures that exist in the real world of work.

The Western Australian Department of Education and Training has developed a series of professional development products for CAVSS teachers, including a two-day workshop in which teachers are immersed in the industry training environment. The workshop is conducted in the Mortar Trades section of the Swan TAFE in Perth, WA, and is delivered by industry trainers in that section who have had three or more years working with CAVSS. The workshop includes a practice teaching session where the participants plan a lesson with an industry trainer and then spend some time teaching in an industry class. For some teachers, it is the first time they have met, or spoken to, industry trainers or students. The workshop is achieving remarkable results. Teachers, who were initially hesitant or unsure about their capacity to teach CAVSS, leave the workshop wanting to start straight away. Teachers who were keen to start delivering CAVSS leave excited about the prospect of teaching literacy and numeracy in the way that 'literacy and numeracy should always be taught!'

Teachers who attend the workshop are often surprised to learn that they will be being taught how to do CAVSS by bricklayers, plasterers and tilers. The workshop is a valuable opportunity for them to learn from first hand experience that industry trainers are highly skilled educators, that those trainers have a serious commitment to helping all of their students achieve their goals, and that the industry students really appreciate the help that a CAVSS teacher can offer them.

### **In conclusion**

To deliver CAVSS, industry trainers and literacy teachers have had to work together to find solutions to the complex problems associated with establishing and maintaining a team-teaching partnership that crosses social, political and ideological divides. In doing so they have created a dynamic that is challenging and changing many of the well-established assumptions and practices associated with doing, learning and teaching literacy. Given the extent to which literacy underpins most aspects of learning, throughout people's lives, these transformations have the capacity to make a real difference.