

University of Wollongong

Research Online

Faculty of Social Sciences - Papers (Archive)

Faculty of Arts, Social Sciences & Humanities

2016

Evaluation Report 2015: Investigating the effectiveness of the In2Uni Year 12 University Preparation Program

Sarah Elizabeth O'Shea

University of Wollongong, sarah.oshea@curtin.edu.au

Valerie Harwood

University of Wollongong, vharwood@uow.edu.au

Steven J. Howard

University of Wollongong, stevenh@uow.edu.au

Ken Cliff

University of Wollongong, cliff@uow.edu.au

Janine Delahunty

University of Wollongong, janined@uow.edu.au

Follow this and additional works at: <https://ro.uow.edu.au/sspapers>



Part of the [Education Commons](#), and the [Social and Behavioral Sciences Commons](#)

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au

Evaluation Report 2015: Investigating the effectiveness of the In2Uni Year 12 University Preparation Program

Abstract

In2Uni's Year 12 University Preparation Program (UPP), which commenced in 2014, is an innovative program for students in their HSC year working towards an ATAR. It targets schools in UOW catchment areas, and particularly those identified as being from the 39 low-ICSEA (Index of Community and Socio-Educational Advantage) areas. Students must meet eligibility criteria, one being that their academic performance is not currently on the trajectory to meet university entry requirements (In2Uni, My Way, 2016). Once accepted into UPP, students attend on-campus study sessions for two hours per week over a 20-week period from April to September. The general aims of UPP are that students (a) receive tips and advice in their chosen HSC subject from undergraduate mentors who excelled in these subjects areas at HSC level; (b) glean information pertaining to successful HSC study; and (c) are provided with a 'taste' of university life as a transitioning strategy. At the culmination of UPP, students who meet requirements of attendance (80%) and task completion are guaranteed an Early Entry Admissions interview at UOW. From this point however, these students are subject to the same entry requirements as all non- UPP UOW applicants. The success of UPP may be reflected in increased enrolments - from 268 in 2014 to 337 in 2015; however an 18% decrease in Early Admission offers in 2015 confirmed the timeliness of this program evaluation. The evaluation project was commissioned by In2Uni to explore the effectiveness of the program, based on data from key stakeholders: current and past students, parents, and In2Uni mentors. In consultation with UPP program coordinators, the evaluation sought to achieve the objectives of: identifying, describing and explaining the impact of UPP on the student experience; and providing In2Uni with an evidence-based understanding of the impact to enable targeted improvements.

Keywords

preparation, university, evaluation, report, program, 2015, 12, investigating, effectiveness, in2uni, year

Disciplines

Education | Social and Behavioral Sciences

Publication Details

O'Shea, S., Harwood, V., Howard, S., Cliff, K. & Delahunty, J. (2016). Evaluation Report 2015: Investigating the effectiveness of the In2Uni Year 12 University Preparation Program. Wollongong, Australia: University of Wollongong.

EVALUATION REPORT 2015

**Investigating the effectiveness of the
In2Uni Year 12 University Preparation
Program**



REPORT PREPARED APRIL 2016

Associate Professor Sarah O'Shea

Professor Valerie Harwood

Dr Steven Howard

Dr Ken Cliff

Dr Janine Delahunty

Table of Contents

EXECUTIVE SUMMARY	5
Evaluation Objectives.....	5
Methodology.....	5
Key findings.....	6
Recommendations	6
1 INTRODUCTION.....	8
2 METHODOLOGY.....	10
Recruitment and data collection.....	10
Quantitative analysis	12
Methods	12
Surveys	13
Academic Data	14
Qualitative data collection	14
Interviews	14
Focus Groups.....	16
Parent Surveys.....	16
Mentor Reflections	16
Qualitative data analysis	17
3 FINDINGS	18
Quantitative surveys: the impact of UPP on attitudes, motivation and self-efficacy.....	18
Psychometric Evaluation of Adopted Scales.....	18
Survey Results	19
Academic data: the impact of UPP on student university outcomes.....	21
Students identify, describe and explain the impact of UPP	22
The impact of mentors on student experience	23
Parent perspectives on the impact of UPP	24
The benefits of UPP participation.....	25
Parent perceptions of university	25
Preparing for Transition into University	26
Future focus: the influence of UPP on choices, pathways, possibilities.....	26
Mentor reflections on the impact of UPP.....	27

Knowledge	27
Support.....	27
Role modeling	28
Suggestions for targeted improvements of UPP – student data	28
Parent matters: perceived barriers and clarity in communications.....	32
Perceived barriers	33
Clarity in communications	33
4 CONCLUSIONS.....	34
The impact of UPP from the student experience	34
Changes in Attitudes, Motivations and Self-Efficacy	34
UPP students' academic outcomes	34
Short-term and long-term benefits	34
The parent perspective	35
The mentor perspective	36
5 RECOMMENDATIONS.....	37
References	39
Appendices	41
Appendix A: Questionnaire Instruments.....	41
Appendix B: Interview questions (current UPP students)	44
Appendix C: Interview questions (past UPP students).....	45
Appendix D: Focus groups questions	46
Appendix E: Parent Survey questions.....	47
Appendix F: Mentor reflection prompts	48
Appendix G: Thematic coding descriptions – interviews and focus groups	49
Appendix H: Thematic coding descriptions – parent surveys	50

Tables and Figures

Table 1: UPP data from 2014 and 2015 In2Uni Annual Reports	9
Table 2: Summary of recruitment processes	11
Table 3: Summary of all data collected.....	12
Figure 1: Research and Program Participation Rates across the UPP program	13
Table 4: Demographic details of interview participants	15
Table 5: Demographics of past students of UPP	16
Table 6: Descriptive Statistics and Over-Time Changes in UPP Participant Survey Responses.....	20
Figure 2: Trajectories of attitudinal change across the UPP program for respondents to all survey time points ($n = 52$)	20
Table 7: Academic outcome data for UPP participants compared with a nearest-comparison Australian low-SES sample.....	22

EXECUTIVE SUMMARY

In2Uni's Year 12 University Preparation Program (UPP), which commenced in 2014, is an innovative program for students in their HSC year working towards an ATAR. It targets schools in UOW catchment areas, and particularly those identified as being from the 39 low-ICSEA (Index of Community and Socio-Educational Advantage) areas. Students must meet *eligibility criteria*, one being that their academic performance is not currently on the trajectory to meet university entry requirements (In2Uni, My Way, 2016). Once accepted into UPP, students attend on-campus study sessions for two hours per week over a 20-week period from April to September. The general aims of UPP are that students (a) receive tips and advice in their chosen HSC subject from undergraduate mentors who excelled in these subjects areas at HSC level; (b) glean information pertaining to successful HSC study; and (c) are provided with a 'taste' of university life as a transitioning strategy. At the culmination of UPP, students who meet requirements of attendance (80%) and task completion are guaranteed an Early Entry Admissions interview at UOW. From this point however, these students are subject to the same entry requirements as all non-UPP UOW applicants. The success of UPP may be reflected in increased enrolments - from 268 in 2014 to 337 in 2015; however an 18% decrease in Early Admission offers in 2015 confirmed the timeliness of this program evaluation.

Evaluation Objectives

The evaluation project was commissioned by In2Uni to explore the effectiveness of the program, based on data from key stakeholders: current and past students, parents, and In2Uni mentors. In consultation with UPP program coordinators, the evaluation sought to achieve the objectives of: identifying, describing and explaining the impact of UPP on the student experience; and providing In2Uni with an evidence-based understanding of the impact to enable targeted improvements.

Methodology

The evaluation adopted a mixed-methods approach to enable a comprehensive and robust investigation of the impact of UPP. Data collection began in April 2015 with recruitment of students from across the five UOW campus catchment areas (Wollongong, Shoalhaven, Batemans Bay, Bega and Southern Highlands). Quantitative data from consenting students included demographic information (to ensure adequate description of the sample), academic results (to objectively evaluate the outcomes of UPP participants) and a survey administered at three key points during the program (beginning, mid and end) to determine self-reported changes in attitudes, motivation and self-efficacy over the duration of the program. Qualitative data was collected from interviews (including focus groups) with students (past and current), while parents contributed to an online survey and In2Uni mentors provided written reflections. Human Ethics Approval was sought and

approved for access to In2Uni's Quality Assurance data (demographics, academic results) for consenting participants, and data collected by the evaluation team from the stakeholders (students, parents, mentors) (HE15/175).

Key findings

Key findings from the quantitative data include:

- UPP students showed maintained levels of academic engagement, effort and intrinsic motivation, and improved self-efficacy;
- There was also an increase in amotivation and decrease in aspirations overall across UPP (although this may be related to the potentially biased final sample);
- UPP students showed better academic outcomes relative to an Australian low-SES comparison group - university offers (94% vs. 80%) and university acceptance (78% vs. 59%).

Interviewed UPP students reported that the program enabled them to:

- Develop deeper and more detailed plans / goals for the future;
- Expand personal knowledge sets about the university's educational and spatial environment;
- Practically apply this knowledge to the achievement of personal goals; and
- Have access to a 'knowledgeable other' who provided insider knowledge of university.

Parents reported the following benefits of participation in UPP:

- Provided students with deeper understandings about options for the future, setting and achieving their own goals; and
- Improved students' self-confidence, self-belief and motivations to work towards and achieve goals.

Mentors perceived themselves as playing an important role in UPP through:

- Sharing practical knowledge that contributed to the demystification of university;
- Forming supportive relationships with students and answering questions about university; and
- Acting as role models and providing inspiration for high school students.

Recommendations

The following provides insights into how In2Uni might seek to improve and develop the program, with 13 recommendations being made:

1. Consider inclusion of approaches which help improve students' academic perceptions, engagement and outcomes (to address small proportion of students

reporting increased amotivation/declined aspirations)

2. Establish a control or comparison group from which academic results can be compared annually for continued evaluation of the UPP program
3. Increase advertising of UPP beyond UOW catchment areas
4. Ensure resources for meeting weekly tasks are available in a timely manner
5. Provide opportunities for students to engage meaningfully with university staff
6. Maintain relationships with mentors longitudinally
7. Continue to offer the guaranteed opportunity for Early Entry interviews
8. Provide opportunities for parents and families to voice their concerns about university study
9. Consider commencing UPP earlier in the year
10. Improve communications between In2Uni and parents/caregivers
11. Enact a 'Plan B' approach for those students who did not gain Early Entry
12. Revise the program questions to mentors to elicit critical reflection of UPP
13. Seek the perspectives of stakeholders from the regional UPP centres

1 INTRODUCTION



This summary reports an evaluation study, which was commissioned by In2Uni to examine the effectiveness of In2Uni's *Year 12 University Preparation Program* (hereafter 'UPP') during its second year of operation (2015).

UPP is an innovative program for Year 12 students working towards an ATAR, targeting students from a diverse range of backgrounds, socio-economic circumstances, academic achievement levels and motivations. UPP commenced in 2014, targeting schools in five UOW catchment areas – Wollongong, Shoalhaven, Batemans Bay, Bega and Southern Highlands (this collective hereafter referred to as *UPP study centres*). The program operates over 20 weeks from April to September as weekly two-hour academic support sessions in HSC subject areas, facilitated by UOW undergraduate mentors who excelled in selected HSC subjects (UOW, 2014).

UPP applicants must meet certain **eligibility criteria** and go through a selection process before participation in UPP is confirmed. These include:

- Current enrolment in Year 12 in a high school in the Illawarra / South East Region
- Completing a subject pattern leading to an ATAR
- Requiring additional support to achieve their desired ATAR for their chosen university course
- Ability to commit to the 20-week program at a UOW campus
- Availability to attend a UOW interview at a time in late January / early February
- Ability to submit Year 11 Yearly Report, with attendance, marks and ranks for all subjects undertaken

Applicants who meet the eligibility criteria must attend an interview before an enrolment offer is made. Prior to enrolment, it is emphasised by In2Uni that all participants must be independent, motivated to participate in all aspects of the program and meet the minimum expectations (including 80% attendance over the 20-week study session period) (UOW, 2014).

Not only does UPP support students at a crucial time in their educational experience, attending UPP gives them a ‘taste’ of university; study sessions are held on campus (where practicable) and students receive a UOW student card and transcript upon successful completion. An Early Admissions interview with their chosen faculty is guaranteed for all who successfully complete the UPP program, although these students are, from this point, subject to the same entry requirements as non-UPP applicants. Data extracted from the 2014 and 2015 Annual Reports show that while there were increases in enrolment of 26% (from 268 to 337) and Early Admissions applications of 4% (from 83% to 87%), the rate of Early Admission offers fell from 93% in 2014 to 75% in 2015 (In2Uni, 2014; 2015). The following table summarises data from the Annual Reports:

From Annual Reports	2014	2015
UPP students – successful completion / total enrolled	268	337
% UPP students who met attendance requirements	215 (80%)	337 (100%)
Early admission applications	222 (of 268) 83%	293 (of 337) 87%
Early admission offers	200 (of 222) 93%	219 (of 293) 75%
First in family	n/a	53%

Table 1: UPP data from 2014 and 2015 In2Uni Annual Reports

The seeming anomalies in the numerical data, particularly the significant drop in Early Admission offers in 2015, signal the timeliness for a robust evaluation. A better understanding of the impact of UPP and its effectiveness will enable In2Uni to address any gaps in the support provided and continue to develop the quality of the program. The intention of this evaluation is to gain insights from UPP’s main stakeholders - students, parents and mentors. Collection and analyses of quantitative and qualitative data drawn from these key stakeholders will contribute to evidence-based understandings, which will inform ongoing development, improvement and reporting of UPP’s impact.

The evaluation project was commissioned by In2Uni to explore the effectiveness of UPP. In consultation with UPP program coordinators, the evaluation sought to:

- identify, describe and explain the impact of UPP on the student experience
- provide an evidence-based understanding of the impact on students to enable targeted improvements and refinement.

Evaluation of UPP began in April 2015, with recruitment of students from the UPP study centres during the first two weeks of the session and the project concluded in February 2016. Following from this *Introduction*, the next section (*Methodology*) explains the process of evaluation employed by the evaluation team, including data collection and analyses. The findings are then presented and respond to the two objectives (outlined above). Finally, *Conclusions* and *Recommendations* are set out in sections 4 and 5.

2 METHODOLOGY



A mixed methods research design was used in order to gain a comprehensive and robust investigation of the impact of UPP. **Quantitative data** included surveys administered three times through the program (at beginning, mid and end-points), as well as academic and demographic information provided to the evaluation team by In2Uni (information collected as part of In2Uni quality assurance processes). **Qualitative data** included focus groups and paired interviews with current students, reflections from In2Uni mentors, and a survey of parents (or caregivers). Past students who were successful in gaining entry to UOW as a result of completing UPP in 2014 were also interviewed. The recruitment and data collection process will now be described, followed by the various methods of analyses for quantitative data and qualitative data.

Recruitment and data collection

UOW Human Research Ethics Approval was sought for academic and demographic data collected by In2Uni for UPP 2015 cohorts, as well as for the research activities undertaken by the evaluation team (HE15/175). Research activities commenced in Week 1 of the UPP program, after ethics approval had been given.

Consent and Participant Information forms were distributed to all UPP study centres in Weeks 1-2. The forms were distributed to UPP participants, with a short explanation of the project's aims by a member of the evaluation team or an In2Uni staff member. Data was subsequently collected from consenting UPP participants. The recruitment process and data collection involved ongoing cooperation between the evaluation team and staff affiliated with In2Uni.

The process for data collection from students began as follows: 1) signed student consents were collected by In2Uni via mentors; 2) In2Uni forward signed consents to the evaluation team; 3) names of consenting students were recorded by evaluation team; 4) evaluation team requested contact details for consenting students from In2Uni; and 5) once student contact details were received the evaluation team made direct contact with students to arrange data collection activities.

Past UPP students (who were now undergraduates at UOW) and parents of current UPP students were contacted by In2Uni (by email or mail) and were given the contact details of a member of the evaluation team if interested in participating (past students) or were given a link to the survey (parents). Mentors were also recruited at In2Uni training and activity days. Thus the evaluation team maintained an arm's length distance from the participant recruitment process.

Recruitment and data collection thus proceeded in various ways and is summarised in the table below.

Data	Recruitment	Reminders	Timeframe	Comments
Quantitative 76-item questionnaire¹	Consents signed in Weeks 1-2	n/a	Weeks 1, 13 and 19 of UPP	Administered x 3 by In2Uni, responses from consenting participants provided to the evaluation team
Academic and university data	Consents signed in Weeks 1-2	n/a	Available after January 2016	Provided to the evaluation team by In2Uni in matched anonymised aggregate form for all consenting participants
Current students: paired interviews / focus groups	By email from evaluation team member	One via email	From Week 5 to Week 16 of UPP	Contact details of consenting participants provided to evaluation team by In2Uni
Past students enrolled at UOW: interviews	By email from In2Uni	One via email from In2Uni	May and September	Initial communication via In2Uni to contact evaluation team member
Parents	By mail out from In2Uni	One via email from In2Uni	10 Aug to 9 Oct	Link to survey did not go out in online In2Uni newsletter, hence recruitment via mail out
Mentors	By In2Uni at 2016 pre-program activities	n/a	Nov 2015 - Mar 2016	Recruitment by In2Uni began in 2015, but not fully carried out until 2016

Table 2: Summary of recruitment processes

A number of incentives were offered to student participants in appreciation of their contributions. Students who gave consent for all quantitative data went into a draw to win one of two \$120 iTunes vouchers. Interview or focus group participation included a \$30 iTunes voucher and refreshments provided for face to face meetings, as participation would involve approximately an hour of their time in addition to the UPP session. A further seven iTunes vouchers were offered to the first seven mentors who completed and handed in their reflections. The following table summarises the data collected:

¹ Three existing and validated questionnaires were combined into a single 76-item questionnaire (see Appendix A) which took approximately 15 minutes to complete

Participant	Quantitative Data		Qualitative Data	
Current UPP students	Surveys:		Interview participation:	
	1. Baseline	203	Main campus: face to face	14
	2. Mid-point	56	Regional: phone	1
	3. End-point	82		
	Information from In2Uni:		Focus groups (x 3):	
Past UPP students	1. Demographic (# consents)	238	Main campus participants	16
	2. Academic (# consents)	227	Regional	0
	n/a		Interviews: face to face	2
Parents	n/a		Regional: phone	2
			Online survey	10
In2Uni Mentors	n/a		Written reflections	10

Table 3: Summary of all data collected

The following describes the methods of analysis used for quantitative data, followed by description and methods of analysis used for the qualitative data collected.

Quantitative analysis

Using the quantitative data collected, we sought to evaluate the impact of UPP on student experience (Objective 1) through subjective changes in attitudes, motivation and self-efficacy over the course of In2Uni's University Preparation Program. We further sought to compare academic and university data for this cohort against population levels in comparable demographic groups and regions. In the sections that follow we describe the participants, the measures and methods of data collection, and the results of our analyses.

Methods

Participants were 234 of the 386 Year 12 students (61%) enrolled in the UPP program, drawn from the 39 low-ICSEA (an Index of Community and Socio-Educational Advantage) partner secondary schools within In2Uni's catchment area. This initial sample was comprised of 119 students attending Wollongong campus and 115 students at regional UOW campuses, which is largely in line with the UPP campus split of 48% regional. This sample was 67% female ($n = 157$) and 3% identified as Aboriginal ($n = 8$). Just less than half of the students (44%; $n = 103$) had no family members who had previously attended University. Using the Australian Bureau of Statistics' Socio-Economic Indexes for Areas (SEIFA), 39% were from low SES households ($n = 78$), 58% from moderate SES households ($n = 118$) and 3% from high SES households ($n = 7$). Socioeconomic data was not available for 31 of the participants. UPP, academic and university data was collected about this entire sample, where available (some variables were not available for students who did not lodge a university application).

From this initial sample, 203 participants completed the baseline survey (87% of the sample, 53% of the UPP population). Of these participants, 82 completed the final survey (40% of the initial sample) from a possible 337 Year 12 students who completed the program (24% of the UPP population). Fifty-six of these participants also responded to the mid-point survey (see Figure 1). Attrition in the sample after the baseline survey was

due to student or school withdrawal from the In2Uni program ($n = 49$), with the rest due to student absence from the on-campus session in which the survey was administered and non-administration of follow-up questionnaires at regional sites.

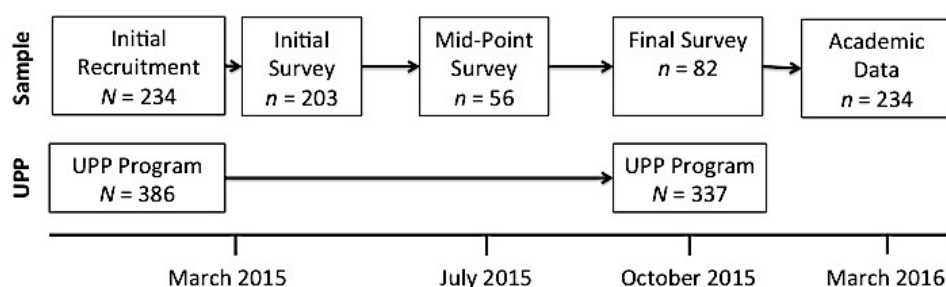


Figure 1: Research and Program Participation Rates across the UPP program

Surveys

The self-report questionnaires assessing academic motivation, academic self-efficacy and students' aspirations were administered to participating UPP students as a means to evaluate change in these factors across the 20-week UPP program. Each scale involved participants rating their agreement with each statement on a 4-point Likert scale ranging from 1 (*Really Disagree*) to 4 (*Really Agree*). Items were reverse-scored for all statements in which a high rating indicated negative perceptions of school or self. As such, for all items and subscales, a higher score indicates higher levels of the measured factor/state/trait.

To assess changes in students' academic motivations across the UPP program, the *Academic Motivation Scale* (AMS; Vallerand et al., 1992) was adopted. AMS is a 27-item scale that yields subscales of students' academic intrinsic motivation (e.g., 'I go to school because I experience pleasure and satisfaction while learning new things'), extrinsic motivation (e.g., 'I go to school because I need to finish school in order to find a high-paying job later on') and amotivation (e.g., 'Honestly, I don't know [why I go to school]; I really feel that I am wasting my time in school'). Intrinsic motivation is further divided into intrinsic motivation to know, towards accomplishment and to experience stimulation. Extrinsic motivation is divided into identified, introjected and external regulation. These subscales provide an index of students' internally and externally derived academic motivations, or absence of academic motivation, respectively.

To evaluate potential changes in students' academic self-efficacy, the 33-item *Morgan-Jinks Perceived Academic Self-Efficacy subscale* (MJPASE; Jinks & Morgan, 1999) was adopted. MJPASE yields subscales of self-efficacy related to talent (e.g., 'I could get the best grades in class if I tried hard enough'), context (e.g., 'I would get better grades if my teacher liked me better') and effort (e.g., 'I work hard in school'). These subscales provide an index of students' internal academic attributions, academic attributions related to the external context and effort toward academics, respectively.

Lastly, to evaluate changes in the students' engagement and aspirations, the *My Voice Survey* (MVS; QISA, 1998) was adopted. The first MVS subscale adopted was academic

aspiration (2 items; e.g., 'I want to do my best at school'). Also adopted was the active engagement subscale (8 items; e.g., 'I learn new things that are interesting to me at school'). According to the scale's authors, active engagement occurs when students are highly and deeply engaged in the learning process, and have enthusiasm to learn new things. Lastly, the MVS purpose subscale was adopted (6 items; e.g., 'School is preparing me well for my future'). Purpose is said to exist when students are goal-directed, motivated to achieve and apply themselves to academic success.

Academic Data

To more-objectively evaluate the influence of In2Uni's UPP program on students' academic and university outcomes, a range of additional data was collected. This includes participants' Year 12 Australian Tertiary Admission Rank (ATAR), application and offers of a university early admission intervention, application to university, subsequent university offers, students' acceptance (or not) of these offers and their university enrolment at the time of writing (*Note*: enrolments could continue even beyond this date). Where possible, UPP students' academic outcomes were compared with the outcomes for a comparable Australia student population (e.g., low-SES) to evaluate differences in academic outcomes across these student groups.

Qualitative data collection

In addition to the quantitative data detailed in the previous section, this evaluation collected a range of qualitative data via interviews, focus groups, qualitative survey and written reflections (outlined in Table 3, page 12). As mentioned in Table 3, a total of 15 current and four past students were involved in either paired or individual interviews, and a total of 16 students attended one of three focus groups conducted at the main UOW campus. All interviews and focus group audio files were transcribed verbatim by a professional transcriber. Ten parent surveys were completed online, and ten mentor reflections were received. A description of the collection of qualitative data follows.

Interviews

The interviews focused on two discrete groups: (1) those who were currently undertaking the UPP program and (2) those who had completed the program and were currently engaging in university studies. The current UPP students were invited at the commencement of the program to volunteer to participate in either paired or small group interviews. Participants were provided with a gift (\$30 iTunes voucher) and also, light refreshments during the interview. The option of using small group or paired interviews was deliberate and based upon recognition that many of these students were relatively new to the campus environment and also, removed from their familiar educational context. In order to ensure that the participants felt 'safe' and comfortable during interviews we encouraged friends or peers to be interviewed collectively. In total, fifteen students were interviewed in nine interview meetings, the majority of the participants opted to be interviewed in pairs or small groups (n=5) but a number agreed to be

interviewed individually (n=4). The following table (Table 4) provides an overview of the participants' key demographics with all names being pseudonyms:

Name	Gender	Age	High School	First in family	Further Details
Mark	M	18	Illawarra	Yes	First in immediate family with some cousins currently at uni
Belinda	F	17	Illawarra	Yes	First in immediate family some cousins at uni
Riley	M	18	Northern Illawarra	Yes	First in immediate family one cousin at uni
Luke	M	17	Southern Illawarra	No	Mum has completed a BEd
Jess	F	18	Distance	Yes with sibling	Sister currently studying
Whitney	F	17	Illawarra	Yes with sibling	Sister currently studying
Nicholas	M	17	Illawarra	No	Both parents got degrees in Russia
David	M	17	Southern Illawarra	Yes	Aunt completed uni
Hayden	M	17	Southern Illawarra	Yes with sibling	Sister currently studying
Matthew	M	18	Southern Illawarra	Yes	Uncle attended uni
Deanne	F	17	Southern Illawarra	No	Dad went to uni
Penni	F	18	Southern Illawarra	No	Dad went to uni
Kate	F	17	Southern Illawarra	No	Mum completed an Accounting degree
Kristen	F	17	(Far) South Coast	Yes with sibling	Sister currently studying
Dilara	F	17	Southern Illawarra	Yes with sibling	Brother currently studying

Table 4: Demographic details of interview participants

The interviews attracted almost equal numbers of male and female participants with the majority indicating that they were either first or second in their immediate family to attend university (n=10) while five had a parent(s) who had completed degrees. The interviews were semi-structured but guided by a series of interview questions (please see Appendix B) and participants were prompted to provide richly descriptive detail about their experiences of engaging in UPP.

We also interviewed a small number of students who had successfully completed UPP and who were currently enrolled in undergraduate studies. The participants were recruited via their student email with an invitation to participate, which mentioned the iTunes voucher incentive. A total of four past students agreed to participate in the evaluation. Similar to interviews with the current UPP students, these participants were encouraged to reflect deeply about their experiences of undertaking UPP but with specific reference to their transition into university and how this participation impacted upon this transition. Again, interviews were semi-structured but guided by a series of interview questions, which are located in Appendix C. All of these interviews were conducted individually with students (i.e. not paired) and the following table provides summary demographic data:

Pseudonym	Gender	Age	High School	First in family	Comments
Abbey	F	18	(Far) South Coast	Yes	2015 enrolled in Nursing
Alice	F	18	Southern Highlands	Yes	2015 enrolled in Nursing
Adam	M	19	(Far) South Coast	Yes	2015 enrolled in Health Sciences
Belinda	F	18	(Far) South Coast	Yes	2015 enrolled in Arts

Table 5: Demographics of past students of UPP

Two of the interviews were conducted in face-to-face mode in a private setting at the main campus of the university. For the other two participants who were located at a regional campus, the interviews were conducted via phone. Each interview was audio recorded and the duration varied from 25 minutes to approximately 45 minutes with each being transcribed in full.

Focus Groups

In addition to the fifteen interviewees, a further sixteen students participated in three focus groups that were conducted at a series of mid-points during the UPP program (between May and August 2015). Again, each of the participants in the focus groups was offered a small incentive to participate (\$30 iTunes Card) and refreshments during the group meeting. The focus groups were open ended and participants were encouraged to reflect upon their motivations for attending UPP and what their experiences had been to-date. All the focus group members were current students of UPP and two of the groups were relatively small in size (3-5 per meeting) with 8 participating in the other. Given that focus group members were not necessarily known to each other, the participants were not asked to reveal much in the nature of personal information and also, no names were recorded (see Appendix D). All quotes from focus groups are simply referenced by the focus group number (i.e FG 1).

It should be noted that students from regional UPP study centres were underrepresented in the qualitative data collected for this evaluation, with only one current and two past students from regional centres participating in interviews or focus groups.

Parent Surveys

Parents were invited to participate in a short anonymous online survey via mail and in a follow-up email from In2Uni. The invitation included a link to the online survey as well as the option to complete a paper copy of the survey, if desired. A total of ten parents contributed to the evaluation – nine mothers and one father. The parent survey details are provided in Appendix E.

Mentor Reflections

A total of ten mentor reflections were collected by In2Uni and provided to the evaluation team in March 2016. All of these reflections were completed by mentors who had worked in the 2015 UPP program. iTunes vouchers were given to the first seven mentors who returned their reflections. The reflective prompts are provided in Appendix F.

Qualitative data analysis

Qualitative analysis began with members of the evaluation team conducting individual readings of all qualitative data (interview and focus transcripts, parent survey responses and mentor reflections) and thematically coding these individually. An evaluation team meeting followed this individual analysis in which each member provided details of the themes that had emerged inductively from the data.

The discussion that ensued provided the basis for the development of fifteen broad codes from student data (detailed in Appendix G); three broad themes from parent surveys (the benefits of UPP participation, transition, and future focus - further details are available in Appendix H); and three themes from mentor reflections (knowledge, support and role modeling). This collaborative coding enabled the evaluation team to share overall impressions of the data and also highlight important foci and emerging themes for closer analysis. This process also tempered the dangers of subjectivity and bias of a single researcher in analysing and reporting on the dataset. Subsequent steps in the thematic analysis involved importing all the data into NVivo (10) including the overarching themes. Each manuscript was then examined on a line-by-line basis to explore how the data related to these themes and also, whether additional themes were required. This further analysis provided the means to explore the data in more depth and led to the inclusion of additional thematic categories or nodes.

3 FINDINGS



This section presents the findings from each of the participant groups firstly on the impact of UPP followed by suggestions made for improvement. The findings from data collected from the key stakeholders - students, parents and mentors - are framed by the two objectives of the evaluation, namely a focus on the impact of UPP on the student experience and how the program could be improved.

Quantitative surveys: the impact of UPP on attitudes, motivation and self-efficacy

Psychometric Evaluation of Adopted Scales

To verify the pre-identified factor structures and reliability of the adopted scales, Exploratory Factor Analysis (EFA) and Cronbach's Alpha reliability analyses were conducted. Factors were identified by eigenvalues > 1 , examination of screen plots and subscale interpretability. Item alignment to particular subscales was determined by the highest factor loading, such that a minimum loading of .30 was required for inclusion in a subscale. Reliability statistics in excess of .70 were deemed to be satisfactory. Results showed general alignment with the a priori hypothesised factor structures, with the following exceptions:

1. For the Academic Motivation Scale, the general factors of Intrinsic Motivation, Extrinsic Motivation and Amotivation were supported, yielding reliabilities between .79 and .88. The scale's further separation into forms of intrinsic motivation and extrinsic motivation were not supported by the current EFA or reliability analyses, however. As such, only the three overarching scales were included in subsequent analyses.
2. For the Morgan-Jinks Perceived Academic Self-Efficacy scale, only Self-Efficacy (with slightly modified item alignments) was found to be reliable ($\alpha = .79$). As such, only this subscale was analysed and reported.
3. For the My Voice Survey, in addition to the three original subscales, a fourth subscale of effort was identified (alpha statistics ranged from .72 to .83) and thus incorporated into subsequent analyses.

Subsequent analyses adopted these slightly revised and reliable subscales to evaluate change over the course of the UPP program.

Survey Results

Available Australian and international evidence suggests that longitudinally, across the high school year(s), factors such as academic motivation, effort, academic self-concept and self-efficacy, and attitudes toward school at best remain constant (e.g., Green et al., 2012), but more often significantly decline (e.g., Anderman & Maehr, 1994; Caprara et al., 2008; Gottfried, 1985; Green et al., 2012; Otis et al., 2005; Yeung & McInerney, 2005). This seems to be particularly problematic for students in areas of disadvantage (Gottfried et al., 2001), who are exactly the students that In2Uni seeks to support through their UPP program. It can thus be expected that the more common trajectory of academic motivation, self-efficacy and effort in this population is one of expected decline across the high school year(s). This trajectory is problematic given the well-established link between these factors and whether a student stays and succeeds in school, as well as their later-life outcomes (Alivernini & Lucidi, 2011; Caprara et al., 2008; Chemers et al., 2001).

Despite this expected trajectory for students within In2Uni's target demographic, a number of these factors showed maintained levels, return to previous levels after initial decline or even improvement (see Table 6 and Figure 2). For instance, respondents reported maintenance in levels of academic engagement and effort. Even more, students' levels of academic self-efficacy improved from the middle to the end of the UPP program. Further, after an initial decline in levels of intrinsic motivation, the respondents reported a return to baseline levels by the end of the UPP program. Each of these trajectories represents a marked departure from the typical and expected pattern of change in these factors over Year 12.

Less positive was the increase in amotivation and decrease in aspirations from the middle to end of the UPP program, as well as an early decline in purpose (that only partially recovered to pre-UPP levels). While the increase in amotivation levels is seemingly inconsistent with the return of intrinsic motivation to baseline levels over this same period, two points must be noted. First, it is noted that the students in attendance in the final week of the UPP program were those who had not yet satisfied UPP attendance requirements. In addition to resulting in a low response rate, this may also have led to a somewhat biased sample for assessing student motivation and aspirations at this point in time (weeks prior to sitting High School Certificate exams and needing to attend the final UPP session). Second, it is notable that, despite the potentially biased sample, the increased level of amotivation was the result of a small overall increase in amotivation levels ($M_{diff} = +0.50$), however, it is noted that 46% of respondents reduced or did not change in their amotivation level. Moreover, only 10 respondents reported negative levels of amotivation (evidenced by amotivation ratings of more than 2.50), four of which reported high levels of amotivation (a change from two and none, respectively, on the baseline survey). Nevertheless, overall levels of amotivation remained low, as evidenced by the mean of 1.79 for this subscale.

	Before UPP M (SD)	Mid-UPP M (SD)	After UPP M (SD)	Subsample sig.
Academic Motivation Scale				
Intrinsic	3.32 (0.43)	3.29 (0.45)	3.40 (0.42)	B>M<A
Extrinsic	3.42 (0.47)	3.39 (0.50)	3.46 (0.39)	B~M~A
Amotivation	1.48 (0.60)	1.47 (0.61)	1.79 (0.85)	B~M<A
Morgan-Jinks Perceived Academic Self-Efficacy Scale				
Acad. Self-Efficacy	2.86 (0.41)	2.95 (0.41)	3.05 (0.39)	B~M<A
My Voice Survey				
Engagement	3.21 (0.50)	3.18 (0.53)	3.17 (0.48)	B~M~A
Aspirations	3.66 (0.45)	3.57 (0.50)	3.49 (0.49)	B~M>A
Effort	3.23 (0.63)	3.20 (0.61)	3.23 (0.63)	B~M~A
Purpose	3.17 (0.49)	3.11 (0.59)	3.21 (0.48)	B>M~A

Table 6: Descriptive Statistics and Over-Time Changes in UPP Participant Survey Responses

Note. B = Before (taken in the first week of In2Uni's UPP program). M = Mid (taken at the midpoint of the UPP program). A = After (surveyed upon completion of In2Uni's UPP program). Descriptive statistics are presented for all respondents ($N = 203$), whether or not they responded to all survey time points. Statistical analyses results (sig.), however, pertain only to those who responded at all time points ($n = 52$). Green font indicates positive change, red font indicated negative change.

While further evaluation with greater and more representative participation is required to see the extent to which these trends are replicated in this larger group, these initial trends are at least positive signs in evaluating the impact of the UPP program on students' perceived levels of intrinsic motivation, self-efficacy, effort and engagement. That is, despite a potential bias in the final respondent sample (such that suppressed ratings could be expected relative to the broader UPP group) the students still indicated higher levels of self-efficacy, restored levels of intrinsic motivation and maintained levels of academic engagement and effort. This is particularly positive given the growing evidence that these factors typically decline across this period, and even more dramatically so in disadvantaged groups. As such, preliminary evidence suggests that UPP may serve to promote self-efficacy and protect against typical declines in intrinsic motivation, self-efficacy, effort and engagement.

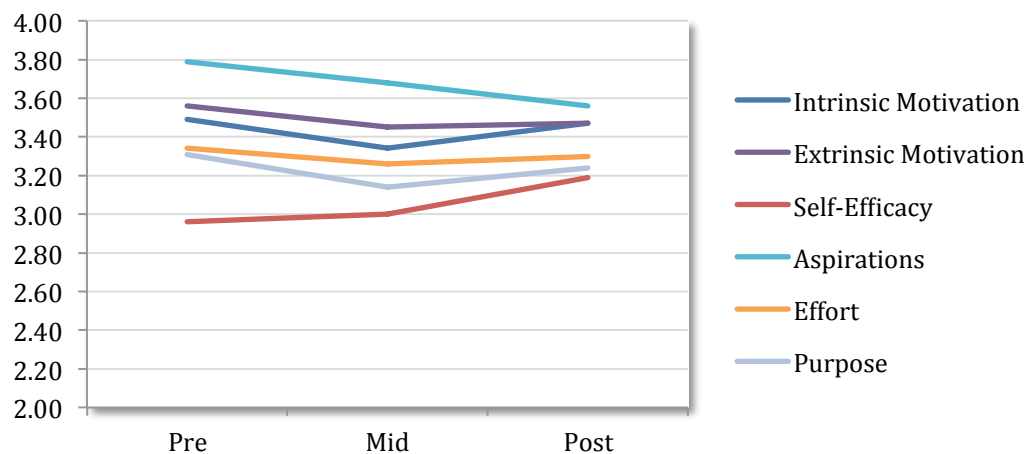


Figure 2: Trajectories of attitudinal change across the UPP program for respondents to all survey time points ($n = 52$)

Academic data: the impact of UPP on student university outcomes

There is ample evidence that academic achievement also scales closely with socioeconomic status (SES). In an Australian context, Cardak and Ryan (2006) have found that high-SES students achieving similarly to low-SES students in Year 9 achieve much higher ATARs 3 years later. Numerous additional studies have found a relationship between ATARs, tertiary study and SES (e.g., James, Bexley, & Shearer, 2009; Marks, Underwood, Rothman, & Brown, 2011; Teese, 2007). While the previous results demonstrates perceived changes (or maintenance) in academically relevant factors, the question remains as to whether UPP also makes an objective difference to participants' real-world academic outcomes.

That is, does UPP alter participants' academic trajectories, supporting its students to 'perform against the odds'? To facilitate this comparison, UPP participants' academic outcomes were compared against the 2015 population of low-SES Year 12 students in Australia, given that this was the closest comparison group that could be found. However, it is also worth noting that UPP specifically seeks to work with students within low ICSEA schools who are not currently on a trajectory toward university. While not all low-SES, these students are often not currently achieving even average levels of academic success at the time of their enrolment in UPP. As such, there are many low-SES students who are already on a trajectory toward tertiary study that are not within In2Uni's participant group. Given this, it could be expected that if the UPP program had no effect on participants' outcomes, the Australian low-SES comparison group might actually outperform the UPP group.

The academic data gathered is highly suggestive in this regard (see Table 7). While 59% of TAC applicants in Australia accepted a university offer, 78% of UPP participants accepted a university offer in 2016 – a statistically significant difference, $z = 5.60$, $p < .001$. This suggests objective and substantial improvements in outcomes for UPP participants relative to a nearest-comparison population.

Comparison data could not be found for enrolments specifically at UOW however, it is notable that 57% of In2Uni's UAC applicants ultimately opted to enrol at UOW. In addition, while comparison data could not be found for enrolments by low-SES students at UOW, this almost certainly would exceed the expected rate of enrolments at UOW (or any other university) by low-SES students. This data thus suggests that in influencing students' self-perceptions and academic trajectories, UPP is also likely making university (and UOW specifically) a more accessible and comfortable place for these students. While quantitative data was not available to speak to this suggestion, this assertion was well supported by the qualitative data.

	Consented UPP Students (N = 234)	Australia Low-SES Comparison (N = 256,201)
Completed UPP # (%)	215 (92%)	-
UAC/TAC Applicants # (%)	210 (90%)	49,388 ^b
Characteristics of UAC/TAC Applicants:		
ATAR (Mean)	61.61	unavailable
University Offer # (%)	197 (94%)	39,473 (80%) ^b
University Acceptance # (%)	163 (78%) ^a	28,934 (59%) ^b
Enrolled at UOW # (%)	120 (57%) ^a	unavailable

Table 7: Academic outcome data for UPP participants compared with a nearest-comparison Australian low-SES sample

Notes. Characteristics of UAC applicants describe those who applied to a University in 2015. For instance, the rate of offer, acceptance and enrollment at UOW is presented as a proportion of the total UAC applicant population (210 students for the UPP sample and 49,388 students for the Australian low-SES comparison sample). UAC = Universities Admission Centre (New South Wales). TAC = Tertiary Admissions Centre (Australia). University acceptance = accepted or deferred. ^aAccurate at the date of collection in Feb. 2016, although it is noted that enrolments continue beyond this date. ^bAustralian SES-based application and acceptance rates were derived from the Australian Government Department of Education and Training's Undergraduate Applications, Offers and Acceptances report 2015.

Students identify, describe and explain the impact of UPP

Overwhelmingly, the interview participants perceived the impact of the UPP program as beneficial to both their current educational achievements and also, their future academic goals. Frequently, this impact was defined in relation to increases in knowledge and understanding, interestingly this was not only subject or discipline specific knowledge but also, a deeper understanding about options for the future. For example, David who described how his participation in UPP had provided him with a deeper perspective on what he wanted to study as an 'adult':

"I feel like it'll help if we want to go to uni afterwards because – well it kind of gives us a bit more awareness to the campus and how everything works and how different it is from High School"
(Participant, FG 2)

The thought of University always interested me because you would come here and you would study exactly what you wanted to do. But then I had the trouble of deciding what I wanted to do and what I wanted to be and then – like as an adult.

(David, Paired Interview, Current UPP Participant)

Similarly, Luke explained how he had 'always wanted to go to Uni' but was unclear if he wanted to continue to study immediately after school. Attending UPP had led to a more expansive personal understanding of what university involved and the repercussion of this wider perspective led him to decide that this was both an option and a possibility he did wish to pursue:

...through the UPP thing I think it's kind of motivated me a bit more to try to – like I've I just didn't know how long outside school because, you know, how fed up I am basically with school right now, I'm like why would I want to go straight into Uni straight after that? But then coming here and seeing the

environment and seeing how everything is I went ‘Oh Okay. Well this is something I can do’.

(Luke, Group Interview, Current UPP Participant)

Importantly, both Luke and David demonstrate how attending university was something they had both considered and planned for in their futures, but participating in UPP contributed a sense of possibility to these plans. Prior to attending UPP, university was perceived in largely vague terms but the act of coming on-campus and attending regularly, seemed to consolidate knowledge of this field. These sentiments are echoed by most of the current students who refer to the UPP as providing:

- Practical advice about educational futures
- Reassurance around ATARs / alternative pathways and
- Deep knowledge of university situational context.

In short, the major impact of UPP was **not** necessarily in relation to deciding to attend university but **rather how this attendance might be enacted**. Most of the participants we interviewed already had aspirations to attend university but UPP assisted them in finding alternative and multiple ways to achieve these ambitions. The following interchange between Matthew and Deanne highlighting the very tangible ways that UPP kept existing aspirations ‘on-track’ (Cummings et al, 2012, p77).

Matthew [I am not] really as worried that I’ve got to get three band fives, if I don’t get that I’ve gotta go as a Mature Age, but I’ve found that there’s other options available.

Deanne I mean – before I kind of started this program I already knew where I wanted to go in Uni. So it hasn’t changed it too much but it definitely has changed the direction in how I’m going to get to it.

Matthew Yeah.

Deanne Yeah so I still want – my end goal is still the same but how I’m going to get there has definitely changed through this program.

(Matthew & Deanne, Paired Interview, Current UPP Participants)

The impact of mentors on student experience

One of the major ways that UPP manage to both reassure and manage participants’ goals and aspirations was via interactions with the mentors. References to the mentors were plentiful throughout the interviews and predominantly their impact was regarded as having a positive influence on these interviewees. The mentors largely filled the role of ‘knowledgeable other’ that many of the UPP participants did not have access to in their household or family. Given the large numbers of first in

*“I think the insight from the mentors has been one of the biggest things, because they’ve already been through the HSC, they’ve already got into Uni, they’ve already done that stuff”
(Participant, FG 3)*

family students in this cohort, it is perhaps not surprising that the mentors were able to ‘fill a gap’ in understanding about university. Riley explained how she feels that participating in UPP enabled her to reach *‘the same level as those people with older brothers and sisters’* referring to discussions with her mentor that provided insider information about alternative entry paths.

Interestingly, one of the primary roles of the mentors in UPP is to provide tutoring in subject specific knowledge but it is the casual conversations and the discussions that sometimes spontaneously occurred in the UPP sessions that these participants seemed to most value:

It’s good to have someone that’s been through what we’ve been through and just to give like their life experience on it and just like little tips on like how to like overcome like certain things like in Year 12 like stress and how to study and stay organised.

(Participant, FG 1)

Frequently, the relative youth of the mentors was mentioned as having a positive impact on the nature and range of this dialogue, as one of the focus group participants explained: *“I think because they’re younger than like the teachers that are our age so we’re able to relate to them more with what they’ve been through kind of thing. Like the whole stress of studying...”* (Participant, FG 1).

The mentors were largely described as being authentic or legitimate purveyors of knowledge, this legitimacy founded upon their relative youth, this insider knowledge and also their current student status. This was a powerful mix that impacted upon participants’ currency of knowledge and also, understanding about the nature of the university experience. The opportunity to engage in meaningful relationships with the mentors was also regarded as having a positive impact on participants; this included having the time needed to get to know the mentors on a personal level, as Mark explained:

“just having them [mentors] there to talk to and find that they were stressed and all that but they coped with it this way and offer some advice and that. And just alternate ways to Uni and just know a bunch of advice.”

(Mark & Belinda, Paired Interview, Current UPP Participants)

Parent perspectives on the impact of UPP

In2Uni invited parents to provide their perspectives on the UPP program through an online survey. A total of 10 parents contributed to the Parent Survey – nine mothers (survey responses #1 to #9) and one father (#10) (one survey was incomplete). Five had daughters completing UPP and five had sons. The highest parental education levels were varied:

“We are very appreciative that this program came around at such an integral part of our son’s schooling and have only seen wonderful impacts from the course”
(Survey respondent #1)

Bachelor degree (n=3), TAFE certificate or equivalent (n=2), Trade qualification (n=1), HSC (n=1), School Certificate (n=1), and Years 7-10 (i.e. no School Certificate) (n=2). Most of the parents found out about UPP through their child's school, or via their child. Others were made aware of UPP through a friend or relative.

The benefits of UPP participation

The assistance provided by UPP participation was described variously. Some of these were that their child was taking more responsibility for their study and schoolwork management. Other students exhibited a greater level of independence, commitment to pursue further study, motivation to continue, and were more goal and future-oriented, developing a routine and achieving better grades at school. One parent felt that the opportunity to attend a mock interview "was a great help" for her daughter, either as face-to-face or by "watch[ing] the webinar that was offered" (#3).

Overall impressions were that the Program is "a wonderful program for Year 12 students", a "great opportunity" and "good peer support to reduce stresses of the HSC" (#3, #5). For students who are first-in-family, the encouragement to attend uni provided by the program was described by one mother as "UPP's real strength" (#6). Another expressed that the Program had done her son "the world of good. He is more confident" and that despite his studies not showing notable improvement "he still wants to go to uni" (#8). The "professional way" the Program was run (#6) was appreciated and a few parents had recommended UPP to friends.

In relation to research Objective 1, to identify, describe and explain the impact of UPP on the student experience, the three key themes that will be explored include:

- *Impact on parent perceptions of university and UPP:* How UPP impacted upon parents' perceptions of their child's experience of university and the effect on their own attitudes
- *Preparing for Transition into University:* How did parents perceive the impact on their child in relation to coming to university as part of UPP?
- *Future focus:* How did parents describe the extent to which UPP opened up choices, pathways, possibilities for their child – what were both the positives and negatives

Parent perceptions of university

Parents were generally positive about their child's decision to participate in UPP, expressing this as "a great opportunity to help with HSC studies" and that they would "gain a better understanding about how uni life works" (#8), however there were some concerns about the extra workload "on top of the demanding HSC course" (#6). Parents' thoughts about university were that it was a priority, "a positive step in life", something "I would like my children to experience" (#6) and a way to develop deeper understandings in a field in order to "get a job" (#9). While five parents indicated these thoughts pre-UPP and post-UPP remained unaffected, four indicated a change in their views. For one parent this included a shift from viewing employment as the end-goal to university as an

opportunity for their child to set and achieve their own goals. Another said that prior to UPP they did not think “greatly” of university, but the UPP experience enabled them to see how “the university takes great steps in motivating and assisting students” (#5).

One of the parents perceived a negative impact on her son who did not get Early Entry despite “work[ing] really hard at the UPP program [to] ... have a chance to get into uni” While the benefits throughout UPP were described as his commitment to attend, a sense of being able to achieve “anything he set his mind and heart into”, feeling like he was “treated as a respected adult”, making use of the university resources and “constantly chang[ing] his studying behaviour”, she described these as “temporary” high. The knockback from Early Entry seemed to have a significant negative impact on him and his parent, “I thought this program would open a door of opportunities yet it only opened a door to crash his dreams ... he doesn’t care anymore to even try to pass his exams ...” (#4).

Preparing for Transition into University

Parents noticed changes in their child as a result of attending the Program. Some commented that their child seemed “better prepared” (#3) for attending university, had gained some “university knowledge” (#5) which contributed to a sense of not feeling “intimidated about going to uni anymore” (#8). This parent also noted that the social aspect of “mixing with like-minded people” (#8) during UPP was also a factor in helping the transition towards university study. Fostering a sense of independence is built into the Program as students have to organise their own transport to and from the weekly sessions, navigate their way to different classrooms and facilities and be responsible for completing the required tasks the program. This approach seems to be helping with transition process, for example one parent noted her son “becom[ing] more independent and responsible for his own study as he had to miss a day a week of school and catch up on work and also get himself to and from uni” (#1). Parents mentioned changes taking place at home, for example one whose son was now “taking responsibility for his own study” (#1) and another noticing that “more study at home taking place and more thought about life after school” (#9).

Some of the benefits of UPP were attributed to the mentor help provided through UPP in a particular HSC subject. Other indirect references to mentoring included improved marks, better grades and “better understanding of school subjects” (#8). Others did not see an improvement in grades as a result of the program but one commented that her “son still wants to go to uni” (#8), while another felt it “did not prepare” her child for university (#4).

Future focus: the influence of UPP on choices, pathways, possibilities

Parents perceived some benefits of attending the program for their child included clearer direction about their future and career paths, “prior to UPP he did not have much of an idea about where he wanted to go” (#1). Many parents noticed improved self-confidence and self-belief, a keenness to attend and increased motivation, which can often wane during the HSC year. One parent commented that her son “has a newfound excitement

about his life which is a wonderful thing to see, especially as ... Year 12 was certainly taking its toll on him!" (#1).

Mentor reflections on the impact of UPP

In2Uni provided the evaluation team with 10 mentor reflection surveys, which had been completed by mentors who had worked in the 2015 UPP program. Here we draw primarily on the following survey questions: *Reflect upon the term 'mentor'. What does this mean to you?*; *How do you think participating in In2Uni might impact on young people's involvement in the program?*; and *What kind of reactions to university did you note in our interactions with young people and their family members?*. Survey responses showed that mentors perceived UPP participants and their families to benefit from program involvement in three main ways: **knowledge**, **support** and **role modeling**.

Knowledge

Knowledge and awareness of Higher Education are thought to be important factors in demystifying university for students from low socioeconomic backgrounds (Hatt et al. 2007). As such, building knowledge and awareness is noted as one of the four key aims of the In2Uni program: "Strengthen relationships with parents and local communities to build an awareness and knowledge about Higher Education" (UOW 2014). Four mentors explicitly noted their impression that the UPP program improved participants' knowledge of available support services, and of pathways to university, including ideas about navigating these pathways (Beth, Kara, Tayla, Tegan). One mentor noted:

"Young people who participate in In2Uni programs will gain a valuable insight into tertiary education, providing them with the knowledge and understanding to know if further study or training is something they wish to pursue" (Tayla).

Other mentors variously noted that In2Uni builds knowledge and experience of aspects such as university life and campus layout. This was said to "prove beneficial to students in the program, allowing a smoother transition between high school and university" (Beth). Mentor reflections also suggested that the direction and guidance they provided might provoke participants to "reconsider preconceived ideas about uni" (Scott).

Support

Both Hoffman and colleagues (2003) and Strayhorn (2012) have noted that connecting with people and gaining a sense of familiarity with the physical environment are important aspects in contributing to a feeling of belonging and support within an institutional space such as a university. In2Uni mentors echoed these suggestions as they discussed the forms of support that they provided and the impact of this support for UPP participants. Two mentors explicitly discussed making participants more comfortable by familiarising them with the university (Scott, Pippa). Other mentors suggested that they provide support through forming relationships with participants so that the participants feel comfortable asking questions (Beth, Tegan). The idea of In2Uni forming part of students'

support network, providing advice across a range of university-related areas, was explained by one mentor as follows:

“In2Uni provides a support network for students to ask questions, explore ideas and consider options in a friendly environment” (Peta).

Role modeling

Teachers at In2Uni schools have previously expressed the idea that mentors serve as effective role models, building participant aspirations through their proximity in terms of age and experience (Harwood et al., 2014). Numerous UPP mentors similarly noted their impression of themselves as role models, explaining their function as one involving “inspiration” (Kirsty, Scott, Hayley) and highlighting the “real struggles that real people had and how they dealt with it” (Kirsty). One mentor said he had “realised that many students have the same questions and fears I had when I started uni” (Blake) and several specifically referenced their own ability to provide authentic and honest advice based on their experiences (Kara, Scott, Tayla).

One mentor (Kara) succinctly explained that she aimed to

“inspire others to see what they can achieve through sharing experiences, ideas, knowledge and being an honest role who brings out the best in others”

None of the questions in the In2Uni reflective evaluation required mentors to critically reflect on the strengths or weaknesses of the program. Given the important role mentors play in connecting In2Uni with high school students, a more reflective and systematic approach to their feedback would be useful.

The next section will explore the suggestions for refinements and changes to the UPP program, based on analyses of the quantitative and qualitative data gathered for this evaluation, thus providing an evidence-based understanding of the impact on students to enable targeted improvements to the program (Objective 2).

Suggestions for targeted improvements of UPP – student data

The **quantitative data** provided the following insights into how In2Uni might seek to further improve students’ academic perceptions, engagement and outcomes:

- In addition to promoting subject-specific and tertiary-related trajectories, a focus on deriving intrinsic motivation from learning and further fostering aspirations may help to support the small proportion who have seemingly increased in amotivation and declined in aspirations by the end of the program;
- Continued evaluation of the UPP program would benefit from establishing a control or comparison group from which academic results can be compared annually. This would provide a far closer comparison to demonstrate UPP’s impact relative to similar students who do not have access to this program. This would also facilitate In2Uni contributing to knowledge in this area, as this would

be highly sought after evaluation evidence, which typically does not exist for such programs;

- In doing so, In2Uni might consider adding some general (established) motivation, effort and aspiration questions to their annual surveying, allowing for a continual process of reevaluation of changes to the program.

However, it is noted that these recommendations must be considered in light of the potentially biased final survey sample (those UPP participants who had not yet met attendance requirements in the final UPP week). Further research capturing a more complete UPP sample would be required to further validate these conclusions.

The **qualitative interview data** aimed to elicit responses from all participants for ways that the UPP program could be improved, however participants either did not have any suggestions or only provided minor recommendations. Overall, the broad structure and content of the program was regarded very positively but to address Objective 2 of the evaluation we have sought specific suggestions that could be implemented.

Both Luke and Jess indicated that the program could be advertised more widely, reflecting how many of their peers did not know anything about UPP. Interestingly, both Luke and Jess were from schools not traditionally affiliated with UPP and while neither explained how they heard about the program, both agreed that if more people from their schools had known about it then they would have attended:

LUKE: *Well nobody from my school did it and then I knew from [another] high school, because I know that the school itself kind of told people about it and I feel like – cos when I go and do it people know that I do it now and I feel that a lot of people would have done it with me had they have known because - - -*

JESS *But like – I don't know if people knew it was there I think definitely a lot more people would have applied...*

(Luke and Jess, Group Interview, Current UPP Participants)

Similarly, Whitney explained that she only found out about the program because she was considering dropping out of school and so her school careers advisor *'did some Googling and like I'm pretty sure that's where he found out about it and so – yeah I feel like if it was advertised more to all the students they'd like – cos like I have friends who are like 'Oh that's amazing. I wish I had known about that' and I went 'Yeah because it's – it's such a great opportunity and it's really worth it'.*

One of the biggest areas for improvement related to the availability of the online resources, with a number of the interviewees expressing frustration that the Moodle site was not available, despite reference being made to the site during the UPP sessions. While this is probably a 'one-off' issue it does highlight the need to have all resources available and online prior to the commencement of the program. For these Year 12 students the inability to access the site added to their stress level as they considered managing time with UPP requirements and the upcoming HSC trials, as Belinda explained:

“...we’re not allowed to fall three weeks behind on these modules but they’re gonna give us like until next term to complete them all but trials are like that – like after that holiday so, you know, we wanna be studying but we also have to complete these. So it sort of gets in the way a bit which is a bit annoying. So...”

(Belinda, Paired Interview, Current UPP Participant)

This is a useful consideration for this type of programs, as they must endeavour to support and engage participants without adding to the pressure and stress of their final school year. There is a need to implement considered planning to avoid participants feeling an additional burden or as one focus group participant explained: *“Competing pressures when you’ve got little time...”*

A small number of participants indicated that they would have enjoyed engaging with the teaching staff within their respective Faculties. While having a mentor was regarded positively, the opportunity to meet with academics or Heads of relevant Schools was also mentioned as being something that these interviewees would have appreciated. Deanne reflected how: *“I have met a few people but I haven’t met a lot of teachers around here. I’ve met students and I’ve met – I’ve met mentors and stuff but I haven’t actually met lecturers or facility staff...”* (Deanne, Paired Interview, Current UPP Participant). For Deanne, the opportunity to meet with a lecturer was inextricably linked with her own future career plans:

“...like the other day I was thinking imagine being a lecturer but I don’t know like I’ve never actually met a lecturer or experienced anything like that, so yeah. Just – even just like one lecturer to talk to everyone would be cool. I don’t know, someone that’s done their degree, completed their degree and yeah. I feel like that would be a cool idea”.

In Deanne’s case, this meeting was particularly important; as this would be the first person she would have the opportunity to talk to who was employed as a university academic, a career that she appears to be considering. The interviews and focus groups did in fact provide such opportunities, as each of the evaluation team members were academic staff. Some participants expressed appreciation that academics were involved in the interviewing, and took full advantage of this opportunity to ask questions, such as *“How do you become a professor? Like, so you studied ... what did you study originally?”*.. The following illustrates an interaction which unfolded as a result of the initial questioning:

[when a research student walked past the room where the focus group was being held]

INTERVIEWER *It’s another PhD student. You can grill them as well for questions*

STUDENT(1) *Is she going to be a doctor as well?*

INTERVIEWER *Yeah. PhD gives you a Doctor of Philosophy*

STUDENT (1) *Oh wow*

INTERVIEWER *And it means you do it in different subjects ... a whole range of things. It just means that you write something that looks like that [points to a thesis]*

STUDENT(2) *Wow!*

INTERVIEWER *You just do it in bits and pieces*

STUDENT(3) *Oh my God. Did you write this?*

INTERVIEWER *No, that's one of our students ...*

STUDENT(1) *It's a nice book*

STUDENT(2) *I want a book!*

INTERVIEWER *It is lovely*

STUDENT(3) *You just go, 'that's my book! Read my book!'*

(FG 1)

Impromptu questions such as these were enabled by the relaxed style of interviewing taken by the evaluation team. Students responded well to this and it enabled them to share their insights in a relatively safe environment. Establishing trust and building relationships seemed to be integral to how positively UPP was spoken about, and particularly so when participants articulated their experiences of the mentoring relationship.

Given that the relationship building with mentors was regarded in a very positive sense, possible threats to this relationship also need to be considered very carefully. One of these is the ability of the mentors to engage in relationships with the participants that cover the length of the program. As indicated, building trustworthy and deep relationships with mentors was regarded as being key to participants but when mentors were unable to maintain this relationship (due to conflicts or graduation) this was perceived negatively by the UPP participants:

...people should be chosen that are still going to be here for the entire duration for the UPP program so you don't have to change and then like get more confidence in your surroundings and all that.

(Participant, FG 3)

Indeed, for some of the participants the relationship with the mentors was so important that they suggested it should continue through to the early stages of their undergraduate study. This was echoed by Abbey, a past UPP participant, who suggested: *"Probably just having a mentor – maybe one mentor at the campus that's available to talk to and just to, not counsel, but help through the first few weeks"*. (Abbey, Interview, Past UPP Participant).

Finally, while not directly responding to the research objectives outlined earlier, it is worthwhile mentioning the participants' responses to the Early Entry interviews. These references were all positive with both current and past UPP participants indicating how

the opportunity to attend an early entry interview was both significant and beneficial. For example, Hayden explained how achieving early entry to university resulted in a *“weight lifted off your shoulders just the relief if you do know that you are – you do have a place in Uni. It just makes you feel so much better”* (Hayden and David, Interview, Current UPP Participants). Similarly, Jess explained how she was redefining her immediate ambitions, focusing on this early entry interview as a preliminary goal: *“My focus is — Early Entry – Entry is my goal”*. (Jess, Group Interview, Current UPP participant).

The guaranteed nature of this interview was also commented upon. Participating in Early Entry interviews was described as providing a more immediate and tangible outcome for current UPP participants. For example, one of the focus group participants described how Early Entry *“...makes it real. Like it makes it like ‘I can do this’ like ‘I can go to Uni’. Like ‘I got this’. ‘I can do it’”* (FG 1). Similarly, Deanne described how this was a “win-win” situation, with UPP providing *“free tutoring and we get to come here and, you know what I mean, experience Uni life and at the end we get an interview as well”* (Deanne, Paired interview, Current UPP Participant). Both Penni and Kate explained how their primary motivation for attending UPP was due to the promise of this early entry interview. Both current and past UPP participants echoed this sentiment, many of which reflected how this guarantee made the regular weekly attendance worthwhile.

It’s that reward of like ‘I’m spending my time coming here and doing this and I get this at the end’”

(Participant, FG 1)

Just the opportunity to have an early entry interview. That was one of my main motivations to actually be a part of the program. I wasn’t sure if I was going to be able to get into Uni of my own accord and they really pulled me through.

(Abbey, Interview, Past UPP Participant)

Overall, the early entry interviews were perceived in highly beneficial terms by the participants we interviewed, providing not only an objective or end goal to the program but also, an incentive for continued attendance.

Parent matters: perceived barriers and clarity in communications

Insights into what mattered for parents was not extensive as UPP was considered very positively, however two themes emerged which can inform how In2Uni may target improvements to the program:

- Perceived barriers: What parents view as difficulties to future university study and difficulties in the HSC year
- Clarity in communications

Perceived barriers

Barriers to achieving a university education included financial concerns or negative perceptions: one parent expressed university as “unaffordable and unreachable”, (#4) another “didn’t think greatly of it”, (#5) and yet another “thought that only really high marks can get you in and that Universities didn’t help students to get in” (#10). Others included concerns about the workload and academic performance, not getting a high enough ATAR, maintaining motivation and commitment to study, personal issues such as stress and anxiety, friends not intending to go to university and practical issues such as transport and finding available support services. Being first in family to attend university was considered a barrier, as was pre-conceived ideas about university, for example one mother expressed “children from disadvantaged communities think that uni is not a place for them, only for the rich and very smart kids” (#4).

Some of the difficulties their child encountered during the HSC year can become barriers. Those mentioned by parents included coping with the high workload, lack of healthy work-life balance, time management, maintaining motivation and focus, and stress and anxiety. Other personal difficulties were issues with peers, moving house, death in the family and close relatives being under stress.

Clarity in communications

There were only two comments by parents on how the program could be improved. One was to start the Program earlier in the year, although a reason for this was not offered. The other was regarding communication to both caregivers and students. As one parent explained “17 year old boys don’t give much feedback, just grunt” so explicit communication with parents was seen as beneficial. This communication was also required for to better aid clarity. For example, this parent explained that her son “felt he had to stay in the one class for the whole time of UPP” and when he swapped to another subject to help with an assignment “he wasn’t sure if he was allowed to do that” (# 8).

4 CONCLUSIONS



The impact of UPP from the student experience

Changes in Attitudes, Motivations and Self-Efficacy

Key findings from the quantitative data include:

- Contrasting the typical trend in previous research of declines in motivation, effort and self-efficacy across the academic year, UPP students showed maintained levels of academic engagement, effort and intrinsic motivation, and improved self-efficacy;
- There was also an increase in amotivation and decrease in aspirations overall across UPP, yet these rates remained low and few participants rated themselves as having high levels of amotivation. This result may also have been influenced by a potentially biased final sample, over-representing those with lower levels of motivation.

UPP students' academic outcomes

- UPP students showed better academic outcomes relative to an Australian low-SES comparison group. This included higher rates of university offers (94% vs. 80%) and university acceptance (78% vs. 59%).

Short-term and long-term benefits

The qualitative interviews and focus groups provided a rich source of participant feedback as students narrated the impact of UPP on them – both in the short and long-term. The previous sections have drawn on this data to explore the impacts of the UPP project and also, suggested recommendations for the program. In terms of impacts, the participants reported how UPP enabled them to:

- Develop deeper and more detailed plans / goals for the future.
- Expand personal knowledge sets about the university's educational and spatial environment.
- Practically apply this knowledge to the achievement of personal goals.
- Have access to a 'knowledgeable other' who provided insider knowledge of

university.

The qualitative data also provided insight into how the UPP program could develop for the future, with the following recommendations:

- Increased advertising of the program to include schools beyond the designated catchment area
- Planning to ensure that all resources are available in a timely manner
- Opportunities to meaningfully engage / develop relationships with a range of university staff including those in academic roles
- Ensure relationships with mentors can be maintained longitudinally
- Continue to offer UPP participants the guaranteed opportunity to participate in Early Entry interviews given the reported level of participation and engagement levels resulting from this guarantee.

The parent perspective

The negative experience expressed by one respondent whose son did not gain Early Entry highlights an issue of learning how to deal with potential disappointment and perhaps emphasising a 'Plan B' approach. The effect on this particular perception of her son's attitude was a negative change from him thinking that "UPP should be compulsory for all high school students" to changing his mind and feeling it was "a waste of his summer holiday to just fail anyway" (#4). While this is likely to represent a small percentage of students, it is worthy of consideration for future programs, and perhaps follow-up for those who did not gain Early Entry.

Improved communications with parents and caregivers was also mentioned. It may be helpful to keep them abreast of the program's activities as well as inform them of appropriate / relevant university opportunities (such as Open Days) which they may like to attend. Growing awareness of the university environment and the services available is useful for the family members supporting the student, and particularly important for parents of students who are first-in-family to attend university.

Parents perceived that barriers to attending were concerning. Some of these included financial barriers, workload expectations, maintaining motivation and commitment to study, coping with stress and anxiety, as well as practical issues of living, transport, maintaining social relationships.

These can be summarised as:

- Opportunities for parents and families to voice their concerns about barriers with university staff, or access to information which addresses these concerns
- Begin the program earlier in the year
- Better communications between In2Uni and parents/caregivers
- While Early Entry Admissions interviews were undoubtedly a big incentive for UPP participation, when Early Entry was not gained consideration was needed

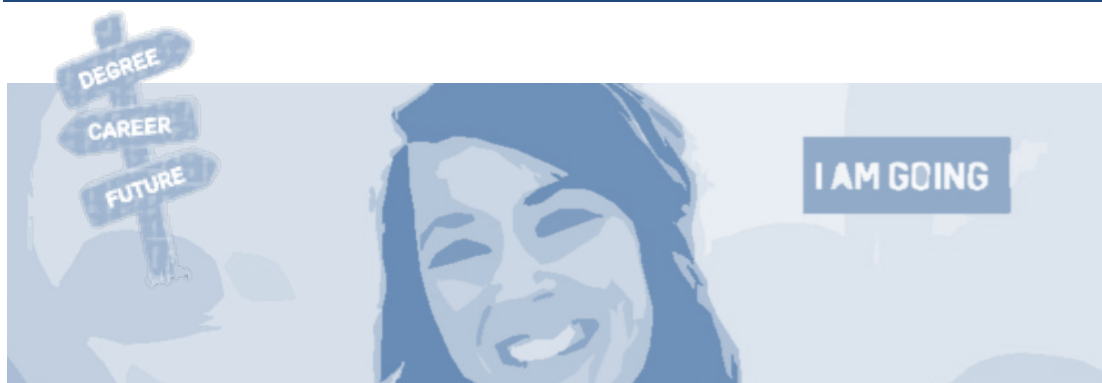
for follow-up and advice on a 'Plan B' approach

Overall, the program was perceived as very positive by parents in helping their child become (more) motivated, future-focused and aware of opportunities available to them. The benefits of UPP which include improved study habits, motivation, commitment to future goals, knowledge about university 'workings' as well as the increasing self-confidence engendered by participating in the program are to be commended. By providing students with a 'real' university student experience through fostering independence and accountability, the transition to university for these students should be far less fraught with anxiety.

The mentor perspective

Survey responses showed that mentors perceived UPP participants and their families to benefit from program involvement in three main ways: knowledge, support and role modeling. These functions helped participants familiarise themselves with the university and navigate the university application process. The important role mentors played in supporting UPP students was echoed throughout the student interviews.

5 RECOMMENDATIONS



Based on the evaluation of UPP as reported, the following 13 recommendations are made:

1

Consider inclusion of approaches which help improve students' academic perceptions, engagement and outcomes:

- Include approaches which support and develop intrinsic motivation from learning and foster aspirations to achieve to address the small proportion of students who have seemingly increased in amotivation and declined in aspirations by the end of UPP
- Include some general (established) motivation, effort and aspiration questions to UPP's annual surveying, allowing for a continual process of reevaluation of changes to the program.

2

Establish a control or comparison group from which academic results can be compared annually for continued evaluation of the UPP program. This would provide a far closer comparison to demonstrate the impact of UPP relative to similar students who do not have access to this program and would also facilitate In2Uni contributing to knowledge in this area as valuable evidence, which typically does not exist for such programs

3

Increase advertising of UPP to include schools beyond the designated catchment area

4

Ensure that all resources needed for meeting weekly task requirements are available in a timely manner

5

Provide opportunities for students to engage meaningfully with a range of university staff including those in academic roles, such as 'meet the lecturer'

6

Maintain relationships with mentors longitudinally

7

Continue to offer the guaranteed opportunity for Early Entry interviews, given the reported level of participation and engagement levels resulting from this guarantee

8

Provide opportunities for parents and families to voice their concerns about attending university through open discussions with university staff; or provide access to information about overcoming perceived barriers: including financial, workload, maintaining motivation and commitment to study, coping with stress and anxiety and practical issues of living and transport.

9

Consider commencing UPP earlier in the year

10

Improve communications between In2Uni and parents/caregivers

11

Enact a 'Plan B' approach for those students who did not gain Early Entry (e.g. follow-up and advice)

12

Revise the program questions posed to mentors to elicit critical reflection on the strengths and weakness of UPP

13

Seek the perspectives of stakeholders from UPP centres other than UOW main campus, as they were significantly underrepresented in this evaluation. Their experiences may provide additional insights which reflect benefits and issues pertaining to the UPP experience at satellite study centres

References

- Alivernini, F., & Lucidi, F. 2011. Relationship between social context, self-efficacy, motivation, academic achievement, and intention to drop out of high school: A longitudinal study. *The Journal of Educational Research*, 104(4), 241-252.
- Anderman, E. M., & Maehr, M. L. 1994. Motivation and schooling in the middle grades. *Review of Educational Research*, 64(2), 287-309.
- Australian Government Department of Education and Training. 2015. *Undergraduate applications, offers and acceptances report 2015*. Retrieved from <https://www.education.gov.au/undergraduate-applications-offers-and-acceptances-publications>
- Caprara, G. V., Fida, R., Vecchione, M., Del Bove, G., Vecchio, G. M. ... Bandura, A. 2008. Longitudinal analysis of the role of perceived self-efficacy for self-regulated learning in academic continuance and achievement. *Journal of Educational Psychology*, 100(3) 525-534.
- Cardak, B. A., & Ryan, C. 2006. Why are high-ability individuals from poor backgrounds under-represented at university? Retrieved from: <http://ssrn.com/abstract=914025>
- Chemers, M. M., Hu, L-T., & Garcia, B. F. 2001. Academic self-efficacy and first year college student performance and adjustment. *Journal of Educational Psychology*, 93(1), 55-64.
- Gottfried, A. E. 1985. Academic intrinsic motivation in elementary and junior high school students. *Journal of Educational Psychology*, 77(6), 631-645.
- Gottfried, A. E., Fleming, J. S., & Gottfried, A. W. (2001). Continuity of academic intrinsic motivation from childhood through late adolescence: A longitudinal study. *Journal of Educational Psychology*, 93(1), 3-13.
- Green, J., Liem, G. A. D., Martin, A. J., Colmar, S., Marsh, H. W., & McInerney, D. 2012. Academic motivation, self-concept, engagement, and performance in high school: Key processes from a longitudinal perspective. *Journal of Adolescence*, 35(5), 1111-1122.
- Hatt, S., Baxter, A. & Tate, J. 2007, "Measuring Progress: an Evaluative Study of Aimhigher South West 2003–2006", *Higher Education Quarterly*, 61(3), 284-305.
- Harwood, V., O'Shea, S., Howard, S. & Cliff, K. 2014. *Evaluation of the In2Uni Program*. University of Wollongong, Wollongong, Australia.
- Hoffman, M., Richmond, J. & Morrow, J. 2003, Investigating 'Sense of Belonging' in First-Year College Students, *Journal of College Student Retention*, 4(3), 227.
- In2Uni, My Way, 2016. Retrieved from: <http://www.uow.edu.au/in2uni-myway/year12uniprep/index.html>)
- In2Uni, 2015. In2Uni Annual Report, University of Wollongong. Retrieved from <http://www.uow.edu.au/in2uni-myway/in2uniannualreports/index.html>
- In2Uni, 2014. In2Uni Annual Report, University of Wollongong. Retrieved from <http://www.uow.edu.au/in2uni-myway/in2uniannualreports/index.html>

-
- James, R., Bexley, E., & Shearer, M. 2009. Improving selection for tertiary education places in Victoria. Retrieved from:
<http://www.education.vic.gov.au/Documents/school/teachers/teachingresources/careers/tertiaryselection.pdf>
- Jinks, J., & Morgan, V. 1999. Children's perceived academic self-efficacy: An inventory scale. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 72(4), 224-230.
- Marks, G. N., Underwood, C., Rothman, S., & Brown, J. 2011. Career moves: Expectations and destinations of NSW senior secondary students. Retrieved from:
https://www.training.nsw.gov.au/forms_documents/vet/bvet/research/vet_planning/career_moves_acer.pdf
- Otis, N., Grouzet, F. M. E., & Pelletier, L. G. 2005. Latent motivational change in an academic setting: A 3-year longitudinal study. *Journal of Educational Psychology*, 97(2), 170-183.
- QISA. 1998. The development of scales to measure QISA's three guiding principles of students' aspirations using the My Voice survey. Retrieved from:
www.qisa.org/dmsView/MV_Scale_Development
- Strayhorn, T. 2012, *College Students' Sense of Belonging: A Key to Educational Success For All Students*, Routledge, New York, NY.
- Teese, R. 2007. *Structural inequality in Australian education*. Netherlands: Springer.
- University of Wollongong. 2014, *About In2Uni*. University of Wollongong. Retrieved from:
<http://www.uow.edu.au/in2uni/about/index.html>
- Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Senecal, C., & Vallieres, E. F. 1992. The Academic Motivation Scale: A measure of intrinsic, extrinsic, and amotivation in education. *Educational and Psychological Measurement*, 52(4), 1003-1017.
- Yeung, A. S., & McInerney, D. M. 2005. Students' school motivation and aspiration over high school years. *Educational Psychology: An International Journal of Experimental Educational Psychology*, 25(5), 537-554.

Appendices

Appendix A: Questionnaire Instruments

For the following questions, please think carefully about your answers and then circle the one response for each item that most accurately and honestly reflects your views on school.

Why do you go to school?	Really Agree	Kind of Agree	Kind of Disagree	Really Disagree
Because I enjoy communicating and debating ideas with other people	1	2	3	4
Because I experience pleasure and satisfaction while learning new things	1	2	3	4
For the pleasure I experience when I discover new things	1	2	3	4
Because I think that finishing school will help me better prepare for what I want to do when I am older	1	2	3	4
Because of the fact that when I succeed in school I feel important	1	2	3	4
Because I need to finish school in order to find a high-paying job later on	1	2	3	4
Honestly, I don't know; I really feel that I am wasting my time in school	1	2	3	4
Because I find it fun to participate in debates with teachers	1	2	3	4
Because I want to show myself that I can succeed in my studies	1	2	3	4
Because I like to discover new things that I have never seen before	1	2	3	4
Because eventually it will help me to find a job in an area that I am interested in	1	2	3	4
Because I like having good grades	1	2	3	4
In order to get a better job later on	1	2	3	4
I used to have good reasons for going to school; however, now I wonder whether I should continue to try	1	2	3	4
For the pleasure that I experience in broadening my knowledge about subjects which appeal to me	1	2	3	4
For the satisfaction I feel when I am working on something challenging	1	2	3	4
Because I enjoy learning more about things that interest me	1	2	3	4
Because, in our society, it is important to go to school	1	2	3	4
Because I do not want to be a failure	1	2	3	4
In order to have a better salary later on	1	2	3	4
I can't see why I go to school and, frankly, I couldn't care less	1	2	3	4
Because my studies allow me to continue to learn about many things that interest me	1	2	3	4
Because doing well at school allows me to experience a sense of achievement as I work toward doing well	1	2	3	4

Because going to school allows me to learn about many things that interest me	1	2	3	4
Because I believe that my school education will improve how good I am as a worker	1	2	3	4
Because I do not want to disappoint my family	1	2	3	4
I don't know; I can't understand what I am doing in school	1	2	3	4

For the following questions, please think carefully about your answers and then circle the one response for each item that most accurately and honestly reflects your views on you, your abilities and school.

	Really Agree	Kind of Agree	Kind of Disagree	Really Disagree
I work hard in school	1	2	3	4
I could get the best grades in class if I tried enough	1	2	3	4
Most of my classmates like to do math because it is easy	1	2	3	4
I would get better grades if my teacher liked me better	1	2	3	4
Most of my classmates work harder on their homework than I do	1	2	3	4
I am a good science student	1	2	3	4
I will graduate from high school	1	2	3	4
I go to a good school	1	2	3	4
I always get good grades when I try hard	1	2	3	4
Sometimes I think an assignment is easy when the other kids in class think it is hard	1	2	3	4
I am a good social studies student	1	2	3	4
Adults who have good jobs probably were good students when they were kids	1	2	3	4
When I am old enough, I will go to college	1	2	3	4
I am one of the best students in my class	1	2	3	4
No one cares if I do well in school	1	2	3	4
My teacher thinks I am smart	1	2	3	4
It is important to go to high school	1	2	3	4
I am a good math student	1	2	3	4
My classmates usually get better grades than I do	1	2	3	4
What I learn in school is not important	1	2	3	4
I usually understand my homework assignments	1	2	3	4
I usually do not get good grades in math because it is too hard				
It does not matter if I do well in school	1	2	3	4
Kids who get better grades than I do get more help from the teacher than I do	1	2	3	4
I am a good reading student	1	2	3	4
It is not hard for me to get good grades in school	1	2	3	4
I am smart	1	2	3	4
I will quit school as soon as I can	1	2	3	4
Teachers like kids even if they do not always make good grades	1	2	3	4
When the teacher asks a question I usually know the answer even if the other kids don't	1	2	3	4

For the following questions, please think carefully about your answers and then circle the one response for each item that most accurately and honestly reflects your views on you, your future and school.

	Really Agree	Kind of Agree	Kind of Disagree	Really Disagree
I enjoy being at school	1	2	3	4
I push myself to do better academically	1	2	3	4
School is boring	1	2	3	4
My classes help me understand that is happening in my everyday life	1	2	3	4
School inspires me to learn	1	2	3	4
I enjoy participating in my classes	1	2	3	4
I enjoy learning new things	1	2	3	4
I put forth my best effort at school	1	2	3	4
I learn new things that are interesting to me at school	1	2	3	4
I want to do my best at school	1	2	3	4
I think it is important to set high goals	1	2	3	4
Getting good grades is important to me	1	2	3	4
Learning can be fun	1	2	3	4
What I learn in school will benefit my future	1	2	3	4
I am excited about my future	1	2	3	4
School is preparing me well for my future	1	2	3	4

PAIRED INTERVIEW QUESTIONS – CURRENT In2Uni UPP STUDENTS

Can you tell me your names, ages and the what school(s) you attend

- Has anyone in your family attended university before?
- If yes, who?
- Can you tell me about some of your experiences of UPP (how do you like it, in what way/s has it been helpful?)
- What are some of the positive things about participating in UPP?
- How has UPP influenced your plans for the future?
- What kinds of hopes and desires do you have for your future?
- What can you imagine yourself doing in the future?
- How much do you think getting a university education is part of your future?
- What do you think might be some barriers to accessing a university education?
- If you are intending to / have applied for a place at university, what has motivated you?
- What do you think university will be like?
- What do your family / close friends think about you attending UPP (and/or attending university)?
- When did you start to consider university as a post-schooling option?
- Tell me some of the key milestones you have experienced in attending UPP (highs /lows)
- What could be improved about the program?

Is there anything else you'd like to add?

INTERVIEW QUESTIONS – PAST In2Uni UPP STUDENTS

Can you tell me your name, age, degree you are enrolled in and the school you attended

- What motivated you to apply for university?
- Before you attending university, what did you expect it to be like?
- Tell me about your initial experiences of university?
- Were your expectations met (if not Why? / If yes in what ways?)
- What have been some of the key milestones that you have experienced at university?
- What do you think are some of the barriers to attending university?
- Do you think the barriers to higher education are still there for you? If not, what changed or what was the turning point?
- What was your experience of UPP?
- In what ways did UPP impact upon your plans for the future?
- Tell me about when you seriously started to consider attending university – what influenced this decision?
- What did your friends / family think about your decision to attend university?
- What do your family and friends think about you attending now?
- What aspects of UPP were positive?
- What aspects of UPP needed to be improved?

Is there anything else you'd like to add?

FOCUS GROUP QUESTIONS

(Each of the focus groups would ask participants to reflect upon their involvement in the program and also request suggestions for changes / improvements)

- Can you tell me about how year 12 works, and the assessments?
- What do you know about organising for study, training or employment after year 12? Where did you find this information?
- Okay, could you each tell us about the In2Uni program (what you know so far?)
- Are there things at In2Uni that you have enjoyed?
- Is there anything that you didn't enjoy or think could be changed/improved?
- What in your opinion has been useful?
- What about things that haven't been useful?
- Can you think of anything that has changed for you since doing In2Uni?
- Do you share information that you've learned with other people (prompt e.g.. Friends, family, talking to people at school) ?

Okay now it is time to ask me questions! As I explained, I work at this university, so I can answer questions about study or what the teaching is like.

Appendix A: Parent Survey questions

PARENT / CAREGIVER OF In2Uni UPP STUDENTS – ONLINE SURVEY QUESTIONS

About you:

1. What is your relationship to the student attending the University Preparation Program (UPP)?

- I am their:
- | | | |
|---|--------------------------------------|---|
| <input type="checkbox"/> Mother | <input type="checkbox"/> Father | <input type="checkbox"/> female caregiver |
| <input type="checkbox"/> Male caregiver | <input type="checkbox"/> Other | |

2. What education have you completed - please indicate all the levels you have completed or are currently completing?

- | | |
|---|--|
| <input type="radio"/> Primary School | <input type="radio"/> TAFE Certificate (or equivalent) |
| <input type="radio"/> High School (Years 7-10) | <input type="radio"/> Trade qualification |
| <input type="radio"/> High School Year 10 Certificate (or equivalent) | <input type="radio"/> Bachelor degree |
| <input type="radio"/> High school Year 11-12 | <input type="radio"/> Postgraduate qualification |
| <input type="radio"/> High School Certificate | <input type="radio"/> Other |

3. Which member of your family is studying in the University Preparation Program?

- ☐ my daughter ☐ my son ☐ Other

4. How did you hear about the University Preparation Program? Please detail below:

Your Reactions and Perceptions:

5. When your family member applied for University Preparation Program (UPP), or began talking about it how did you react or feel about that? What kinds of things did you think about?

6. Before your family member started UPP, what did you think about university?

7. Since your family member has been attending UPP, have you learnt anything new about university? Please detail below:

8. Have your thoughts / feelings about university changed over time?

- ☐ yes ☐ no ☐ I'm not sure If yes, can you describe these changes?

9. Have you noticed any changes in your family member since they started UPP?

- ☐ yes ☐ no ☐ I'm not sure If yes, can you describe these changes?

10. What do you think might be some of the barriers your family member faces in attending university?

11. What do you think have been the 'high points' of participating in UPP for your family member (i.e. are there any 'big' or 'small' achievements that they are proud of?)

12. What do you think are some of the difficulties that your family member has encountered during their HSC year?

13. In what way(s) has UPP benefited your family member?

14. What is your overall impression of the UPP? (i.e. some positive points and/or areas for improvement)

15. Is there anything else you'd like to add?

This concludes the survey. Thank you for your participation

In2Uni Mentor reflections

- Reflect upon the term 'mentor'. What does this mean to you?
- How do you think participating in In2Uni might impact on young people involved in the program?
- What kinds of reactions to university did you note in our interactions with young people and their
- family members?
- Has your opinion / perception of young people changed since your involvement in In2Uni? If no, why not? If yes, in what ways?
- In what ways has participating as a mentor impacted upon your ideas for the future or your university experience?
- Any other thoughts?

Appendix G: Thematic coding descriptions – interviews and focus groups

Overarching Theme or Tree Node	Description	Additional Child Nodes
Motivations	Motivation for coming to university at this stage	A long held dream or ambition Increase or change future options
Expectations about university	The kinds of expectations students had about university and the sources of these	Sources of these expectations 'Not like high school'
Spatial understandings of university	How did students reflect upon university in a spatial sense?	
Diminishing unknowns	How UPP impacted upon participants' choices, pathways and possibilities in life	
Embodied Transition into University	How did the students describe their feelings in relation to coming to university as part of UPP?	Feelings related to their identity / attitudes / thinking/ confidence
Differences between university and school	How did the students perceive the differences between school and university	
Learning environments	References to learning environments in the university and high schools – how did students compare the two environments? For example, how students learnt from others in UPP or learnt from the mentors?	
Assistance or benefit provided by UPP participation	How do students explain the benefits of UPP?	References to strategies that UPP taught the student Learning motivations: how UPP provided motivation to learn Benefits afforded by interactions UPP allowed (i.e. learning from others) Flow on effects – the domino effect
Reactions from friends and family	Reactions from family and friends concerning both attendance at UPP and also, coming to university	
What could be improved?	Any suggestions for improvements	
The mentors	How did the students describe the mentors – what were both the positives and negatives of the mentors	Level of subject expertise Approachability of the mentors Methods of instruction
All References to Early Admission Interviews	References to the early admission interviews and students' perceptions of this opportunity.	
Expressing gratitude for the opportunity to participate in the program	Any references to feeling grateful or privileged for being able to participate in the program,	
Outside influences	People or events that have influenced the UPP participants	
Barriers	Any barriers explore in relation to attending university or future plans	

Appendix H: Thematic coding descriptions – parent surveys

Overarching theme	Description	Additional sub-themes
Impact of UPP on experience / attitude towards university	The kinds of impacts parents perceived in their child or experienced themselves	Impact on their child's attitude or study habits Impact on their own attitudes towards university A long held dream being fulfilled by their child
Transition to university	How did parents describe their perceptions of how UPP prepared their child for transitioning from school to university	
Future focus	References to the possibilities that UPP opened up	Pathways to study Pathways to a career Decisions and choices for the future Changes in attitude to future