

Published 2013 by the National Association of Enabling Educators of Australia, C/- Open Access College, University of Southern Queensland, Toowoomba, Queensland, Australia, 4350

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Connecting a community: Education and community building in the Auburn community of schools

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Auburn is a community in Western Sydney with reportedly one of the most diverse cultural and linguistic backgrounds in Australia. Students in this community face greater disadvantages and barriers to gaining access and achieving success in a tertiary education setting, than those from higher SES regions. Our goal is to create a Community of Schools that addresses the underlying issues by linking schools, parents, community agencies and local school and industry partners. Our Auburn Community of Schools program consists of initiatives such as collaborative Principal networks, academic and employment preparedness and leadership skills for students. In addition, STEM (Science, Technology, Engineering and Mathematics) programs such as Robotics and Engineering Challenges allow young women to be introduced to non-traditional roles. This paper will outline the structure of the program and discuss some of the cultural issues and other barriers that have been encountered.

The Macquarie University LEAP Auburn Community of Schools (ACoS) program began in early 2012 and since then it has been successful in engaging students and providing an enrichment experience. LEAP, in itself, is an acronym for Learning, Education, Inspiration and Participation and is funded by the Australian Government’s ‘Higher Education Participation and Partnerships Program’ (HEPPP, 2011). Central to the program is the desire to increase the participation in Higher Education of students from low socio-economic status (SES) backgrounds who are traditionally under-represented.

From its inception, the ACoS has ensured that the program engages with staff and students from the NSW Department of Education and Communities schools in the South Western Sydney suburbs of Auburn and Granville. Furthermore, two goals have been integral to its continued development and growth:

- To increase the engagement of students in Science, Technology, Engineering and Mathematics (STEM) through school enrichment programs, professional learning support, campus programs and a process of transition and support from school to university:
- To broaden aspirations, create possibilities and actively support students from disadvantaged backgrounds with the aim to successfully participate in higher education.
With these goals in mind, the program is now gaining a successful reputation in four key schools within the Auburn community. These schools encompass both Primary and Secondary schools and are lead by supportive and committed staff that focus on the goals integral to the success of the Community of Schools and LEAP program ethos. At present, the schools immersed in the program are Auburn Girls High School, Granville Boys High School, Auburn North Public School, and Auburn Public School.

Aside from the obvious locale commonalities, these schools are attended by students from a low SES and culturally divergent background. The main languages spoken are Arabic, Dari and Turkish. Figure 1 shows the number of ESL students in relation to the number of students enrolled. In most cases between 98-99% of students have English as their second language.

![Figure 1: Auburn CoS ESL and Student Enrollment Data](image)

Furthermore, according to the most recent 2011 census (www.censusdata.abs.gov.au) only 11.9% of the parents of students within the Auburn community were born in Australia and the majority of inhabitants are from either China, Turkey, India or Lebanon. Islam is the predominant religion and the suburb’s median per week personal income is approximately $200 less than the state’s median. Added to this, 77.6% of the households in Auburn do not have English as their native language and Arabic, Cantonese, Mandarin, Turkish and Korean are the languages of choice.

The LEAP program engages students from this demographic range and is incentivized by the latest educational reforms for the inclusive teaching of students from a low socio-economic status background (Devlin, et al., 2011). The Australian Federal Government has also recently set a target that by the year 2020, 20% of higher education enrolments at undergraduate level should be students from low socio-economic backgrounds (http://www.innovation.gov.au/highereducation/ResourcesAndPublications/ReviewOfAustralianHigherEducation/Pages/default.aspx). Thus, our programs have been developed...
in order to cater for accessing university and optimal success at university (Devlin, 2010).

Subsequently, the schools within this community battle with a school, student and parent body that are often culturally divided by language and expectations. Finding a common ‘voice’ to communicate amongst each of these schools and within the community has been one of the important goals of the LEAP Auburn Community of Schools program.

Numerous research endeavors (O’Keefe, 2011; Eckert et al., 2007; Jehl, 2001, Redding, 1992; Alvarez-Valdivia et al., 2013; Ingram et al., 2007., Sanders., 1998) have shown the importance of parents and the broader community playing a vital role in supporting successful learning outcomes for children. Parents impact attitudes to academic achievement, lower drop-out rates, school attendance, social skills and intrinsic motivation and positive teacher-student relationships, (Alvarez-Valdivia et al., 2013). The most meaningful partnerships are often those where ‘schools, parents, students and the community’ have worked together to focus on student learning. There is a ‘shared value system’ (Cobb, 1992).

Zepke’s paper (Zepke et al., 2010) ‘Improving student engagement: Ten proposals for action’ provides ten clear areas for promoting active engagement with students. Developed from 93 research studies, the ten action strategies lead rise to four synthesized research perspectives. These are, ‘student motivation; transactions between teachers and students; institutional support; and engagement for active citizenship.’ (p. 167)

Subsequently, O’Keefe (O’Keefe, 2011) reiterates that the themes for successful school transformation can be attributed to six key areas:

- Community/business school partnerships
- Parental collaboration
- Curriculum connected to real world experiences
- A student voice
- Cross generation learning, and
- Locals designing solutions to local problems

Although, the ACoS programs will ultimately encompass these six elements, our focus has been on developing a curriculum connected to real world experiences and developing a community of schools partnership with both the primary and secondary schools within Auburn. Our inspiration for the program has been drawn from a very successful and already existing community of schools program based in an area of Sydney called the Peninsula (http://www.peninsulacommunityofschools.schools.nsw.edu.au/). The Peninsula Community of Schools was launched in 2007 as a collaborative learning community of three local high schools and ten area primary schools who partner with each other and with Macquarie University and Brookvale TAFE to provide over 8,000 students from diverse backgrounds from K-12, with new and dynamic learning opportunities.

Schools need to be viewed as a community resource (Eckert et al, 2007) and the LEAP program has focused on looking at the direct needs of the school’s community. In
particular, the program has instigated commonalities within the schools that include working towards a shared vision, fostering diversity and allowing participants to have freedom to experiment and take risks. (Eckert et al, 2007). This takes its lead from the African proverb that states, “It takes a village to raise a child.” Perhaps, it would take a ‘community to raise a school.’ (O’Keefe, 2007).

The ‘Auburn’ Student

According to Devlin (2011), there are a number of characteristics that are common to students from a low SES background and these set them apart from ‘traditional students’. The programs offered to the schools were developed in order to cater for the needs of students who would not traditionally view university and tertiary pathways as an option for themselves. These are summarised in Devlin’s (2011) paper entitled ‘Inclusive teaching and support of students from low socioeconomic status backgrounds: A brief discussion paper,’ and include (p.3-4):

- Expectations that are ‘disjunctive with the reality of higher education’
- Aspirations that are lower than those of traditional students
- Lack of confidence and self-esteem in seeking support from academic staff
- A belief that their skill-set is less-equipped than ‘traditional’ students
- Levels of preparedness are often different to those of students from a more traditional background
- More time constraints as a result of financial pressures, family responsibilities and greater hours of employment
- A lack of family support for their desire to attend university
- A lower rate of completion
- Financial issues that can impact their higher education choices and oftentimes, work is more important than education.

With these characteristics in mind, the LEAP Auburn Community of Schools program has been developed to maximize the involvement of the student body and the staff at the participating schools and plant the seeds for fostering a desire to attend tertiary education.

Our Programs

LEAP ensures a learning paradigm shift in which we have focused on what are the perceived needs of the students and how we can best target our program to accommodate these needs. Through discussions with the students, the staff at the respective schools, university collaborators and the executive committees at the schools we have developed programs that are learner-centered, collaborative, problem-based and require active participation of the students as opposed to passive consumption, (Jenzabar, 2011). The Low SES Schools Communities National Partnership has also motivated our program as it aims to, ‘improve the education and life opportunities of students from low SES backgrounds through reforms including teacher quality, better assessment data, strengthened school leadership and strengthened partnership arrangements between schools and parents, local communities and the higher education sector.’ (http://www.psp.nsw.edu.au/lowsesscnp/Home.aspx)

At present, the LEAP Auburn Community of Schools offers a variety of programs to the schools and our over-riding goal is to increase the participation rates of students from
the Auburn/Granville Community in higher education. These programs can be viewed on Tables 1 and 2 below.

Table 1: Thematic breakdown of programs and goals

<table>
<thead>
<tr>
<th>Tertiary Preparedness</th>
<th>Broadening Aspiration</th>
<th>Building Capacity</th>
<th>Building Community</th>
<th>Women in Science and Engineering</th>
<th>Environmental Science and Sustainability</th>
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<tbody>
<tr>
<td>Academic skills and Time management (Year 7 and Year 11)</td>
<td>Campus visits (Year 6, 7, 9, 11)</td>
<td>Robotics</td>
<td>Auburn Community of Schools</td>
<td>Robotics</td>
<td>Sustainability programs</td>
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<tr>
<td>Resilience and Positive Thinking (Year 11 and Year 12)</td>
<td>Visiting academics</td>
<td>Teacher Professional Development</td>
<td>Parent engagement – Bridges</td>
<td>FIRST Lego League</td>
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<td>Scholarship applications (Year 11 and Year 12)</td>
<td>Peer mentoring</td>
<td>Pathways presentations</td>
<td>Campus Days</td>
<td>Regional Challenge at GBHS (20 Nov)</td>
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<td></td>
<td>Career Development and Planning (Year 11)</td>
<td>What steals my time? (Year 9 and Year 11)</td>
<td>Establish partnerships with local NGOs and local SIPs programs</td>
<td>Young Einstein’s</td>
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<td></td>
<td>Increased Professional Experience Placements from School of Education</td>
<td>The’ Write’ Way (Year 11)</td>
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<td>Decision making skills</td>
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Table 2: Detailed Description of Programs on Offer in the Auburn Community of Schools

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<th>Program</th>
<th>Key Points</th>
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| Young Einsteins    | • Targets Year’s 3-6 and involves both critical and creative thinking skills during a commitment to 8-10 weeks of term time  
• Students are involved in a variety of activities that enable them to create something new or original through curiosity or perceived need  
• Students develop new ideas and compare and contrast the ideas by being given the change to invent something and then show-case their invention in an end of term ‘Invention Convention’  
• Students investigate great minds from the past and explore the different design processes  
• Students engage in problem solving a range of invention scenarios |
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<tr>
<th>Program</th>
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| Robotics and the FIRST Lego League | One of the newest programs within the Auburn Community of Schools program and engages predominantly Year 6 and 7 students  
• Requires a year long (and more) commitment from participating schools  
• Based on the principles of STEM (Science, Technology, Engineering and Math)  
• Developed in collaboration with the FIRST Lego League, a world wide initiative to engage students in STEM  
• Uses Robotics as a platform to develop critical thinking skills, a collaborative work ethic, gracious professionalism, an introduction to basic programming, the elements of the design cycle and prevalent issues we need to address in the 21st Century.  
• Students work in teams to design and program their own robots and get them to complete a range of activities in preparation for involvement in a FIRST Lego League competition |
| What Steals my Time? | A full day course which is designed to enable students to gain skills in study and time management strategies  
• The program develops independent learning skills and encourages students to be reflective with their own learning  
• Encourages students to work collaboratively with other students and experience the benefits of peer learning  
• Students are provided with expert advice on using library resources, how to understand critical reading, proactive tips on note-taking and how to produce bibliographies |
| Off to a Good Start | Targets Year 11 students over a 5-6 week period of time.  
• Provides strategies for students to effectively plan their time and schedule the competing demands of being a student with other teenage activities  
• Common areas that are explored are the Board of Studies expectations, syllabus requirements, support opportunities, time management stress, goal setting, career pathway possibilities, learning styles, strengths and study styles and where to seek information and help from. |
| The Power of the Mind | Targets Year 11 students and is presented as an hour long workshop as close to the beginning of the school year as possible  
• The goal of this workshop is to empower and motivate students to strive for success  
• Students are asked to identify ways of being proactive, reflect on negative and positive paradigms and how to shape these, understand how to develop better habits and be more resilient to outside influences  
• The strategies taught are to empower the students to make use of them throughout the duration of Year 11 and Year 12 |
| What Now? | Targets Year 11 and 12 students and is presented as on-going career development and planning sessions  
• These sessions draw on a number of profiling tools to help students |
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<th>Program</th>
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<tr>
<td>Program Key Points</td>
<td>identify their personal strengths and interests</td>
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<td>• Students are directed to possible suitable career pathways and guided through the research process of required education and training for their chosen fields</td>
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<td>• Further investigation is encouraged regarding individual institutions and their entry requirements, as well as finding alternate pathways into university</td>
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<td>The ‘Write’ Way to Power Up</td>
<td>• Targets Year 11 and Year 12 GTP students who have been selected by teachers to prepare them for tertiary education</td>
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<td>• It’s a 6-8 week program during term time</td>
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<td>• Implemented in Year 11, the goal is for students to acquire the relevant skills and experience necessary for a successful scholarship application.</td>
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<td>• Students have the opportunity to research the many different scholarships available on offer at universities (with particular focus on Macquarie University) as well as the wider community scholarships on offer</td>
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<td>• Students examine the Educational Access Scheme (Bonus Points), UAC and Equity Based programs</td>
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<td>• Students also learn the essential skills of writing scholarship applications that include, cover letters, competency-based questions and how to answer them and successful scholarship application supporting documents. The focus is on specific language and structuring of responses.</td>
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<td>NXT Robotics Workshops Professional Development</td>
<td>• These are bi-yearly workshops run specifically for teachers involved in the Robotics program in the primary and secondary school’s in Auburn</td>
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<td>• Their focus is to instill the confidence within the teachers to see how they can improve their student’s learning outcomes through the use of robotics</td>
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<td>• It enables teachers to see how easily robotics can be implemented within the classroom with a direct hands-on approach and a range of exciting activities that are inclusive and targets the needs to all students</td>
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<td>• Robotic usage in the classroom has been proven to be an incredibly affective resource as it empowers students to promote their investigative and planning skills, as well as their testing and implementing skills</td>
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<td>Campus Visits</td>
<td>• Targets all the year groups which the Auburn Community of Schools program works with</td>
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<td>• The respective students are invited onto the Macquarie University campus and given an enriching experience</td>
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<td>• Campus Visits have included Sustainability activities, Robotic workshops, interactions with lecturers and the Future Student’s Team as well as targeted STEM activities.</td>
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At present, both Auburn Girls High School and Granville Boys High School have just completed participation in our Term 3 program entitled, ‘The ‘Write’ Way to Power
Up’. Figure 2 shows how this grew from discourse between the staff and students at the schools and the LEAP Macquarie University based program. This discourse enabled us to develop programs that targeted the specific needs of the low SES students that we work with and ensure our programs are both empowering and enabling.

Figure 2: The 2013 Auburn Community of Schools High School Program

Results and future plans

In line with O’Keefe’s (2011) steps for successful school and community transformation, the Auburn Community of Schools program is gathering momentum and links are being made within each school and across the community. Our initial data is qualitative in nature and relies on both pre and post student and staff evaluations. The evaluations allow us to further develop our programs and fine-tune them so that we successfully accommodate the needs of the schools. It also allows us to assess which programs are thriving within individual schools and which ones might offer potential for peer mentoring and further development.

At present, our success lies in the willingness of the schools to continue the programs as well as adapt their curriculum to accommodate them. Auburn North Public School (ANPS), Auburn Public School (APS) and Auburn Girls High School (AGHS) have been participating in the program since its inception in 2012. Granville Boys High School (GBHS) joined the program at the start of 2013. Figures 3 and 4 show our present available data and although, in some cases (ANPS and AGHS) the numbers appear less, we have yet to complete Term 4. It is also important to note that a number of the schools changed their selection criteria for those students allowed to participate in the programs. So, for example at AGHS, the Robotics class enrollment changed from being a complete Year 7 class to one that consisted of selective Gifted and Talented Pupils.
Figure 3: Schools Engagement and Participation in ACoS Programs 2012-2013 (Auburn North Public School, Auburn Public School and Auburn Girls High School)

Due to our success in both targeted primary schools and Auburn Girls High School, Granville Boys High School has implemented our programs and made a variety of changes to the school curriculum in order to allow the students to have maximum benefit from the opportunities the program offers. We are in negotiations with the Executive Staff at the secondary schools to develop new material for 2014 and will be providing a campus visit prior to the end of 2013.

Figure 4: Schools Engagement and Participation in ACoS Programs 2013 (Granville Boys High School)

The program has also offered all Primary and Secondary students the opportunity to participate in a campus visit. These are clearly designed with the particular group of students in mind and we have received a range of positive evaluations based on these experiences. The visits allow the students to be introduced to the various facilities that we have on campus and the range of study opportunities open to them. By the end of
November, 2013 all of the schools, and the varying year groups will have engaged in a campus visit.

The success of the program is also reliant on the participation of willing teachers who provide LEAP with the ability to work with students during class time. This has led to further enrichment programs for professional development. At present, we offer teachers the chance to participate in our NXT Training Program twice a year. Teachers can realize the true benefit of initiating a Robotics NXT Program (part of the FIRST Lego League) within their classroom and harness the potential of their students. In the first year of the program, 6 teachers participated in the training and so far 9 teachers have participated in 2013.

It is this Robotics NXT Program that has enabled LEAP to work towards developing a Community of Schools within Auburn and connects each of the core schools. Students have been working in teams throughout the year and will come together in late November for a regional FIRST Lego League Championship at Granville Boys High School. In total, 15 teams will compete in the Robotics challenge and hope to be given the chance to enter the National Championships later in the year. Robotics also develops our student’s sense of teamwork and ownership as the FIRST Lego League prides itself on a student’s ability to think critically, to manipulate the design cycle, to solve real-world problems and promote the fundamentals that underpin the importance of an integrated STEM curriculum (www.usfirst.org).

Both Auburn North Public School and Auburn Public school have already recognized the need to develop a link amongst the primary schools and Instructional Leaders have been employed to develop further enrichment programs which will strive to connect the schools. These Instructional Leaders are in place to develop networks pertaining to literacy and numeracy from K – 2. Their goal is to continue their work throughout the primary school years.

As of December, 2013 our program will effectively start to target parental involvement through developing a close relationship with the Community Liaison Officer in place at Auburn Girl’s High School. Furthermore, as part of the collaborative Bridges to Higher Education Parents Project group, we have been able to provide opportunity for parents in Auburn to spend a day at each of the participating universities (University of Sydney, University of Technology Sydney, Macquarie University, University of Western Sydney and Australian Catholic University). Transport is provided for 100-200 parents each time to visit a Sydney campus, seek information about access, pathways and support services. This is of particular relevance to the numerous parents who are new immigrants to Australia and are supportive of their children accessing Higher Education, but have no background knowledge to our systems and processes. Interpreters are made available for these days and opportunity for further discussion takes place throughout the day. The previous visit consisted of 140 parents who all responded positively to the experience through an evaluation that they completed.

One more achievement for 2013 is our annual December Auburn Community of Schools meeting. This will be our second round table discussion where we bring together all the key stakeholders (including Principals, members of the Executive, involved teachers and instructional leaders) who have initiated the LEAP programs in their respective schools. This meeting allows us to plan for 2014 and ensure we are
meeting the curriculum and school requirements for our programs. Principals and teachers are engaged in proactive decisions regarding the future of their schools engagement within the wider community.

**Conclusion**

The LEAP Auburn Community of School’s Program is gathering momentum and we are working in collaborative partnerships with the schools to ensure that these programs continue to engage and empower the staff and students that we work with. Clearly, one of our biggest concerns is the continuation of the program after December 2014 as the sustainability of the program is contingent on HEPPP or alternative funding. However, our goal is to ensure that teachers are given the right tools in order to continue the programs themselves into the future.

The evaluations that we have received and the positive responses to our involvement in the schools, via campus visits and other school engagement opportunities suggest at the program is making a positive difference to the way students view both STEM subjects and to their willingness to consider tertiary education as a possible pathway into the future. The LEAP Auburn Community of Schools program hopes to increase its student and school participation in 2014 and continue to develop the links that a ‘community of school’ relies on.

**Acknowledgements**

This work was funded by the Australian Government Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education through the Higher Education Participation and Partnerships Program. With special thanks to Luan Heimlich from Macquarie University, Department of Engineering for her role in running the Robotics program. We also acknowledge the efforts of all of the participating schools and their staff who are involved with the program.

**References**


