

SUCCESS AND SUSTAINABILITY IN RURAL P-12 SCHOOLS DEFINING A SUCCESSFUL SCHOOL - QUEENSLAND STYLE

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ABSTRACT

What makes a successful rural P-12 school? This paper will review the notions of a successful school and will challenge the dominant voice of quantitative data as the yardstick for such success.

In doing so, this paper will focus on qualitative measures including those aspects which are ignored by the quantitative data. Reference will be made to the Calen District State College and the Glenden State School (a P-12 school in a mining community) and the projects which these schools offer their students to provide them with a competitive edge in the job market.

Phenomenographic research will be conducted to ascertain students' conceptions regarding the success of these schools and their projects.

INTRODUCTION

We live in a data-driven world. It is a world of accountability, transparency, performance targets and outcomes. There is nothing wrong with accountability, transparency and performance targets - they are in fact absolutely necessary for the development of a business plan or improvement agenda. The problem however, arises from the use of limited or restricted criteria to evaluate the success and achievement of targets. For example an aim of the health departments of various states is to improve the efficiency and effectiveness of hospitals. The data used to measure the achievement of this goal is the patient waiting time which on the surface may appear to be the most appropriate criterion to measure this effectiveness and efficiency. However this criterion ignores other important indicators such as: the waiting time to get on the official waiting list; the frequency with which the theatre scheduled list gets overturned by emergency cases; response time to emergency cases; patient satisfaction; levels of complication; medication errors; and nursing home waiting lists which cause a bottleneck in hospitals.

The narrow focus on the patient waiting time to the exclusion of other possible performance indicators has led to allegations of data manipulation and falsification of records (Cox, 2012; Bowman, 2012).

In schools, the quantitative data sets used to measure success, particularly according to the media, are the year 3, 5, 7 and 9 results on the National Assessment Program: Literacy and Numeracy (NAPLAN) and the year 12 Overall Position (OP) results for university entrance. Like the patient waiting times, these criteria do not tell the whole story. The high stakes focus on the NAPLAN results have contributed to allegations of some schools falsifying NAPLAN results (Chilcott, 2011a; Patty, 2012; McDougall & Dillon, 2011). Greens NSW education spokesman, John Kaye, is quoted as saying that cheating on NAPLAN tests as being the “direct result of the high stakes placed on results by politicians” (Patty, 2012).

The Bradley Report (2008) recommends that in order for Australia to remain internationally competitive as a member of the OECD, it needed to have 40% of its people aged between 25 and 34 having a first degree by 2020. Therefore it would appear that the percentage of the senior OP eligible cohort having an OP between 1 and 15 would appear to be an appropriate criterion on which to measure a school’s success.

However, like the patient waiting time, the OP data does not reveal the full story regarding a school’s success. Only between 59% and 63% of seniors in Queensland in any one year are OP eligible and therefore reliance on OP data alone ignores 40% of the senior cohort. Allegations have been levelled at schools in terms of manipulation of OP data through actively preventing potentially poorer performing students from being OP eligible. This means that reliance on OP data alone does not reflect the success of a school in terms of its entire senior cohort and it does not indicate whether a school is meeting the needs of all of its senior students. However, despite this the media appear to maintain an almost singular focus on OP results with headlines such as “Top Boys’ School gets best results in OP scores” (Chilcott & Vonow, 2012) and “Independent schools deliver what parents pay for” (Chilcott & Davis, 2012).

In addition to these concerns, OP data also ignores the following: there are multiple pathways to attaining a university degree; transition to the trade or career of choice is an important indicator of whether a school successfully meets the needs of students; and the community or industry partnerships which provide opportunities for students.

TRACKING AND ACADEMIC MANAGEMENT INDEX.

In a break from the traditional quantitative measure of OP scores, the “Tracking and Academic Management Index” developed by Dr Judy Smeed of the Queensland University of Technology is designed to ascertain whether a school is meeting the needs of its entire year 12 cohort in quite a different manner. This index aggregates a school’s achievement levels on the following four criteria: percentage achieving an OP 1-15; percentage achieving a QCE; percentage achieving a Vocational Education (VET) Certificate; and the percentage achieving one of their top two preferences for

university placement; to provide a score out of a possible 400 (Davey, 2001, p15; Chilcott, 2011, p25).

While this index does provide a picture of the entire senior cohort of a school rather than focus on the 60% who are the OP eligible students, the question remains, "Does this index provide a complete portrait of the success of a school?"

This question can be answered by examining a sample school, Focus State College (a pseudonym). This school is a small P-12 school with an enrolment of 230 students and it is situated in a small rural community about a forty-five minutes' drive from a large regional centre. The size of the senior cohort each year vary widely from 8 to 20 students and with such a small number, the performance of one student can have a dramatic impact on the percentages which indicate performance outcomes. The local industries include cane and small crops farming and beef cattle grazing. Apart from seasonal farm work, there are limited employment opportunities in the local community. In 2011 this school was acknowledged by the "Tracking and Academic Management Index" as being the top school in Queensland, being the only one to score 400 points out of a possible 400 (Davy, 2011, p15; Chilcott, 2011, p25) in terms of the 2010 data. This result would indicate that the school was successful in catering for the needs of senior students and maximising their outcomes. However, there were no OP eligible students in the 2011 senior cohort at the school and this would automatically drop the school's results on Smeed's Index by 200 points as it would be impossible to have any student achieve an OP 1-15 and therefore obtain the first two preferences of university placement. The students in the 2011 cohort opted for vocational education (VET) subjects and obtained apprenticeships and traineeships rather than university places.

According to this index, Focus State College was the top school in the state one year and near the bottom the next, all because there were no OP eligible students in the cohort that year. Does the fact that the school's index score in 2011 was 200 points lower than the previous year, make it less successful in meeting the needs of the senior students? This raises the question that if the definition of success was to be challenged and therefore the performance indicators changed, would the outcomes (i.e. which schools are deemed to be successful) change accordingly? This paper will consider the school's performance in terms of senior students' outcomes, according to the indicators utilised in the "Tracking and Academic Management Index" before applying additional indicators using the data already available in the school, to answer the question above.

DATA COLLECTION

In order to ascertain the level of the school's success according to the "Tracking and Academic Management Index, the following indicators were used:

- Percentage of OP eligible students who achieved an OP between 1 and 15

- Percentage of students who achieved a Queensland Certificate of Education (QCE)
- Percentage of students who achieved a Vocational Education (VET) qualification
- Percentage of students who achieved one of their top two preferences for university placement

The data used for this index is published annually in the Courier Mail as well as local newspapers.

When evaluating the school's success according to additional criteria the following quantitative data sets were used:

- The monitoring and mapping program which includes students' results; involvement in university study programs e.g. CQU's SUN program, school based apprenticeships and traineeships. This information is published in the Principals' Survival Kit which the Queensland State P-10/12 School Administrators' Association distributes to the principals of P-10/12 schools in Queensland.
- Student destinations, post year 12 which are published in the annual Next Step Report and which is included on the school's website.

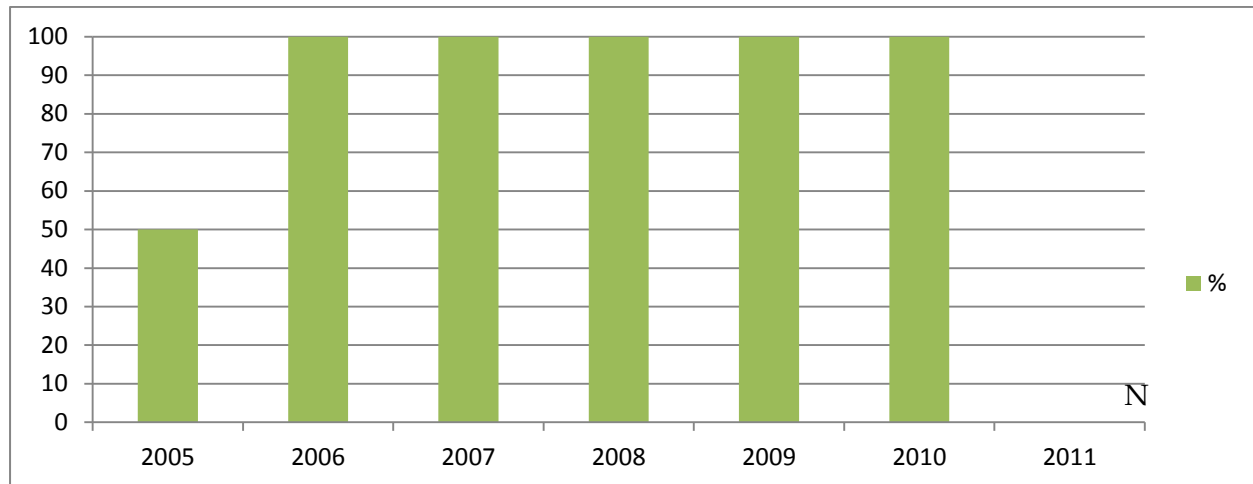
In addition to this quantitative data, this paper will also refer to the programs which the school has developed with community/industry partners to provide opportunities for the students.

ANALYSIS AND DISCUSSION OF DATA

All data used in this paper is freely available on the school's website, the Courier Mail's Annual Senior Students' Outcomes reports, school newsletters and brochures published by the school.

Figure 1: Percentage of OP eligible students at Focus State College obtaining an OP 1-15

OP SCORES



Queensland’s Department of Education, Training and Employment (DETE) has mandated that one of the performance indicators for school performance and reporting is the percentage of the state secondary school students achieving an OP of between a 1 and 15. In Queensland an Overall Position (OP) determines university entrance with 1 being the highest result a student can achieve and 25 being the lowest. The OP is calculated using students’ levels of achievement on their best five subjects which is then scaled using that school’s students combined performance on the Queensland Core Skills Test. OP scores are a focus for newspapers such as the Courier Mail when they report on the success of schools. Students’ OP scores are also one of the criteria which comprise the “Tracking and Academic Management Index”.

Figure 1, above shows that in 2005, only 50% of the eligible students at Focus State College achieved within the range of 1 - 15. However, from 2006 to 2010, 100% of the school’s OP eligible students achieved within this range, which illustrates a dramatic improvement. In 2011, however, there were no OP eligible students so the school scored a Not Applicable on this indicator and 0 points on the “Tracking and Academic Management Index”. According to the criterion of the percentage of OP eligible students achieving a score between 1-15, the school was very successful from 2006 to 2010 but very unsuccessful in 2011.

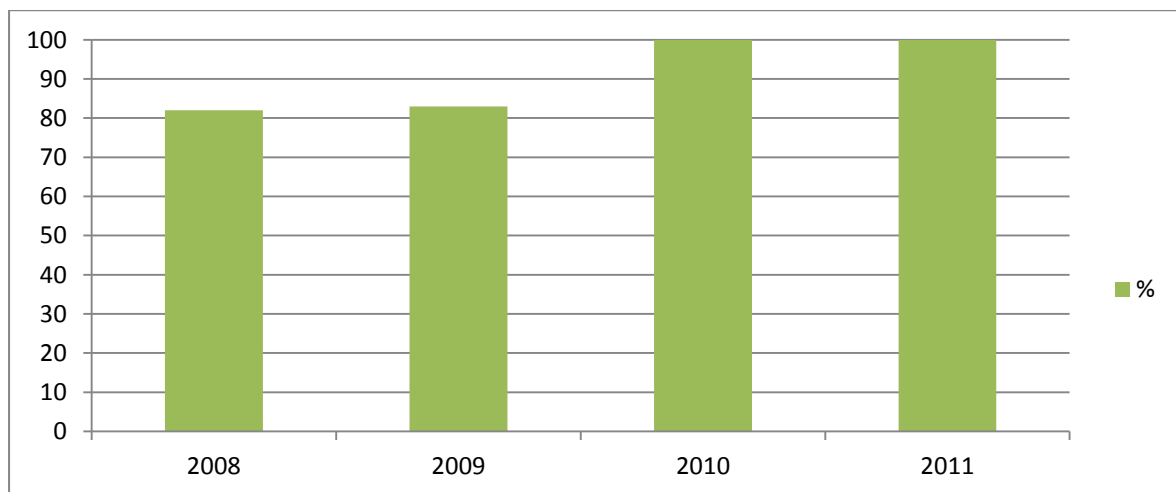
However it needs to be remembered that Focus State College is a relatively small school with a small cohort of senior students. There were fourteen students in the 2005 cohort and of these only four were OP eligible, so with two obtaining OPs below a 15, then the school’s overall achievement on this criterion, therefore, was 50%. Of the sixteen students in the 2006 cohort, seven were OP eligible and all of these students attained OPs between 1 and 15. In the subsequent years (2007, 6 OP eligible in a cohort of 10; 2008, 4 OP eligible in a cohort of 17; 2009, 5 OP eligible in a

cohort of 12; and 2010, 6 OP eligible in a cohort of 20) until 2010, all OP eligible students at Focus State College achieved OPs in the 1 to 15 range. In 2011 however, there were no OP eligible students in the cohort.

QCE

Since the introduction of the Queensland Certificate of Education (QCE) in 2007, students have had to accumulate 20 points and obtain a pass in both a Maths and an English subject. Points are achieved through the successful completion or exiting of a school subject, the passing of a university subject, achievement of a VET certificate, Duke of Edinburgh, Lifesaving Medallion, Queen's Scout Award, or music, dance or drama levels (i.e. Trinity College). If a student, for example, is studying Geography and passes the subject for the first three semesters but fails the final semester, that student does not receive any points for the subject as it was neither completed nor exited on a pass. Conversely, if another student fails Geography for the first three semesters but manages to pass the final semester then that student accumulates four points for that subject. This indicator, the percentage attaining a QCE, is one of DETE's mandated dimensions of measure for school improvement targets and one of the criteria on the "Tracking and Academic Management Index".

Figure 2. Percentage of senior students at Focus State College who attained a QCE



Although the QCE was introduced in 2007, the first cohort to receive a QCE was the 2008 senior class. For the first two years after its introduction, 82% and 85% of the senior cohorts at Focus State College have achieved a QCE and for the past two years 100% achieved a QCE. Generally the 15% to 18% who don't achieve a QCE at Focus State College have not done so because they have not been awarded a VET Certificate from TAFE; points which the school had anticipated the students would achieve when calculating intended outcomes and permitting students to drop subjects in order to undertake the TAFE course. The reason for this non-awarding of a Certificate II qualification is that some employers in the construction and engineering industries are reluctant to employ apprentices who already have a

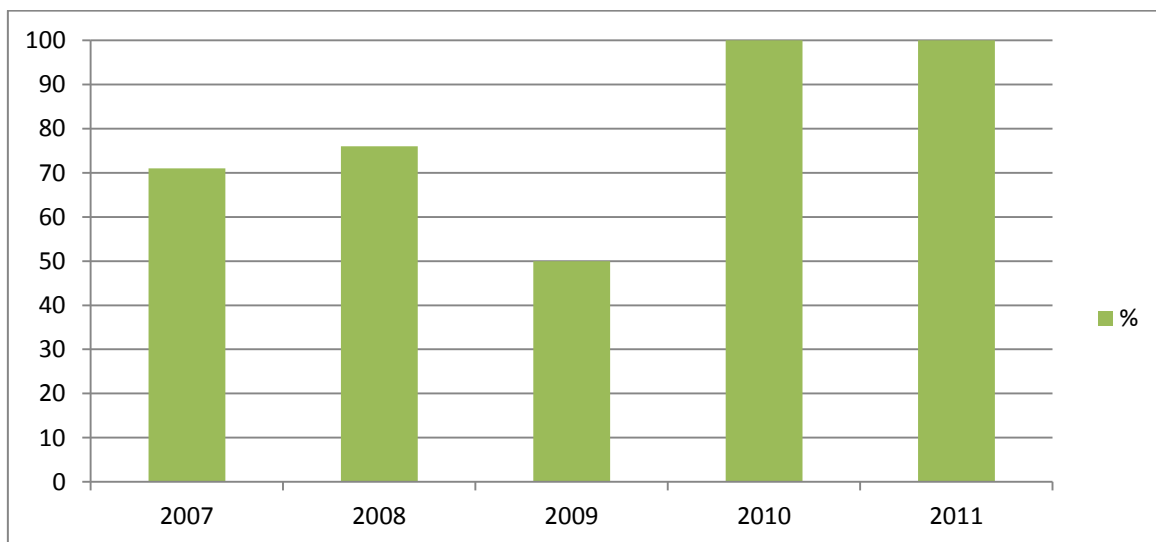
Certificate II qualification as they would need to be paid at a higher rate of pay in recognition of their qualifications (Bird, 2012).

At the end of the 2011 school year, one student did not achieve a QCE as she had missed a great deal of school as she left on a number of occasions to take up employment opportunities which did not eventuate. In order to enable her to achieve a Learning Statement with passes in four subject areas it was decided to permit her to study only four subjects which left the overall score for a QCE, two points short. However, students are able to bank/accumulate credit points towards their QCE, as their learning account remains open. Credit points however expire after nine years. As this student was able to complete a certificate course within six months of completing year 12 she was awarded a QCE.

VET QUALIFICATIONS

Students' attainment of a Vocational Education and Training (VET) qualification is another criterion which is a component of the data set which comprises the "Tracking and Academic Management Index". This criterion acknowledges the fact that only 60% of Queensland's senior students are OP eligible and that not all of these students immediately transition to study at university.

Figure 3: Percentage of senior students at Focus State College who attained a VET qualification



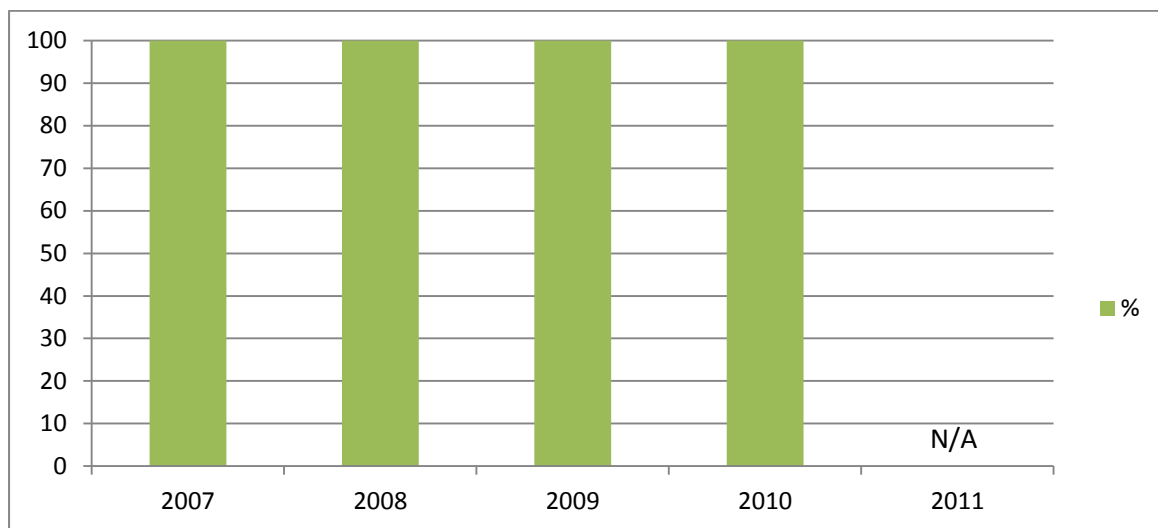
Focus State College's data regarding the attainment of VET qualifications has improved from 50% in 2009 to 100% in 2010 and 2011. This improvement is the result of a concerted effort by the school for teachers to obtain Certificate IV in Training and Assessment qualifications in order to deliver a range of VET programs on campus, rather than have the students travel to a large regional city, forty-five

minutes' drive away, to attend TAFE. With no public transport, it can be a problem getting students to attend TAFE, sixty kilometres away. Since the desired courses were conducted on different days it was not possible to carpool or to charter a bus to transport the students to TAFE on a weekly basis. Since 2009, the school has been able to offer Certificate I in Work Education and Certificates I and II in Information Technology, Business and Media. Some students also still undertake VET certificate courses in childcare, construction, engineering, graphic design and hairdressing at TAFE in a nearby regional centre (60 kilometres away).

UNIVERSITY PLACEMENT PREFERENCE

The fourth criterion which determines the "Tracking and Academic Management Index" is the percentage of students who achieve one of their top two preferences for university placement. As the graph (Figure 4) depicts, 100% of the OP eligible students at Focus State College, from 2007 to 2010 have achieved one of their top two choices for university placement. This criterion was not relevant to the 2011 cohort as there were no OP eligible students although one student had gained automatic university entrance due to the successful completion of a SUN course at CQU and had successfully met the pre-requisites.

Figure 4: Percentage of OP eligible students who gained one of their top two preferences for university placement

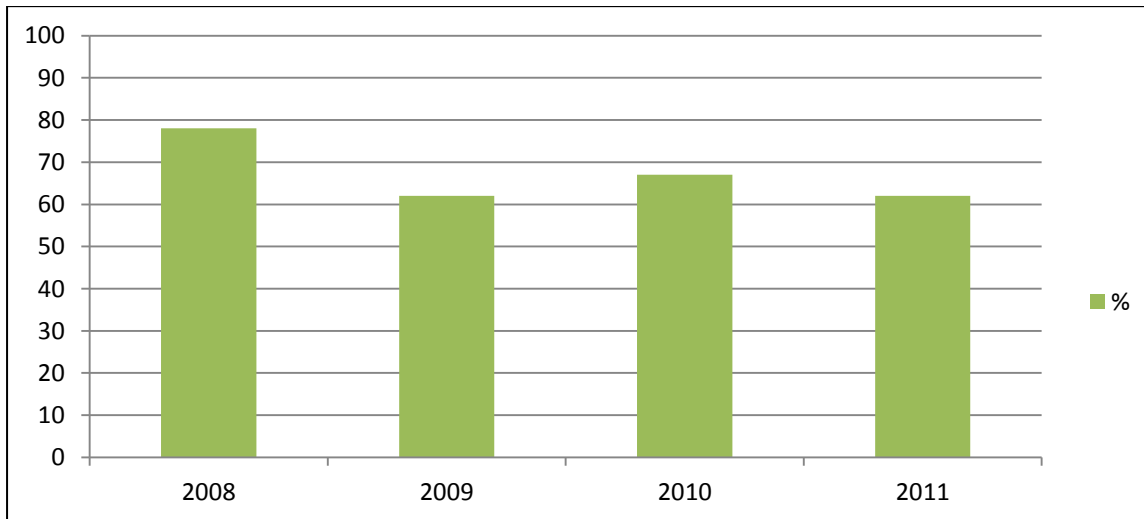


RETENTION RATE

Success in schools is measured, at least in the media, by NAPLAN and OP scores. The senior data set has been widened to include the "Tracking and Academic Management Index" which demonstrates that there are some limitations to looking at OP scores alone. An additional criterion which is used by Queensland's DETE regarding school improvement statistics, but which is not included in the "Tracking and Academic Management Index" is the retention rate of students in the senior

phase of learning (i.e. from year 10 through to year 12). However the retention rate does not mean that these students are OP eligible as the data from Focus State College indicates: 2005 - 28% OP eligible; 2006 - 43% OP eligible; 2007 - 60% OP eligible; 2008 - 23% OP eligible; 2009 - 41% OP eligible; 2010 - 30% OP eligible.

Figure 5: Retention rate of senior phase students (Yr 10-12)



As Figure 5 demonstrates, for the past three years, the retention rate of students in the senior phase of learning (years 10-12) has consistently been between 62% to 67%, although the 2008 data was higher at 78%. One could assume from examining this data that the school was not meeting the students' needs and that 30% to 40% of the cohorts were either dropping out of the education system or moving to another school. However these statistics do not reveal the entire story and one should consider the destination statistics as reported in school newsletters and the School Annual Report.

Although some students do move to other schools due to subject choice availability and family mobility, the school actually has a proud record of the students' successes in securing apprenticeships and traineeships, transitioning to training in such diverse areas as aged care, cabinetmaking, childcare, construction, diesel fitting, hairdressing and mechanical, during their senior phase. Many of Focus State College's students transition to their trade training positions during or at the end of year 11, by which time they have generally completed at least two work experience sessions, during which time their work ethic and level of skills have impressed the host employers and they have also usually completed a number of modules leading to VET certificates.

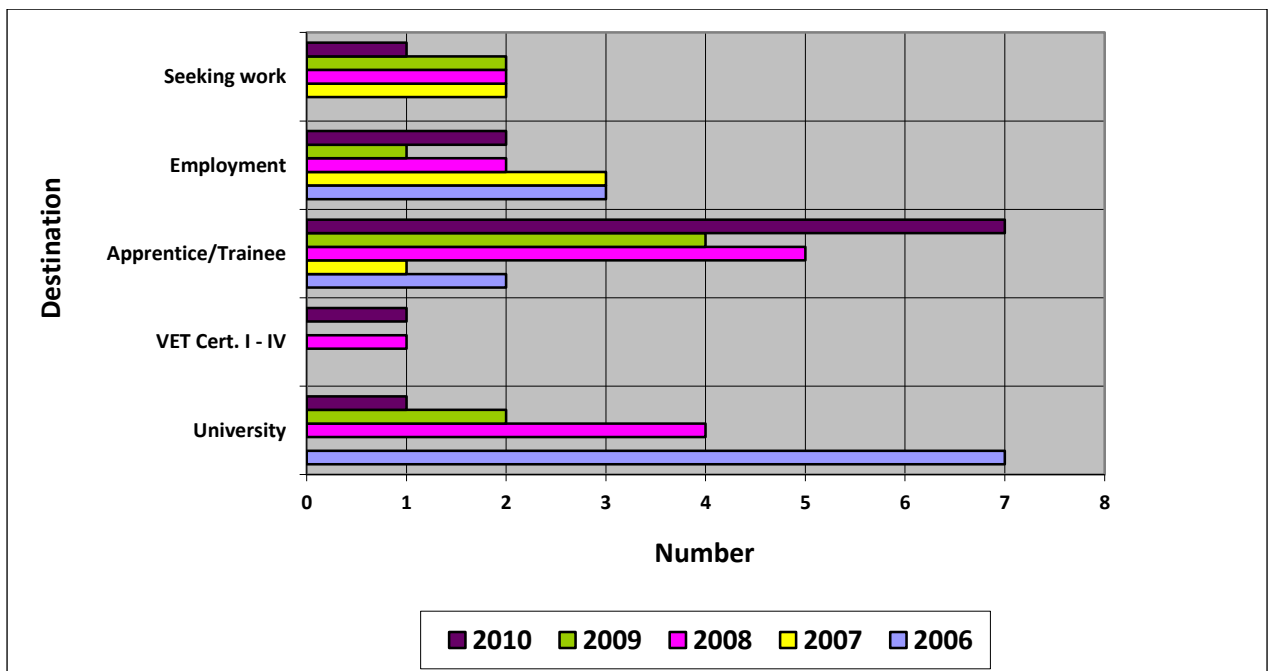
SENIOR DESTINATION REPORTS

Figure 6 has been compiled using the data from the school's Next Steps Report supplied by DETE, regarding the destinations of the seniors in the cohorts of 2006, 2007, 2008, 2009 and 2010. The data for the 2011 senior cohort which will be in the

Next Step Report 2012 is not available as yet. The Next Steps Destination Reports are compiled from surveys which are sent to all students who completed senior in the previous year. The response rate from the Focus State College seniors from the various cohorts in completing the surveys ranges from 60% to 82% which means that between 3 and 6 students from any year did not complete the survey. Three students from 2005, 2006, 2008 and 2009, and four from 2007 and six students from 2010 did not have their post school destinations included in the Next Steps Destination reports.

However, the school also conducts its own post school destination surveys and publishes this information in the school's newsletters. However this additional information is not included in the graph below. The non-respondents have either been at university in another city or have obtained employment in another town and were unable to be contacted by DETE. Besides the incomplete picture of the post-school destinations, an additional problem with relying on the Next Step Reports as an indicator of success is the fact that as it records only those who complete year 12 and ignores those students who were successful in obtaining apprenticeships and traineeships during their year 12 year and left school.

Figure 6: Destinations of Senior students at Focus State College 2006 - 2010



The School Annual Reports reveal that the university bound students have undertaken study in such diverse academic paths as accounting, aviation, business, engineering, health and fitness, information technology, journalism, law, medical imaging, nursing, pharmacy, physiotherapy and teaching (FSC, SAR 2011, p5).

The data sets do not reveal the stories involving the programs which the school has established and which involve community or industry partnerships. These

programs are designed to provide ongoing real life industry experiences for the students and therefore provide a competitive edge in the job market.

DIFFERENT STROKES : MECHANICS MATTER

The Different Strokes: Mechanics Matter project operates in partnership with Cummins South Pacific, an international diesel motor company and involves interested students from years 6 to 12. Once a week, the students work on motors in a workshop located on the school grounds, under the watchful eyes of a primary teacher, a retired mechanic and the apprentice co-ordinator/training facilitator from Cummins South Pacific.

Not only do the students gain practical experience through the reconditioning of motors, they also develop their literacy, numeracy and information technology skills, through consulting manuals, writing job reports, calculating man-hours worked and the cost of parts, estimating size and ordering parts online. The older students also undertake online courses such as “Basic Electronic Troubleshooting Theory” through the Cummins Virtual College.

Some of the students who are involved in this project also undertake study in a first year university subject offered online through CQ University Australia’s Start Uni Now (SUN) program. These subjects include Engineering Studies leading to an Associate Degree in Engineering and Occupational, Health and Safety subjects which lead to degrees.

Students who participate in the Different Strokes : Mechanics Matter project while they are in the senior phase (years 10, 11, 12) have been successful in securing apprenticeships. Many have had to choose between three offers. (FSC SAR, 2001, FSC Showcase 2012)

DIFFERENT STROKES: RADIO ROCKS

The Different Strokes : Radio Rocks project is conducted in partnership with 4CRM (Community Radio Mackay) and involves providing students from years 6 to 12 with training in radio presenting, media writing, radio production and station management. Students can achieve Certificate II in Media and Certificates II and III in Broadcasting (Radio) through the Community Broadcasting Association of Australia (CBAA).

Students undertake the theoretical components of the course covering such diverse topics as media law; on air speaking (presenting); media writing (news, documentaries, sponsorship); programming; recording and scheduling at school. They undertake the practical components in the school’s radio studio and in the 4CRM studio in Mackay. Initially the students read the weather and pre-record news reports and sponsorship announcements before being interviewed regarding a book they have read and then graduating to presenting their own programs. A

number of CQU's SUN program courses align with Different Strokes : Radio Rocks and these include business, communication, multimedia, media writing and information technology. All senior phase students who have been involved in the Radio Rocks program have transitioned into tertiary study in aviation, journalism, law, business and teaching.

CONCLUSION

The sustainability of schools in rural areas relies on the confidence and support by the local community and this confidence is dependent upon the perception that the school is a successful one.

At present the definition of success is tied to quantitative data, such as the year 3, 5, 7 and 9 NAPLAN tests, the year 12 OP data and the "Tracking and Academic Management Index" as developed by Dr Judy Smeed. This paper has focussed on the year 12 data in relation to a small rural P-12 school. The data from the 2010 year 12 cohort rated this school as the number one school, or the most successful in the state. However as there were no OP eligible students in the 2011 cohort, the performance data decreased with the result that the school could be seen as one of the least successful. But the questions arise, "Is this school less successful?" and "Is the school no longer successful at meeting the needs of the students?" The discussion regarding Focus State College also highlights the problem with using quantitative data when examining schools with small cohorts.

Perhaps it is time to re-consider the definition and measurement of success. If this definition and the performance measurement indicators changed, would the outcomes and the portraits of successful schools also change?

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*The name "**Focus State College**" is a pseudonym to protect the anonymity of the school whose data has been used in this paper.