

Awakening Aspirations of Primary School Students: Where Will Your Dreams Take You?

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Abstract

This article posits that when children are encouraged to aspire, they can become aware of a new world of choices and opportunities. Children should be supported to aspire in all areas of their lives. Of interest is children's capacity to aspire to attend tertiary education. Literature shows that children cannot aspire to attend higher education when they have no knowledge of the opportunities nor realise its purpose. To support this argument, we discuss a project involving primary school students from areas that have been identified as having a low socio-economic status. The results show that as a consequence of students participating in the My Tertiary Education (MyTED) program they developed the capacity to aspire to attend tertiary education.

“Alicia would look up at the starry sky and dream”

(Bright Star, Crew, 1997, p.5)

Keywords: Aspirations, Awakening, Digital literacy, Interactive ebook, Participatory research, Photovoice, Primary school students, Higher education, University

1. Introduction

In his book *Bright Star*, Gary Crew introduces Alicia as a young girl who realises her future is as limitless as the stars. But it took for her mother to remind her “it is a choice only you can make” (Crew, 1997). Some children dream of becoming princesses and superheroes, described by Somerville (2013) as “fantasy” aspirations. Others dream of achieving sporting feats or to have specific careers. Whatever it is that children aspire to, they should be encouraged to look up at the starry sky and dream from a young age. Egan (1999) explains how the imagination of children and their creativity gradually decreases as they grow older. It is often as adults that the barriers to the fulfilment of children's dreams become apparent, and adults can become dismissive of their stories and imaginative musings (Bouakaz & Persson, 2007). Lessons can be learned from our Australian Indigenous histories about the importance of dreaming. The first Australians use stories as a means of communicating their hopes and dreams and to pass on knowledge (Perso, 2012).

Ernst Bloch (1986) considers the not yet world as a utopian possibility and sees it as part of the function of dreams. For Bloch, dreams are not simply idle time wasters, but opportunities that offer inspiration, turning ‘that which does not yet exist’ into a possibility (1986, p. 86). Bloch replaces unconscious with ‘not yet conscious’ that which is latent within us in the form of anticipation but not yet articulated. We use Bloch's notion of not yet conscious to highlight that the aspirations of primary school students are latent but can be awakened through what we have called an awakening aspirations phase of the program to be discussed in this paper.

2. Literature Review

While there have been some improvements in higher education participation in Australia, especially amongst women, mature-aged students, students with disabilities and international students, there are still significantly lower proportions of students from disadvantaged backgrounds, especially low SES enrolled in higher education (Putnam

& Gill, 2011). The proportion of students from low SES studying at universities has remained virtually static for the past 15 years and is well below their representation in the general population. The Government has set a target of 20% of new university enrolments to be students from low SES by 2020 (Commonwealth Government of Australia, 2009). The average national rate for this group is currently 15% and in our study region, the participation rate is below this at 13.8%. The study schools are predominantly in a local government area that has an even lower rate of around 7%. In 2008, the average participation rate nationally for students from low SES areas was 12.5% (Best, 2010). While Best (2010) acknowledges that classification of SES is troublesome, there appears to be consensus that the catchment area, no matter which classification scheme is used, has a high proportion of people of low SES and that we need to identify ways in which to enhance higher education outcomes for this group. A dedicated multi-strategic sustainable intervention aimed at primary school children from disadvantaged backgrounds is needed (Gale et al., 2010). Australian universities are working in this area of engagement with many schools across all states to reach the 20% target. Four key obstacles have been identified as barriers to the participation of students from disadvantaged backgrounds in tertiary education: availability; accessibility of tertiary education; academic achievement; and aspirations of students (Gale et al., 2010). We have chosen to concentrate on the aspirations of students and building the capacity for students to aspire to attend tertiary education.

2.1 Capacity to Aspire

The My Tertiary Education (MyTED) program aims to raise the capacity of children to aspire to higher education. The term *capacity to aspire* recognises that the development of aspirations is a complex process that encompasses a person's gender, background, role models, peer group, parental/carer/family expectations and location. Students' aspirations are shaped by the formative experiences to which they are exposed (Mezirow, 1991; Taylor, 2000). St Clair and Benjamin (2011) assert that it is folly to view aspirations as personal characteristics within the control of individuals. What may seem at first to be a paucity of ambition may in fact be a lack of information or awareness of available options. Steele (2008) states that individuals and their families may be willing to make significant sacrifices to make dreams of attending university a reality, while for students with weaker aspirations, barriers to higher education participation are likely to have a more decisive influence. Sommerville et al. (2013) claim that by Year 5 children have sophisticated ideas about their choice of careers but little information about the multiple pathways to achieving their career aspirations.

According to Gore et al. most careers education in Australia is delivered in Year 10. However, she found minor differences on occupational choices and aspirations from Years 4 to 10 and as a result discussions about aspirations could be introduced at an earlier age. MyTED aims to increase children's range of potential hopes and dreams in primary school by addressing the factors that influence their capacity to aspire.

2.2 Influences on Aspirations

Parents/family can intentionally and unintentionally influence the aspirations of their children. Parental occupations are often reflected in the aspirations of their children simply because the children are aware of the existence of that option (Hartung, 2005). Other researchers have similarly noted that the career aspirations of children are influenced by the expectations and occupations of their parents (Bryant, 2006; Helwig, 2008; Lee, 2012; Wilks & Wilson, 2012; Schmit, Wilson & Walsh, 2012; Sosu, 2014). Parents from a higher SES are likely to be in a better position to support their children through the higher education required for some careers, either through an understanding of the system, or through access to social networks (Vryonides & Gouvias, 2012). Bryant (2006) and Creed (2007) recognised that parents' aspirations might be affected by their experiences and socio-economic status. It has been found that there is a link between family SES background, aspirations and rurality. "The pattern of young peoples' post-secondary aspirations strongly reflected the influence of parents and siblings (cultural capital) and the local environment (social capital) especially in the last two years of primary, and the first two years of secondary school" (Wilks & Wilson, 2012). However, rather than steer their children away from unfamiliar pursuits, Bok (2009) identified a desire by the parents to help in any way they could, despite being somewhat unaccustomed to the expectations of higher education.

Parents can indirectly dissuade their children from following particular career paths. Jobs change rapidly and some children's aspirations may not be recognised as legitimate career choices by their parents (Allen, 2013). Since Bandura (2010) concluded that parents are more likely to hold high aspirations for their children if they believe they can help them, some of these new fields, such as computer game design or entrepreneurship, may seem unrealistic and children aspiring to them may lack parental support. Rennison, Maguire, Middleton and Ashworth (2005) noted that many of the parents they interviewed felt they had inadequate knowledge of the qualifications system and thus felt unable to advise their children.

Researchers have also recognised that parents indirectly influence their children's aspirations through their cultural background (Dandy & Neckelbeck, 2002), by their socio-economic status (Bandura, 2010), and by the gender of the children (Eccles, 2009). The mechanism through which children are influenced by parental expectations is unclear, with Bryant (2006) concluding that children do not really know what their parents do for a living, but they know they earn money. As a result, children's aspirations often revolve around earning an income. Other parents hold the view that the actual career path followed by the children is unimportant, so long as the children are happy (Somerville, 2013). Related to this, Bandura (2001) contends that parental aspirations for their children are the primary influence on their perceived academic self-efficacy, that is, their belief in their ability to achieve academic goals.

Children's sense of self and their sense of their abilities influences aspirations, as children tend to target roles that both interest them, and seem achievable. As the actual job tasks are often unknown or unclear, children imagine themselves undertaking particular careers. They consider occupations based on the enjoyment that they anticipate feeling when undergoing that role and ultimately choose aspirations that match their interests and skills (Eccles, 2009). Interest in a role and competence in the skills required for that role enjoy a symbiotic relationship (Rohlfing et al., 2012) in that children will try harder at an activity they enjoy, and then enjoy the activities more because of their greater competence. Equally important are children's internal pictures of themselves – if children consider themselves caring, they will be drawn to the caring professions; artistic children may target the creative industries (Smith, 2011).

These factors contribute to the notion of an intervention in primary school is important because career exploration starts surprisingly early. The students who participated in the MyTED program are 9 to 11 years of age and have already recognised that adults have jobs, and reject careers that they perceived as inappropriate for their gender (Gottfredson, 1996). Creed (2007) asserts that their aspirations are strongly influenced by the perceived social value and status of a job and they have not yet begun to consider their own interests and abilities. Gale and Tranter (2010) recommend interventions at this stage of development for people in low SES areas because test results as early as Year 6 indicate that patterns of decreased university attendance are measurable. University-based intervention programs typically target students in years 11 and 12 by which time decisions about higher education have already been made. Rather, it is recommended that interventions begin in primary school and continue into high school when students begin to shape aspirations that involve their own skills and interests (Gale & Tranter, 2010). Beddington (2016) recently confirmed this notion by stating how it is important to “get into the primary schools and stimulate aspiration.” All of these factors contributed to the decision to develop a program for Year 4 students despite questions being raised that the students are too young.

3. Methodology

A participatory research methodological approach is taken during the MyTED program. Participatory research involves researchers working closely with a community or individuals in understanding a social problem by working with those directly affected to address the problem and enact change. Participatory research is designed to improve the quality of peoples' lives by empowering individuals and organisations through research conducted with the full engagement of those directly affected (Creswell, 2008). Nygreen, Kwon and Sanchez (2006) define participatory research as “an alternative paradigm of knowledge production in which groups who are adversely affected by a social problem undertake collective study to understand and address it” (Nygreen, Kwon and Sanchez, 2006, p.109). Participatory research attempts to ensure that those who were conventionally researched are involved in all stages of the research process from the identification of the problem through to the dissemination of the results and consequent action (Pain, 2004).

Involving children in any participatory research can be challenging, as there is always a power differential between children and people asking the questions (Greenaway, 2011). Participatory approaches engage participants in all aspects of the process. The participatory research method chosen is Photovoice as it enables participants to represent their point of view through photography and narrative. The Photovoice method has been used extensively with marginalised groups to great effect and contributes to an enhanced understanding, thus providing opportunities for empowerment (Catalani & Minkler, 2010; Mallan, Singh, & Giardina, 2010). We do not consider that the participating students constitute a marginalised group but we are borrowing the general principles of Photovoice to collect data from what we consider to be an underrepresented group of students. We are using Photovoice methods to ensure the voices of the students are heard rather than an adult interpretation.

In this type of research, equal importance is placed on the feelings and values of participants. The perspectives and ideas of people involved are seen as the key to achieving a more rounded and in-depth understanding of an issue. In some instances, participatory research involves researchers and participants working together to develop a research

agenda and the collection of data for critical analysis. The research is co-owned; therefore, a negotiation between the academic researcher and the participants takes place to determine the research processes. Participants can exercise their right to analyse their own situation and address the problems presented.

A participatory research methodology is considered most appropriate for this study as the project includes primary school students in a research experience that directly affects their lives. This approach attempts to break down the distinctions between researcher and the researched, that is the subject and object of the research (Flicker et al., 2008): the latter is often the case when researching young people.

3.1 Methods

MyTED program Overview

MyTED program encourages primary aged students from schools that are located in an area that has been identified as having a low socio-economic status (SES) to consider higher education opportunities. It aims to awaken and build their capacity to aspire to attend higher education. In an effort to inform, guide and encourage students, the program focuses on the critical stages of primary school. The research (Gore et al., 2015; Bradley et al., 2008; Gale and Parker, 2003) tells us that students from low SES backgrounds have substantive aspirations, but have less developed capacities to bring them into fruition. Boc (2010) refers to Bourdieu's theories of cultural capital, habitus and field which provides a supplementary theoretical framework where he stresses the complex relationships between socio-cultural background and life-world experiences that inform students' and families' dispositions toward school and their capacities to aspire to higher education. According to Gale et al. (2010), interventions to encourage students to consider their aspirations are more effective when aimed at primary school students. The literature indicates that the prime developmental time to begin discussions about aspirations is between the ages of eight and eleven. MyTED program is based on the premise that children cannot aspire to attend higher education if they do not have the knowledge or resources. The MyTED program team have ensured a consistent common language throughout the project that supports our aim of capacity building rather than that of raising aspirations to eliminate any value judgments of the aspirations of children.

The program takes a multi-strategic approach that encourages and fosters dreaming and imagination to explore possibilities for the future. The multiple strategies include a series of four in-class lessons delivered by university staff and education students in their third year, an interactive eBook with a story about the aspirations of Edwina, an Eastern Grey kangaroo as the lead character, video narratives by university and Technical and further Education (TAFE) graduates describing their sometimes-unusual career pathways, and a university campus visit. The strategies used are designed to encourage and foster imagination and to help children to awaken and discover their latent aspirations. Higher Education and Tertiary Education are used interchangeably during the MyTED program and refer to opportunities offered by TAFE, universities and private providers post-secondary school.

MyTED program fosters imagination in children as it builds capacity to aspire and the ability to believe that the "future is as limitless as the stars" (Crew, 1997). For the Year 4 participants in MyTED program, an *aspiration* is defined as a dream or a wish, something that you hope to do when you grow older. Children can have more than one dream or wish for the future. Aspirations are not limited to career choices but offer opportunities to enhance education, sporting prowess, leadership ambitions or environmental awareness, to name a few. Edwina herself is the product of daydreams and imagination and is used to excite children into discovering their aspirations.

Students' aspirations are captured and discussed by using the research method Photovoice. Using photography, students can creatively elucidate their aspirations. Creativity is the process of generating ideas that are novel (Wright, 2010, p. 3) and can be expressed by children in a variety of ways such as the written word, drawing, photography, gaming and the spoken word. We acknowledge that people tend to be creative in some specific domains but not necessarily in others because creativity is both a cognitive and a personality trait (Wright, 2010, p. 3). For this reason, we give students opportunities to write about, take photographs and draw pictures that represent their aspirations. Students' enthusiasm about drawing pictures that represent their aspirations created a new research method that we have called MyVoice. Children often draw for artistic pleasure or for learning by engaging with ideas, knowledge and concepts across a whole spectrum of subjects (Knight, 2010). The MyTED program discusses complex ideas that students may prefer to explore through visual means rather than by taking photographs or writing (Knight, 2010). Malchiodi (2012, p. 8) contends that people working with children recognise that drawing is an effective modality in which children can express themselves in ways that language cannot. We encourage students to work in groups during the activities, as creativity grows out of the relationships between an individual, his or her work and other people who judge the quality of the work. The research methods will be outlined in more detail and discussed further.

Photovoice is a participatory research method used to investigate the lived experiences of the participants. It enables participants to represent their point of view through photography and narrative. Students were asked to take photographs in various locations. The photographs represented their aspirations in primary school, secondary school and as an adult. Students then choose their four favourite photos to tell their story. They recorded the photographs on their “aspirations pathway” - an electronic worksheet found in the eBook that represents the yellow brick road from the Wizard of OZ leading to a specific goal or destination. Students are shown examples of the aspirations pathways of the project team, their teachers and Edwina, nicknamed Ted the kangaroo in order to model expectations and stimulate thought.

Edwina appears on the MyTED program worksheets and is referred to in class activities. Her life story is found in the interactive eBook and students commonly try to spot her during the visit to the University campus, which is also a wildlife reserve hosting Eastern Grey kangaroos. Edwina responds to student emails during the term when the project is being conducted to ensure that she becomes a significant character to the students during the program.

Along with the photographs, students develop narratives to help them to explain why they chose the photographs. Participants have the option of using the PHOTO acronym shown in figure 1 below to construct the narrative associated with a photograph and to help convey their message.

Name	
P	Describe your Photograph
H	What is Happening in your photograph?
O	Why did you take a photograph Of this?
T	What does the photograph Tell us about your aspirations?
O	How can you create Opportunities to achieve your aspirations? What is missing from this photograph?

Figure 1. Photo acronym used to contextualise photographs

Another method to collect data emerged as we worked with the students. We have called this method MyVoice as it gives students the chance to express themselves through imagination and creativity. When the students are participating in MyVoice, they draw a picture of their aspirations for their future and then complete the following sentences to help describe their drawing.

I have drawn...

I drew this because...

To reach my aspirations I need to...

The Photovoice or MyVoice session is repeated with the parents/carers of the student participants to capture their aspirations for their children and highlight any barriers or enablers that may influence their children’s capacity to aspire. The students and their parents conducted the Photovoice or MyVoice activity at different times to eliminate any unwanted influence. This added another interesting dimension to the project when the students’ and parents’/carers’ photographs came together. The photographs, drawings and narratives were analysed to capture emergent themes.

3.2 Participants

The participants were purposefully selected from Year 4 classes at primary schools on the University’s priority schools list. MyTED program was conducted at 10 primary schools with a total of 566 students participating over three years. The research team worked with 80 student participants in 2013, 211 in 2014 and 275 in 2015. The total number of parents and caregivers participating in MyTED program was 129 over the three years.

3.3 Features of the Program

3.3.1 In-class Lessons

Education is an essential component of driving social change (Crump, 2005) and it is important to support children to aspire to higher education. However, it is well recognised that schools are facing a number of pressures, including what is often referred to as the ‘crowded curriculum’ which means too much content is becoming overwhelming for the students (Crump, 2005). To address this, strategies to align this project with current curriculum requirements of the Australian Curriculum were put in place.

3.3.2 Interactive eBook

The use of digital technologies is a feature of the multi-strategic approach. Young people are often using digital technologies such as online games, networking and participation in virtual worlds (Greenaway, 2010). As a result, interventions designed to increase students' aspirations about tertiary education are more often placed online.

Online virtual tours and engaging activities that provide an overview of what the university looks like, how it operates and aspects of student life can provide site familiarity and reduce concerns of students. The virtual tour shown to students in regional and rural schools as part of the current MyTED program project proved to be very popular.

3.3.3 Parents and Caregivers

We have included parents and caregivers in all the MyTED program activities because supporting parents and caregivers to familiarise themselves with the university experience, may be a leverage point for increasing participation amongst low SES groups (Scull & Cuthill, 2010). Perceptions about the benefits of tertiary education and family experience with tertiary education can greatly influence a student's decision to consider tertiary education as an option. One of the most reliable predictors of educational aspirations is parental education

3.3.4 Campus visit

Students particularly enjoy the interaction with university staff. Students indicated that their favourite feature of the program was the visit to the University because "it is not that scary, it is just a big school" (Student, 2013). These visits not only showcase the opportunities for study at the facilities and the many career opportunities available in the local area, but begin to demystify the assumptions surrounding tertiary education (McKay & Devlin 2014).

3.4 Data Collection Phases

There are four phases to the MyTED program project. To gather data about the capacity of students from disadvantaged backgrounds to aspire to attend higher education, there is a need to first identify what their aspirations are. The aspirations the parents have for their children also have a significant influence on the dreams of the children (Bok, 2010). Thus, during phase 1 the focus is on capturing the aspirations of a group of Year 4 primary school students and their parents for their future. At this phase, the aspirations of the students are seen as latent, not yet conscious and waiting to be roused. During class time the MyTED program team and the students discuss the significance of the yellow brick road in the movie the "Wizard of Oz" (LeRoy, 1939) as a framework for organising and recording student's aspirations. The students identify with the characters in the Wizard of Oz and gain an understanding of wishes and dreams. This discussion leads into the identification of the word "aspirations" and its meaning. The dreams the students have for the future and any factors that influence the capacity to aspire to participate in higher education are captured using Photovoice and MyVoice.

Phase 2 of the project promotes dialogue through the sharing of narratives about non-traditional pathways to higher education. A diverse group of current staff members and students from various higher education facilities were interviewed about their journey to higher education. During the pilot in 2013, the project team endeavoured to find staff members with stories that address the themes emerging from phase 1. The interview questions were developed after phase 1. Twelve interviews of 15 minutes each were conducted. The interviews were videoed and edited to 3 minutes to appeal to the target audience's attention span. The edited versions are video narratives that have been included in the eBook. The video narratives were again used in the delivery of the program in 2014. Some additional video interviews, including current students, were added to the interactive eBook at this stage.

Phase 3 is what we have called an awakening phase that builds the capacity for students to aspire to higher education. It is framed around an interactive eBook about the life of Edwina the kangaroo and her friends. The eBook has Edwina's life story as its organising framework designed to engage Year 4 students. The characters in the interactive eBook investigate their dreams but eventually find out that only they have the answers. Each character and consequently each year four student investigate their own pathways and aspirations for the future.

During phase 3, the students visit a higher education facility to tour the campus, find Edwina, who is studying at university and to meet the people they have seen in the videos in the interactive eBook. The campus visit includes a tour where students visit different areas of the University including nursing, paramedics, engineering, business and science. The students attend a lecture delivered by the staff they have seen in the interactive eBook and they also participate in first people of Australia activities focussed on aspirations and dreaming.

Phase 4 requires participants to conduct a further Photovoice or MyVoice activity. The purpose of this phase is to ascertain whether their capacity to aspire to participate in higher education has changed through the exposure to the

awakening exercises and the project in general. Students are explicitly asked on the MyTED program project’s worksheet if their aspirations have changed or have stayed the same at the end of this phase. Quantitative and qualitative data was collected through worksheets, part of the interactive eBook, and interviews held in class.

4. Results

We recorded any change in aspirations that the students said they had. We also recorded observable changes to aspirations that were evident in the student’s Photovoice photographs and MyTED program drawings.

4.1 Pilot Program 2013

In the MyTED program pilot program three classes from two primary schools participated, one state school and one independent school. A total of 80 students and 17 parents / caregivers participated.

Table 1 shows the students perception of any change that may have occurred in their aspirations from the start of the program to the end. Students were asked the question “Have your aspirations changed or stayed the same?”

Table 1. Student perception of change

Change	School 1 Class 1a N=26	School 1 Class 1b N=24	School 2	Total N=50	%
Yes	12	16	Students were not asked this question	28	56%
No	12	4		16	32%
Incomplete	2	4		6	12%

Table 2 shows the change in aspirations of the students from when the first data was collected to the data collection at the end of the program. Some students said their aspirations had not changed but there were obvious differences in the data when analysed.

Table 2. Observable change in aspirations

Change	School 1 Class 1a N=26	School 1 Class 1b N=24	Total School 1 N=50	Total School 1 %	School 2 N=30	Total N=80	%
Yes	16	19	35	70%	17	52	65%
No	10	5	15	30%	9	24	30%
Incomplete	0	0			4	4	5%

Students were asked what they would need to do to reach their aspirations. The results are shown in Table 3.

Table 3. Total: “To reach my aspirations I need to...”

School 1 + School 2	Total’ N=80	%
Undertake Tertiary Education	30	38
Work hard / Practice	25	31
Other	25	31

4.2 Results 2014

After some refinements to the program nine classes from six primary schools participated, three state schools, two independent schools and one catholic school. A total of 211 students and 82 parents / caregivers participated.

The students were asked the same question “Have your aspirations changed or stayed the same?” at the end of the program and the results are shown in Table 4.

Table 4. Student perception of change

Change	School 1 N=56	School 2 N=27	School 3 N=17	School 4 N=71	School 5 N=27	School 6 N=14
Yes	12	13	4	17	12	6
No	10	10	10	31	13	6
Incomplete	7	4	3	22	2	2

There were also observable changes in the data that the team noted as shown in Table 5.

Table 5. Observable change in aspirations

Change	School 1 N=56 (Lost data)	School 2 N=27	School 3 N=17	School 4 N=71	School 5 N=27	School 6 N=14
Yes	13	9	5	19	12	6
No	7	9	9	28	13	6
Incomplete	7	9	3	24	2	2

4.3 Other Results 2015

Students were asked what they would need to do to reach their aspirations and their results are shown in Table 6. The data from school 1 is incomplete as the data was lost in transit.

Table 6. "To reach my aspirations I need to..."

Change	School 1 N=56	School 2 N=27	School 3 N=17	School 4 N=71	School 5 N=27	School 6 N=14
Undertake Tertiary Education	4	8	3	6	4	6
Work hard / Practice	14	13	14	36	12	5
Other	4	6	0	29	11	3

4.4 Results 2015

As with the previous two years' students were asked the same question "Have your aspirations changed or stayed the same?" at the completion of the program as shown in Tables 7, 8 and 9.

Table 7. Student perception of change

Change	School 1 N=23	School 2 N=50	School 3 N=24	School 4 N=67	School 5 N=18	School 6 N=83
Yes	10	27	14	37	9	47
No	10	23	10	30	7	30
Incomplete	3	0	0	0	2	6

Table 8. Observable change in aspirations

Change	School 1 N=23	School 2 N=50	School 3 N=24	School 4 N=67	School 5 N=18	School 6 N=83
Yes	12	30	14	41	9	53
No	8	20	10	26	7	24
Incomplete	3	0	0	0	2	6

Students were again asked what they needed to do to reach their aspirations however only those students answering that they need to attend tertiary education was recorded. This data was not able to be identified as coming from any particular schools.

Table 9. "To reach my aspirations I need to..."

Change	School 1 N=23	School 2 N=50	School 3 N=24	School 4 N=67	School 5 N=18	School 6 N=83
Undertake Tertiary Education	134 students said they have to attend tertiary education					
Work hard / Practice	Not recorded					

In summary - a comparison of the results across the three years is shown in Table 10. The results are recorded as a percentage of the number of students in each category.

Table 10. Comparison of the results

	2013	2014	2015
Student Perception of Change	56	37	54
Student Perception of Change	65	34	60
Undertake Tertiary Education	38	16	51
Work Hard / Practice	31	47	Not recorded

5. Discussion

During phase 4, the students were asked if their aspirations had stayed the same or had they changed from the beginning of the program. 56% of all the students indicated that their aspirations had changed. After further discussion with the students as a group, they indicated that their aspirations had changed because of the information they had received during the MyTED program This result supports the notion that a student cannot aspire to attend tertiary education if they do not know that it exists.

There were many opportunities to assess whether the students' aspirations had changed or not. Fifty-two out of 80 students changed the details of their photograph or drawing from the beginning of the project to the end. The students said that they now knew more about tertiary education so they can choose whatever they want to do in the future.

At the end of the pilot project, students were given the opportunity to ask questions about TAFE and university. These question and answer sessions were videotaped and each lasted approximately 15 minutes. Questions were primarily concerned with the time period of a degree and what courses are offered at university as opposed to TAFE. From these sessions, it was clear that students had not considered that they would attend further education for extended periods of time. The length in years of a program of study was of particular interest and fuelled further discussion. Three years are perceived as a long time from the perspective of children compared to that of an adult. At the beginning of the project, it was noted that there was no mention of attending tertiary education by any students.

From the discussions, we had with the parents and from the photographs they took during their Photovoice session we discovered that 100% of the parents had the same aspirations for their children. Not surprisingly, all the parents' photographs indicated that they wanted their children to be healthy and happy. This reflects the findings of Bok (2010) who noted that the parents in her study wanted their children to be happy and successful, in whatever form success took for them. During dialogue with parents, various barriers to attending tertiary education emerged. The main concerns parents had been around the significant financial outlay required and noted this as the number one barrier to attending tertiary education. The second most discussed barrier was location and the fact that their children would have to leave the area to attend higher education.

Age

Results from the MyTED program project support previous studies showing that strategies aimed at students in primary school are effective in changing the aspirations of younger students as are those aimed at traditional groups such as year 10 onwards (Gale et al., 2010; Heckman & Rubinstein, 2001). However, according to Gale et al. (2010), by Year 10 onwards academic achievement patterns are harder to turn around, aspirations are likely to be well established and students may have already selected or been counselled into subject selections and tracks that do not allow them access to the tertiary education trajectory they may have otherwise taken (Gale et al., 2010).

Due to their success, current University programs targeted to senior school students warrant their continuation, however, a multi-strategic approach caters for students into the middle years of schooling to further build on these experiences. Gale et al. (2010) state that,

"the most effective strategies in raising attainment and increasing pupils' aspirations are those that are part of an on-going programme of events which expose pupils to realities of all aspects of university life" (HEFCE, 2006).

5. Conclusion

The results from this investigation confirm that there are a number of factors that influence the capacity to participate in tertiary education. They also show that students respond favourably to a multi-strategic literacy based program that discusses aspirations and tertiary education options. By favourably we mean that the aspirations of students can change or expand as they acquire more knowledge of the opportunities available to them. Parents and caregivers, teachers and community members are encouraged to promote dialogue about tertiary education to ensure students have the opportunity to discover and ask questions about tertiary education. MyTED program starts a conversation about tertiary education by awakening the not yet conscious aspirations of primary school students. Students benefit from the continuation of these conversations both in and out of school as each student's knowledge grows and their aspirations form.

The various awakening aspirations strategies in which the students participated promoted discussion and excitement about what the future holds for them. The project team encouraged students to believe in their own potentialities and to dream of doing whatever was of interest to them. This positive reinforcement and knowledge gained from stories explaining the pathway of others and their achievements encouraged students to think about their own aspirations. Students also gained the understanding that to reach their aspirations they may need to participate in tertiary education and that they need to work hard and practice.

Photovoice was a successful way to collect data as the students engaged with the activity and enjoyed taking photographs using an iPad. The introduction of MyVoice was popular as students were able to draw on their creativity to create illustrations of their wishes and dreams. This was a useful addition to the program especially when students were struggling to find something to photograph.

Reading the interactive eBook formed one of the strategies that promoted dialogue and questions from the students. The students enjoyed the story of Edwina the kangaroo and engaged with her character during the project. Edwina provoked their imagination and raised excitement among the students at the possibility of seeing her on campus.

The parent's responses to program in all three years showed that they all wanted their children to be healthy and happy in the future. It promoted discussion with their children about the parents' own aspirations, the barriers and enablers that they encountered, and sometimes their own pathway to higher education or alternative aspirations. A discussion of the barriers and enablers can assist students to further consider participating in tertiary education. When the barriers are discussed, they can often be overcome as people become aware of the various enablers that are available. There are many opportunities and all students should be encouraged to look up at the starry sky and dream.

As Gary Crew (1997) introduced, the future for children is as limitless as the stars but "it is a choice only you can make" (Crew, 1997). Whatever it is that children aspire to, they should be encouraged to look up at the starry sky and dream from a young age. Universities can play their part in building the capacity for children to aspire by opening their doors to children at a young age, showing them the plethora of opportunities they offer and encouraging them to dream.

References

- Archer, L., DeWitt, J., & Wong, B. (2014). Spheres of influence: What shapes young people's aspirations at age 12/13 and what are the implications for education policy? *Journal of Education Policy*, 29(1), 58-85. <https://doi.org/10.1080/02680939.2013.790079>
- Beal, S.J. & Crockett, L.J. (2010). Adolescents' occupational and educational aspirations and expectations: Links to high school activities and adult educational attainment. *Developmental Psychology*, 46 (1), 258-265. <https://doi.org/10.1037/a0017416>
- Beddington, W. (2016). *Choice, outcomes and sustainability: A report card on the higher education system*. Higher Education Summit. Melbourne, Victoria.
- Best, T. (2010). *Equity: Summary report*. University of the Sunshine Coast. Queensland, Australia.
- Bloch, E. (1986). *The principle of hope*, trans. Neville Plaice, Stephen Plaice, and Paul Knight. Studies in Contemporary German Social Thought series, Cambridge: MIT Press.
- Bok, D. (2010). *The politics of happiness: What government can learn from the new research on well-being*. Princeton University Press. <https://doi.org/10.1515/9781400832194>
- Bok, J. (2010). The capacity to aspire to higher education: "It's like making them do a play without a script". *Critical Studies in Education*, 51(2), 163-178. <https://doi.org/10.1080/17508481003731042>
- Bouakaz, L. & Persson, S. (2007). What hinders and what motivates parents' engagement in school?. *International Journal about Parents in Education, European Network about Parents in Education*, 1(0), 97- 107.
- Bradley, D., Noonan, P., Nugent, H., & Scales, B. (2008). *Review of Higher Education in Australia: Final Report*. Canberra, NSW: Australian Government.
- Bram, S., De Keere, Kobe, DK., Keppens, G., Roggemans, L., Van Droogenbroeck, F. (2016). What Is It Worth? An Empirical Investigation into Attitudes towards Education amongst Youngsters Following Secondary Education in Flanders. *British Journal of Sociology of Education*, 37(4), 586-606. <https://doi.org/10.1080/01425692.2014.960960>
- Catalani, C., & Minkler, M. (2010). Photovoice: A review of the literature in health and public health. *Health Education & Behavior*, 37(3), 424-451. <https://doi.org/10.1177/1090198109342084>
- Checkoway, B. & Gutierrez, L. (2006). *Youth participation and community change*. New York: The Haworth Press, pp. 107-123. https://doi.org/10.1300/j125v14n01_01
- Creed, P. A., Conlon, E. G., & Zimmer-Gembeck, M. J. (2007). Career barriers and reading ability as correlates of career aspirations and expectations of parents and their children. *Journal of Vocational Behavior*, 70(2), 242-258. <https://doi.org/10.1016/j.jvb.2006.11.001>
- Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.)*. New Jersey: Pearson Education.
- Crew, G. (1997). *Bright star*. Brooklyn, NY: Kane/Miller Publishers.

- Crump, S. (2005). Changing times in the classroom: Teaching as a 'crowded profession'. *International Studies in Sociology of Education*, 15(1), 31-48. <https://doi.org/10.1080/09620210500200130>
- Egan, K. (1999). *Children's minds, talking rabbits & clockwork oranges: Essays on education*. New York: Teachers College Press.
- Evans-Cowley, J., & Hollander, J. (2010). The new generation of public participation: Internet-based participation tools. *Planning Practice and Research*, 25(3), 397-408. <https://doi.org/10.1080/02697459.2010.503432>
- Feeley, M. & Lynch, K. (2009). *Gender and Education (and employment): Gendered imperatives and their implications for women and men: Lessons from research for policy makers*. European Commission, Education and Culture DG.
- Flicker, S., Maley, O., Ridgley, A., Biscope, S., Lombardo, C., & Skinner, H. (2008). e-PAR: Using technology and participatory action research to engage youth in health promotion. *Action Research*, 6(3), 285-303. <https://doi.org/10.1177/1476750307083711>
- Gale, T., Sellar, S., Parker, S., Hattam, R., Comber, B., Tranter, D., Bills, D., Sellar, S. (2010). *Interventions early in school as a means to improve higher education outcomes for disadvantaged students: A design and evaluation matrix for university outreach in schools*. South Australia: Department of Education, Employment and Workplace Relations.
- Gale, T., & Parker, S. (2013). *Widening participation in Australian higher education*. Leicester, England: Higher Education Funding Council for England; CFE Research.
- Gordon, E., & Koo, G. (2008). Placeworlds: Using virtual worlds to foster civic engagement. *Space and Culture*, 11(3), 204-221. <https://doi.org/10.1177/1206331208319743>
- Gore, J., Holmes, K., Smith, M., Southgate, E., & Albright, J. (2015). Socioeconomic status and the career aspirations of Australian school students: Testing enduring assumptions. *Australian Educational Researcher*, 42(2), 155-177. <https://doi.org/10.1007/s13384-015-0172-5>
- Gottfredson, L.S. (1996). *Shared cognitive map of occupations*. Retrieved November 13, 2016, from: <http://www.udel.edu/educ/gottfredson/careers/figure.pdf>.
- Gottfredson, L. S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counseling psychology*, 28(6), 545. <https://doi.org/10.1037//0022-0167.28.6.545>
- Greenaway, R. R. (2011). *School-community engagement: A critical approach to involving young people in an urban planning project*. (Doctoral dissertation, Queensland University of Technology). Retrieved from <https://eprints.qut.edu.au/52644/>
- Higher Education Funding Council for England. (2006). *Strategic plan for 2006-2011*. Bristol, England: Higher Education Funding Council for England.
- Heckman, J. J., & Rubinstein, Y. (2001). The importance of noncognitive skills: Lessons from the GED testing program. *The American Economic Review*, 91(2), 145-149. <https://doi.org/10.1257/aer.91.2.145>
- Knight, L. M. (2010). Finding out about children's meaning making through drawing together. *Every Child*, 16(4), 8-9.
- Lareau, A. & McNamara Horvat, E. (1999). Moments of social inclusion and exclusion race, class, and cultural capital in family-school relationships. *Sociology of Education* 72(1), 37-53. <https://doi.org/10.2307/2673185>
- Ledermann, N. G. & Abell, S.K. (2007). *Handbook of Research on Science Education*. UK: Routledge.
- LeRoy, M. (Director). (1939). *Wizard of Oz* [Motion picture]. California, USA: Metro-Goldwyn-Mayer.
- Malchiodi, C. A. (2012). *Understanding children's drawings*. Guilford Press.
- Mallan, Kerry M., Foth, Marcus, Greenaway, Ruth, & Young, Greg T. (2012) Serious playground: Using Second Life to engage high school students in urban planning. In Hunsinger, Jeremy, Krotoski, & Aleks (Eds.) *Learning and Research in Virtual Worlds*. (pp. 107-129). Routledge.
- Mallan, K., Singh, P., & Giardina, N. (2010). The challenges of participatory research with 'tech-savvy' youth. *Journal of Youth Studies*, 13(2), 255-272. <https://doi.org/10.1080/13676260903295059>

- McKay, J. & Devlin, M. (2014). 'Uni has a different language ... to the real world': Demystifying academic culture and discourse for students from low socioeconomic backgrounds. *Higher Education Research & Development*, 33(5), 949-961. <https://doi.org/10.1080/07294360.2014.890570>
- Naylor, R., Baik, C., & James, R. (2013). *Developing a critical interventions framework for advancing equity in Australian higher education*. Retrieved December 13, 2016, from: <https://www.ncsehe.edu.au/wp-content/uploads/2014/09/Critical-Interventions-Framework-20-August-2013.pdf>.
- Nygreen, K., Kwon, S. A., & Sanchez, P. (2006). Urban youth building community: Social change and participatory research in schools, homes and community-based organisations. In B.N. Chekaway & L.M. Gutierrez (Eds.), *Youth participation and community change*. (pp. 107-123). Philadelphia, US: The Haworth Press. https://doi.org/10.1300/j125v14n01_07
- Pain, R. (2004). Social geography: participatory research. *Progress in Human Geography*, 28(0), 652-663. <https://doi.org/10.1191/0309132504ph511pr>
- Patton, W. & Creed, P. (2007). The relationship between career variables and occupational aspirations and expectations for Australian high school adolescents. *Journal of Career Development*, 34 (2), 127-148. <https://doi.org/10.1177/0894845307307471>
- Perso, T.F. (2012). *Cultural responsiveness and school education with particular focus on Australia's first peoples: A review & synthesis of the literature*. Darwin, NT: Menzies School of Health Research.
- Putnam, T., & Gill, J. (2011). The Bradley challenge: A sea change for Australian universities?. *Issues in Educational Research*, 21(2), 176-191.
- Rennison, J., Maguire, S., Middleton, S. & Ashworth, K. (2005). *Young people not in education, employment or training: Evidence from the Education Maintenance Allowance Pilots Database*. Nottingham: DFES Publications
- Scull, S., & Cuthill, M. (2010). Engaged outreach: Using community engagement to facilitate access to higher education for people from low socio-economic backgrounds. *Higher Education Research & Development*, 29(1), 59-74. <https://doi.org/10.1080/07294360903421368>
- Somerville, M. (2013). The 'place time mattering' of aspiration in the Blacktown Learning Community. *Critical Studies in Education*, 54(3), 231-244. <https://doi.org/10.1080/17508487.2013.831365>
- Somerville, M., Gray, T., Reid, C., Naidoo, L., Gannon, S., & Brown-Singh, L. (2013). *Student Trajectory Aspiration Research (STAR): A study of aspirations, enablers and barriers to further education in the Blacktown Learning Community*. Penrith, N.S.W: University of Western Sydney.
- St Clair, R., & Benjamin, A. (2011). Performing desires: The dilemma of aspirations and educational attainment. *British Educational Research Journal*, 37(3), 501-517. <https://doi.org/10.1080/01411926.2010.481358>
- Steele, P., (2008). Transcript of Evidence, Public Hearing, Rosebud, 12 May 2008, p.41.
- Watson, M. & McMahon, M. (2005). Children's career development: A research review from a learning perspective. *Journal of Vocational Behavior*, 67(2), 119-132. <https://doi.org/10.1016/j.jvb.2004.08.011>
- Watson, C. M., Quatman, T., & Edler, E. (2002). Career aspirations of adolescent girls: Effects of achievement level, grade, and single-sex school environment. *Sex Roles*, 46(9-10), 323-335. <https://doi.org/10.1023/a:1020228613796>
- Welsh, S. & Schmitt-Wilson, M.C. (2012). Vocational knowledge in rural children: A study of individual differences and predictors of occupational aspirations and expectations. *Learning and Individual Differences*, 22(6), 862. <https://doi.org/10.1016/j.lindif.2012.06.003>
- Wilks, J., & Wilson, K. (2012). Going on to uni? Access and participation in university for students from backgrounds of disadvantage. *Journal of Higher Education Policy and Management*, 34(1), 79-90. <https://doi.org/10.1016/j.lindif.2012.06.003>
- Wright, S. (2010). *Understanding creativity in early childhood: Meaning-making and children's drawing*. Sage.