First-year students’ perceptions of inclusion and relationships with other university experiences.

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Abstract: This study is the first report of first-year students’ perceptions of inclusion in teaching practices and campus interactions in an Australian university using a six-item set of questions as a scale to measure inclusion. There were no significant effects of age, gender, program of study or campus on perceptions of inclusion. Perceptions of inclusion correlated significantly with perceptions of quality of teaching (0.41), perceived benefit of university study (0.45), paid employment (0.36) and to a lesser extent with intention to continue university studies (0.23). Generally speaking, Australian-born students had higher perceptions of inclusion than Asian-born students. Younger Australian-born students, often considered at high risk of discontinuing study, perceived the lowest levels of inclusion. Whilst Asian-born students had overall lower perceptions of inclusion, they were less likely to discontinue university study. Further studies of inclusion are warranted if universities wish to compete effectively in a marketplace characterised by greater accountability and increasing student diversity.

Keywords: inclusion, diversity, evaluation, first year experience

Introduction

The shift from elite to mass education over the last decade has been accompanied by greater diversity in the student population and significant shifts in the patterns of participation of individuals from all economic, cultural and social groups represented in Australian society. In policy documents such as A Fair Chance for All (DEET, 1990), the Australian government has tended to equate diversity with equity, identifying sub-populations of students ('equity groups') that are given special attention and compared with the 'normal population' of students. A broad view of inclusion is one where “participation and success are irrespective of race, gender, socio-economic status, ethnicity, age and disability so that disadvantage is not reproduced” (Nunan, George & McCausland, 2000, p. 64). However, inclusion extends beyond equity and its associated legislative frameworks to encompass approaches in which each individual is valued and respected, differences between individuals are seen positively and the diversity of an institution’s social capital is seen as a quality outcome. This view of inclusion places academic staff in higher education institutions at the coal face of accommodating and responding to the diversity of the student population—making students welcome as part of a community of learners. There is little data available that illuminates understanding and perceptions of inclusion in higher education contexts in Australia (Hicks & Santhanam, 2002). This exploratory study was designed to elicit first-year students’
perceptions of inclusion in teaching practices and on campus, and to explore the relationship among those perceptions with other perceptions of the institution.

Methodology

In 2002, Griffith University conducted a suite of online surveys of all students using a sampling process targeting the broadest range of appropriate students for each survey. This survey was confidential which allowed the integration of survey data with existing institutional data before the whole dataset was de-identified. Here we report data from the First Year @ Griffith survey which sought answers about first-year students’ readiness for study, their experiences on campus, perceptions of inclusion and quality of teaching (from the Australian Course Experience Questionnaire, ACEQ), use of technologies and thoughts about continuing study. The six inclusion questions focused on respect for individuals, inclusiveness of the curriculum (derived from Hicks & Santhanam, 2002) and self-comfort on campus. The online survey (www.SurveyMaker.com.au, Zimitat & Crebert, 2002) used a variety of questions requiring: free-text responses, single of multiple responses (to multiple-choice style questions), and 5-point scale responses (e.g., with ratings from ‘strongly agree’ to ‘strongly disagree’, with a midpoint of ‘uncertain’).

Statistical analyses were performed on unmodified data (scales not collapsed) using SPSS (Ver 11.5). Sample size varied according to the availability of the data: where information such as student gender was not available for a particular case, that case was omitted from tabulations requiring that information. A combined variable was generated from the six inclusion items and used for correlation with other survey data. Statistical significance was recognised when p<0.05. For the purposes of reporting data in this study some five-point scales have been collapsed into a three-point ordinal scale (e.g., strongly agree/agree, uncertain and strongly disagree/disagree).

Results

The First Year @ Griffith survey was completed by 1841 of 6100 students (response rate 30%) in 2002, yielding 1645 complete data sets for this analysis. Of the respondents 61 percent were female, 77 percent Australian-born and 8 percent Asian-born. Student responses from each campus reflected similar proportions of each campus’s enrolment. No students in the survey self-identified as members of equity groups, however free-text answers to questions revealed some respondents to be Aboriginal students and students with disabilities.

Overall student responses to the six inclusion items revealed that the majority of the first year population had positive perceptions of inclusion in teaching practices and other on-campus interactions (Table 1). More than 80 percent of students believed that staff and other students showed them respect, whilst nearly three-quarters of them felt comfortable being themselves on campus. The lowest ‘scoring’ item was that relating to the inclusiveness of the curriculum with 50 percent of students who could see themselves in the curriculum and 16 percent who considered themselves invisible in the curriculum. Of this 16 percent, the majority were Australian-born students aged 18-21. Many students considered themselves as part of a learning community, though a small percentage (13%), of largely 18-21 year old Australian-born students, did not.

It was not the intention of this project to develop an inclusion scale, however correlations between the six items were undertaken and revealed significant correlation between all items. Correlations were greatest between Items 5 and 6 (0.408) and Items 6 and 2 (0.459), whilst
correlations between Items 1 and 2, 4 and 5 were also high (0.32, 0.36 and 0.38). An initial item-response analysis was conducted using the 6 items. A principal factor analysis with varimax rotation of the 6 items suggested the dominance of the initial component extracted. It accounted for 42 percent of total variation. This model accounted for a considerable proportion of variance in the data and indicated that the six items related to a single major factor. Cronbach’s coefficient alpha, possibly the most commonly used measure of reliability in social research provided a lower bound estimate of the reliability of a scale. For these items, the reliability coefficient was 0.66 (Cronbach alpha). A combined variable (INC) was generated from combination of the six inclusion items and used for correlation with other survey data.

Table 1: Students perceptions of inclusion. Percentage responses. (n=1645)

<table>
<thead>
<tr>
<th>Question</th>
<th>SDA</th>
<th>DA</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers, tutors and other university staff treated me with respect. (Item 1)</td>
<td>1</td>
<td>3</td>
<td>15</td>
<td>65</td>
<td>16</td>
</tr>
<tr>
<td>My fellow students showed me respect. (Item 2)</td>
<td>1</td>
<td>2</td>
<td>14</td>
<td>63</td>
<td>19</td>
</tr>
<tr>
<td>I was able to &quot;see&quot; myself reflected in some of the examples used in the course notes, cases, and materials selected by teachers. (Item 3)</td>
<td>3</td>
<td>13</td>
<td>34</td>
<td>41</td>
<td>9</td>
</tr>
<tr>
<td>The teaching in my courses catered for student diversity - gender, age, race, sexuality, disability etc. (Item 4)</td>
<td>2</td>
<td>4</td>
<td>21</td>
<td>58</td>
<td>15</td>
</tr>
<tr>
<td>I felt comfortable being &quot;myself&quot; in lectures, tutorials, laboratory work, studio work, online and on campus. (Item 5)</td>
<td>1</td>
<td>8</td>
<td>20</td>
<td>56</td>
<td>15</td>
</tr>
<tr>
<td>I felt I belonged to the university community. (Item 6)</td>
<td>2</td>
<td>11</td>
<td>28</td>
<td>49</td>
<td>10</td>
</tr>
</tbody>
</table>

**Perceptions of inclusion and preparation for study**

There was a significant, but low correlation (0.15, p<0.05) between students’ self-reported level of academic preparation for university study and perceptions of inclusion. The correlation between perceptions of inclusion (INC) and GPA was similar (0.13, p<0.05), as was the correlation with students’ self-reported computer and web-literacy skills (0.17, p<0.05). There were no significant correlations between students’ perceptions of inclusion (INC) and their access to, or use of, or benefits from using communication technologies to contact staff or students.

**Perceptions of inclusion and quality of teaching**

Students were asked to respond to questions derived from the ACEQ: first about the overall quality of teaching (Overall satisfaction item) and second about whether their studies had been worthwhile. On the 'Overall satisfaction item', there was a significant correlation between perceptions of inclusion (INC) and perceptions of the overall quality of teaching (0.41, p<0.05), and a higher correlation between students’ perception of inclusion (INC) and their overall belief that their university experience had been worthwhile (0.45, p<0.05). Students who had serious thoughts of leaving university study reported lower perceptions of teaching quality than those who had not considered discontinuing (Figure 1).
Perceptions of inclusion and perception of the quality of teaching

Students were asked about the relative amounts of time engaged in study, employment and other commitments. There was a significant correlation between students’ experience in paid employment and their perceptions of inclusion (INC) (0.36, p<0.05). Students working more than five hours per week in paid employment had significantly higher perceptions of inclusion (INC) than students that were not engaged in paid employment (ANOVA, Tukey Post hoc, p<0.05). There was insufficient data to examine the effect of voluntary work on perceptions of inclusion.

Perceptions of inclusion and retention

Amongst the whole cohort of first-year students, there was a significant correlation between perceptions of inclusion (INC) and serious thoughts of discontinuing university studies (0.23, p<0.05). When comparing for age, gender and country of birth in post-hoc analyses, this was significant only for Australian-born students, not Asian-born students who generally had lower overall perceptions of inclusion (Figure 2).

Discussion

Without surprise, the data presented here support the view that the majority of first year students in this university had strong perceptions of inclusion based upon their experiences of teaching and on campus. More than 80 percent of students agreed that staff and peers showed them respect, whilst 70-73 percent felt comfortable on-campus and agreed that teaching staff catered for student diversity across a range of teaching and learning activities. The ‘teaching catered for student diversity’ question was based upon that of Hicks and Santhanam (2002) who reported a considerably lower level of agreement with the question than we do here. Similar proportions of students in both studies disagreed that teaching practices catered for diversity, but only 47 percent of first year students at the University of Western Australia agreed or strongly agreed that teaching practices catered for diversity compared with 73 percent in this study. Since the Hicks and Santhanam (2002) study is based upon student
evaluations of teaching, there is no further data available to characterise their student population, however factors contributing to the different results could include age of the student cohort, field of study and the country of birth profile of the cohort.

Figure 2: Students’ perception of inclusion graphed on the basis of country of birth and intentions to continue or leave university study. 1= Australian, 2=Asian, 3= Pacific, 4= European, 5=N. American, 6=S. America, 7=Mid East, 8= Africa. Five-point scales collapsed into a three-point ordinal scale (e.g., strongly agree/agree, uncertain and strongly disagree/disagree).

The learning community question, similar to that in the new ACEQ scales (McInnis et al., 2001), recognised the importance of social life on campus in contributing to learning. Whilst the majority of students were in agreement with the statement 'I felt I belonged to the university community', nearly one-third of students were uncertain or disagreed with the statement. This may not be surprising given the university’s focus on flexible learning where 11 percent of students are more likely to study at home than on campus, and 7 percent of students believe they have little obligation to attend teaching and learning activities on-campus (Data not shown). In addition, with increasing numbers of students working longer hours, their opportunities for social engagement with the university community is decreased (McInnis et al., 2000). Nearly 70 percent of students are not involved in on-campus social or sporting groups (Zimitat, 2003). As McInnis (2001) points out, universities need to reconsider their expectations of students particularly if they consider the on-campus experience and experience in an academic environment to be critical components of their learning at university.

The lowest perceptions of inclusion were reported on the 'curriculum visibility' question. Half of the respondents disagreed or were uncertain that the curriculum materials contained examples that reflected their own identity. With regard to international students, Volet and Kee (1993) argued that academic staff should be aware of the diversity in their classroom and take care to provide examples relevant to all students. However this advice should be considered more generally, because in this study the majority of students who believe they are invisible (those disagreeing with the statement), were younger Australian-born males and females. These are the same age group that are more likely to discontinue their university studies (Zimitat, 2003), especially if they are working part time (McInnis & Hartley, 2002). It
is unclear why this age group should feel less included, perhaps the gentrification of academic staff is contributing to a generational barrier that makes some younger students question the relevance and benefit of their university experience.

**Perceptions of inclusion and workforce experiences**
An unanticipated finding was the correlation between experience in paid employment and perceptions of inclusion. Hicks and Santhanam (2002) reported that perceptions of inclusivity in teaching practice increased with year of study, though whether this was due to maturity, attrition or smaller class sizes was unclear. It is possible that students with more experience in the workforce, and perhaps dealing with a wider cross section of society, had become more aware of, and/or tolerant of diversity and this was reflected in their student life. This finding deserves further investigation and provides supportive evidence for the incorporation of more extensive work-based practicums in degree programmes.

**Inclusion and retention**
A longitudinal study of the Australian first-year university experience has shown that during the period 1994 to 1999 there was a constant proportion of first-years (33%) considering deferring or leaving study in first semester (McInnis et al., 2000, p. 15). This was roughly the same proportion of first-year students who were uncertain or disagreed with the each of the six inclusion questions. Tinto (1993, p. 60) believes that “the more marginal one’s group is to the life of the university, the more likely is one to perceive of oneself as being separate to the institution” and so set a course for departure from university study. A considerable proportion of students who strongly disagreed with the six inclusion questions were 18-21-year old Australian-born students, those also at greatest risk of discontinuing university study (McInnis et al., 2000; McInnis & Hartley, 2002). Whilst these data here are consistent with a link between inclusion and attrition, further work needs to establish more clearly the dimensions of such a relationship in the Australian university context.

In this study we also reported that Asian-born students perceived lower levels of inclusion than their Australian-born peers. There are many possible factors contributing to this situation. Mullins, Quintrell and Hancock (1995) and Burke (1986) report that racism, both in personal interaction with staff with prejudices and in the environment (e.g., graffiti, rallies and conversations that are racist in tone) is a concern for the majority of international students. Asian-born students in this study report a lack of respect from their peers, consistent with the view of Mullins et al. (1995), that many international students’ unwillingness to participate in tutorials is attributable to a lack of trust and respect. Despite low perceptions of inclusion, these students do not consider leaving university studies, presumably because of the strong subjective norms embedded in their culture (Chen, 2003). However this is a sleeping problem for universities because these students are far less likely to recommend their Australian university to friends and family in their home country (Mullins et al., 1995; Volet & Kee, 1993).

**Conclusions**

The issue of student diversity is not new to Australian universities which have faced massive changes in student profiles over the last decade. This study is the first to broadly explore first-year students’ perceptions of inclusion of teaching practices and on-campus activities in an Australian university. The six questions about inclusion function as an adequate scale, though there is room for refinement. Correlations were found between perception of inclusion and quality of teaching, views on the worthwhile nature of higher education, paid employment and retention. There are differences between Australian-born and Asian-born students in their
perceptions of inclusion and their consideration of leaving university studies. Given these links between inclusion, good teaching and retention, further studies of inclusion are warranted if universities wish to compete effectively in a marketplace characterised by greater accountability and increasing student diversity.

References

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