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## What about our talented students?

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## An exploratory study

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**AOTEAROA**  
 NATIONAL CENTRE FOR  
 TERTIARY TEACHING  
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# What about our Talented Students?: An Exploratory Study

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## Project team

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## Executive summary

This study investigated provision for talented undergraduate students in one university in New Zealand. Four faculties within the University participated in the study. Two of these were Science-based faculties and two were Humanities-based. For the purposes of reporting, the faculties were given the following pseudonyms: FS1, FS2, (for the two Science-based faculties) FH1, FH2 (for the two Humanities-based faculties). We conducted two focus groups with four staff members in each (a total of 16 participants). Following the staff discussions, we conducted four student focus groups, one from each faculty. Approximately ten students participated in each student focus group (38 students in total). These were students who had been identified by their faculties as being talented students.

We took a grounded theory approach to analysing the data which resulted in four major themes being identified: how 'talented' students were defined, how talented students were identified, opportunities for talented students that supported their learning, and issues for talented students.

### How talented students were defined

Most staff and students defined talented students in relation to what might be thought of as 'schoolhouse giftedness'. Definitions such as this referred to students as having high academic achievement, succeeding academically in some way, showing creativity in thinking and possessing various personal characteristics indicative of qualities associated with high achievement in school such as high levels of academic motivation, perseverance and love of learning. However, many staff and some students recognised that talented students often had multiple abilities and indeed in some faculties students needed to be multi-talented in order to succeed at the highest levels. In line with this, talented students were also thought of as possessing particular social qualities such as leadership, independence, good social skills and the ability to work well with others.

### How talented students were identified

Most students perceived that they had been identified as talented because they had high grades or because they had shown initiative in making themselves known to staff. However, while grades were a factor with staff, more identified questioning and higher levels of thinking as being indicative of talent.

## **Supporting the learning of talented students**

Some departments had clear procedures for supporting talented students; others did not. In one faculty the only provision was the summer scholarship offered by the University. Lecturer interest in students, positive attitudes, encouragement and belief in students were mentioned in all focus groups, by both staff and students, as being supportive of student learning. One faculty and one department identified talented students at secondary school and then provided specific programmes for the students at the University which were designed to meet their needs. Students were also offered particular opportunities in some departments like working alongside a lecturer or working as a teaching assistant with students in earlier stages of their undergraduate degree. Students were appreciative of opportunities to complete alternative (but not additional) assignments that required greater levels of thinking and ability, although separate assignments were not often provided. Some departments also recognised talented students in some way, for example, through inviting them to a tea at the end of each semester or including them in seminars offered to postgraduate students. Students were extremely appreciative of receiving recognition for their efforts. Functions such as the teas had the added bonus of creating a critical mass of students who then formed interest or study groups together where they could challenge and inspire each other.

## **Issues for talented students**

In faculties where there was little or no provision for talented students, they sometimes felt quite isolated and had a difficult time fitting in. Some graphic accounts were presented by students of staff making fun of them, criticising them for their ability or using unwarranted name-calling. Some complained about staff who made no provision for them or whose courses were not well run. Some felt neglected and not appreciated. Some achieved the minimum grades because they believed there was no incentive to perform at high levels.

## **Recommendations and guidelines**

### **Identification**

Early identification of talented students appears to contribute to their success and on-going participation in tertiary education. In most instances grades and marks are going to lead to identification. Where possible it is recommended that student marks/ passes in NCEA from secondary school are made available to staff when students begin their first year. However, it is recognised that this will not always be possible, but is likely to be so in programmes that have selection requirements. Where it is not feasible or practical to make grades/ marks available, it is recommended that at the end of each semester, staff are made aware of students scoring A grades in specific courses or programmes. These would be students to target for the types of potential interventions outlined below.

However, as outlined above in the findings, grades were not the only means of identifying talented students. Grades are a necessary but not sufficient condition for identification of talented students. It is also recommended that staff be alert to students who ask challenging and unusual questions as well as those who provide answers to questions that show high levels of depth and understanding. Such students may also be invited to take part in the programme developed for talented students. In some faculties/departments/schools particular personality characteristics and social behavioural patterns may also be necessary to indicate talent in that field of endeavour. For example, in professions that involve working closely with children and adults, students considered talented would need to be able to interact appropriately with their clients.

The following strategies and procedures provide guidelines and recommendations to better meet the needs of talented undergraduate students in a tertiary environment. Institutions would select from those below to suit individual contexts:

1. The importance of staff having positive attitudes toward talented students is emphasised.
2. Students are identified early in their programmes and their talents fostered. This could take the form of:
  - a. Identification on entry, i.e. staff would be given a summary of the prior academic record of students who have excelled either at secondary school or in a previous tertiary course/ programme.
  - b. Identification from grades/ marks achieved in the current course/ programme.
3. Provision of separate and more advanced assessment tasks for talented students, i.e. students can choose the assessments they complete.
4. Letters or certificates to all students scoring A's in their overall coursework.
5. Additional letters or certificates or prizes to the top 3 students in each course.
6. Invitations to staff and all those scoring A's in their overall coursework to a morning or afternoon tea as soon as marks are finalised.
7. Encouragement by staff for talented students to form collegial study groups/ subject clubs.
8. Invitations to all departmental seminars and any relevant guest lectures.
9. Early advice of possible available scholarships.
10. Inclusion of a summer scholarship scheme where students complete a research project alongside a staff member.
11. Inclusion of a mentoring scheme where talented students meet and work closely with a staff member over an extended period on a research or other project.
12. Recruitment of businesses/work environments to work with talented students.
13. Identification of talented Māori and Pasifika students and inclusion in departmental initiatives as above. Targeted scholarships are offered.
14. Use of talented undergraduate students to tutor other undergraduate students in earlier years of the programmes/courses.

## Introduction

This report presents the results of a small-scale study designed to investigate the current provision for talented students across four faculties, within one tertiary institution in Aotearoa-New Zealand. Staff and students from the four faculties participated in separate focus groups so that their perceptions of talented students could be gained and how they were currently being catered for within the University environment could be ascertained. Understandings about who would be categorised as 'talented' and how they were currently located were explored. Talented students identified practices that had supported their learning as well as initiatives they believed could be implemented to further enhance their experiences and learning.

The report begins by describing the literature in relation to talented students and why our search of the literature led to this project. The methods used for collecting the data are presented and the findings outlined. The report ends with some recommendations for how the learning experiences of talented students within tertiary environments might be enhanced. Several outputs have resulted from this project and these are also listed in the final section of the report.

## Background to the Study

The primary goal of the current project was to ascertain the experiences of talented learners across four faculties at the University of Auckland. This was an exploratory study aimed at the design and

implementation of a future intervention within at least one faculty at the University. The overarching goal was to enhance both the identification practices and the learning and experiences of talented students. It was hoped that new practices would lead to increased numbers of students enjoying their tertiary experience and moving into postgraduate study. A planned third stage of the project will be to implement the intervention across a range of other institutions.

The term 'talented' rather than 'gifted' was used in the recruitment of participants because the term 'gifted' is often associated with narrow perceptions of elitism into which only a few very able students might fall. We wanted to provide a term that was more broadly based and had fewer emotive associations. Further, McAlpine (2004) argues that most writers in the area do not differentiate between the terms 'gifted and talented' and points out that they are often used interchangeably. Hence, in this study, while we began with the term 'talented', our participants used the term 'gifted' as well and so both terms are included in this report.

The project was designed to provide baseline data related to the current experiences of talented students across four faculties, two of which were humanities-based faculties and two of which were science-based. A perception among the members of the research team was that within one particular humanities-based faculty with which the team was familiar, little was being done in a systematic or planned manner to support the learning and experiences of talented students. There were no known additional programmes in operation for such students nor did there seem to be planned differentiation within compulsory courses to enable these students to optimise their learning potential. There did not appear to be a mentoring programme or system for channelling talented students toward specific postgraduate programmes/studies. Anecdotal evidence suggested that encouragement and support were provided on an ad hoc basis by individual staff members. It was believed that this meant many students who had the potential to succeed at postgraduate level, did not enjoy their tertiary experience and left the University once they had completed their undergraduate study. Hence, this exploratory study was designed to discover what happened in the four faculties at the University for talented students and was expected to provide baseline data for further projects.

Talented tertiary students can potentially contribute much to our society and to our economy. However, there appears to be a paucity of research in relation to talented students. The limited evidence we were able to locate in relation to tertiary students suggested that they were a largely neglected group within the tertiary sector (Abeysekera, 2008; Moltzen, 2008; Rinn & Plucker, 2004). In contrast, we found an increasing amount of literature which highlighted a lack of research relating to talented students at the tertiary level, and which emphasised the importance of investigating what was happening at this level in order to more effectively support and enhance these learners' experiences (Abeysekera, 2008; Moltzen, 2008; Rinn & Plucker, 2004). We believed the potential of our talented students to benefit Aotearoa-New Zealand - regionally, nationally and internationally was significant and that therefore there was much to be gained by focusing on ways to enhance their learning and experiences.

While we acknowledged that a number of talented students did achieve at a high level, it seemed clear that many did not (Moltzen, 2008), and that this was likely to be due to the frustration and boredom these students experienced within the tertiary environment where very little was done to nurture their talent and potential. To our knowledge, when this study began, there were no tertiary faculties or institutions offering specific programmes or differentiated learning opportunities for talented students. Indeed, as Moltzen (2008, p.2) highlighted, "There seems to be a perception that at school it is important to differentiate the curriculum to meet diverse levels of ability... but at university a 'one size fits all' approach is appropriate". Moltzen suggested this was a major factor contributing to the underachievement and non-retention of talented students. It was anticipated

that developing specific programmes, and/or differentiated learning opportunities within existing tertiary courses for talented students could enhance their learning and motivate them to remain in the tertiary sector longer.

Contemporary theory, research and literature within the gifted education arena advocates a liberal, multi-categorical definition of giftedness and talent as opposed to the more traditional uni-dimensional or schoolhouse view (e.g., Gagné, 2005; Renzulli, 2005; Moltzen, 2008; Bevan-Brown, 2004; Davis & Rimm, 2004; Riley, Bevan-Brown, Bicknell, Carol-Lind & Kearney, 2004). A further aim of the project was to explore definitions of talented students from the perspective of staff and students across the faculties.

In line with Ako Aotearoa's focus on best practice and developing networks, the project aimed to develop an understanding of talented students in order to learn how to enhance their learning outcomes. Because a highly-educated workforce is important for economic productivity, it was believed that identifying this sector of students could provide valuable information, currently lacking, about how they could be supported to reach their full potential. As indicated earlier, research investigating education for talented students at the tertiary level remains largely uncharted territory (Abeysekera, 2008; Moltzen, 2008; Rinn & Plucker, 2004). Indeed we were unable to locate a single study, conducted in Aotearoa-New Zealand or internationally, aimed at enhancing the learning of talented students within the tertiary environment. Given this and the relative lack of any research in relation to giftedness and talent at the tertiary level, it would seem imperative to investigate the issues and the directions needed in this area, particularly given that we are dealing with a human resource that should be nurtured for both individual and national development (Abeysekera, 2008; Moltzen, 2008).

It was anticipated that an increased focus on excellence and enhancing the tertiary environment to better meet the needs of talented students, would result in them enjoying enhanced learning opportunities and experiences. It was also believed that pedagogical practice and student achievement within the faculties involved in the study would be further strengthened, specifically in relation to talented students, but also for a greater number of students overall. Moreover, it was anticipated that the intervention developed from this exploratory study could be implemented across a range of other institutional settings. This exploratory study determined how talented students were currently identified within their faculties and how their learning was enhanced. Both staff and student views were sought. It was anticipated that the intervention that we developed from the current study could be of significant benefit to not only the University students and teaching staff in which the study took place, but would also be applicable across other tertiary institutions in Aotearoa-New Zealand.

## Method

Two staff focus groups were conducted at a central location agreed upon by all participants, with representatives from one science-based faculty (reported below as FS1) and another humanities-based faculty (reported below as FH1) participating in one focus group while simultaneously members of the other science-based faculty (FS2) and humanities-based faculty (FH2) met and discussed provision for talented students in their faculties. An initial approach was made to one staff member in each respective faculty by the project leader. All those approached were previous recipients of a National Tertiary Teaching Excellence Award for Sustained Excellence and were known to the project leader. All those approached agreed to participate. They then recruited other members of their faculties who they knew had an interest in teaching and student learning (though not necessarily in talented students). Staff participants in this study were 4 representatives from each of the four faculties with a total of 16 staff taking part in the focus groups.

Student focus groups were conducted in the respective faculties in a room where there would be no interruptions. There were 6-12 talented students from each faculty who participated; they were identified by the staff participants based on criteria that they used within their own faculty/department/school to identify talented students. The criteria for selection was deliberately left to staff since the students identified to participate in the focus groups would then be ones currently engaged in any programmes/provisions that were available for talented students in their faculties. A total of 38 students contributed to the student focus groups. Staff participants were provided with lunch as compensation for their time while students were given a \$20 voucher.

Consent to conduct the study was gained from the University Human Participants Ethics committee and all participants were required to sign consent forms agreeing to participate. The Dean of each faculty also completed a consent form to allow the research to take place within the respective faculties.

Each focus group lasted for one hour. Three members of the project team conducted the staff focus groups with one member acting as a facilitator, one taking notes and the other observing (the initial focus groups provided training for less experienced project team members). Student focus groups were carried out with two staff members, one acting as a facilitator and the other a note-taker. All focus groups were audio-recorded and later transcribed by a professional transcriber. Together the discussion notes and the audio-tape transcripts provided an almost complete record of each focus group.

The discussions in each focus group were guided by a common set of topics and a similar set of prompts devised by the project team and developed over a series of meetings. The prompts for the staff focus groups were:

1. What do you understand by the term 'talented students'?
  - a. What are the characteristics, dispositions and/or behaviours of a 'talented student'?
2. What do you consider to be the place of faculties or departments in fostering the learning and abilities of talented students?
3. How do you identify 'talented students'?
4. What do you currently do to enhance the learning and experiences of talented students?
  - a. Is these students' learning supported in any way?
5. What does your faculty currently do to enhance the learning and experiences of talented students?
6. Are you aware of any other strategies or programmes in place at this university or others that are designed to support talented students?
7. Do you have any suggestions of strategies that could be implemented within your faculty or across the university that might further enhance the learning and experiences of talented students?
8. If a plan or programme was introduced to our university to support talented students what do you see as being the benefits?

The prompts for the student focus groups were:

1. Why do you think you were selected to participate in this focus group?
  - a. How did the staff members know this, do you think?
2. Is your learning supported in any way? How?
  - a. What does your faculty do currently to enhance your learning and experiences at university?



3. How could your faculty or the teaching staff do more to make your learning at university more engaging or more challenging?
  - a. Is there anything about your learning experience at the university that has not been good?
4. Do you have any suggestions of strategies that could be implemented within your faculty or across the university that might further enhance the learning and experiences of talented students like yourself?
5. If a plan or programme was introduced to our university to support talented students what do you see as being the benefits?

All transcripts of focus group discussions were analysed. The members of the project team read through the transcripts several times to become familiar with what the participants had said and discussed. Notes were made directly onto the transcripts related to common and core ideas emerging from the data. Relevant sections in the transcripts were highlighted. This process facilitated an understanding of the core ideas and enabled themes to be developed from the data as recommended by Strauss and Corbin (1998). Statements made by the participants were then systematically coded into categories within the themes developed from the data by two of the project team. Each researcher reviewed the themes and categories coded, in conjunction with close reading of the focus group transcripts. Discussions occurred where additions and amendments were made to coding categories until all members of the project team were satisfied that the set of categories and themes identified, accurately and exhaustively represented the data. The four major themes that were identified from the data form the basis of the summary presented in the results section. All names reported below are pseudonyms.

## Findings

The four major themes identified from the data were:

- How talented students were defined
- How talented students were identified
- Opportunities for talented students that supported their learning
- Issues for talented students

Within these major themes, various sub-themes were determined through the analyses. These will be reported below.

## Definition of talented students

### Schoolhouse giftedness

Most staff and students defined talented students in relation to what may be thought of as schoolhouse giftedness (McAlpine & Moltzen, 2004). Definitions such as this referred to students as having high academic achievement, succeeding academically in some way, showing creativity in thinking and possessing various personal characteristics indicative of having high levels of academic motivation. Hence they were representative of qualities associated with high achievement or ability in school. In every focus group, both staff and students mentioned achieving high grades as showing that students were talented. For example, from staff members in both focus groups:

*...most people I would say in my experience would like to go towards those who are academically able so those who get A+ are considered to be talented. FS1 Staff*

*...they are the students who are just going to do well in their formal courses, get A's, A+ and be really involved and immersed in what they're doing. FS2 Staff*

And from two students:

*Well, I would have thought tangible result, getting successful grades, jobs, whatever else you come to university to do, or academic recognition. **FH2 Student***

*But as a measure you would hope that good grades would correlate to understanding, so as a measure, yeah. **FS2 Student***

Coupled with a perception that talented students achieved high grades was recognition that such students would have effective learning strategies. For example:

*I think talented student, talented student means talented learning...**FH2 Staff***

*Well, you could be talented at studying. **FS2 Student***

However, interestingly, there were examples from three students in one faculty of a perception that an inverse relationship between ability and effort showed students were talented. For example:

*Yeah like I reckon someone is talented if their effort to reward ratio, they get good marks for relatively little study time...**FS1 Student***

An associated conception was that talent was innate although this idea was mentioned less frequently by both staff and students than was the idea that achievement of good grades represented talent:

*Or quite talented which implies a sort of innate ability by whatever definition... **FS2 Staff***

*Maybe someone who picks up on things faster ...it's like that kind of shows a natural ability then...**FS1 Student***

A further related idea was that talented students grasped concepts quickly and easily:

*...I categorise them as sort of, having better raw intelligence or native intelligence where they're much better at thinking on their feet, coming up with a quick fire answer. They're better at analysing completely new and novel situations. They're much better at understanding concepts...**FS1 Staff***

*Yeah, I'd say picking it up quickly is kind of more talented. **FS1 Student***

An aspect that was mentioned by staff in all focus groups and by several students in one faculty was that talented students were creative thinkers, were those who could problem-solve or were innovative.

*It's diverse and analytical thinking*

*And creative thinking as well*

*Yes, creativity*

*As opposed to just telling you what you've taught them. **FS2 Staff***

Problem-solving was also valued:

*...what we would be looking for there is someone who has a good GPA but not necessarily a perfect nine score but has the range of skills my colleagues have talked about: the ability to*

*deal with complex problems or, in fact, even before that, the ability to form an opinion, to articulate that opinion, to lead others and to deal with truly complex problems* **FS1 Staff**

As was being innovative:

*Innovation is really important because it is what pushes the field forward...* **FS1 Student**

Interestingly, several times in all staff focus groups, members talked about how they considered a characteristic of talented students to be those who asked searching questions. This was not an aspect mentioned by any students.

*I do look for people who seem to be deeply engaged in discussions and with going further than just the surface stuff. They challenge ideas, they ask questions, they sort of go beyond whatever it is that we're doing.* **FH1 Staff**

*...one day he asks a question after class and just like you were saying, boy, that's a good question, you are something special. That was the only reason I would ever have paid any attention, any special attention to him, because he asked this insightful question.* **FH2 Staff**

Conversely, in all student focus groups, students mentioned characteristics that could be defined as academic motivation: persistence, motivation, eagerness to learn, curiosity, enjoyment of challenge, love of learning, satisfaction from hard work and self-regulated learning as showing that they were talented. Only persistence was mentioned by staff as something that they thought of in relation to a talented student.

*...for the really capable students with those design projects they can go a bit further. The problem is that they tend to go too far and how do we actually get them to stop working on things that they've got too excited about...* **FS1 Staff**

Three quotes from students that relate to aspects of academic motivation are presented below (though there were several others):

*...just an enjoyment of gaining knowledge yourself outside of what you actually have to do. Just being interested in things and doing for yourself, read your National Geographic research on this topic, watching this sort of stuff, this is important, I think.* **FH1 Student**

*An eagerness to learn, you're eager to know, rather than you have to know.  
Curiosity...  
Maybe like enjoyment out of something new. People thrive on new things...  
The love of learning new things.  
The challenge.  
Challenging yourself, yeah.  
Broadening your horizons and things.* **FS1 Students**

*...it's more like how far can I push myself rather than how much can I beat this other person?* **FS1 Student**

## **Multiple talents**

However, while a schoolhouse conception was predominant in the understandings of both students and staff when defining talented students, many recognised other characteristics as being important or as equally indicative of being a talented student. One attribute was that talented students

possessed multiple abilities, as illustrated in the staff quote above in relation to problem solving as well as those below:

*There are also talented students... they're sort of multi-talented students. The ones who come through and they could go to university and they could do anything and many of them do conjoint degrees in two different disciplines. They also may very well be talented in sport or in music or cultural endeavours and they're kind of multi-talented people...FS2 Staff*

*I think, for me talented is very much bound up in research potential which means creativity, insight, intellectual curiosity but unfortunately you also have to have the temperament. You have to be able to stand the slow pace of research and not give up. You have to be able to go really deep and not get put off... FS2 Staff*

*Hopefully that means we've got a range of talents by the time they end the degree that effectively says they are talented over a range of skills: communication, computational, writing, problem-solving and... they should be practically intelligent too. FS1 Staff*

*If you're looking at a talented person then that's multi-factorial. They could be a wonderful dancer, you know, it's more. They might be a B student but they've got other interests which makes them talented, an all round person. FS2 Student*

However, others disagreed. They believed that being talented was domain specific:

*I think when you use 'talent' it's in a particular domain. You say he's a talented pianist, talented research mathematician, a talented rower. When I think of talent I think of very domain specific. With gifted I think of perhaps a multiplicity of things. FS2 Staff*

*I actually think it really depends on the context, like in FH2 I think talent is defined in certain ways and certain values are promoted and in other fields there will be other definitions FH2 Student*

### **Personal qualities**

Several of the focus group members viewed talented students as not only possessing academic qualities and abilities in other areas, but also as having particular personal qualities. Often various personal qualities were regarded as being a necessary component of what constituted a talented student. Possessing good people skills was one such attribute:

*...I think it's the whole person. So it doesn't matter if you're academically smart... it's interpersonal skills that matter and building relationships with [clients], staff, people...FH1 Student*

Further, while talented students were regarded as knowledgeable in one or more areas, knowledge was also something that should be shared:

*You can be as brainy as you like but unless you can use that knowledge in some way that's useful to others, that solve s problems, it's not a talent in my eyes. It's just knowledge. [In Māori communities] knowledge doesn't mean anything unless it's used in some way to benefit others. So the notion of talent is kind of about others. FH1 Staff*

Leadership was a further quality identified by both staff and students as a marker of a talented student:

*I think I pick up on the talented students... because they are often the ones who take on some leadership role and especially in tutorials when you've got them workshoping certain ideas and doing activities, they step up and demonstrate whatever talent they have in those situations... **Staff FH1***

Talented students were also considered to possess what might be regarded as a good work ethic; they were well-organised, hard-working and able to work independently:

*...it's the matrix of strongly your personal organisation and personal management plays out really strongly in that and then your intellectual ability comes along beside that... **FH2 Staff***

*...I think that at university level it's more about how much work you put in rather than your natural talent at it. I mean even if you are extraordinarily gifted you still need to put in hard work... **FS2 Student***

*It's also about how you study, finding the way that's suitable for you and a lot of the time it's also about persistence, like keep trying, and time management, organisation skills, and giving up sleep, drinking ridiculous amounts of caffeine. **FS2 Student***

*They need to be independent. **FS1 Staff.***

Another quality that staff in particular regarded as important was initiative. Talented students put themselves forward and became known to lecturers:

*There may be some groups within society where there are traditions of not putting yourself forward where you [the lecturer] have to be slightly proactive but on the whole talented people emerge and they'll come and take advantage of opportunities. **FH2 Staff***

*The students have to put themselves forward. **FS2 Staff***

*...students come forward and say, I want to put myself forward for this summer scholarship or this summer job... can you write me a reference and then you'll look at things like their grades but also what they're doing. Are they involved in the student associations? Are they sort of Olympic level rowers? So they're multi-tasking and so on, but they emerge... We're very reactive if they come forward. **FH2 Staff***

## Identification of talented students

In a university environment, where students are often in large lecture theatres, the researchers were interested in the ways that talented students were identified. As we have seen above, at times recognition related to students showing initiative and directly approaching lecturers. But a range of other methods for identifying talented students was expressed. These will be presented below. One obvious means of identifying students was through grades and marks achieved in examinations. In one faculty, in particular, identification of talented students began before they had entered the university<sup>1</sup>:

*For FS2, the principle mechanism is grades coming out of high school to start with. That's what allows people to be accepted for the Accelerated Pathway programme. **FS2 Staff***

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<sup>1</sup> In this particular faculty, students apply for the Accelerated Pathway programme on the basis of their high school grades. Students in the programme complete their four-year degree in three years.

Students mostly believed they had been identified as talented students because of marks or grades they had achieved on assignments or examinations. However, while marks had been used for their initial identification, students realised that other factors were also important:

*Well, not just grades, they know that I might do sport... everything I do. I do mentoring [of other students] and by my grades they know I'm studying; they know my work ethic as well.*

**FS2 Student**

Interestingly staff again identified questioning and higher level thinking as a means they used to recognise talented students but students were also aware of becoming noticed:

*I'm on the lookout for people with perceptive observations or asking lots of good questions... There are those subtle linkages between the different fields in [my area] and early on in the degree these things looked like separate islands but as you go through the degree there's a lot of powerful general concepts that link these things together and I look for the students who can identify those connections by themselves without having to be told.* **FS1 Staff**

*If the lecturer asks a question I often find I answer the questions more often than others in the class and I think they can pick that up as well if you're more involved as perhaps I am.* **FS1 Student**

Staff also observed students carefully looking for elements they considered differentiated talented students:

*I have to say I don't have any formal criteria. It's more observation and experience over many years of teaching. So it's very loose but observation is quite powerful. Listening to students.*

**FH1 Staff**

At times staff used opportunities presented by students to let students know they considered the student had potential:

*...if they do happen to darken my doorway, then I ask them things like, what are you doing next year? Have you thought about doing research? Your mind seems to work in a way that you might be quite talented at this...I encourage them to think along those lines...So I don't have any formal system. It's just experience and my gut feeling for, over the years, seeing this correlation between talented research students and the common traits they have as undergraduates.* **FS1 Staff.**

Students also recognised that getting to know lecturers was one way of becoming identified as talented:

*...They've seen our grades, they know what that's like but they, like Dianna said, all the other stuff we do for them because it's like a little family, people know each other very well.* **FS2 Student**

*Well, I usually go have a chat with people who I just saw in the corridor...* **FS2 Student**

## **Supporting the learning of talented students**

Faculties varied in the ways in which they catered for talented students. There was no university system specifically set up to support the learning and experiences of talented students and hence systems that had developed had mostly been put in place by interested and enthusiastic lecturers. Even where established systems were present these had been initiated by specific staff members.

Generally the ways in which student learning and experiences were enhanced fell into six broad areas which will be reported below: individual lecturers, early identification, facilitative and leadership opportunities, specific provisions, recognition, and catering for diversity.

### Individual lecturers

Lecturer interest in students and positive attitudes were mentioned in all focus groups, by both staff and students, as being supportive of student learning, and as of being important in providing activities specifically for talented students:

*In third year papers we are probably interested in identifying but very, very informally, those who might go on to do an honours programme or postgraduate work and very, very informally again, sort of giving them a pat on the back and saying, that would be a good pathway for you and then encourage your student. FH1 Staff*

*It was really the initiative of individual lecturers and academics who kind of encouraged me to feel that I could be a colleague in the future. It was very much in that sort of individual basis and not through a formal programme. FH2 Staff*

*He was just my project supervisor last year. Yeah, he was a good mentor, helped you through the rough bits and gave you the confidence, yeah, he sort of gave you the idea that he believed you could do it, and you just do it, like you can do it, and not so much telling you exactly what you should do but you know, giving suggestions. FS1 Student*

*I think the staff really do care about the students doing well because it's quite a unique environment here and a unique way of doing things. FH2 Student*

*And I found what's really good about the faculty I'm in is the lecturer you cannot only go to them to ask about, you know, a problem related to a certain course but sometimes they're acting as a mentor kind of figure that you just feel comfortable like talking to them about your problems and they have a lot of experience and sometimes they just offer you like good advice on how to overcome your difficulty for that certain part in your life which I found is really good. FS2 Student*

*...Mary, who did drama in her classes, she made things relevant to us and meaningful to us because the life experience that she had was something that we were all interested in as well so we knew her... we didn't just hear her as a class lecturer but also as a person who had a life outside of the room. FH1 Student*

### Early identification

Identifying talented students early on appeared to have benefits for students. Staff in one faculty had a programme specifically for talented students. Students applied for the programme, were selected based on their secondary school grades and then went straight into the second year of the programme so that they completed their four-year degree in three years. Staff spoke about its benefits.

*Previously before we had AP [Accelerated Pathway], I would find talented students would be a lot more quiet and they wouldn't speak out and I would say they were trying to hide their talent, but now there's a critical mass in each degree so there's usually four to six in my degree of say 50 and they all know they're talented students and so I think they feel safer and so what I have found in the last few years is that there are a lot more questions from these students. They're just unabashed, they don't mind asking questions and showing*

*they're talented because everybody knows they're the Accelerated Pathway students anyway so they're out. It's allowed them to take some freedom over the questions in class. FS1 Staff*

Another faculty also engaged secondary school students:

*...we have a programme, the Max programme, that's about talented school kids who do a first year [course]... Last year high school students who are doing one university paper. FS2 Staff*

Within the same faculty another department identified students in their second year for their Honours programme:

*Things that really worked well for the very talented students were that we selected for Honours at an extremely high grade at second year and treated them like the chosen from there on so that they worked hard to get it. They put value on it. They were visible in the student body as people of academic standing and the retention rate through into the postgraduate programmes was almost 100%... FS2 Staff*

### **Facilitative and leadership opportunities**

Talented students were given some opportunities to develop their abilities in all Faculties. Some of these opportunities were made available by the University while others were initiated by specific departments. Some departments offered summer internships while others took advantage of the University summer scholarship programme:

*We have summer internships which we would normally use with students who have been identified as talented, normally by their third year we're trying to entice them into the research programme essentially so we buddy them up with researchers both staff and other postgraduate students for a summer of work. FS1 Staff*

A further possibility was the idea of providing talented students with a mentor:

*I like the system, is it Oxford or Cambridge, where each student gets to spend one hour per week with an academic and it can be to do with a specific topic or it can be a whole other educational experience maybe the equivalent of a laboratory or a tutorial session specifically with that academic. Then the activity can be finely tuned to the needs of that student so for our best students...they can be mentored in a much more efficient way. Their interests can be sort of teased out and encouraged and expanded. I see nothing but positives coming out of that. FS1 Staff*

*I got one of the summer scholarships which is that kind of paid summer job working with researchers and although that's not in class it was brilliant... and I just learnt so much and I developed really good relationships and that was really beneficial... FH1 Student*

Talented students were also employed as teaching assistants and tutors with other students in earlier years of their undergraduate degrees:

*We may shoulder tap some of the really talented students to help out as teaching assistants so we have fourth year students helping out with first year programmes and some of them are truly outstanding. FS1 Staff*

Alternatively talented students helped to enthuse younger students:



*We've used some of our top achievers, we've had some of them going round high schools...Again, it's just something different and they find it quite exciting and it's something they can put on their CVs that complements their [degree].* **FS1 Staff**

### **Specific provisions**

Some staff and students mentioned specific provisions that were made for students, particularly in terms of the kinds of assessments they completed:

*I would say the sorts of provisions that we make in first and second year classes particularly would be to offer ways for students to show that they can think differently by giving choice in terms of assessment or choice in terms of the way they work.* **FH1 Staff**

Staff in HS1 and HS2 spoke about providing extension questions for talented students. However, some staff members cautioned about this practice:

*We had at times put up extension activities because good students were saying, well, what's difficult about this but the backlash from that was, but we're good and we're not giving any trouble, why are you making us do extra things and the idea of it being not a substitute because of some perception of equity of assessment and all the rest but actually a punishment for being good.* **FS1 Staff**

Nevertheless, students appeared to want optional (and at times additional) assignments:

*...the assignment questions are really, really easy and sometimes you do it and you feel like I did not learn anything from that assignment at all and I always thought it would be great it they can actually have some hard problem, the kind of problem you tear your hair off and bang your head against the wall kind of problem, because doing problems I find a lot of the time it's a really good way to learn but when you don't have hard enough problems you're not really learning much. So, if they could have, you know, like optional assignment questions...* **FS2 Student**

Some students also valued the opportunity to work in a collegial manner:

*I also like the fact that in [my faculty] my experience is that people work together a lot as well, like there is not kind of, I'm not going to help you because you might get a better grade than someone else. Here, I'll teach you this and later you'll teach me this or whatever.* **FS1 Student**

Both staff and students recognised the value of linking with outside agencies (businesses or academics in specific fields) either through inviting representatives to speak to students, for example, either in a seminar or as a guest lecturer, or through students gaining work experience during holidays with specific companies. Two representative quotes related to these ideas are presented below:

*We've tried at times identifying a top group and linking them with companies. We did that with [name of company] some years ago and they adopted a cohort and put them on the company intranet and invited them to their internal seminars and did all sorts of things with them; arranged to meet them on campus a couple of times, had them visit a couple of times...* **FH2 Staff**

*...it would be great to even see like maybe really exciting guest lecturers and speakers come to the university that we could have the opportunity and it could be advertised so everyone actually knows it's there and we could go. **FH1 Student***

### **Recognition**

Some faculties or particular departments provided some kind of recognition of students' achievements. Overwhelmingly, for students situated in one of these contexts, they appreciated being acknowledged for their high achievement. Further, staff recognised additional positive implications of these measures:

*We write letters to them, anybody who gets an A, I think, gets a letter saying, well done, signed by the HOD and I think probably twice or four times a year we have a tea for people who've got letters from us to try to create something...So they get together and we also have {subject} club that some of the students have set up...it's about getting like people, with like interests to realise that they're not the only ones. **FS2 Staff***

And from the student perspective:

*Another thing I found the [subject] department does really well is every year, like after the exam, they send a letter to students that get good grades and kind of invite them to an afternoon tea or sometimes lunch. The food is usually all right but we get to meet a whole bunch of like interesting people and you get to make friends with people who have a common interest...**FS2 Student***

*Well, they praise you, it sounds silly but it's a huge thing to get recognised and they send out a certificate saying you got this, you've got first, congratulations. **FS2 Student.***

In the same faculty, but in another department, they took a different approach to recognising students and, following the statement below, the staff member went on to again acknowledge how beneficial creating a group of talented students had been for their learning:

*...they had their own personal invitations to seminars and whatever activities were going on. They were on a special list that treated them as if it wasn't just a blat to the department but it was, we would really like you to come and because they were identified then [second year], staff who saw them as very, very good bets for project work for Honours and potential PhD took a great interest in them, so at social events, the ratio of staff to students was enormous because they were high value and that's been sustained now for over 10 years. **FS2 Staff***

And from a student:

*...there's always like events going on where you get free food, where you get to meet other students to hang out with and socialise and form study groups and things like that. **FS2 Student***

### **Catering for diversity**

Staff members spoke about the ways in which they or their department catered for students from diverse backgrounds:

*There's also a new role here looking at trying to retain Māori students into postgraduate study **FS1 Staff***

*...the only people that I am aware are proactive in trying to get into Honours are the Māori and Pasifika students where there's a specific, so I understand, targeting. **FH2 Staff***

*Students from say Taiwan, Malaysia, Hong Kong they're not quite as good in English as the other students so they tend to be a little reserved about approaching people...so I try to help them with their English skills as much as I can and I found there is a talented pool in there but because of their English language it's kind of failing them... **FS1 Staff***

## **Issues for talented students**

While some departments and faculties appeared to be making, at times, considerable effort to cater for their talented students, there were aspects of some students' experiences at university that were identified as being less positive. Some lecturers recognised that talented students' experiences were not always positive but, perhaps not surprisingly, negative experiences were reported more frequently by students. These fell into four broad categories which will be reported below: individual lecturers, difficult fit, lack of opportunity and assessments.

### **Individual lecturers**

In the section above, staff and students reported lecturer practices that were supportive of the learning of talented students. However, several students named behaviours that were not favourably viewed by students. Criticism of specific lecturers related mostly to course design (FS1) or individual interactions (FH1). All such comments came from the students of two faculties, FH1 and FS1. A small sample of these comments will be presented next:

*...there's these professional development courses and the way that they're poorly run and the way they're graded, I know they're required...but they do a terrible job. It is embarrassing... I complained to the dean, they took no action and I don't know why and it's an embarrassment. **FS1 Student***

*Like sometimes there are communication issues between papers as well...we missed out on a really crucial bit of learning in like second year and we were taught it until a week before the exam in third or fourth year when they thought that we'd learnt it way back in second year and we hadn't... **FS1 Student***

*There was one incident,... in the course I was doing... the lecturer kept on making mistakes and I kept on pointing out mistakes and he got really annoyed and was really rude to me and later near the end of semester he kind of made a point to me saying that I shouldn't come to class if I know it all. So that wasn't good because I still want to go to the class... **FS1 Student***

*I think being able to speak what you think and not get shut down [is important] because I've had lecturers that because I have opinions, and I'm not being rude or anything like that, it's just my world view on a point and I've had lecturers who do shut me right down and make me feel like I am small in front of 60 people... **FH1 Student***

*...I had two people this semester who've both, I felt insulted that I was a talented student...she turned around and said, have you ever failed anything, and I said, well, no I haven't, and she made that a real criticism... she kind of made it sound that I needed to fail something so that I'd realise what it was like to fail, and I'm just kind of thinking, should you not be encouraging me, and then another one... my work has been used as an exemplar, she's a fantastic lecturer but she goes, well, this is the goody-goody's example... and like the first couple of times it was a joke... but now it's like every day she's going, oh, the goody-goody did this but you don't need to do that, and it's just the whole language... **FH1 Student***

*... go to the next one; we sit there and, okay, got it after five minutes but 20 minutes. The next lecturer was the same and I said something to the tutor and she called me an aggressive person. FH1 Student*

### **Difficult fit**

Some lecturers believed that talented students were not accepted by others or that they lacked social skills:

*...we would have entire conversations about these incredibly gifted talented students because they often struggled out [in the work environment] because their [mentor] quite frankly couldn't cope with their academic level. There was often a mismatch...They're very interested in the macro-political philosophical side of life...You're talking about [the work environment] and they can see the bigger picture, the bigger political, the historical influences and that...they often have a hard time from other lecturers and they have hard times out [in the work environment]...FH1 Staff*

*...there's this notion that people who are good at [subject] are nerds and so they don't have other friends...FS2 Staff*

Students gave different reasons for the feelings they had at times of a lack of fit:

*I studied [in a different faculty before]and everything was about asking questions, everything was about analysing, interpreting and just questioning everything that's said. All the professors would really like question me...So I started questioning people in [new faculty] and they're not used to that, you know. This is not how we do it, you know, why are you questioning this...People told me I am aggressive because of questioning. FH1 Student*

*I'm in a class where...it's really difficult being in that class and having all these ideas and... everybody else is down here... we're talking about [topic] and we still, this is the fourth week and we still haven't grasped the concept of [topic]. I got it in week one... FH1 Student*

### **Lack of opportunity**

Some staff admitted that there was no system in place for identifying talented students:

*...we haven't got a formal system FH1 Staff*

*I'm not sure we do a lot at undergraduate level... you're more likely to get a more tailored kind of programme at that level [postgraduate] but at undergraduate it's a bit hit and miss. FH1 Staff*

Others had a different focus:

*...I tend to concentrate more on the other end of the class which is to pick up the pieces for people who are actually struggling because retention is important. We're like everyone else, a restricted entry faculty so we can't actually afford to lose anyone... FS1 Staff*

*We're under more pressure to account for the bottom end of our classes than the top end of our classes but we're under more pressure to account for the number of fails than the number of A's and so if we have resources in our department to put into extra initiatives, we'll be putting them into the students that are struggling and the students that are doing fine, we'll leave them to do fine and we'll hope they'll hang on in there and at the end of their Bachelor's degree have shown an aptitude for and interest in research. FS2 Staff*

It may be because of attitudes such as these that the talented students felt neglected or believed their opportunities were limited by lecturers' actions and reactions:

*I think there are a couple of papers that may be realistically the [faculty] could accept for people who are demonstrating capacities in other areas... They can say, fine, you don't need to waste your time doing this completely pointless and frustrating exercise... I think if we had streamed tutorials that would be great. FH2 Student*

*It's dumbed down too much... people talk to you like you're little children... after you've seen it the 20<sup>th</sup> time with the 10<sup>th</sup> lecturer you just get sick of it. FH1 Student*

*...this is what we have to teach and we're going to teach everybody the same... I have one [class] and I just got bored, absolutely bored. FH1 Student*

*...we've always been emailed, like we want you to apply for these scholarships and stuff but I always get the emails after the date's closed... they got sent to my house a week after the actual date had closed, so those things annoy me. FH1 Student*

*...we had a lecture last week, and they sat there: in this box you go here and write this, in this box you write this, and it was kind of like, well then why are you getting us to do the assignment, you've just done it for us. Everybody just sat there and wrote the answers. That was the first like two pages done... it's ridiculous. Like, why hand us so much if you're wanting [us] to show it. But it's kind of like, well, we have to scaffold you. That's not scaffolding; it's just giving us the answers. FH1 Student*

Some students also appeared somewhat aggrieved at not having any recognition for their achievements:

*I like to think that if I get an A+ in most of my papers that it means something. Because it almost feels like I do my work and then, it's not that I want to be acknowledged for it, it's just that there has to be a next step to well, this guy has potential to do something more beyond this paper. FH1 Student*

*But you do want to be acknowledged, that's the truth, you can't hide that you don't want to be acknowledged. You do. FH1 Student*

For some, a lack of recognition for their achievement had resulted in a loss of motivation:

*I just can't be bothered doing a really good essay because it's like I know this is enough to give me a B so I'm not going to push myself any further if I'm not going to get acknowledged for it... FH1 Student*

## Assessments

A further area that talented students saw as an issue was assessments. Some felt that marks or grades were not necessarily a valid means of identifying talented students (although it must be remembered that although students believed staff were totally reliant on grades, staff reported using a range of methods), some expressed concern about the validity of some of their assessments and others questioned the lack of challenge in some of their assessments. These aspects will be reported in this section.

Some students questioned the validity of using grades as a selection criteria:

*I think judging your talent on grades is always dubious especially...  
Yeah, it means you're good at sitting exams sometimes. FS1 Students*

Others believed there were some assessments that did not appear to validly test the students' abilities:

*I agree those tests are ridiculous. The ones we do weekly where you've got to do like a 30- or 40-page reading, or however long it was, and then kind of almost remember quotations from it and like a multi-choice test, it's just pointless. You don't learn anything. FS1 Student*

Some were concerned that their assessments did not extend their thinking or learning:

*...it's insulting spending two weeks on how to make a Power Point presentation, giving that presentation and then being given some sort of arbitrary grade on what he feels like and then being followed by two weeks of tuition with the worst Power Point slides you've ever seen. It's just insulting and ... I felt like, you're treating me like an idiot. FS1 Student*

*...so we have this template now and you know you write it, you write exactly what the teacher wants to hear really; that's what you do... People that want a template, do it, and people who want something else, write an essay.  
But it's irrelevant and it restricts your thinking in a way because you're following a prescribed way of thinking whereas your whole critical literacy is based on understanding the world and where you fit in the world whereas if your world is confined to a writing frame then you're not exploring what your talent is of thinking outside the square... FH1 Students*

## Conclusion

Most staff and students defined 'talented students' in the conventional Western sense, i.e. in terms of schoolhouse giftedness (McAlpine & Moltzen, 2004). However, some defined the term more broadly and recognised that being talented could encompass a range of skills. Interestingly, while students perceived that the means by which they had been identified as talented was their grades, staff had a broader conception. Staff did take grades into account but also regarded questioning and higher level thinking as revealing that students were talented. They perceived that deeper conceptual understanding was not always portrayed in exam grades. These understandings align with more conventional definitions of gifted and talented students which encompass a broader notion of talent (or giftedness) rather than the narrow and traditional definitions which defined gifted students as those who were in the top 2% on IQ tests( e.g., Parkyn, 1948; Terman, 1925). For example, Renzulli (2005) has proposed a three-ring model which is made up of above average IQ, task commitment and creativity and Sternberg (1985) has advocated that giftedness is comprised of students who show high levels of analytical thinking, creative thinking and practical thinking. Hence, IQ tests have long since become an outmoded means of identifying gifted and talented students. Broader conceptions are used instead. The findings from the current study suggest that at the tertiary level a multi-dimensional definition of gifted and talented students is appropriate.

Some departments had procedures in place for identifying talented students and for fostering their learning. However, such strategies were mostly ad hoc, the result of initiatives by particular staff members. Nevertheless, the departments that did have some means of identifying and celebrating talented students were appreciated by students. Both staff and students mentioned not just the recognition and acknowledgement of the talented students as being important, but also perceived

other benefits. Celebrations of student achievement led to students becoming aware of other students in their departments who had high levels of skills which in turn led to the students forming study groups and subject clubs where they then had the opportunity to interact on a more frequent basis. This acknowledgement of students where they were brought together resulted in the creation of a critical mass so that students felt a lot more comfortable in being labelled 'talented' as they came to know others like themselves.

Some faculties/ departments made few provisions for talented students and in some cases this led to students believing that they were not adequately catered for, and, at times, that their abilities were not even acknowledged. Students were able to provide some graphic accounts of being humiliated or embarrassed by staff members because they were talented.

It appeared that students did not want to be constrained by assessment tasks they considered easy; many expressed the view that they would like either separate assessments or the opportunity to complete extension tasks, perhaps instead of what others were completing. Recommendations for enhancing the learning and learning opportunities for talented students are provided below.

### **Limitations to the study**

Firstly, this study was designed to discover current provisions for talented students across four faculties at the University of Auckland. It was designed as a small-scale exploratory study from which a larger intervention study could be developed. As such, the findings from the study are not generalisable to other institutions or faculties. They do, however, provide some valuable initial information. Secondly, the recruitment of students was left to individual faculties. This was because it enabled faculties to identify talented students according to any criteria currently in use. It may be argued that such identification was not objective since a standardised measure was not used. However, there is currently no such measure available and this was a preliminary study designed to include small numbers of participants currently identified as talented. Thirdly, at least one staff member from each focus group was a previous tertiary teaching excellence award winner and they were asked to recruit other staff interested in teaching. Hence it is likely that the views of staff were positively biased since they were likely to try to enhance the learning experiences of students. However, students had a broader overview of their treatment by a larger number of teachers (not necessarily those who did try to cater for their needs) and hence the section on 'Issues for Talented Students' largely includes comments made by students.

## **Recommendations and guidelines**

### **Identification**

Early identification of talented students appears to contribute to their success and on-going participation in tertiary education. In most instances grades and marks are going to lead to identification. Where possible it is recommended that student marks/ passes in NCEA from secondary school are made available to staff when students begin their first year. However, it is recognised that this will not always be possible, but is likely to be so in programmes that have selection requirements. Where it is not feasible or practical to make grades/ marks available, it is recommended that at the end of each semester, staff are made aware of students scoring A grades in specific courses or programmes. These would be students to target for the types of potential interventions outlined below.

However, as outlined above in the findings, grades were not the only means of identifying talented students. Grades are a necessary but not sufficient condition for identification of talented students. It is also recommended that staff be alert to students who ask challenging and unusual questions as

well as those who provide answers to questions that show high levels of depth and understanding. Such students may also be invited to take part in the programme developed for talented students. In some faculties/departments/schools particular personality characteristics and social behavioural patterns may also be necessary to indicate talent in that field of endeavour. For example, in professions that involve working closely with children and adults, students considered talented would need to be able to interact appropriately with their clients.

The following strategies and procedures provide guidelines and recommendations to better meet the needs of talented undergraduate students in a tertiary environment. Institutions would select from those below to suit individual contexts:

1. The importance of staff having positive attitudes toward talented students is emphasised.
2. Students are identified early in their programmes and their talents fostered. This could take the form of:
  - a. Identification on entry, i.e. staff would be given a summary of the prior academic record of students who have excelled either at secondary school or in a previous tertiary course/ programme.
  - b. Identification from grades/ marks achieved in the current course/ programme.
3. Provision of separate and more advanced assessment tasks for talented students, i.e. students can choose the assessments they complete.
4. Letters or certificates to all students scoring A's in their overall coursework.
5. Additional letters or certificates or prizes to the top 3 students in each course.
6. Invitations to staff and all those scoring A's in their overall coursework to a morning or afternoon tea as soon as marks are finalised.
7. Encouragement by staff for talented students to form collegial study groups/ subject clubs.
8. Invitations to all departmental seminars and any relevant guest lectures.
9. Early advice of possible available scholarships.
10. Inclusion of a summer scholarship scheme where students complete a research project alongside a staff member.
11. Inclusion of a mentoring scheme where talented students meet and work closely with a staff member over an extended period on a research or other project.
12. Recruitment of businesses/work environments to work with talented students.
13. Identification of talented Māori and Pasifika students and inclusion in departmental initiatives as above. Targeted scholarships are offered.
14. Use of talented undergraduate students to tutor other undergraduate students in earlier years of the programmes/courses.

## Outputs

This project has resulted in several outputs as follows:

- A seminar was presented to staff on 7 September as part of the Faculty of Education Teaching and Learning Showcase.
- A proposal has been submitted to the University Teaching and Learning Showcase and has been accepted. Hence the findings will be presented in this forum and all faculties who participated in the study will be specifically invited to the presentation.
- Three academic papers for submission to peer-reviewed journals are currently being prepared by the project team. These relate to:
  - Definitions and identification of talented students in a tertiary environment
  - Pedagogical approaches to teaching talented students in a tertiary environment
  - Staff and student perceptions of talented students in a tertiary environment
- The project team will write a series of proposals for conference presentations



- The project team are currently preparing a submission for research funding for a second phase of the project which will involve an intervention designed to enhance the learning opportunities for talented students across at least one faculty.

## Future developments

It is proposed to develop an intervention to be trialled next year in four schools across the Faculty of Education. The faculties involved in the current project will be sent a summary of the findings and also the proposed intervention for the Faculty of Education. While the original conception was to trial an intervention across four faculties it was found this involved complexities not envisioned by the researchers before the current project began. For example, some faculties are not clearly divided into schools like the Faculty of Education; identification of specific departments, schools or programmes within faculties who might take part would be complex; an intervention that would be suitable within the Faculty of Education would not necessarily suit another faculty (this is the main reason for the list of possible procedures above since they provide a selection that different departments, schools or programmes might adapt for their own situation). A recent presentation at the Faculty of Education led to a firm commitment to a future intervention by two schools, a tentative agreement by another school and we will approach a fourth school before the end of the year. Second year students will be targeted for the intervention since they will be able to compare their experiences pre- and post-intervention.

The intervention to be trialled within the Faculty of Education will include the following (subject to final decisions by Heads of Schools and the research team):

- 1) An initial meeting with all staff in each school at which the importance of staff having positive attitudes toward talented students is emphasised.
- 2) Identification (BEd Tchg and Liberal Arts) of talented students from first year grades.
- 3) Students across the four schools will be invited to a social event so they can learn about the intervention and make connections with each other. Staff will be invited. Students will be encouraged to form support groups/study groups.
- 4) Provision of separate and more advanced assessment tasks for talented students, i.e. students can choose the assessments they complete.
- 5) Letters or certificates to all students scoring A's in their overall coursework at the end of first and second semester.
- 6) Additional prizes to the top 3 students in each course.
- 7) Invitations to staff and all those scoring A's in their overall coursework to an afternoon tea as soon as marks are finalised.
- 8) Invitations to all departmental seminars and any relevant guest lectures.
- 9) Advice of possible available scholarships sent out during first semester.
- 10) Inclusion of a mentoring scheme where talented students meet and work closely with a staff member over an extended period on a research or other project. This may include the summer scholarship (but participation in this would be outside the time frame for the project).
- 11) Identification of talented Māori and Pasifika students and inclusion in departmental initiatives as above. Targeted scholarships are offered.
- 12) Use of talented undergraduate students to tutor other undergraduate students in earlier years of the programmes/courses. An area will be set up within each school where talented students would be available on a rostered basis to provide tutoring support to other students. These would be funded positions.

It is anticipated that in the future other institutions would be approached to work towards implementing a programme for talented students in one or more schools, departments or faculties in their own institutions,

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