LEADING CHANGE: AN UNENDING QUEST

LUBOMIR TCHERVENKOV

Corresponding Author: Lubomir Tchervenkov, MEd, MSc (Eng), MIEEE

Address: P.O. Box 5209, South Lake, WA 6164, Australia

Tel: 0466458505

Email: info@lubomir.name

Website: www.Lubomir.name/engineering

Word Count: 8166

Last Date of Revision: 12 April 2013

KEYWORDS

• VET, TAFE, narrative reflection and analysis, technical support, conceptual map, AQTF

^{*} Word Count is excluding Title Page, Table of Contents and References

TABLE OF CONTENTS

 Introd 	luction3	
 Backg 	• Background4	
• New 'I	Managerialism' in Practice6	
• Initia	• Initiating Change8	
• Conceptual Map		
 Conce 	ptual Map: How It Is20	
 Conce 	• Conceptual Map: How It Should Be	
• Conclu	usion	
0	Appendix 1Training Matters	
0	Appendix 2 Docket	
0	Appendix 3Letter to Staff Members	
0	Appendix 4 JDF Technician, level 2	
0	Appendix 5 A Letter Signed By All Lecturers	
0	Appendix 6 The Importance of Effective Leadership37	
• Refere	• References 40	

ACKNOWLEDGEMENTS

I dedicate this work to Stephen Lay, an ASL2 lecturer in the Electrotechnology section of the Challenger Institute of Technology in Beaconsfield campus. Without his inspiration, sharing of expertise and support over the years, I wouldn't be the teacher I am today.

SYNOPSIS

This paper examines a case study from my practice, which clearly outlines the conflict between the aspirations for improved educational outcomes (from an educator's point of view) vs. running the educational institution simply as a business (from a manager's point of view). In their attempt to save money, managers are cutting back on essential practical technical training, which gradually have eroded the quality of delivery over the years. Yet, at the end of the day, everyone points the finger to lecturers. The paper examines my endevours to bring change in this practice, which process is still ongoing. It raises the awareness that the manner in which the educational institution is run has direct impact on the qualify of delivery. Since managers are responsible for the allocation of funds, their decisions ultimately determine the level of practical training for students. The paper concludes that managers should assume full responsibility for any such problems in the section.

INTRODUCTION

Vocational Education and Training is a specialised area of teaching, which requires particular attention to some key elements of delivery. First and foremost are the practical aspects of training. This makes VET institutions quite different from universities. For some disciplines, the latter may teach just by employing the method of reflection on pure abstract thinking concepts. VET on the other hand, is bound to impart practical, hands-on skills and abilities. Thus, for the successful delivery of a VET program, it is crucial to have extensive, practical, training facilities. In addition to this, having a strong technical support for lecturing staff is absolutely imperative. These points are especially valid in the engineering courses. For many units of competency the only way to achieve the desired underpinning skills and knowledge is exclusively through systematic and rigorous practical training.

Unfortunately, a high level of technical support and sophisticated training facilities also means higher costs to deliver those subjects. In their desire to cut costs, managers of VET institutions often either drastically reduce the amount of funding allocated for students' practical training, or cut the funding for lecturers' technical support. Sometimes they do both. What's worse is that in some cases, the official documents that entice students to enrol in a particular engineering course may portray one picture, while in reality, once enrolled, they are faced with an entirely different situation. Sometimes, the program manager of an engineering division holds a generic MBA qualification, but does not have any specialised technical expertise. Also, it is also very rare for middle management to have teaching qualifications. When all these factors are combined, the situation changes from bad to worse.

Since the late 1990s the policy has been to place TAFE appointed administrators, called 'program managers' (usually MBA graduates) in charge of sections. This practice is still thriving, although research shows that it probably shouldn't (Eacott, 2011; Heinz-Dieter, 2002; O'Brien & Down, 2002). The old 'welfarism' was replaced with the new 'managerialism' (Gewirtz & Ball, 2000). The effect upon students' learning is devastating. In order to cut costs, they are given very little practical training and most of their delivery is done just on theory. I know that I am just a common lecturer. However from 2009 till 2012 I led a lot of initiatives in order to improve this situation, as much as I could. This quest is still ongoing.

BACKGROUND

My career as a lecturer with, then Challenger TAFE, began on the 4th of May 2004. Initially I was employed on a casual basis and it was not before the 25th of March 2008 when I was offered a permanent contract. The legality of keeping someone for four years as a causal lecturer without offering him a contact is questionable. However, back then I was happy to do what I was doing. Challenger TAFE was not the only company I was working for. I travelled a lot, which prevented me to take up permanency anyway.

Being an electrical engineer with a Masters' degree, I quickly became a valuable asset to the electrical engineering section. Over the years I thought nearly the entire range of subjects in the Advanced Diploma in Electrotechnology course, including mathematics, calculus, DC and AC Fundamentals, Digital Techniques, Process Control, Transducers, Industrial Installation Systems, SCADA, Amplifiers, and many others... The list is very extensive indeed. Undoubtedly, teaching is a very difficult profession. However, it is more arduous for those of us who have to be both very good educators and content specialists. Even more so, if the content of the delivered subjects encompasses a vast area of specialised scientific knowledge. Finally, it becomes exceptionally demanding, if an entire range of engineering subjects is constantly being updated, restructured and revised.

Anyway, back in those days I did not pay attention to those burdens too much, as I was offered considerable support. The unit descriptors were very specific. This made the identification of content easier. The electrical engineering section employed two technicians, whose job was to provide the lecturers with sufficient technical support. Both of them were very knowledgeable and experienced. They offered partial supervision of the class during practical exercises. They were also fixing technical malfunctions and made sure that training equipment worked properly. They photocopied laboratory exercises and distributed them among the students. They made sure that complex practical equipment is kept in good working order at all times. Back then we had a 'fluid lab' with several complex laboratory stands, where a flow of water and air was measured by various means. It was the technicians' job to check and maintain this equipment. Complex electrical machines and equipment were tested and certified on a regular basis, so they were ready for lecturers and students when needed.

Also ASL1 and ASL2 lecturers offered support to new lecturers. Mr. Stephen Lay in particular, an experienced ASL2 lecturer dedicated a considerable amount of his time to offer me personal mentoring. He showed me where the unit descriptors are kept, how to fill in the necessary paperwork, and was offering generous advice and assistance every time, when I needed it. Since those days, the advanced skill lecturers have had much more administrative functions placed on them. This makes personal mentoring harder. It is increasingly more difficult for them nowadays to juggle between admin work and lecturing duties (Black, 2009).

When I first started at TAFE, the program manager was a qualified mechanic and had some good understanding about the technical aspects of delivery. He was helpful in many respects, because he knew the simple truth that without practical training, the delivery in TAFE is meaningless. On several occasions when I asked him for support, he has been nothing but helpful to me. Once I asked him to purchase some specialised technical manuals for the section. I needed them for my delivery, but their price was prohibitive for students. This was hindering the teaching process. He, then, purchased enough of those books and placed them as 'special reserve' in the library. After that a considerable number of students were able to access those resources over the years. They are able to borrow those books for the duration of the semester. They were required to return them back upon completion of their course. We even continue this practice today, long after he is gone.

On another occasion, in his capacity as a qualified mechanic, the then, Program Manager provided personal support to a student, who was then able to win a gold medal on the prestigious international event WorldSkills (see Apendix 1).

... last year before the international competition, Howard Wilson, program manager of [the] automotive industries and electrical trades at Challenger TAFE, was asked to help Dale who needed financial assistance to get the equipment he needed to train on. With his strong industry links and networks, Howard managed to source and purchase a Nissan diesel engine and Nissan automatic transmission funded by Challenger TAFE for Dale to practise stripping and assembling techniques in record time. Howard and industry consultant Peter Hard of Contract Automotive Management Services were also proactive in arranging with the service managers at Prestige Honda and Magic Nissan-Platinum for Dale to visit their workshops and learn the latest technologies firsthand. A qualified mechanic himself, Howard said it was important for him as program manager to build a strong relationship between TAFEWA and local industry, and that the benefits of those links had paid off for Dale ("Dale Mops Up a WorldSkills Gold," 2008).

To summarise my initial experience as a lecturer at Challenger TAFE, I can identify the following important provisions, which supported lecturers in their delivery:

- Technical Support Personnel
- Technical Equipment
- Administrative Support
- Supportive Management

These are the main pillars upon which a successful VET and technician education rests upon (Hermann, Richardson, & Woodburne, 1976). There are others as well, such as lecturer's abilities. Also, in recent years a lot has been written about Professional Learning Communities. The research conclusively demonstrates that when lecturers are given more autonomy over the micro-management of their sections, their work becomes "more transparent to public" (Wood, 2007, p. 699) and it can be linked to better student performance(Visscher & Witziers, 2004, p. 798). We are going to elaborate on this concept later on. However, for now we are going to continue with the narrative of the story, in order to obtain the full picture first.

'NEW MANAGERIALISM' IN PRACTICE

The situation in my workplace started to change around 2007. A new program manager was appointed. He was in possession of a MBA degree, but he did not have technical background or any qualifications in education. This case is not isolated. It represents a definite trend that the VET sector is run as a business model, which started about a decade ago.

The history of TAFE shows that technical education has undergone two major reforms in its history. The building blocks of the TAFE system were established in 1974 by the Kangan report (Australian Committee on Technical Further Education, 1974). It was extremely important, because it put TAFE on national agenda for the first time. It outlined all important areas of future TAFE developments, training of staff specialists, counselling services, curriculum research and development, grants to develop facilities and so on.

Then the second big shift occurred in 1996, when the National Training Framework (NTF) was implemented. It consisted of three major components: an industry driven system, the development of Training Packages and the Australian Recognition Framework. This gave an impetus to the second major overhaul of the TAFE system, which commenced in July 1998 with the release of the report "Today's Training, Tomorrow's Skills" (Goozee, 2001, p. 99).

Basically, the new line of TAFE management envisaged that those institutions can be run by a new cast of public servants and administrators (usually MBA graduates). It was believed that there is no need for them to be wedded to any specific industry or professional sector. They were expected to apply generic management skills to run any type of business, say a factory, a department store or a teaching institution. Gerwirtz & Ball (2000) describe this phenomenon with the term 'new managerialism'. This topic is explored in a greater depth in my paper "The Relationship Between TAFE and Its Lecturers' Community: An Attempt to See the Future" (Tchervenkov, 2012b).

There is overwhelming evidence in academic literature that this model is prone to failure and that it has a disastrous effect on the teaching and learning process. For example, Heinz-Dieter (2002) argues that managers in schools and universities cannot succeed if they simply "imitate" the practices of their peers in business and that a qualification in the field of education is imperative for success. A local Perth study, conducted by O'Brien & Down (2002) identifies at least 14 serious problems arising from the current 'managerial' system. Among them are: the inappropriateness of corporatisation of the public sector, burying teachers in administrative paperwork, increased levels of stress and little accountability for managers. Dennison & Shenton (1990) classify schools as 'professional bureaucracies', where both roles of 'leading professionals' and 'chief executives' should be amalgamated into one.

In the context of the case study which I am describing here, the new program manager adhering to the true spirit of the new 'managerialism' showed very little appreciation about all the important premises, supporting practical training mentioned before. In his desire to 'cut costs' and make the section 'more effective', he gradually undermined all provisions, which previously supported effective delivery in the classrooms and the laboratories.

INITIATING CHANGE

At first, it was difficult for me to figure out that the era of the 'new managerialism' (Gewirtz & Ball, 2000) had arrived in our division. The change was subtle and gradual. Additionally, it was difficult to figure out the exact motives of the new manager. He is a well behaved man and has the manner of speaking beautifully and candidly, so at first he appeared to be a really 'good guy'. It took couple of years, before everybody realised that his words do not match his actions.

By March 2009 I have noticed that the continuous lack of technical support has impacted very negatively on my delivery and I have decided to take decisive action about it. It took me two years to figure out that speaking to the program manager was totally unproductive. Every time he admitted that there were problems that need fixing and promised to do something about it, but in reality he never did. By that time, one of our technicians retired and was replaced with another one. It seemed like the new technician was not provided with proper training, neither was he given clear instructions about his duties. Instead of providing technical support to lecturers, he resorted into more administrative work, OHS duties and accomplishing special tasks, that were given to him by the management.

Gradually each lecturer was left on his own to cope with both academic and practical delivery. Also, the training equipment was in a dire need to be replaced, but the program manager was not doing anything about it. Early in 2009 I tried to obtain the support not only from Stephen Lay, but from some of the others ASL2 lecturers in order to change the status quo.

Something that springs to mind are the (at least 25 years old) digital trainers, which need replacing. They are getting beyond repair and are also very dated (G.C. personal communication, 24 March 2009).

On the 9 September 2009 I wrote an email to all the lecturers, trying to raise their awareness about the importance of technical support in our section:

We need to prioritise. My understanding is that the first priority of the technician is lab support. I think we all agree that the primary task of TAFE is delivery. If we are not able to deliver, then we have to shut down the college. Anything else is auxiliary. A technician should be available on standby when labs are going on. Sometimes, certain equipment problems should be addressed immediately. We cannot make a group of 20 students or so stay idle, while the equipment malfunctions ... This is how things were set up few years ago ... I am sure that if technicians and lecturers all work together on this issue, the quality of delivery will greatly improve (Tchervenkov L. personal communication, 9 September 2009).

Unfortunately, the fear factor prevented all lecturers to be united around this idea. The reply came back from the same ASL2 lecturer, mentioned previously: "You need to address the main issue/s here to the management, who can coordinate/consult the way the section operates" (G.C. personal communication, 9 September 2009). The lecturers in our section did not stand united, which allowed the 'managerialism' and the associated with it lack of technical support to escalate even further.

Later on this year, the technician introduced a repair docket system (see Appendix 2), requiring lecturers to "provide some relevant, accurate information, on any fault condition before placing the equipment in the office of the appropriate technician, to aid in its repair" (D.G. personal communication, 25 November 2009). Essentially this meant the end of any technical support for several units of delivery. It was ludicrous to fill in a docket for each job and wait days for assistance. A lot of those things could be performed in a matter of a few minutes.

As the problem escalated, the program manager called a meeting on the 2 December 2009 in order to resolve 'technician issues'. On this meeting I wrote and distributed to all staff, present at the meeting a three page document, addressing the lack of technical support and my vision of what procedures we must put in place in order to rectify the issue. This letter is enclosed in Appendix 3. In it I write:

The bottom line is that we, lecturers, need adequate technical support. It seems that we do not have such at the moment. Every time that we require even some very minor technical job to be done, (such as replacing a fuse, for example) we are faced with a major opposition. Either we have to complete two pages of paperwork per faulty meter, or we have to give explanations and justifications why students blew the fuses in the first place. Without adequate technical support, we are not able to deliver quality practical training according to the AQTF [Australian Quality Training Framework] procedures. This seriously impairs the quality of delivery in our section and leads to all sorts of auxiliary problems (Tchervenkov L. personal communication, 2 December 2009).

Unfortunately, back then I did not succeed to obtain enough support from the other lecturers, more specifically those in the ASL1 and ASL2 positions. The entire issue was presented as a personal clash between me and the technician. However, I did not believe then and I do not believe now, that this was the case. I believe that something much deeper was happening here. The old system of 'welfarism' was being replaced by the new 'managerialism' and we were bearing its first fruits. Those were lack of technical support, lack of unity among the lecturers and unwillingness from the management to replace the out-dated training equipment. A technically competent manager was replaced by a TAFE appointed administrator. The latter was determining the section priorities from a 'managerial' point of view. He was running the section, entirely as a business unit. In his desire to cut costs, he was undermining the very foundation of our operation: the practical, technical training.

Then I was called in the program manager's office and I was told in a private conversation that if I continue to talk publicly about the lack of technical support I may lose my job. Clayton, Fisher, & Hughes (2005) assert that "knowledge loss" is becoming a major concern for the VET sector, especially due to the changing demographics of lecturers. However, this didn't seem to concern our program manager. "TAFE institutes greatly depend on the vocational competency of their teachers—their technical competency and currency, comprehensive industry know-how, networks and high-level teaching skills—to maintain and

build their credibility" (Clayton et al., 2005, p. 9). I was newly appointed to my position as a permanent lecturer, so I decided to back up. From that moment onwards neither the technician ever offered his support, nor did I ever ask for it.

I knew it was wrong, as the technician's job description form explicitly states otherwise. It clearly states that among the other duties, he has to "set up equipment for laboratory classes and demonstrations and supervises its use for groups of students, who are under the direction of lecturers. Assists the lecturer, where necessary, in the description of operation of test equipment" (Job Description Form for Senior Technician Electrical Engineering, level 3, see Appendix 4).

Unfortunately, it took several years before all the lecturers began to see clearly what is actually happening. By that time, however, the new 'managerialism' has entrenched itself deep in the structure of our division. The program manager's methods of operation were often very obscure and it required a lot of critical thinking to get to its main purposes.

For example, two lecturers came to work for our section at the same time. They both studied at the same university and obtained the same engineering degrees at the same time. They knew each other for many years and were good friends. After working for a while on a causal basis, the program manager placed one of them on a full-time contract, while he offered the other one only a 0.8 FTE (full-time equivalent) position.

The explanation was that there was not enough work for both of them. In such a way he ingrained a deep division between those two colleagues and friends. Those 'managerial' techniques are consistent with the findings of Shorne (2008) in her theses "A Study of the Lives of Casual TAFE Lecturers in Metropolitan Perth". If it was really true that there was not enough work, why weren't both lecturers placed on 0.9 FTE each?

At the end, the second lecturer felt underappreciated and after some time he left. He could not tolerate being subjected to such preferential treatment any more. He is now working for the industry. Challenger Institute lost a valuable specialist. This example illustrates that it is difficult to initiate change among workers, who are fearful for their job security. The ancient

Roman postulate "Divide and conquer" is still successfully implemented in reality by the new 'managerialism'.

So, I have partially accepted the fact that there is no technical support and no managerial support for my classes, but at least I wanted to fix the issue with the remarkably old equipment, which I was forced to use for my delivery. I reminded the program manager at every opportunity that this equipment needs to be replaced. I asked a group of my students to conduct a research, as part of one of their units. Their task was to establish approximately how much it would cost to replace the old equipment. There was overwhelming evidence that the budget would not exceed \$5,000. I showed my program manager this research and asked him for his assistance. Yet, time was passing by and as usual he did not take any action. An opportune moment appeared on the 24th of March 2011. The director called a meeting in regards to the proposed new budget for the section. The total amount of money allocated for equipment upgrade in the division was very large. However, even in those circumstances the program manager blocked the spending of a mere 1 or 2 % of the allocated budget for my classroom. In a letter to him from 29 March 2011 I write:

In regards to the meeting from the 24th of March 2011 and the proposed package for new equipment, I have to say that the requirements for the practical delivery of my subjects are NOT met. As you are aware the practical equipment in UL 05 is manufactured in the 70s and the 80s. The labels attached to it clearly indicate that the last time it has been calibrated by our technicians was back in 2006. Also the power supplies/function generators that we currently use, pose a real danger of electrocuting a student who is not careful enough. The output of these machines can be increased to the dangerous level of 200 V. I always make sure that I warn the students not to use this option. However, I work with large groups and ever since Terry Leitch left TAFE I have never been assisted by another person when conducting the labs.

Therefore, I cannot physically supervise all the students at every single moment of time. In my view this is a potential disaster waiting to happen. For this reason I have been insisting for several years that we totally replace all the equipment in UL05 (Tchervenkov, L. personal communication, 29 March 2011).

My letter was simply ignored, as many others. According to Gasskov (2006) all governments wish that their VET institutions operate flexibly, cost-efficiently and respond quickly to the changes of the labour market. However he points out that such responsiveness depends on large extent on the competence of their managerial staff. Also, there is an excellent conceptual model for accountability developed by the Department of Education and Training (2008). There is conclusive research, which shows that teachers make a difference in classrooms (Hattie, 2003).

However, what is often overlooked is that managers (especially middle level managers) can make a significant contribution towards uplifting or dropping school performance. Barber & Mourshed (2009) draw an exponential curve depicting the relationship between effective leadership (including administrative) and student's performance. This graph is reproduced in Appendix 6. Thus, they conclude that "maintaining an orderly environment, budgeting, and support functions" are extremely important (Barber & Mourshed, 2009, p. 28).

Finally, I decided personally to inform the CEO of the college and stress the need for new equipment. One day she passed down the corridor next to my teaching room, together with some delegation. I rushed out and invited her to come and have a look at the lab herself. In the 5 min, which I had to talk to her, I managed to convince her that replacing our equipment is very important to our section. So, finally thanks to her personal involvement several months later the new equipment was delivered in my teaching room.

However, this was not a happy ending. Even though the section had new training equipment, the program manager managed to twist the outcome once more. The selected apparatus was different from the one, which specified based on my students' research. The total cost was \$ 18,000 instead of the projected \$ 5,000. It was unclear who made the decision to change the technical parameters of the equipment, which I ordered and what engineering

credentials those people had (if any) to make such a decision. Later on the equipment was removed altogether from my teaching room and placed somewhere else.

All this clearly indicates that the program manager in our section is either incapable, or unwilling to assist delivery by providing adequate technical and managerial support. His actions sometimes are, quite sadly, defeating the real purpose of training and delivery. Alas, middle level managers are accountable to only a few people. They are usually their immediate superiors, and this is how middle level managers often escape accountability. One of the key findings of O'Brien & Down (2002) show that "Accountability is a one-way process, where teachers do not have the opportunity to make their views heard" (p. 129). Most data used in academic research is also taken by interviews with middle management. In such a way they can hide their own poor performance behind the overall data (Misko & Halliday-Wynes, 2009; Normore, 2004). My efforts to initiate change, however, did not remain unnoticed. Other lecturers started to see the situation more clearly and became more organised.

On the 24th of November 2011 as part of my 'lead for change' initiative, I gathered most lecturers to come with me to one of our labs, in order to identify obsolete equipment. The problem with it was that it was obstructing access to useful equipment. Also, its mere presence made the management reluctant to purchase new training aids. In the eyes of non-specialists, it looked like we have a lot of gear. The truth was that most of it was totally useless junk from the 60s and from the 70s. Apart from its sentimental worth and probable use for some museum, it did not hold much other value. This equipment was long overdue for decommissioning and there was dire need to be modernised.

The lecturers collectively identified what equipment was not needed any more. 55 pictures were taken and were then emailed to every lecture in the division. Some of the images were disturbing. There were obvious OHS issues, and a long standing neglect was apparent throughout the store. Some equipment was locked in cupboards by the program manager. The date on it read 26 February 2010.

In the book "Good Practice in Vocational Education and Training" it is written:

Change and responsiveness are a function of the incentive structures. A key issue is what those in charge (in system management or in the training center) gain or lose. In the majority of cases, inertia carries a prize, and change brings trouble to whoever promotes it. Therefore, getting the incentives right is fundamental to reform and to the execution of investments (Asian Development Bank, 2009, p. 67).

On the 14 November 2011 I emailed the most disturbing photographs to the Director of the Defence and Resources, with copies to the Program Manager and to all lecturers. Collaboratively, all lecturers made propositions concerning the better operation of the division. In particular there were suggestions concerning the optimal sharing of resources, technical equipment, teaching rooms and laboratories. Then on one of the staff meetings with the CEO of the college, I had again another 5 minutes opportunity to talk to her and make her aware of the underutilisation of some of the current rooms. She seemed to be very understanding and indeed some action was taken after this. Some of the stores were immediately cleaned out, some of the labs were improved, we gained access to one additional room and improved the unitisation of the existing rooms.

However, after that 'incident', I was called personally by both the program manager and the program director on a 'private discussion' with them. No other staff members were allowed to attend this meeting. I was reprimanded not to take such initiatives any more. The entire situation was absurd. I was criticized for talking to the CEO of the college on an informal staff meeting, the entire purpose of which was that she hears the opinions of the staff. It clearly indicated that the middle management was doing everything possible to stop any initiative and creative thinking that originated at lecturers' level to reach the upper echelon of management.

This practice directly contradicts the four paradigm model developed by Dr. John Mitchell (2007), which resides at the core of the Challenger Institute's mode of operation. In fact, the entire process of lecturer progression towards the ASL1 (Advanced Skills Lecturer) position is based on Dr. Mitchell's model about the 'advanced VET practitioner' (Mitchell, 2009). According to it, lecturer's characteristics should foster the development of four

paradigms. These are lecture centered (1st paradigm), learner centered (2nd paradigm), training embedded within an enterprise (3rd paradigm) and industry-wide workforce planning (4th paradigm).

"A related findings is that the boundaries between the paradigms are fluid, not fixed, porous not water tight. Advanced practitioners find it easy to jump in and out of different paradigms" (John Mitchell & Associates, 2011, p. 10). According to Mitchell (2007), the lecturer adhering to paradigm 2 should be able to apply "training needs analysis services to implement workplace training and assessment strategies". According to paradigm 3, he should be able to demonstrate "teamwork capacity, resilience and initiative". According to paradigm 4 the lecturer should "exercise a high degree of professional judgement" and have "leadership capability" (Mitchell, 2007).

And yet, as it was clearly demonstrated in my case, the practices of both my program manager and my program director directly contradicted this model. The executive team of Challenger must be warned that the honest attempts of lecturers to adhere to the four paradigm model are being discouraged and discontinued by middle level management. Maybe, the reason for this is that in this particular case both the program manager and the program director are neither qualified engineers, nor do they possess any teaching qualifications. This topic is fully explored in my paper "Essential, Desirable and 'Would be Excellent to Have' Qualifications for VET Lecturers, Managers and Directors" (Tchervenkov, 2012a).

In his book "The Fourth Way of Finland", the world renowned educator and Director General of CIMO (Centre for International Mobility and Cooperation) Pasi Sahlberg writes:

... all too often, those who speak truth to power come to regret it. The way I see it, our time to speak out is now. Andy Hargreaves has eloquently mentioned that just as much as there are cornerstones for any grand ideas, we need corner stores for alternatives. I remain one faithful client to be met there (Sahlberg, 2011, p. 184).

So, following his inspiring example I decided to continue my initiative, which is aiming for the improvement of our section. I initiated the draft of a letter, which was subsequently signed by all the lecturers in the Electrotechnology division. They all collaborated in writing it. The letter is called "Lack of Technicians and Increased Lecturers Workloads in the Electrical Engineering Department at Fremantle Campus" and it is reproduced in Appendix 5. All lecturers expressed their concerns in regards to the way our section is managed. This letter was written in a truly democratic fashion. Everyone contributed to it. It was a marvellous example that our section can function as a professional learning community. As Wood (2007) puts it:

...successful LCs [learning communities] foster teacher collaboration and make practice public. At a deeper level, however, this type of professional development depends on teachers taking more control over their work, realising tacit knowledge and expertise, developing critical judgement, and taking fuller responsibility for student learning. Such a construction of teacher's roles and responsibilities sometimes collides with entrenched norms in school cultures (p. 699).

As outlined by Thompson, Gregg, & Niska (2004) there is a link between professional learning communities and leadership. However, as pointed out by Buck (2008), Hord (1997) and Vescio, Ross & Adams (2006), in order to flourish, the professional learning communities model should be supported by the management. However, in the VET sector, thanks to the new 'managerialism' which has been instilled for years, changing the methods of administration is not going to be an easy task. The middle level managers have been given too many rights and entitlements. It is only natural for them to try to preserve the status quo, although their practices may be against the best interest of the students and the quality of delivery. And this is where the clash occurs.

On three pages the lecturers list event by event what led to the current dysfunctions in our section. Most of them can be attributed to the practice of new 'managerialism'. This should not come as a surprise when highly capable professionals are managed by TAFE appointed bureaucrats. Some of the lecturer's recommendations, (endorsed by the union) are:

- Decisions at a managerial level, concerning *technical* issues should be made with a prior consultation with lecturers. They are specialists in this area, not managers.
- Lecturers should be fully informed about the management's decisions, rather than finding about it via the rumour mill.
- OHS issues are becoming a concern, without properly trained technical staff and support, resulting to non-functioning equipment. Lecturers are not necessarily trained for technician's duties.
- Technicians must collaborate very closely with lecturers.
- Better inventory of equipment is to be maintained at all times.

There is a striking similarity between our own recommendations and those made by Rice (2004, pp. 9-10) in her research. This letter was not officially submitted to the program manager, however the issues in it have been communicated to him personally on many occasions in private conversations by all of us on numerous occasions. I went on 6 months leave to finish my Master of Education degree and this project remained unfinished. As Lashway (1996) reminds us, ethical leadership requires us to sometimes make some difficult choices. "How can the evolving *modus operandi* of business in schools (the 'business of education' – structural and cost efficiency, quality assurance, income generation, performance indicators, accountability ...) be prevented from surprising the 'ethics of care', i.e. the schools' caring role and duty of care" (Burke, 2000, p. 20). So, the quest for initiating change is ongoing...

CONCEPTUAL MAP

My original idea was to draw a square, labelled "Vocational Education and Training", which is 'supported' on several other vertical rectangles. In such a way it could be graphically represented what provisions are supporting this specialised type of training. However, the notion of drawing squares or circles to depict education did not appeal to me. I have always

envisaged that education should be depicted as a temple. Back in antiquity, education was a privilege, not a right. It was typically imparted to selected disciples in closed (often religious) organisations.

Since science originated in ancient Greece, I imagined that modern 'Vocational Education and Training' should be depicted as a Greek temple. The writing would be on its pediment, while the columns will *support* the pediment and distribute its weight equally. The essential columns of VET education are teacher abilities, technical support, administration support, professional learning communities, supportive management and adequate technical equipment.

However, as it was outlined in my report, in order to save costs, the new 'managerialism' essentially cut all the supporting columns. At the moment only one of them is still there, although it is cracked all over. The last column is essentially the teachers. Some of them put a heroic effort to support the entire vocational education and training from collapsing. From students' point of view, this is in fact the only 'column', which they observe directly. They don't see the enormous bureaucratic apparatus, which is hidden behind the facade. However, the middle management, in their attempts to 'cut costs,' try to undermine even this last column. If this happens, a disaster may strike the vocational education and training.

Australia's technical and further education (TAFE) institutes have an ageing teaching workforce, whose impending departure endangers the institutes' skill base ... TAFE institutes greatly depend on the vocational competency of their teachers—their technical competency and currency, comprehensive industry know-how, networks and high-level teaching skills—to maintain and build their credibility. Retaining, developing and renewing TAFE institutes' organisational capability involves planned recruitment ... Such approaches need to be properly resourced, and supported by funding bodies, policy-makers, TAFE management and teachers (Clayton et al., 2005, p. 9).

So, all this led me to depict the present situation of the VET sector 'how it is' and 'how it should be' on the following two diagrams. Please refer to table 1 and 2.

CONCEPTUAL MAP: VET - HOW IT IS

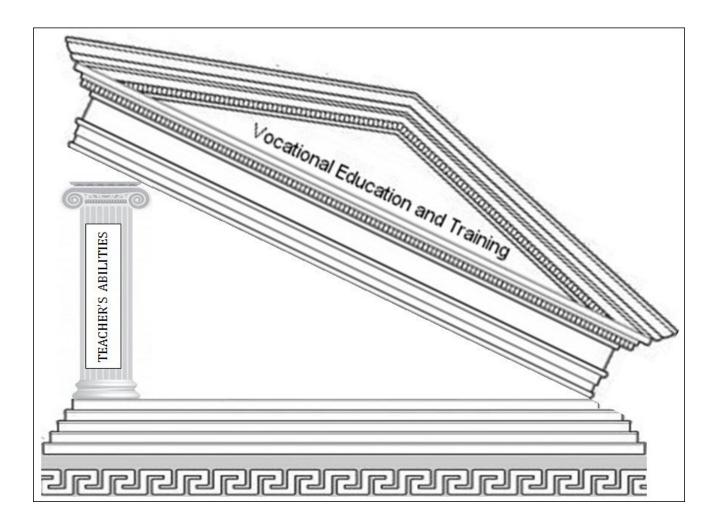


Diagram 1. Vocational Education and Training – How It Is. This conceptual diagram depicts the present situation of the VET sector, pertaining to our case study. There is no adequate technical, administrative and managerial support to lecturers, the technical equipment is out-dated and the ASL1 and ASL2 lecturers are buried in administrative work. All these factors combined, result in delivery which is solely vested in the personal capabilities of the lecturers. Such a model is extremely inefficient. The entire structure may collapse at any moment, as it is only supported by the heroic efforts of individual lecturers.

CONCEPTUAL MAP: HOW IT SHOULD BE

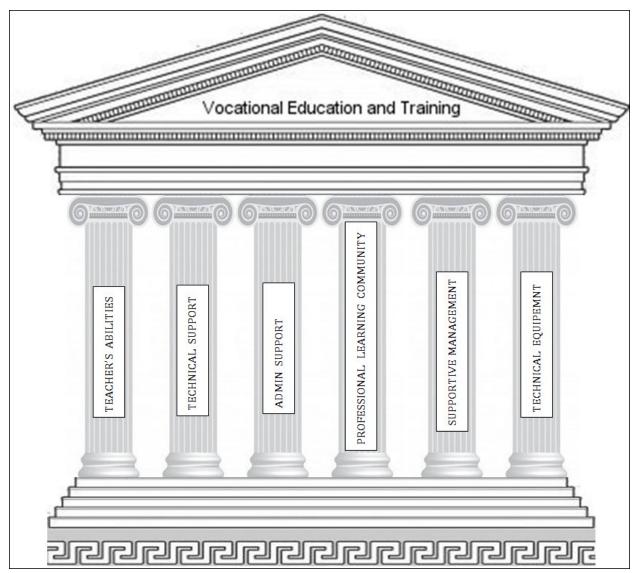


Diagram 2. Vocational Education and Training – How It Should Be. This conceptual diagram depicts how the VET sector should look like. In this ideal model the weight of the delivery is supported by several important pillars. In addition to teacher's professional and educational capabilities, there is strong technical support, which is combined with modern technical equipment. Lecturers are organised in professional learning communities. The administrative personnel are supportive and are taking some of the admin burden away from the ASL 1 & 2 lecturers. Management is professional, qualified, competent and supportive.

Looking at a temple of knowledge lying down in ruins is not an easy task, especially for those who love the teaching profession. However, we must realise that we are all partially to blame. Our complacence with the system allowed the current 'managerialism' to rise and rule the teaching profession. Afraid to speak up, we all became entrenched and conditioned to a system, which is going against the grain with what we, educators, really are. Fink (2010) summarises it beautifully like this:

It is "about time" we focused on learning and not on all the artefacts of learning that tend to dehumanize children by reducing them to aggregated and disaggregated numbers; and "about time" we gave students, teachers, and school leaders the time to focus on what the job is all about; and "about time" we began to actively seek, develop, select and sustain "leaders of learning" rather than just "managers of things" in all of our schools and school districts. At the heart of the succession challenge is the reluctance on the part of many dedicated educators to risk their personal security and professional ethics in the pursuit of policies that are at odds with the reasons they became teachers in the first place (p.22).

ANALYSIS

Based on everything what we said so far, we can identify the following main objectives, of the initiated change. Those are pretty much concurrent with the six columns, depicted in the second conceptual map. In this paper I did not write much about my personal professional development as a lecturer, neither I touched a lot on the administrative support. Those topics remained outside the scope of this work and may become a subject of future writings. In other words, what I was primarily trying to achieve was:

- Achieve better technical support for our section.
- Obtain better practical training equipment for our section.
- Organise the lecturers in our section into a kind of a professional learning community.

• Get more managerial support for the above causes.

In some of those causes I succeeded, in some I didn't. For example, I managed to obtain more practical training equipment and I brought certain awareness to the lecturers' community that they have to be more organised and attentive to the problems in our section. Initially most of them believed that *all* the problems in the section should be resolved on a managerial level. Now many of them believe that lecturers are quite capable to self-manage a lot of aspects of our daily tasks by ourselves, provided that we are given greater autonomy and a small budget.

I could not succeed to obtain more technical support. The existing technician still dedicates a lot of his time to fulfil tasks which have nothing to do with the delivery in our section. When he is not busy with those tasks, he is not particularly helpful. The position of the second technician is still not filled. It has also not been advertised and has been vacant for more than a year now. Also, I could not persuade the manager to effect some positive changes. It seems that lecturers and managers have sometimes diametrically opposing agendas. However, without the managerial active involvement, the existing technician will continue to shirk his responsibilities. We, as lecturers, do not have the authority to direct him and we cannot enforce that he fulfils the obligations of his position.

The strengths and weaknesses of the discussed initiative for change are as follows:

Strengths:

- Strong conceptual understanding of the occurring processes.
- Very good analytical skills.
- Good writing skills.
- The ability to persuade, initiate and motivate others.

Weaknesses:

Need for more decisive actions.

- Need to develop more tolerance towards others.
- Need to understand the situation also from the managerial point of view.
- Limited capacity to initiate and sustain change due to the limitations of my current position as a common lecturer.

The only way to overcome the problems with the inadequate technical support is to obtain more managerial support. The strong hierarchical structure of the college demands that certain procedures are followed. It will be very difficult, if not impossible, to obtain change from below without the support of the middle management. Even if the executive team of the college takes decisive action and parachutes one or two improvements for our delivery, a long term sustainable change will not be possible. A radical change in the middle management is needed.

The problem is rooted not so much in the particular people, who occupy the middle management positions, but rather in the managerial model, upon which our college operates. Some of the current responsibilities of the program manager should be distributed to the lecturers. The section can be successfully micromanaged by the ASL1 and ASL2 lecturers. They should be given some time off lecturing, so that they can do some of the associated administrative work (O'Brien & Down, 2002).

All lecturers should be organised in professional learning communities (Hord & William M. Sommers, 2008). They should meet every week for brief professional meetings. The middle management should be supportive of such an initiative. Some sort of limited budget (say up to \$5,000 per semester) should be given to the section. The lecturers are professionals and they can decide among themselves how to direct the expenditure of that money (O'Brien & Down, 2002). This will allow them to purchase relatively inexpensive equipment quickly, without the necessity to wait for years for bureaucratic approvals. This money can be used to buy some inexpensive demonstration equipment or some trivial things for the section, such as new desks and chairs, or even coffee and tea or a new kettle. Those small gestures of good will may help to alleviate the presiding current negativism among lecturers towards management. Lecturers

will feel more valued, more independent and more appreciated. Ultimately this will motivate them and it will give them an incentive to perform better (O'Brien & Down, 2002).

Unfortunately, one limitation of my initiative is, of course, the very limited power which is in my disposal to officially change the status quo. The decision to shift some of responsibility for the daily running of the section from middle management to professional learning communities has to be done probably on executive level. The middle management will never instigate such a change, without pressure from 'above'. Also, the executive management has to be sure that the middle level management is really supportive of such initiative, as it is very easy to quietly sabotage it.

Lecturers should have more say about how the technical support is running in the section. For example, if issues are identified on the weekly lecturers' meetings, the technicians should act straight away. As it is per their job description, they should liaise and collaborate predominantly with the lecturers and not so much with the program manager. Lecturers who operate as professional learning communities share resources. Therefore, it would be excellent if they are encouraged to digitise most of their delivery. In such a way most of their resources can be made easily distributable from lecturer to lecturer. They can be encouraged to take 5% extra pay in order to develop online resources, which could then be shared with the rest of the community. Overhead projectors and paper printouts should be discontinued. Most subjects should have an online component. Blackboard is one viable option. If I was a program manager I would definitely look at all those alternatives and many more.

CONCLUSION

The new 'managerialism' has had a devastating effect upon the students' education, especially in the paraprofessional engineering education. The model to manage the VET sector with business managers is old and ineffective. We need a new breed of professionals, who cross disciplines and are educated simultaneously in several fields, such as engineering, education and business. These will be the new leaders and managers (Simon & Bonnici, 2011, p. 10). They

will be able to incorporate support on all levels: technical, administrative and educational, thus restoring the value of our technical college.

Managing educational institutions simply as a business is a recipe for disaster. The diplomas that every educational institution issue hold their value only if others place their *trust* in them. The process is similar to printing money. The value of the paper on which the bank notes are printed is minimal. What makes them valuable is the public *trust*, that they can be exchanged anywhere for exactly the same value, which is printed on them. Besides, the value of the printed banknotes is inversely proportional to their number in circulation. The more money is printed, the less value they hold. This process is called inflation.

Similarly, educational institutions are bound to print diplomas only when the statement printed on the paper is true and correct. That means that the bearer of the diploma is really competent in some particular field and he or she holds a practical skills 'value'. Then, the skills, printed in the diploma can be exchanged for employment and remuneration. Also, the teaching institutions should print only a limited amount of diplomas. Otherwise their value will dramatically decrease. The diplomas issued by the VET sector are only valuable, if the public and the prospective employers have the *trust* that the bearer is thoroughly instructed, tested and made truly competent.

The current 'managerial' system produces an extremely high educational 'inflation' of the issued diplomas. This is because managers (and especially middle level managers) are only interested in short term profits. Our Advanced Diploma courses, for example, have been shortened with one semester. Instead of being delivered over two and a half years, they are now delivered in two years.

This means that our Advanced Diplomas already have lost 20% of their value. This is because lecturers now have 20% less time to teach the same qualification. Inevitably some of the previously imparted knowledge and skills have now to be dropped. This is nothing else, but an educational 'inflation'. The diplomas produces in such a manner hold less value than the ones, issued previously. The managers and bureaucrats can justify this the way they want, but we know the truth! In a similar fashion, the governments can try to persuade us in their sound

financial practices and yet, when they print too much money, the inflation rises and the bond markets show the difference.

The managers cut costs to save on technical support and new equipment. They are predominantly occupied with achieving financial targets, instead of focusing on education. Unfortunately they forget that the main 'product' of their 'business' is in fact 'education'. Middle level managers are predominantly MBA graduates. As such they should have learnt at university that if a business is offering a low quality 'product' it usually goes bust.

Some teaching institutions concentrate on the value of education and this is the reason why they thrive so well in an increasing global competition on the educational market. Places like Harvard, Oxford, MIT or Cambridge still hold a very high value of the diplomas they issue. At the same time some other places issue diplomas to just about anyone, who is eager to pay them. Thus, their diplomas become extremely hyper-inflated and hold very little value. Challenger Institute of Technology has some important decisions to make about the direction in which it wishes to go in the future. In the words of Prof. Andy Hargreaves (2009) "Now is our moment of choice" (p.36). If nothing is done now a time may come when the actual paper, which our diplomas are printed on, will cost more than the qualification itself.

14 Training Matters



At Just 23, Dale McMullen is fast on his way to big things after representing his country at the 39th WorldSkills International Competition – and it all started with a WA apprenticeship.

When he was a young boy mopping floors in his father's mechanical workshop, Dale couldn't have imagined that in just a few years he would be gracing the Worldskills stage in Japan. But it seems that those years spent cleaning up after mechanics at G-Mac Auto Centre in Myatee were what gave Dale the edge over his competitors, it enabled him to win Best of Nation and a gold medal in the automotive mechanics category at WorldSidis in Japan in November 2007.

"I think because I have had a lot of experience and been exposed to the Industry for a long time, I was very adaptable." Date said.

"Also, the pressure didn't seem to get to me as much as the other guys."

As the automotive mechanics representative

In the Australian WorldSkills te am, Dale had to compete in seven tasks at the international event in Shzuoka, Japan. He did so well that he was recognised not only as the best in his trade, but as the best Australian competitor in the event.

it's a proud achievement for the young mechanic who displayed exceptional dedication and commitment to get there, and had a strong, supportive learn around him.

As well as his dad Graeme and colleagues at G-Mac Autos, Dale worked closely with WorldSkills automotive technology category

Appendix 1. Dale Mcmullen wins the title "Best Mechanic in the World" on the 39th WorldSkills International Competition in Japan in November 2007. Behind him are some of his biggest supporters – dad Graeme McMullen and Challenger TAFE Program Manager Howard Wilson ("Dale Mops Up a WorldSkills Gold," 2008).

Note: ALL FIELDS ARE REQUIRED TO BE FILLED IN.		
Equipment Repair Docket.		
Date of Request. : Equipment Type. :		
Problem / Fault Condition.		
<u>:</u>		
Requestor.		
Signature. : Repair Status / Progress.		
<u>:</u>		
:		
÷		
Repair Date. : Signature. :		

Appendix 2. A repair docket system was introduced by our technician on 25 November 2009. This essentially meant that most lecturers did not resort to his 'help' anymore, as the efforts around the paperwork involved were greater than fixing the issue themselves.

Why students blow fuses? ... and what should we do about it?

Does it mean (as per email) that "the students are not being given the necessary information to enable them to use the equipment properly and carry out the required readings correctly"?

- First of all let me say that I don't believe that it is appropriate for technical support staff to pose this question. His job is to provide us with technical assistance and not to question our abilities to deliver, but since the question has been raised, let me try to answer it.
- We teach students how to measure currents from the very beginning of the course. It is described in Floyd, there is a poster on the wall in UL05, it is in their notes, it is in their labs, it is in their home works. How to measure currents and voltages are the first questions, on the first page of their first test.
- 3. However, some students learn better academically, while for some others the only way to learn is by experience. So, that second type of students needs to blow 3, 4, 5 or even more fuses before they learn how to use multimeters properly. But this is OK, as fuses are cheap and relatively easy to replace. It is all part of the learning process. The students are here to learn, the lecturing staff is here to facilitate their learning process and the technicians are here to provide the lecturers and the students with technical support.
- 4. The labs (including ULO5) are shared between several groups and lecturers. Sometimes students claim that the fuse of their multimeter was already blown before they started the lab. This often may well be the case. It is very difficult to tell in a large size group who exactly did what.
- In previous years, the technician used to check multimeters for faulty fuses before each lab.
- 6. The large size of the groups makes it extremely difficult, if not impossible for the lecturer to police everybody. We often deal with groups of 18, 19 and more students per group. The latest group I had for DC fundamental had initially 35 students in it, before it was split into two. In order to conduct the practical exercises properly, the maximum number of students should be no more than 12.
- 7. Even well trained people can make a mistake, lose attention and blow a fuse. When we are dealing with students who are still learning, and especially when we are dealing with large groups of students, the chance of making a mistake is increased many times over.
- 8. Most of the students have not been resulted yet as competent. Some of them have not passed their mid-semester test. Many have not completed all their lab work yet. They are still in a process of learning DC fundamentals. Therefore, it is normal for them to blow fuses at this stage and it is the technician's job to replace them. Otherwise this issue seriously hinders the delivery and the training process.

1

9. To use a simple analogy, when we have a problem with our computers, we dial 8585 and ask for computer support. The technicians in that department do not start to accuse us that we computer illiterate, but are there to help us to resolve our problems. The same rule applies to the students and the multimeters. Otherwise the whole situation just becomes ridiculous.

Several propositions cropped up how to circumnavigate this problem, without making the technician deal with this problem. One of the suggestions was that each student should be using their own multimeters. So if they blow a fuse, this then becomes their problem. I personally believe that while this approach is solving some of our concerns, it is not addressing the core of the issue, which is the lack of technical support for the lecturing staff in our division in general. Apart from this main issue, the following questions still do arise:

- 1. It is obvious that students will still continue to blow fuses, so when they do blow the fuse of their own multimeter what are we supposed to do in this situation? Shall we tell them to leave the classroom, go to purchase their own fuses and come back? Obviously meanwhile they will miss the opportunity to complete the lab. Or shall we tell them that they are supposed to come to school with a packet of spare fuses?
- 2. Or shall we provide them with spare fuses ourselves? It is very likely that they will be using variety of different multimeters with different fuses ratings. So what will happen if we do not have the fuses with the right rating? And who is going to teach them how to relace them? What if the student forgets his multimeter at home? Shall we in that case deny him access to the lab?
- 3. And what happens if students miss on the opportunity to complete a lab for the above mentioned reasons? Then they can accuse us that they were competent at the time, but were not able to demonstrate this to us, because we did not provide them with sufficient resources (i.e. multimeters). Then they can also raise the question why the college did not provide working multimeters for them? They can raise the question how we utilize their resource fees? Other questions also may crop up.

It becomes evident that making the students have their own multimeters not only does not resolve all our problems, but potentially will create many other additional problems that we have to deal with in the future. We can avoid all these potential troubles, if the technicians simply do what they are meant to do and keep always 12 working multimeters in the lab at all times.

The bottom line is that we, lecturers, need adequate technical support. It seems that we do not have such at the moment. Every time that we require even some very minor technical job to be done, (such as replacing a fuse, for example) we are faced with a major opposition.

Either we have to complete two pages of paperwork per faulty meter, or we have to give explanations and justifications why students blew the fuses in the first place.

Without adequate technical support, we are not able to deliver quality practical training according to the AQTF procedures. This seriously impairs the quality of delivery of our section and leads to all sort of auxiliary problems.

The statement in David's Gray email that we treat him as a slave is simply ridiculous. All we want is some minimum level of technical support what his position is really all about. If Mervyn tells me for example, to go in class and lecture, does that mean that I am being treated as a slave?

<u>So, the following procedure is being proposed.</u> It is designed for keeping at least 12 multimeters in good working order in the labs at all times. A designated box should be placed in the labs, which single purpose should be to place the faulty multimeters in it. A label should be attached to each faulty meter that is placed in the box. The label should state the room number, the date and the fault, such as "Cannot measure current", "Needs calibration" etc. The technician should check the box daily, repair the multimeters and return them back to their respective places. This policy should also be enshrined into the Departmental Procedure for Lecturers and adhered to. By doing this, we will ensure the quality of practical training and smooth operation of our division.

3

Appendix 3. Letter written by me and addressed to all staff members, present on the meeting on 2 December 2009 in regards to lack of technical support in our division.





JOB DESCRIPTION FORM

SENIOR TECHNICIAN ELECTRICAL ENGINEERING LEVEL 3

KEY POSITION REQUIREMENTS

In this position you will provide technical support to delivery teams by ensuring materials and equipment required by lecturers and students in the course of their study program are available as required and in safe working order. Under the direction of the Program Manager, the position is responsible for the acquisition, maintenance, and storage of materials and equipment required by the delivery team for teaching and for the associated preparation of those materials and equipment as needed for programmed class sessions. The position requires a degree of technical knowledge relevant to the use of materials and equipment associated with the particular training environment.

You should also have:

- Current Electrical Workers Licence (Restricted "R" Licence or "NREL" Licence)
- Good oral and written communication skills, including report-writing.
- Ability to work independently, analyse technical matters and advise on improvements on plant and equipment.
- Good experience at trade or technical level, particularly in preventative maintenance of equipment and machinery

It is also desirable but not essential to have a current first aid certificate and a Diploma of Engineering (Electrical/ Electronics) or approved equivalent

[&]quot;A high performing & visionary vocational training organisation."

Page 1

DUTIES OF THE POSITION

CONSTRUCTION

- Constructs and tests equipment including teaching aids for use in the Electrical/Electronic Microcomputer Technology areas of study
- Modifies and updates commercial equipment for educational and training purposes
- Assists with the design, modification, documentation, testing and commissioning of new equipment

MAINTENANCE AND SERVICING

- Carries out preventative maintenance, safety checks, service and repair of electrical/electronic equipment within the Engineering Department.
- Locates and repairs faults in apparatus and measuring instruments.
- Calibrates precision test and measuring equipment.
- Maintains records of maintenance and service of all electrical/electronic equipment.

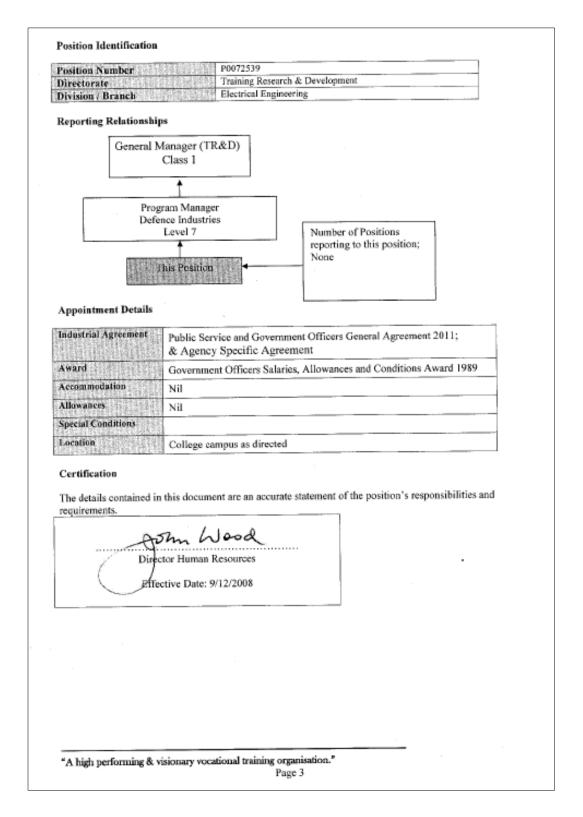
COORDINATION OF RESOURCES

- Prepares computer programs to support laboratory and demonstration applications.
- Sets up specialised equipment for laboratory use and demonstration. Supervises its use for groups of students who are under the direction of lecturers. Collaborates with the lecturers in the description of the workings and operation of the equipment.
- Maintains a direct link with industry to enable compilation of detailed background information on the latest state-of-the art equipment, techniques and computer software.
- Liaises with other departments, colleges to enable the dissemination of information, the standardisation of laboratory equipment and practices, including the arranging of temporary loan of specialised equipment when required.
- Acts as a source person to co-ordinate the facilities of the electrical/electronic area, as wells as those of a
 electronic nature within the mechanical/civil area
- Liaises with lecturers on all aspects of hardware and software connected with computer aided drafting.

OTHER DUTIES

- Assists with the design, documentation and teaching of new experiments, and acquaints lecturers accordingly.
- Provides technical guidance in purchase and maintenance of stocks and equipment.
- Liaises with local equipment suppliers to obtain information on new equipment and materials, and disseminates information to lecturers.
- Sets up equipment for laboratory classes and demonstrations and supervises its use for groups of students
 who are under the direction of lecturers. Assists the lecturer, where necessary, in the description of
 operation of test equipment
- Assists in managing and maintaining an inventory of all the equipment within the Engineering section.
- Advises the Program Manager on the location of teaching aids and equipment
- Prepares chemical reagents for use in photochemistry and buttery-charging. Ensures safe storage and adequate stocks
- Operates microcomputer equipment
- Maintains lead-acid and alkaline batteries in a charged condition, servicing and replacing as necessary
- Carries out evening duties as required.
- Ensures compliance with Occupational Safety & Health (OSH) and Equal Employment Opportunity (EEO) policies and legislation
- · Other duties as required

[&]quot;A high performing & visionary vocational training organisation."



Appendix 4. Job Description Form for the position of a Technician in the Electrotechnology Section of Challenger Institute of Technology, which explicitly lists the duties associated with it.

Lack of Technicians and Increased Lecturer Workloads at Electrical Engineering Department at Fremantle campus

Copies to:



3 November 2011

The intent of this letter is to summarize concerns of lecturing staff, which have been brewing for the past few years and to bring them to the attention to the management in the hope of suitable resolution. In summary, we are concerned about the erosion of technical support for lecturers in the Electrical Engineering Department at Fremantie campus, lack of resources and subsequent increased lecturers' workloads.

To understand our concerns we have to see the changes which happened in our division in historical perspective over the years.

- On 8th of July 2005 yellow "DO NOT OPERATE" tags were placed on valuable electrical power equipment in UL24. This longstanding problem, hindering the delivery of a number of electrical power subjects, needs to be fixed as soon as possible.
- Second semester 2006. Our division lost the exclusive use of room J17, which at the time
 was used by our department as a lecture room for an array of subjects and as a laboratory
 room for PLC delivery. The room was given back then to the Mechanical division. It housed
 also some extremely valuable instrumentation equipment, which was simply thrown away in
 the rubbish bins and it was never replaced. Today the use of this room for our division
 amounts to 3 hours per week.
- Second semester 2006. The loss of the J17 was accompanied with the loss of valuable computer software and stand-alone computers for Festo PLC. At the moment some remnants of this equipment still reside in J17, but they cannot be used, due to the lack of computer software. At the same time the new PLCs which have been promised since 2008 still have not been delivered.
- 4. Dec 2007. Terry Leitch retired. He was the only one, who had the sole understanding about how to operate and how to maintain the equipment in the fluids lab. Lecturers used to do a variety of some valuable practical exercises in this lab. When he was gone, the know-how to maintain that equipment was also gone and never replaced. Unfortunately, currently we do not have a technician who is capable of repairing and maintaining this equipment any more.
- 5. The same applies to the equipment installed in the thermo-lab UL28/UL29. Most of the equipment which is installed there is archaic and there is no technician, who has the understanding how to operate it, calibrate it, maintain it or service it. Subsequently, as far as we know, the last time when practical exercises were conducted in this lab was circa 2005 / 2006.

- 6. Early 2009. Room UL08 has been designated for the exclusive use for the NAVY contract, which is delivered via a private provider, namely Scientific Management Associates (SMA). Although this \$600 000 contract is highly lucrative for Challenger Institute, our department sees no benefits from this. Quite the opposite; when the contract was signed, the Electrical Engineering department simply lost one more very useful lecture room, which also has never been replaced.
- May 2011. Michael Blanchard retired. Since then, this position has not been filled. We need
 a knowledgeable, enthusiastic and capable person to fill this position as soon as possible.
- There is anecdotal evidence that the only technician that we currently have has been told to dedicate 50% of his time to the NAVY contract, but nothing has been officially communicated to us. If this is true, than instead of 2 full-time technicians, we have been left with 0.5 FTE of a technician.
- 9. Most of the useful components in UL25 are obstructed or blocked and there is no easy access to it. Everything stored in UL24 and UL25 should be clearly labeled, neatly arranged on the shelves in a logical manner and easily accessible for all lecturers at all times. Alongside the useful equipment, there is a lot of obsolete apparatus, which needs to be decommissioned. This issue has been raised in meetings many times before in the past years, but no action has been taken. The whole area in UL25 needs a good clean up and rearrangement, because the current setup renders the delivery of practical exercises in UL24 almost impossible. The same applies to equipment, stored in UL26 and UL28. A lot of useful equipment there is kept locked at all times and lecturers have no access to it at all. This was not the practice years ago, when every lecturer could freely access all the equipment, necessary for the delivery of every subject.

With expanding number of students enrolling in our division, lesser number of rooms, greatly deteriorated technical facilities and decreased technical support, the lecturers in our department are being placed under enormous pressure. Lecturers often have to perform the duties of a lecturer, administrator and a technician at the same time! This has a tendency to result in lower quality of delivery, lower morale among staff and students, and sub-standard performance.

Some practical training could be simulated with specialized software. However, our department has only one computer room (ULO4), while in Civil and Mechanical Engineering, for example, there are three computer rooms (J014, J019 and C114). Our computer room ULO4 is heavily utilized. For the subject "Solve Problems in Basic Amplifier Circuits" only 1.5 hours per week work with software have been allocated. For other subjects, such as "Solve Problems in DC Power Supplies with Single Phase Input", "Find and Repair Faults in Complex Power Supplies", "Provide Solutions to Single Phase Electronic Power Control Problems", "Solve Problems in Single and Multiple Path DC Circuits", "Solve Problems in Frequency Dependent Circuits" and "Use Engineering Applications Software" no computer lab hours have been allocated at all, because the room ULO4 is fully-booked.

Also, it should be noted that in the new 2011 training package, (version 7.4) almost every unit of competency requires some sort of computer software usage, such as "Multisim"," MatLab", "Citech", "MS Project", "MS Office" and similar software. These are required because the courses result in Diploma and Advanced Diploma paraprofessional courses. The shortage of computers adds to the deficiency of practical laboratory equipment and lack of technical support, which puts lecturers in indissoluble situation.

At the same time, as explained earlier, we have gradually lost several valuable rooms and at present UL28 and UL29 are used as a storage space for antiquated equipment, while UL26 and UL27 need to be re-organized, in order to fully utilize their potential. It would be advantageous if UL27 and UL 28

could be re-designed in such way that they can be converted into combined labs/lecturing rooms. For this purpose, data projectors need to be installed there.

Also, communication and consultation with management has not been adequate. We are all highly qualified experts in our field. The training we do is highly specialized and it is not our expectation that the management be experts in all areas. However, we feel that without proper and regular consultation with us as specialists, management is not in a fair position to make informed decisions. We would like to be told what is happening, rather than discover things through the rumour mill.

Technical support is paramount for productive and efficient contact time for our students, who are our customers. It was recognized that support technicians need to be well trained and have expertise for their appropriate area. They need to collaborate with lecturers in the description of the workings and operation of the equipment. They should help us to set up specialized equipment for laboratory use and demonstrations. They should assist with the design, documentation and teaching of new experiments and they should acquaint us accordingly. At the moment we feel that often we are left to do all those tasks by ourselves, which is increasing our workload and diminishes the quality of our delivery.

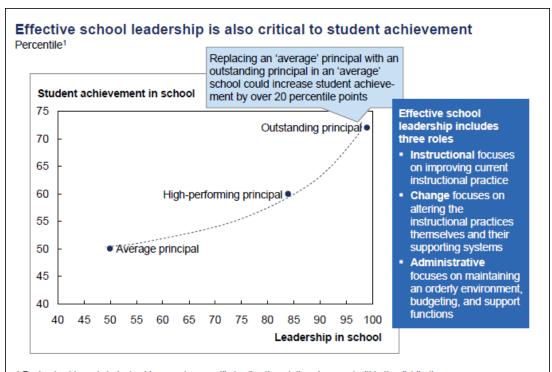
Lack of sufficient technical support may also be demonstrating poor industry standards, which may hinder our current efforts to be affiliated with IEAust. By word of mouth our student numbers may decline in the future, due to poor technical support which in turn leads to mediocre lecturing opportunities and resources. We truly want to do the best we can for our students and maintain high standards. For example, international students pay around \$6 000 per semester. However, we do not have the technical support and access the resources to enable us to do so. We believe that any extra duties that lecturers currently perform are good will and not included in our 'extra duties' as per the award.

In order to correct this situation the management must act in these areas to return the operation of this section to one that is conducive to the students learning and minimizing the risk of exposure to complaints regarding the quality of the practical content of delivery. Also in doing this it will enable the section focus on quality delivery rather than attempting to cobble together practical requirements with damaged and unsuitable equipment.

We propose that:

- Decisions at a managerial level, concerning technical issues, should be made with thorough prior consultation with lecturers, who are the specialists in their area.
- Lecturers should be fully informed about management decisions, rather than finding about it via the rumour mill.
- OHS issues are becoming of a concern, without properly trained technical staff and support resulting to non-functioning equipment. Lecturers are not necessarily trained for technician duties
- Students' safety is paramount and may be at risk. Some of the machinery (if it is really being operated) at UL28 and UL29 has a safety tags dating back to 14th of October 1999.
- Technicians must work in very close collaboration with lecturers.
- Better inventory of equipment is to be maintained at all times.
- Major re-designing of UL25, UL26, UL27, UL28 and UL29 should take place in order to convert them into fully functional lab/lecturing rooms.
- An argument exists that we should go back to the old practice of timetabling labs separately to lectures, in order to better accommodate for practical training.

Appendix 5. A letter addressed to the Program Manager and signed by all lecturers in the Electrotechnology section. The signatures of the lecturers are not reproduced here to protect their identity.



1 For leadership and student achievement, percentile implies the relative placement within the distribution
SOURCE: A 'meta-analysis' of 69 studies of school leadership conducted between 1978 and 2001, involving an estimated 14,000 teachers and 1.4 million students, Marzano, Robert J., Timothy Waters, and Brian A. McNulty, 2005

Fortunately, there is also good agreement about what constitutes effective teaching and leadership. Instead, the challenges for both teaching and leadership are how recruit the right people into these positions, in the right number; to retain them; and then to scale up good teaching practice and leadership across a large system so that every student has an effective teacher and every school has an effective leader. The IER discussion focused on three aspects of these challenges:

- Attracting top talent into teaching and school leadership, and retaining them
- Strengthening the professionalism of the teaching force
- Motivating and managing the performance of school professionals

Appendix 6. A graphical representation of the importance of effective school leadership, based on a large quantitative study (Barber & Mourshed, 2009, p. 28).

REFERENCES

- Asian Development Bank. (2009). Good Practice in Technical and Vocational Education and Training. Australian Committee on Technical Further Education. (1974). TAFE in Australia: report on needs in technical and further education / Australian Committee on Technical and Further Education (ACOTAFE). Canberra:: Australian Government Publishing Service.
- Barber, M., & Mourshed, M. (2009). *Shaping the Future: How Good Education Systems Can Become Great in a Decade Ahead*. Paper presented at the International Educational Roundtable, Singapore.
- Black, S. (2009). The Role of Frontline Managers in TAFE: A Reality Check. *Australian TAFE Teacher*, 43(2), 14-15.
- Buck, J. T. (2008, 2008/12//). Leading Professional Learning Communities: Voices From Research and Practice. *School Administrator*, 65(11), 48.
- Burke, C. (2000). Opening up public schools for business: the issues of equity and ethics. *The Practicing Administrator*.
- Clayton, B., Fisher, T., & Hughes, E. (2005). *Sustaining the skill base of technical and further education institutes*. Adelaide: National Centre for Vocational Education Research.
- Dale Mops Up a WorldSkills Gold. (2008). *Training Matters*, 1, 14-15.
- Dennison, W. F., & Shenton, K. (1990). Training Professional Leaders: The New School Managers. *Oxford Review of Education*, *16*(3), 311-320.
- Depratment of Education and Training. (2008). *School Improvement and Accountability Framework*. Perth, Australia: Retrieved from http://www.det.wa.edu.au/education/accountability/.
- Eacott, S. (2011). Preparing "Educational" Leaders in Managerialist Times: An Australian Story. *Journal of Educational Administration and History*, *43*(1), 43-59. doi: 10.1080/00220620.2010.532865
- Fink, D. (2010). *The Succession Challenge: Building and Sustaining Leadership Capacity through Succession Management*. Thousand Oaks, California: SAGE.
- Gasskov, V. (2006). *Vocational Education and Training Institutions : A Management Handbook and CD-ROM*. Geneva: International Labour Office.
- Gewirtz, S., & Ball, S. (2000). From 'Welfarism' to 'New Managerialism': Shifting discourses of school headship in the education marketplace. *Discourse: Studies in the Cultural Politics of Education,* 21(3), 253-268. doi: 10.1080/713661162
- Goozee, G. (2001). The Development of TAFE in Australia. 3rd Edition. Leabrook, SA: National Centre for Vocational Education Research
- Hargreaves, A. (2009). *Fourth way of educational reform* (Vol. no. 45.). Penrith, N.S.W.: Australian Council for Educational Leaders.
- Hattie, J. (2003). *Teachers Make a Difference: What is the Research Evidence?* Paper presented at the Australian Council for Educational Research Annual Conference on Building Teacher Quality, Melbourne.
- Heinz-Dieter, M. (2002). The new managerialism in education management: corporatization or organizational learning? *Journal of Educational Administration, 40*(6), 534-551. doi: 10.1108/09578230210446027
- Hermann, G. D., Richardson, E., & Woodburne, G. J. (1976). *Trade and technician education : principles and issues* Stanmore, N.S.W. :: Cassell Australia.
- Hord, S. M. (1997). *Professional Learning Communities: Communities for Continuous Inquiry and Improvement* Austin, Texas: Southwest Educational Development Laboratory.
- Hord, S. M., & William M. Sommers. (2008). *Leading Professional Learning Communities: voices from research and practice*. Thousand Oaks, California: Corwin Press.
- John Mitchell & Associates. (2011). *Capabilities of the emerging 'advanced VET practitioner'*. Paper presented at the 11th Annual Conference of AVETRA, Adelaide.

- Lashway, L. (1996). Ethical Leadership. ERIC Digest, Number 107: ERIC Clearinghouse on Educational Management, Department 5207 University of Oregon
- Misko, J., & Halliday-Wynes, S. (2009). *Tracking our success: How TAFE institutes evaluate their effectiveness and efficiency*. Retrieved from http://www.ncver.edu.au/publications/2169.html.
- Mitchell, J. (2007). *Building a New Practice. Implementing the Four Paradigm Model of Service Delivery* Challenger TAFE, Fremantle.
- Mitchell, J. (2009). *Advanced VET practitioners : developing their capabilities, cultivating their minds / John Mitchell*. Pyrmont, N.S.W. :: John Mitchell & Associates.
- Normore, A. H. (2004). The edge of chaos: School administrators and accountability. *Journal of Educational Administration*, 42(1), 55-77. doi: 10.1108/09578230410517477
- O'Brien, P., & Down, B. (2002). What are teachers saying about new managerialism? *Journal of Educational Enquiry*, *3*(1), 111-133.
- Rice, A. (2004). *TAFE Managers: Juggling educational leadership and accountability*. Paper presented at the The seventh Australian VET Research Association Conference "The Heart of the Matter", Canberra. http://www.avetra.org.au/Conference Archives/2004/documents/PA007Rice.pdf
- Sahlberg, P. (2011). The Fourth Way of Finland. *Journal of Educational Change, 12*(2), 173-185. doi: 10.1007/s10833-011-9157-y
- Shorne, P. (2008). *A Study of the Lives of Casual TAFE Lecturers in Metropolitan Perth.* (Doctor of Philosophy), Murdoch University, Perth, Australia. Retrieved from http://researchrepository.murdoch.edu.au/690/2/02Whole.pdf
- Simon, L., & Bonnici, A. (2011). *Paths to Promotion*. Paper presented at the Australian VET Research Association 14th Annual Conference, Melbourne. http://avetra.org.au/wp-content/uploads/2011/05/AVETRA-Final-Programme-Book.pdf
- Tchervenkov, L. (2012a). Essential, Desirable and 'Would be Excellent to Have' Qualifications for VET Lecturers, Managers and Directors (Masters' of Education assignment), Edth Cowan University, Perth, Australia.
- Tchervenkov, L. (2012b). *The Relationship Between TAFE and its Lecturers' Community: An Attempt to See the Future.* (Master's in Education assignment), Edith Cowan University, Perth, Australia.
- Thompson, S. C., Gregg, L., & Niska, J. M. (2004). Professional Learning Communities, Leadership, and Student Learning. *Research in Middle Level Education Online*, 28(1).
- Vescio, V., Ross, D., & Adams, A. (2006). A review of research on professional learning communities: What do we know? *Paper presented at the NSRF Research Forum January, 2006*: University of Florida.
- Visscher, A. J., & Witziers, B. (2004). Subject Departments as Professional Communities? *British Educational Research Journal*, *30*(6), 785-800.
- Wood, D. (2007). Teachers' Learning Communities: Catalyst for Change or a New Infrastructure for the Status Quo? [Feature Article]. *Teachers College Record*, 109(3), 699-739.