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Rights, Respect and Responsibilities Online - Reflections and Efficacy

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Rights, Respect and Responsibilities Online – Reflections and Efficacy

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Abstract: Demands for moral development are increasing in business and professional training. Mixed results of diversity training programs in the higher education sector suggest that innovative approaches are required for preparing students to become morally upright leaders and teachers. This research looks at the implementation of an online interactive tutorial that focuses on students working and learning together with others from a variety of diverse backgrounds. The study comprises a three-year investigation on the attitudes and understandings of students prior to a group work assessment task, and after completing the online tutorial. First year primary education students (n=594) completed pre- and post-surveys on their perspective of working with others, with a moderating educational intervention. Results revealed mixed views about the value of the program to this generation of students. We make suggestions for institutions of higher education to consider when creating diversity training and support for university students.

Introduction

No one is born hating another person because of the colour of his skin, or his background or his religion. People must learn to hate, and if they can learn to hate, they can be taught to love, for love comes more naturally to the human heart than its opposite. (Mandela, 1995, p. 622).

An understanding of the rights, respect and responsibilities we all share is an important step in creating harmonious and productive relationships. This is particularly relevant at universities where students from diverse cultures, religion, values, sexual orientations and physical abilities work together in study and laboratory groups.

Moreover, instilling respect for the ‘other’ through training is particularly crucial for tertiary students undertaking studies in education, as it is incumbent upon these people who mould our future generations to build cultural bridges and create tolerance for diversity (Garcia & Lopez, 2005; Pratt-Johnson, 2006). Teachers should hold themselves apart from other professions due to the moral nature of their work, and the role they play in modelling moral virtue (Bullough Jr, 2011; Sanger & Osguthorpe, 2013; Warnick & Silverman, 2011).

Recognising this duty, institutions that qualify teachers have been providing training aiming to develop morally appropriate attitudes towards diversity. While the research that has been completed in this area is sparse, most of these programs show that diversity training can have an effect on student awareness and sensitivity. Despite ample evidence of the
benefits of online learning, it is not yet clear if this learning approach is equally appropriate for all learning outcomes.

This paper presents a longitudinal examination of the effectiveness of an online diversity-training program for education students. The program aimed to educate students on their responsibilities, rights and respect towards others from a range of diverse backgrounds and social and physical distinctions with special attention to harassment, discrimination and diversity. The research approach taken in this paper is both qualitative and quantitative and through this lens, the program is evaluated and its effectiveness is discussed.

The paper begins with an introduction to the current literature on diversity training programs in higher education. The paper then introduces the training package offered to first year primary education students, called “Rights, Respect and Responsibilities” (RRR), and the evaluation of its effectiveness. Following this, the methods for evaluating the program’s effectiveness are presented, and then the results are shown. After an examination of the qualitative and quantitative results, the paper concludes with suggestions for improvement in future diversity training programs.

**Human Rights**

When defining human rights, it is common to refer to the Universal Declaration of Human Rights adopted by the UN General Assembly in the aftermath of the two World Wars. Article 2 of the Declaration reads: “Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status” (United Nations, 1948, p. 203).

The elements of the Declaration include human dignity, equality, non-discrimination, universality, respect, responsibility, and participation. While many countries were signatories to it, the declaration has no legal binding. However, it does provide a guide that has the potential to ensure human dignity (Tapola, 2011).

The Australian Constitution does not specifically address human rights as for example the USA with their ‘Bill of Rights’ (Ozdowski, 2013; Wright, 2013). Australia’s Federal and State Governments have developed anti-discrimination legislation based on age, disability, race, and sex (Attorney-General's Department, 2015). In compliance, Australian government institutions, workplaces and universities have developed staff and student policies around ‘equity and diversity’, a collective term for equitable treatment of women, Aboriginal and Torres Strait Islanders, people with disabilities and sexual orientation, freedom from harassment and bullying, sexual provocation and discrimination on the basis of religion, cultural background, language or race. In this paper the term ‘equity and diversity’ will be adopted to concur with Australian legislation.

The Australian Human Rights Commission was established in 1986 as an independent statutory organization charged with protecting and promoting the human rights of all people in Australia (Australian Human Rights Commission Act, 1986). In the education sphere it promotes and provides training, education and resources in the context of human rights. For example, in the primary and secondary school level, the Australian National Curriculum (Australian Curriculum, Assessment and Reporting Authority [ACARA], 2014) aims to develop school students with the skills to better engage and reason with ethical and moral dilemmas (Australian Human Rights Commission, 2011). Further, in 2011, a new ethics course was introduced as an alternative to the traditional scripture classes in public primary schools where parent volunteers train to teach the lessons (Australian Broadcasting Corporation [ABC], 2014). While there is a set of 79 lessons taught, there is no curriculum...
document *per se*. More information can be found on the Primary Ethics website (primaryethics.com.au). The Safe Schools Coalition Australia also offers various programs for schools to “create safer and more inclusive environments for same sex attracted, intersex and gender diverse students, school staff and families” (Safe Schools Coalition Australia, 2017, para. 1).

Equity and diversity are not enforced as specific criteria for all students in higher education institutions, although there are some subjects offering the topics as part of the coursework for certain degrees (Wright, Wright, Kerr, & Mutimer, 2008) such as sociology and special education. The Tertiary Education Quality Standards Agency (TEQSA) has now provided a guidance note in regards to diversity and equity (TEQSA, 2017). While the Higher Education Standards Framework (Threshold Standards) (2015) does not mandate equity and diversity training for all students attending tertiary institutions, there is a requirement for education to provide equal opportunities and an arena where all students have the chance to succeed.

The Australian university student population consists of a mixture of local and international students, the latter often between 20 to 40% of the total numbers (Australian Bureau of Statistics, 2011), with a range of other points of diversity evident amongst the student body. As recognised by Denson and Zhang (2010), the increasing diversity that exists within Australian tertiary institutions is by no means a guarantee that students will interact with those they perceive as different to them. Denson and Zhang (2010) go on to conclude that although successful interactions “can only be achieved if both groups of students are ready to make it work… institutions do play a critical role in fostering positive interactions amongst students” (p. 541).

The increasingly international face of tertiary education is a global phenomenon. In a report by University World News (Maslen, 2012) Belinda Robinson, Chief Executive of Universities Australia, states:

*Education globally is a high growth industry: by 2030, the number of higher education students enrolled around the world is expected to reach an astonishing 414.2 million, up from 99.4 million in 2000. Of these students, 10.5 million are expected to be in the market for international education. (para. 13)*

This student churn will have large impacts on cultural diversity in the target countries, and will, therefore, place an increased burden of pressure on tertiary institutions to provide training in moral development for all students.

Many countries are developing policies and establishing guidelines that ensure educators are aware of and informed about equity and diversity issues that impact their teaching (Darling-Hammond & Lieberman, 2012, p. 2, United Nations Educational, Scientific and Cultural Organization [UNESCO], 2017).

Kulik and Roberson (2008) examined the literature from 1970 to 2008 to collect data on the effectiveness of diversity education in organisations and educational institutions across learning outcomes and contexts. They found diversity education to be consistently positive in terms of general outcomes, stating,

*Regardless of differences in trainee characteristics (e.g. age and employment status) or intervention characteristics (e.g. length and content of diversity education), the contexts yield common conclusions that diversity education is effective in improving diversity knowledge and overall attitudes towards diversity. (p. 314)*

Bowman and Brandenberger’s study (2012) found that students exposed to diversity training and then made to engage in personal informal interracial interactions reported that they had benefitted from positive cognitive growth as a result. Similarly, the work of Denson...
and Zhang (2010) has shown the positive effect of diversity education on students’ abilities to
problem solve and work with others, as well as their appreciation and respect for diversity.

Examples of Tertiary Diversity Training

There are few examples of diversity training at the tertiary level. Intergroup dialogues
between students of different ‘social identity group’ were first introduced at the University of
Michigan in the 1980’s in the wake of racial tensions (Zúñiga, Nagda, Chesler, & Cytron-
Walker, 2007). These dialogues, which took place for two hours each week over a seven-
week period, provided an opportunity for university students to engage in conversations
around identities such as race, gender and sexuality. Since 1980, various diversity groups
have effectively implemented this program across the United States. Gurin, Nagda, and
Zúñiga (2013) designed a dialogue course focused on race and gender that was based on three
fundamental pedagogies (content learning, structured interaction and facilitative guidance)
and delivered to nine American universities. The progress of students who participated was
monitored through longitudinal surveys, interviews and papers. The course was found to
increase understanding and formation of personal relations between the participants and
continues to support and promote respectful and inclusive practices amongst diverse groups
at American institutions (Gurin-Sands, Gurin, Nagda, & Osuna, 2012).

In another example, Sanner, Baldwin, Cannella, Charles and Parker (2010) created a
workshop for student nurses in the US that was designed as a professional learning
experience. The three-hour event included a keynote speaker, shared meals and small
interactive group activities with time to reflect and discuss what participants learned. In an
attempt to gauge the success of such an event impacting cultural awareness, the Openness to
Diversity/Challenge Scale (ODCS) was used in a pre- and post-context (Pascarella, Edison,
Nora, Hagedorn, & Terenzini, 1996). The 47 students who attended the event and
volunteered to be part of the study completed the pre-test 30 minutes prior to the three-hour
event starting and the post-test directly when the event finished. The results of these tests
showed that the students who volunteered had more cultural sensitivity after the event as
measured by their scores on the ODCS (Wilcoxin Signed-Rank test z= -3.286, p = 0.001).
These findings suggested that providing opportunities for diversity training such as the
cultural diversity workshop could indeed foster students' cultural sensitivity.

Mino, Yasuda, Tsuda and Shimodera (2001) developed a one-hour education program
to help change attitudes towards mental illness. Their program was delivered as a lecture on
mental health and psychiatry services in Japan compared to England to 95 first year Japanese
medical students. Two identical surveys, one before the lecture and one after, sought to
examine the effect of the program on their attitudes towards mental illness. The study also
incorporated a control group of 94 students who did the same pre- and post-survey before and
after a lecture that was unrelated to mental health. After completion of the one hour program,
favourable changes occurred in the intervention group in regards to their observed attitudes
towards ‘psychiatric services’, ‘human rights of the mentally ill’, ‘patients’ independence in
social life’, and ‘causes and characteristics of mental illness’. In contrast, no significant
changes were observed in the control group. Therefore, the results from this one-hour
program suggest that by having students take part in attitude modifying training, their
attitudes towards those with mental illness could change in favour of the patient.

Kirby, Dluzew ska and Andrews (2009) sought to promote awareness of culture,
gender, sexual and economics diversity to help develop knowledge and skills and improve
students’ workforce potential. They created a diversity-training module for students who
were from rural and international locations and were living in residential college at their
North Queensland University in Australia. Students volunteered to attend the training in the hope that it would “enrich first year experience, contribute to effective learning communities and build institutional culture” (Kirby, Dluzewska & Andrews, 2009, p. 1). The results of the feedback survey were generally positive with 89% of the 18 students who participated finding the program interesting. The authors felt that their project “contributed to the cultivation of a positive climate for diversity and peer connection” (p.6) and commented that it would be good to work with a larger group of students and compare results.

How Do Students Perceive Diversity Training?

There have been a small number of studies that attempted to understand how students in tertiary education settings perceive diversity training. In 2009, Green, Callands, Radcliffe, Luebbe and Klonoff surveyed 491 clinical psychology graduate students from the US and Canada to examine their definitions of diversity and to understand their perceptions of diversity following their exposure to diversity training, which was a specific module within a course. The results showed that, overall, students were somewhat satisfied with the training concerning ethnicity/race, gender, sexual orientation and English as a Second Language (ESL). They were somewhat dissatisfied, however, with the training in the areas of religion and physical disability. Interestingly, they also revealed that the satisfaction levels for students in regard to the content of the training depended significantly on the area that was being studied as well as their levels of satisfaction of the subject matter, and was unrelated to whether the students themselves identified as belonging to an underrepresented group or not. The nature of the course of study for these students (that is, psychology) also leaves the question of whether aptitudes of a specific group of students would be different to another.

Littleford (2013) conducted a study with 932 undergraduate American students who completed an online survey to report their understandings of diversity, the influence of diversity on the curriculum, and their motivation for learning about diversity. The findings revealed that students primarily thought of culture and race when thinking of diversity and seldom included age, sexual orientation, socioeconomic status, or physical/cognitive/mental abilities. Overall, the participants affirmed diversity and would like to see more diversity content incorporated into their classes. The students also felt that it was important to learn about diversity because it would help them to be more employable in the future and it was important to them to learn how to interact with different people as well as grow intellectually, emotionally and personally themselves.

In another study, Giddens, North, Carlson-Sabelli, Rogers, and Fogg (2012) were interested in a virtual community program called ‘The Neighbourhood’ in which 342 first semester nursing students in the USA were enrolled over one semester. The aim of this study was to determine if personal stories among culturally diverse characters in an online, virtual community would motivate and encourage cultural awareness among students in the real world. The students took part in an online virtual neighbourhood that had 40 characters with varying issues and from diverse backgrounds and cultures. In this study, there were pre- and post-surveys on either side of the intervention. The researchers performed descriptive and comparative analyses on the data collected from these students and the results suggested that cultural awareness among the students might have been enhanced by the use of the online virtual community.
Responsibilities, Rights and Respect (RRR) Online Tutorial

The Responsibilities, Rights and Respect (RRR) training course utilised an online tutorial design developed by Wright and colleagues (2008) and adapted resources developed by the Australian Human Rights Commission (see https://www.humanrights.gov.au/). In addition, some of the equity scenarios were inspired by work from the University of British Columbia (2007). The online training package was developed to reach the widely diverse student population of the University of Wollongong. The training used a series of seven online videos and questions to explore harassment and discrimination from the perspective of ethnicity, gender, disability, age and sexuality. The scenarios also covered topics such as excessive drinking, shared living arrangements and various academic environments. These videos can be found here: http://www.uow.edu.au/about/rrr/index.html

In comparison to similar resources offered to higher education students, this training was developed as a just in time, online, interactive tutorial and was designed to be a compulsory component for all first year students, with successful completion recorded on their academic transcript (Wright et al., 2008). As an initial pilot, the subject coordinator of a first year pedagogy subject in the Bachelor of Primary Education course, volunteered to have the enrolled students complete the tutorial. This pilot continued for three consecutive years as a compulsory activity for the first year students in the degree.

This paper seeks to examine the impact of the tutorials and to understand whether diversity acceptance training should be imposed as a compulsory component of the overall tertiary academic learning system.

Study Design and Method

The RRR tutorial was adopted as the basis of a three-year investigation into the effectiveness of the online tutorial by measuring the underlying attitudes of students on working and learning with others during their university studies. In total, 594 students completed both the pre- and the post-surveys. Table 1 shows the annual breakdown:

<table>
<thead>
<tr>
<th>Year</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>216</td>
</tr>
<tr>
<td>2012</td>
<td>194</td>
</tr>
<tr>
<td>2013</td>
<td>184</td>
</tr>
</tbody>
</table>

Table 1: The number of students by year that completed a pre- and post-survey

Ethics approval was obtained from the Human Research Ethics Committee at the University (HREC 2009/080).

Each year, the students were asked to complete three tasks as part of the study. The first of these was to fill out the pre-survey at the beginning of the session in their own time, and bring the completed survey to the tutorial that was held in the computer laboratory during Week 3 of classes. The students were asked to label their survey with the month they were born, followed by their mother’s maiden name. They used this same code on both the pre- and post-surveys so that the researchers could pair the responses for comparison. Tutorial leaders collected the surveys during subject tutorials.

The second task involved the students watching the RRR Online videos on the university website and answering the questions after each video, which tested for student understanding of the content of the videos. The students were told in advance that during the tutorial they would be given time to log onto the RRR online website, watch the videos and answer the accompanying questions. Therefore, there was no need for any input from the
tutorial leaders other than to direct students to the correct website, and to remain in the room to answer any questions as they completed the task. In the following weeks, the students were asked to choose peers to work with on a group assessment. Once these groups were chosen and students were well underway with the assignments, the third task (a post survey) was administered to the students in Week 10 of the session. Much the same as in Week 3, the tutorial leaders collected the completed surveys. It was an expectation of the subject that all of the students would complete the RRR online videos and answer the questions at the end of the videos. The data collected on the pre-surveys were analysed to determine the students’ perceptions about diversity and in particular: people with a physical disability, mental disorder, religion, sexual orientation, ethnicity, language and cultural background. There were also questions that asked if the students would consider doing group projects with individuals of a different race, age group, sexual orientation, etc. Students were also asked if they themselves had been harassed, bullied, embarrassed or assaulted while at University. Directions on the participant information sheet, as well as the online program itself and impact of training suggested to students that if the questions asked on the survey or in the online program brought up any emotions or personal stories that they felt they should discuss with someone, they should consider the university counselling services. Contact information for both the university counselling services and the LifeLine (an independent crisis support service) were provided to the students.

The survey questions also sought to determine if students were aware of the university policies and procedures that were in place to support students. The purpose of the post-survey was to have the opportunity to compare answers from the pre-survey and discover whether the online training sessions had made any difference in the way that students chose to think about diverse groups in the university setting. The researchers were also trying to determine if implementing the RRR online program made a difference to the students’ decisions about the people with whom they chose to interact and study.

Both pre- and post-surveys for each year incorporated qualitative and quantitative questions to obtain a complete picture of the impact and value of the RRR online program. Thirty-two questions were asked in each pre-and post-survey, with the following types of questions:

- Pre-survey: 6 demographic questions, 10 Likert scale questions, 3 qualitative questions, and 13 other styles of questions (e.g. provide a ranking)
- Post-survey: 6 demographic questions, 13 Likert scale questions, 4 qualitative questions, and 9 other styles of questions (e.g. provide a ranking)

The findings from these surveys were analysed in accordance with quantitative and qualitative techniques. These approaches are discussed below.

**Quantitative Analysis**

Data from the RRR survey were broken into independent variables (demographic questions) and dependant variables (Likert scale questions). The independent variables used in the analysis were Gender and Age. The dependant variables comprised two Likert scale questions (ASTINEQ (7) and IMDIVED (8)) and two constructs composed of similar Likert scale questions (DIVACC (C1) and OTTOL (C2)). All tests comprised a two-tailed paired t-test, which compared the median values of pre-training responses to those collected from post-training responses, and examined if the differences were statistically significant.

ASTINEQ measures respondents’ beliefs on the importance of understanding and addressing student inequality. This item is based on Q7 of the survey (single item). The item was ranked by respondents, who indicated their degree of agreement or disagreement with the
statement “I believe that inequalities between students need to be understood and addressed” over a five-point Likert-type scale (0 = not at all, 5 = believe very strongly). Scores ranged from 0 to 4 at Time 1 (pre-) (M = 3.32, SD = 0.80) and 0 to 4 at Time 2 (post-) (M = 3.32, SD = 0.79).

IMDIVED measures respondents’ attitudes towards the importance of diversity education. This item is based on Q8 of the survey (single item). The item was ranked by respondents, who indicated their degree of agreement or disagreement with the statement “I feel diversity education is” over a five-point Likert-type scale (0 = not important, 5 = very important). Scores ranged from 0 to 4 at Time 1 (M = 3.50, SD = 0.71) and 0 to 4 at Time 2 (M = 3.48, SD = 0.72).

DIVACC (median of scores) measures acceptance of diversity. This item is based on Qs 9, 10 & 11 (each had 15 parts). Respondents, who indicated their degree of agreement or disagreement with the statements using a five-point Likert scale, ranked the items. Each question presented a series of diversity types. For example, Q10 Part D asks: “How comfortable would you be completing a group work task with a heterosexual male” (0 = not at all, 5 = very comfortable). Median scores ranged from 1 to 4 at Time 1 (Cronbach alpha = 0.941, M=3.41, SD = 0.68) and from 1 to 4 at Time 2 (Cronbach alpha = 0.949, M=3.34, SD = 0.72).

OTTOL (median of scores) measures sensitivity to others’ tolerance of diversity. This item is based on Q12 (6 parts), asking participants to rank expressions of intolerance of various diversity groups based on frequency of exposure. The items were ranked by respondents, who indicated their experience with the scenarios over a five-point Likert-type scale (0 = never, 5 = frequently (once a day)). Median scores ranged from 0 to 4 at Time 1 (Cronbach alpha = 0.895, M=0.55, SD = 0.88) and from 0 to 4 at Time 2 (Cronbach alpha = 0.900, M=0.59, SD = 0.

These results are summarized in Table 2.

![Table](Table 2: Means and standard deviations for survey variables (n = 583))

Qualitative Analysis

Data from the comments sections of the surveys were aggregated and compared following the principles of grounded theory. Grounded theory is “an inductive, theory discovery methodology that allows the researcher to develop a theoretical account of the general features of a topic while simultaneously grounding the account in empirical observations or data” (Martin & Turner, 1986, p. 141). This approach provides a detailed and rigorous method of analysis, which enables a systematic interpretation of participants’ comments and narratives. Grounded theory is particularly useful in providing rigorous insight into areas which are relatively unknown to the researcher.
The comprehensive process of grounded theory utilised three stages: open coding, selective coding, and theoretical coding. This project utilised the first stage with open coding to explore and thematically accommodate congruent datum, and thereby build a composite understanding of the phenomenon under examination. Key to this analysis is constant comparison and notetaking, which lead to themes, sub-categories, and core categories. As categories are identified, developed, and gain depth, constant comparison compels the researcher to begin to reflect on the data and to conceptualise. This is exemplified in the results section.

Results
Quantitative Results

Of the 594 surveys obtained from students who participated in the RRR program during the years 2011-2013, ten were inadmissible, resulting in 584 valid cases. Demographic data for this sample is specified in Table 3.

<table>
<thead>
<tr>
<th>Year (%)</th>
<th>Gender (%)</th>
<th>Age group (n=582) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td></td>
<td>Male (%)</td>
<td>Female (%)</td>
</tr>
<tr>
<td>37</td>
<td>32.2</td>
<td>29.8</td>
</tr>
<tr>
<td></td>
<td>19.7</td>
<td>80.3</td>
</tr>
<tr>
<td>88</td>
<td>6</td>
<td>2.6</td>
</tr>
<tr>
<td>3.1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Demographic breakdown of the sample population (n=584)

The discussion which follows will first present the quantitative data, with the qualitative data presented afterwards.

The quantitative analysis examined differences in diversity attitudes pre- and post-training by using a paired two-tailed t-test. These differences were examined among the entire sample, and in three additional breakdowns: (1) within each gender group, (2) within each age group, and (3) by splitting the sample according to high and low pre-training scores of ASTINEQ (i.e. belief in the importance of understanding and addressing student inequality). The high and low pre-training scores of IMDIVED (i.e. belief in the importance of diversity education) were also examined.

It is important to note that apart from the differences highlighted in this paper, the majority of the analysis showed no significant change in mean or median values between pre- and post-training across years, gender, or age. Therefore, the analysis showed that for the most part, this three-year program of diversity training did not have an overall resounding effect on students’ reported perceptions.

Entire Sample

When examining the effects of the training program on the entire sample, a significant effect was only found for DIVACC, (i.e. acceptance of diversity). A two-tailed paired t-test which compared median pre- and post-scores found marginally lower scores post training ($t= 2.90, df = 581, P < .01$), as shown in Table 4.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Pre (median)</th>
<th>Post (median)</th>
<th>Diff</th>
<th>Diff (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTINEQ</td>
<td>573</td>
<td>3.32</td>
<td>3.32</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>IMDIVED</td>
<td>577</td>
<td>3.50</td>
<td>3.48</td>
<td>-0.02</td>
<td>-0.57%</td>
</tr>
<tr>
<td>DIVACC</td>
<td>582</td>
<td>3.41</td>
<td>3.34</td>
<td>-0.07*</td>
<td>-2.05%*</td>
</tr>
<tr>
<td>OTTOL</td>
<td>581</td>
<td>0.55</td>
<td>0.59</td>
<td>0.04</td>
<td>7.27%</td>
</tr>
</tbody>
</table>

*P < 0.01

Table 4: Effect of training on test scores – entire sample
These results suggest that after the diversity training program, students were significantly and slightly less accepting of diversity than they were prior to the program. However, there was a notable, although not statistically significant, growth in students’ sensitivity to diversity intolerance among others.

**Gender and Age Groups**

The same result as the entire sample was evident when controlled for gender and age groups. No significant differences between pre- and post-training scores were found (except for a marginal difference between DIVACC pre- and post-scores) within groups of males, females (Table 5) and age groups (Table 6a-d).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>N</th>
<th>Pre (median)</th>
<th>Post (median)</th>
<th>Diff</th>
<th>Diff (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIVACC</td>
<td>Females</td>
<td>468</td>
<td>3.43</td>
<td>3.37</td>
<td>-0.06*</td>
<td>-1.75%*</td>
</tr>
<tr>
<td></td>
<td>Males</td>
<td>114</td>
<td>3.34</td>
<td>3.23</td>
<td>-0.11*</td>
<td>-3.29%*</td>
</tr>
<tr>
<td>OTTOL</td>
<td>Females</td>
<td>467</td>
<td>0.50</td>
<td>0.54</td>
<td>0.04</td>
<td>8.00%</td>
</tr>
<tr>
<td></td>
<td>Males</td>
<td>114</td>
<td>0.77</td>
<td>0.80</td>
<td>0.03</td>
<td>3.90%</td>
</tr>
<tr>
<td>ASTINEQ</td>
<td>Females</td>
<td>459</td>
<td>3.34</td>
<td>3.35</td>
<td>0.01</td>
<td>0.30%</td>
</tr>
<tr>
<td></td>
<td>Males</td>
<td>114</td>
<td>3.24</td>
<td>3.18</td>
<td>-0.06</td>
<td>-1.85%</td>
</tr>
<tr>
<td>IMDIVED</td>
<td>Females</td>
<td>463</td>
<td>3.52</td>
<td>3.52</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td>Males</td>
<td>114</td>
<td>3.41</td>
<td>3.31</td>
<td>-0.1</td>
<td>-2.93%</td>
</tr>
</tbody>
</table>

*P < 0.01

| Table 5: Effect of training on test scores – by gender |

The results show that the reduction in diversity acceptance was greater among males than among females, whereas the sensitivity towards others’ intolerance was greater among females.

<table>
<thead>
<tr>
<th>Age group</th>
<th>N</th>
<th>Pre (median)</th>
<th>Post (median)</th>
<th>Diff</th>
<th>Diff (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>514</td>
<td>3.41</td>
<td>3.34</td>
<td>-0.07*</td>
<td>-2.05%*</td>
</tr>
<tr>
<td>25-29</td>
<td>34</td>
<td>3.59</td>
<td>3.38</td>
<td>-0.21</td>
<td>-5.85%</td>
</tr>
<tr>
<td>30-34</td>
<td>15</td>
<td>3.13</td>
<td>3.27</td>
<td>0.14</td>
<td>4.47%</td>
</tr>
<tr>
<td>35+</td>
<td>18</td>
<td>3.39</td>
<td>3.39</td>
<td>0</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

*P < 0.01

Note: This test was also run with age groups 25-35+ combined, but no significance was found.

| Table 6a: Effect of training on DIVACC scores – by age group |

<table>
<thead>
<tr>
<th>Age group</th>
<th>N</th>
<th>Pre (median)</th>
<th>Post (median)</th>
<th>Diff</th>
<th>Diff (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>513</td>
<td>0.58</td>
<td>0.61</td>
<td>0.03</td>
<td>5.17%</td>
</tr>
<tr>
<td>25-29</td>
<td>34</td>
<td>0.32</td>
<td>0.59</td>
<td>0.27</td>
<td>84.38%</td>
</tr>
<tr>
<td>30-34</td>
<td>15</td>
<td>0.33</td>
<td>0.33</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>35+</td>
<td>18</td>
<td>0.39</td>
<td>0.50</td>
<td>0.11</td>
<td>28.21%</td>
</tr>
</tbody>
</table>

*P < 0.01

Note: This test was also run with age groups 25-35+ combined, but no significance was found.

| Table 6b: Effect of training on OTTOL scores – by age group |

<table>
<thead>
<tr>
<th>Age group</th>
<th>N</th>
<th>Pre (median)</th>
<th>Post (median)</th>
<th>Diff</th>
<th>Diff (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>507</td>
<td>3.37</td>
<td>3.35</td>
<td>-0.02</td>
<td>-0.59%</td>
</tr>
<tr>
<td>25-29</td>
<td>33</td>
<td>3.03</td>
<td>3.00</td>
<td>-0.03</td>
<td>-0.99%</td>
</tr>
<tr>
<td>30-34</td>
<td>15</td>
<td>2.73</td>
<td>3.00</td>
<td>0.27</td>
<td>9.89%</td>
</tr>
<tr>
<td>35+</td>
<td>17</td>
<td>3.06</td>
<td>3.18</td>
<td>0.12</td>
<td>3.92%</td>
</tr>
</tbody>
</table>

*P < 0.01

Note: This test was also run with age groups 25-35+ combined, but no significance was found.

| Table 6c: Effect of training on ASTINEQ scores – by age group |
An examination of the results displayed in Table 6a shows that among the younger student cohorts, students between 25-29 years old had the greatest reduction of diversity acceptance. Table 6b also shows that students of this age group had the greatest increase, albeit not statistically significant, insensitivity to others’ intolerance of diversity. Table 6c shows that the cohort of 30-34 year old students had a large increase, albeit not statistically significant, of beliefs in the importance of understanding and addressing student inequality, and Table 6d shows that there were no significant or notable differences in the beliefs about the importance of diversity education among any students’ age group.

**Pre-Scores Groups**

Participants who scored highest on ASTINEQ pre-training (i.e. 4 out of 4 on the Likert scale) had the following significant differences between pre- and post-training scores. Post-training scores of ASTINEQ were significantly lower than pre-training scores (t= 8.22, df = 290, P < .001). Post training IMDIVED scores were marginally and significantly lower than pre-training scores (t = 2.48, df= 291, P < .05). Post training OTTOL scores were marginally and significantly higher than pre-training scores (t = -2.40, df = 292, P < .05). These differences are summarized in Table 7 below.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pre (median)</th>
<th>Post (median)</th>
<th>Diff</th>
<th>Diff (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTINEQ</td>
<td>4.00</td>
<td>3.68</td>
<td>-0.32**</td>
<td>-8.00%</td>
</tr>
<tr>
<td>IMDIVED</td>
<td>3.75</td>
<td>3.67</td>
<td>-0.08*</td>
<td>-2.13%</td>
</tr>
<tr>
<td>OTTOL</td>
<td>0.54</td>
<td>0.65</td>
<td>0.11*</td>
<td>20.37%</td>
</tr>
</tbody>
</table>

**p < .01; *p <.05**

Table 7: Summary of pre- and post-scores of variables

These results show that participants who reported that understanding and addressing student inequality was highly important before training reported a significantly reduced view of such importance. Similarly, these participants reported lower perceived importance of diversity education. In contrast, however, these participants reported a significant increased sensitivity to others’ intolerance of diversity.

Participants who scored highest on IMDIVED pre-training (i.e., 4 out of 4 on the Likert scale) had the following significant differences between pre- and post-training scores. Post-training scores of ASTINEQ were lower than pre-training scores (t=1.95, df = 355, P = .052). Post-training IMDIVED scores were significantly lower than pre-training scores (t = 7.44, df= 358, P < .001). Post training DIVACC scores were marginally and significantly lower than pre-training scores (t = 2.97, df = 360, P < .005). These differences are summarized in Table 8 below.
These results show that participants who reported that diversity education was important to them before training reported lower attitudes towards diversity related-issue after training. These attitudes include the view of the importance of understanding and addressing student inequality, the importance of diversity education, and the acceptance of diversity.

For the rest of the participants, those who did not score highest on pre-training (i.e. any score under 4 on the Likert scale), had the following significant differences. Post-training scores of ASTINEQ were higher than pre-training scores ($t = -2.14$, df = 216, $P = .033$). Post-training IMDIVED scores were significantly higher than pre-training scores ($t = -5.574$, df = 217, $P < .001$). These differences are summarized in Table 9 below.

The statistical analysis found outcomes, some that were supportive of the program, and some that were not. The more relevant of these are tabled below (Table 10).

### Qualitative Results

**Diversity Education**

A variety of attitudes and opinions regarding the place of diversity education at university were expressed throughout the surveys. 77% of the participants felt diversity education was relevant in this setting, and that it was important for the university to provide opportunities for diversity education. 48% of participants, however, showed signs of resistance to its implementation, particularly concerning the compulsory nature of the RRR Online tutorial.
Diversity Education is Relevant in a University Setting. Of the 77% of the participants who found diversity education to be relevant at university, many gave further information in their open-ended responses to explain that this relevance was due in large part to the diverse student population. Students acknowledged that diverse education “allows opportunities for people from different cultures to mix in and blend with our way of life in a comfortable, welcoming way and gives students opportunities to learn from and experience different cultures and ways of learning” (Student 58, 2011). One student also noted that universities are well positioned to provide diversity education as “young adults are forming their own perspective of the world” (Student 68, 2013).

The value of diversity education in general was also confirmed by students’ responses. Some students agreed that it is “extremely relevant and necessary in the education system” (Student 68, 2013), with one participant recognising that diversity “is a social issue [and therefore] should be integrated into the learning criteria” (Student 65, 2013) within their university course. Additionally, students acknowledged that “obviously in the working world there are going to be people of all kinds of nationalities and backgrounds with different beliefs [and so on], this sets you up for that” (Student 104, 2012). Students also noted the benefits of encouraging “groups who don’t usually meet or hang around in the same circles [to] combine, talk and share experiences” (Student 200, 2011), enabling the sharing of many different viewpoints to expand their own.

In contrast to these views is the notion that students may be at university to study their chosen course only. According to one participant, “these students want to get in, do their work related to their topic and leave the campus” (Student 18, 2012). Students also questioned the need to continue to pursue diversity education at university, given their previous schooling and life experiences. Furthermore, some students expressed a belief that “if people are already set in their ways, I don’t think there’s much you can do to change their mind… [we] need to teach it to younger children so they understand diversity from a young age” (Student 16, 2011).

Providing Opportunities to Learn About Diversity Issues is Important for the University. As noted above, 77% of the participants believed it was important for the university to provide opportunities for students to learn about diversity issues. The possibility that there were students at university from backgrounds where these issues were not previously discussed frequently emerged in participants’ responses. These students; participants reasoned, include those from:

- rural backgrounds where there may have been less multiculturalism compared to Wollongong, overseas students [who] may come from countries [with] different policies and procedures in dealing with diversity issues, and many students [who] may just not have been taught properly in their younger years about the seriousness of participating in actions of harassment, discrimination, etc. (Student 114, 2011)

A few indicated that they believed “international students may not be as open-minded due to their culture or background” (Student 33, 2013), while others saw the need to protect international students from discrimination. These statements reflect stereotypical notions, reinforcing the need for diversity training at tertiary institutions.

Participants recognised that “education is one of the most effective ways to eliminate discrimination” (Student 8, 2013), given that “people fear what they don’t understand” (Student 32, 2013). Several mentioned that students who do discriminate against others may not be aware of the consequences of their actions, and they believed that through university-provided opportunities these people might become more aware of the issues and the impact of their words and actions.
Several students reflected on the way that the RRR Online tutorial “opened their eyes” (Students 22, 29, 67, 77, 2011; Students 12, 29, 2012; Students 121, 157, 2013) to the diversity issues they may encounter on campus. It encouraged them to consider their own views and attitudes, with some students saying they had been challenged by the tutorial to become more accepting of the variety of people at the University of Wollongong. As a result, one student began to “mix and socialise with a variety of students” (Student 40, 2011), and others became more aware of “how unintentional comments can hurt other people” (Student 189, 2011).

Concerns Regarding Diversity. Despite the widely held positive attitudes towards diversity education at university, some students expressed concerns regarding their interactions with diversity. Some were worried that their grades would be negatively affected if required to work with, for example, “non-English speaking students” (Student 60, 2011), due to the communication barrier. One student stated that although “it is good to have a mix of cultures, religion, etc.… I think it has gone too much the other way” (Student 203, 2011), lamenting the number of overseas students at the university.

On the other hand, one student declared that while the university claims to be diverse, the needs of parents with dependent children are rarely taken into consideration, for example when setting class times. Another student was dissatisfied with the lack of support for people seeking disability services prior to receiving an official diagnosis.

Resistance Regarding Diversity Education. There were some students in each cohort who stated that they were already aware of the issues raised in the online tutorial, and therefore did not see the value in the RRR Online tutorial. These participants felt that their life experiences appropriately prepared them to address diversity issues in a variety of settings. Their attitudes are well summarised by one participant who stated, “I already had a good understanding of diversity, so completing the RRR Online did not affect my understanding” (Student 189, 2011).

Compulsory Nature

The University was contemplating having all first year students complete the RRR Online modules as part of their orientation. The cohorts involved in this study were a pilot group to try this compulsory task and they were required to complete the RRR online. This compulsory nature of the RRR Online tutorial bothered many of the participants involved in the study. When asked on the survey if they thought this tutorial should be mandatory for all students, many complained, “It should be the student’s choice, not something that should be forced” (Student 16, 2012), and “It should be up to the individual if they wish to take part, not incorporated into students’ degrees” (Student 37, 2011).

Conversely, one student reflected, “RRR Online applies to a select few who don’t know how to conduct themselves” (Student 33, 2011). Another participant similarly reasoned that, “some people may already be aware [of diversity issues], however, some may not. Therefore, maybe students should be provided an opportunity in case they are the latter” (Student 74, 2012). These comments indicate a need for compulsory training, to ensure that all students are made aware of their rights and responsibilities.
Participants made further comments specific to the RRR Online tutorial and its implementation, including the format, services discussed, and timing of the tutorial in relation to their degree.

**Format.** The format of the RRR Online tutorial came under criticism by a number of participants across each cohort. One participant felt the scenarios were cartoonish and child-like, preferring scenarios of “real people, either acting or telling their stories, to highlight [the] reality that it does exist in society” (Student 148, 2011). Some found the format “condescending” (Students 33, 39, 2011; Student 19, 2012), while another felt that it was “too black and white, it doesn’t allow for all the grey areas” (Student 37, 2011). One participant felt that the RRR Online tutorial was not valued by their peers, saying, “It was a joke, those that are racist found it funny, and those that are culturally diverse did not need the lesson” (Student 184, 2013). Another student believed there were improvements to be made regarding presentation and information, finding the present version “quite boring and didn’t maintain my attention so not a lot was actually taken away from the experience” (Student 33, 2013).

Participants mentioned some recommendations for alternative means of incorporating diversity education throughout the degree. A few participants requested that the surveys generated for this research be implemented throughout their university degree to assess students’ ongoing views regarding diversity and discrimination. One student believed the ‘faceless’ nature of the tutorial and surveys detracted from their purpose, preferring a lecture or seminar (Student 116, 2011). Another recommended, “Students should be given the skills to deal with adult harassment from all types and levels to successfully operate and manage in their careers” (Student 18, 2012) leaving the question, whose role is it to provide harassment skills training for the students? Does this fall into the purview of the Careers Office, job readiness programs, subject coordinators, or someone else?

Similarly, one participant believed that “RRR Online could be modified (and implemented at university) to include more complex situations as many of the scenarios offered seemed to only need common sense” (Student 127, 2011). Additionally, they requested a summary of the university’s policies regarding bullying and harassment, rather than expecting students to find and read these policies in their own time. This, once again, raises the question of whose responsibility is it to ensure that students are made aware of these policies. Students are often pointed to these documents during orientation but there is so much information given on that day that many students become overwhelmed and forget the specifics. Perhaps the policies need to be reviewed in the first week of subjects for first year students.

**Services.** Participants recognised the value of introducing students to the services available to victims of harassment, which was done in part through the RRR Online tutorial. One participant acknowledged that the “systems in place [at the university] are good for harassment, discrimination and diversity” (Student 127, 2011), but suggested the provision of an actual workshop that is dedicated to introducing new students to these services. Several students stated that they did not have any exposure to, or awareness of, these policies and procedures.

**Discussion and Conclusion**

The responses of the participants in the study echo those involved in previous studies regarding the value of equality and diversity education at university. Tertiary institutions with
diverse student populations are well positioned to ensure that all students, regardless of their prior experiences or backgrounds, interact positively with diverse people and situations, to share different experiences with their peers and expand their own viewpoints, particularly when the university actively encourages these interactions (Denson & Zhang, 2010). As one participant in this study recognised, diversity education can set them up for the global workforce they are heading for.

The education provided through the RRR Online tutorial unfortunately has continued to follow the pattern recognised by Kulik and Roberson (2008) in their review of previous literature. They found that while organisations and institutions positively affected individuals’ knowledge of, and attitudes towards, diversity in general, little attention was being given to skill learning regarding diversity. This surprised and disappointed Kulik and Roberson (2008) since “educators agree that the ultimate goal of diversity education is to prepare learners to work effectively in a diverse world” (p. 314). The findings in this research are equally disappointing with little increase in education of awareness of diversity-related issues. Our research builds on the work of Sanger and Osguthorpe (2011, 2013), and shows that while it may be difficult to achieve, it is important to reach pre-service teachers and inculcate into them these basic moral guidelines. As our results do not warrant the current diversity acceptance training suitable for compulsory inclusion in the university learning system, perhaps the training should be made compulsory for education students. Although Nieto (2000) cautions that tertiary teacher education programs can only prepare perspective teachers effectively if their own programs and of its institution actively promote diversity and social justice.

It seems there is no golden approach to reach students: the very nature of diversity means that there is a banquet of different learnings styles, preferences and beliefs, and by definition, no single approach can possibly work. Ultimately, the RRR Online tutorial was made available to the student population as a resource to assist them in managing “situations that may have a significant impact on the quality of their university experience” (University of Wollongong, 2017, para. 1).

It is worth noting that this research study did not follow an experimental design. All students were treated and there was no control group. The overall statistical indication is that students had the same level of awareness of diversity issues after the 13-week semester subject as they had before the subject began. It may be that other pedagogical or social activities had an influence on the awareness of these three cohorts. As these were first year students, their sudden socialisation with members of diverse groups may have provided some de-sensitisation and familiarity with these issues and therefore reduced the impact of the training. An experimental design that utilises a control group, would compensate for any environmental impacts on student’s awareness (or lack thereof). Future studies should consider this approach to expand upon the findings of this study.

In addition to a lack of skill development through the RRR Online tutorial, issues with the format and implementation of this form of diversity education were evident through this study. Some participants found the scenarios to be oversimplified, boring, and condescending at times, while others thought the whole tutorial was a joke. Those who felt they were already aware of the issues presented found it difficult to remain engaged for the duration of the tutorial, while those who others anticipated would benefit most from the course also struggled to engage. Bowman and Brandenberger (2012) who caution that many students are resistant to being challenged by beliefs different to their own recognize this. Aside from these issues, the compulsory nature of the tutorial may also need to be questioned. Even so, statements made by participants demonstrate the stereotypical ideas that RRR Online is aiming to work against, thus supporting the need for universities to provide opportunities such as this for students to access.
It seems that, while diversity education itself has a significant role in tertiary education, an alternative to the RRR Online tutorial may need to be considered. A new format that can engage all students, regardless of their previous experiences or backgrounds, and develop their skills as well as their knowledge of diversity in general and more specifically would be ideal (Denson & Zhang, 2010; Kulik & Roberson, 2008). By considering the work that has been done in this area previously, a few suggestions for what this new format may look like, and the key elements of such a program, can be ascertained. The work of Sanner and colleagues (2010), involving a workshop, shared meal and interactive activity, as well as that of Giddens and colleagues (2012), utilising an online virtual community, indicates that personal interactions are crucial in diversity education programs. A university wide approach to racial and ethnic diversity amongst college students was suggested by Milem and Chang (2012) who also stressed the importance of fostering interracial friendships. The chance to engage in discussions with diverse people about diversity issues has been shown to positively affect student outcomes and engage them holistically (Denson & Zhang, 2010). To this end, acknowledgement of diversity and its benefits in our communities should be given throughout course content in lectures, tutorials, discussions and assessments (Denson & Zhang, 2010; Littleford, 2013). The researchers would like to recognise the value of collecting both quantitative and qualitative data in this research study. While the quantitative data provided no significant insights into the issue by itself, the richness of the qualitative responses enabled in-depth understanding to be gained.

By holding the findings of both types of data in tension, the results of this study can add a unique perspective not previously found in the literature.

In conclusion, the quantitative data revealed students’ attitudes and perceptions towards diversity education and the RRR Online tutorial itself despite the lack of statistically significant results on the effect of the training. The detailed qualitative comments provided by many participants facilitated in-depth insights revealing the benefits of incorporating diversity education into university courses. Some students discussed the positive impact of the online training and how participating “opened their eyes” (Students 22, 29, 67, 77, 2011; Students 12, 29, 2012; Students 121, 157, 2013) to others around them. The participants were divided on whether or not the training actually changed or influenced their decisions about the people with whom they chose to interact and study. The results also identified the challenges presented by the RRR Online tutorial format. A major finding of this research was in the design of the course itself, with most students finding the online tutorial to be too simplistic in nature. A recommendation for universities contemplating implementing similar training courses is to consider the approach that they use when designing the intervention. Time needs to be spent understanding the needs of students in terms of piquing their interest and delivering information in a format that is innovative, focused and relevant. This may mean creating several versions of the same training package, and permitting customised delivery to meet the needs of students who have different backgrounds, languages, and levels of knowledge. Finally, to the matter of the compulsory nature of diversity training for university student populations. As institutions of higher education, part of our role is to develop students into professional and moral leaders of society. It has been said that sophistication is the ability to approach culture with the minimum amount of anxiety. Students who attend university whilst becoming independent, self-directed learners, still need to be scaffolded, guided and supported. Perhaps our role as university educators is to model that sophistication and expect nothing less of our students.
References


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