Empowering a Diverse Student Population

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Introduction

Appreciating diversity in classrooms help students increase their knowledge and stretch their thinking; once students are capable of interpreting events through different perspectives, they will be able to think critically and adapt quickly to a variety of situations.

This article will address issues raised by some students (in my personal interviews with them) and provide some strategies to cope with a diverse student body. I believe that the students’ feedback on their experiences and perspectives on diversity can help educators to evaluate the impact of educational strategies and develop measures to meet the needs of a diverse student body. However, implementing techniques to include diversity in classrooms presents its own challenges—the education of a diverse student population requires self-reflection, evaluation, patience and commitment.

Diversity and Inclusion

Dimensions of diversity are not always easily defined. Either hidden or visible, the dimensions may refer to our individual and/or collective differences such as race, gender, ethnicity, age, personal background, education, job function/position, geographic origin and lifestyle. An individual’s values determine a person’s attitudes and how he/she communicates across different cultures.

When people find commonalities or honour diversity, it allows them to function together with one another in different situations including classroom settings (McArthur-Blair, 1995), creating one of the foundations of inclusion. Thus, it is important to promote diversity in teaching and learning to create an inclusive community of critical, independent learners. Addressing diversity can also help alleviate anxiety in courses with complex subject matter such as introductory statistics courses. A foreign student indicates, “I prefer instructors and students to acknowledge my culture, recognise that English is not my first language, allow and encourage me to speak up.”

Diversity Issues and Assumptions

Instructors commonly assume that students share the same perspectives and life experiences and will therefore learn about diversity on their own. However, students can easily misinterpret that honouring diversity is not essential for them to succeed either in their education or future career. Thus, to help individual students to succeed, instructors need to balance between holding high expectations for all the students regardless of who they are as well as use different techniques to teach each individual effectively (Bucher, 2000).

The interviewees raised three main issues on diversity in the classroom: cultural, age and gender differences. Another type of diversity that I often deal with is the differences in learning styles.
Cultural Differences

One student interviewee said, “My classmate who did not like me to compare between the Canadian society and my country, gave me mean comments when I did so. Most of my instructors neither acknowledged my cultural experiences and ideas nor allowed me to share my ideas freely.” Instructors need to recognise that acknowledging the differences between cultures and letting students articulate their different experiences is important in making students feel part of the learning community. Quoting the student, “it will enable me to blend into their circle so we can learn from each other’s cultures.”

Age Differences

My interviews indicate that many students are returning to the university to acquire the necessary knowledge for career change and/or career advancement. One of the two single mothers I interviewed said she “found it difficult to find a job with only homemaker skills”, while the other wanted to “upgrade my qualifications so that I can work as a resident care assistant in hospitals.” They are both mature students, there is an obvious age gap between them and fresh high school graduates. The two interviewees gave similar responses on their expectations of their instructors and fellow students:

- “I prefer instructors to be approachable, and not put students down because of age differences.”
- “Instructors need not give me special treatment, but at least consider me the same as the rest of the class and don’t put me down. I would also prefer classmates to better understand and respect my reasons for returning to school.”

Gender Differences

Various literature assert the difference in learning context between males and females (especially in mathematics and science). Although rapid technological advancement might affect men to some extent, it is a hurdle for some women. “I feel totally uncomfortable with high technology equipment like computers; I get nervous whenever I have to sit in front of the computer to type my essays,” said a female student returning to school after 19 years as a homemaker. Instructors need to be aware of the gendered context of previous learning that might become an obstacle in the current learning (Hartman, 2000).

Learning Styles

Both Kolb (1976) and Tobias (1990) have detailed discussions on different learning styles. However, many instructors do not take into consideration the diversity of learning styles and their implications to the success of learning. I have previously discussed how an instructor can get students to focus on the material by accommodating different learning styles, thereby helping students who are learning complex subjects such as statistics to feel less anxious (Chan, 2002). Formation of discussion groups and open-ended questions can be one of the ways to create a comfortable atmosphere where students can ask questions and think critically (Chan, 2002).

Strategies to Handle a Diverse Student Population

Reaching a Consensus

Instructors can briefly explain the necessity to form ground rules for the class, lay out the regulations, and allow sufficient discussions on each of the tenets to ensure that every student understands the terms used. (For example, an instructor can ask the class what respect looks and feels like). In order to promote a positive classroom atmosphere that allows students to feel comfortable to take risks and make mistakes, and respect the different dimensions of diversity, it is necessary to have a consensus on the classroom’s ground rules (Andrzejewski, 1995).

Agreeing to Disagree

Instructors should use questioning techniques that personally involve students, which allows them to respond in a way that reflects their diversity and expose their fellow students to those differences concurrently. A mature student indicated, “I want [instructors and students] to treat me with respect by taking all my opinions into consideration and not just ignore them.” In a classroom setting, instructors can honour the differences, continue the discussion, and discover what students can learn from one another (i.e. ‘agreeing to disagree’). As a result, diversity is embraced and the discussions are fruitful and mutually enriching.

Empowering Prior Knowledge

Each adult learner possesses a set of previous learning experiences and attitudes that can either block or contribute to the learning process. For example, for mature students who lack confidence in their return to school, I emphasise particularly that mistakes are an inevitable part of learning, and choose evaluation methods that provide frequent feedback to build a sense of competence. I also use problem-based learning assignments with real-life research examples to foster an active and practical learning approach that is relevant to all students.
By setting ground rules, allowing discussion of different opinions, and empowering prior experiences, different types of learners can be accommodated. In addition, the amount of anxiety that students experience either in learning complex subjects or upon returning to school after many years can be reduced significantly.

**Challenges of Implementation**

It is challenging for an instructor to create a sense of community in large classes (especially in the first few weeks when teachers need to pay special attention and determine the kinds of diversity that need to be addressed). Large classes also make it difficult to come to a consensus where ground rules are concerned; students may lose patience with the teacher who tries to include everyone’s opinion.

Despite the difficulties, it is important for instructors to try to deliver their lessons in a way that accounts for the class’s diversity and various learning styles. A female interviewee indicated that her instructor did not acknowledge her learning style even though she had pointed it out to the instructor.

Since it is impossible for instructors to understand all the different cultures that exist in the world, choosing words and phrases that are acceptable to every culture is difficult, making it easy for instructors to offend the students unintentionally. It is an also a challenge to determine when to use jargon in delivering lessons to students for whom English is not their first language.

**Conclusion**

As educators, our goal is to embrace as many different dimensions of diversity as possible in teaching and learning. Consequently, educators need to be aware of the issues of a diverse student body, incorporate strategies to handle such matters, and to address the challenges of implementation of these strategies. By doing so, we can help students develop skills to cope with a diverse world.

**References**


1. Critical Incidents V: Diversity and Inclusion video produced by the University Victoria, Office of Equity Issues has a vignette on a student who confronted her instructor about her discomfort with one of the terms the instructor used in a history class.

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**Strategies for Achieving ‘Cultural Synergy’ in a Culturally Diverse Student Body**

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Given the respective definitions of heterogeneity and homogeneity as ‘diverse in character’ and ‘of the same kind’, it becomes difficult to think of any group of people as homogeneous. Who could ever claim that a group of students would be ‘of the same kind’? We might point to similarities like discipline, age, gender or culture, but it is rare that student groups will fit into only one of these categories; they are all ‘diverse in character’. In this article I want to focus on how working with groups of students from different cultural
backgrounds has challenged me to be more diverse in my teaching approaches.

Watkins & Biggs (2001) suggest that good teaching practice is not just a matter of enacting a particular approach, but also focusing on student learning. They recognise that there are some universal principles of good teaching that involve supporting students to engage with learning at an appropriate cognitive level. These are not new concepts to those of us who reflect continuously on our teaching and learning practices. What is less often the subject of critical debate is that how students are encouraged to engage with learning is also dependent on a culturally appropriate approach to teaching influenced inevitably by socialisation practices and educational values.

My approach to teaching and learning has been influenced by Knowles’ (1990) guiding principles of adult learning and has developed out of my experience of being an adult learner and educator working mainly with ‘non-traditional’ students. These students are usually studying part-time, combining their study with work and family commitments. Knowles’ (1990) principles suggest that adult learning is most effective if students:

- Are involved in planning how the learning takes place,
- Feel comfortable in the learning environment,
- Believe that their experience is valued, and
- Are helped to relate the learning of the ‘classroom’ to their world outside.

Such principles are not only sound and applicable to any group of students, they are also clearly student-centred and congruent with my belief in the ability of human beings to reach their full potential. They are however located within a western view of the world, emerging from an individualist culture where individual fulfilment is paramount. They may have less relevance to students who come from collectivist cultures where more emphasis is placed on group rather than individual good and where success may involve significant others (e.g. the family, peers and society as a whole). The challenge of working in an international multicultural environment is to acknowledge that my approach to teaching and learning has developed through my own individual enculturation and personal beliefs, which may differ from those of the students. What is important therefore is to develop teaching practices that are culturally suitable, sensitive and clearly driven by a student-centred theory of teaching and learning.

Cortazzi & Jin (1997) talk of ‘cultural synergy’ and building bridges of ‘mutual intercultural learning’. They suggest that cultural understanding and harmony will emerge through the mutual effort of teachers and students to understand each other’s academic cultures, cultures of communication and cultures of learning. In the learning environment, I seek to work towards ‘cultural synergy’ in a number of ways. I recognise that my own preference for a highly discursive experiential approach to learning may be unfamiliar to many students. It may be threatening for those students who feel less confident about their spoken English and who may hold culturally-based perceptions of silence and reticence (Jones, 1999). Such an approach therefore needs careful introduction. Embedding an explicit statement about teaching and learning methods in the course outline is one way of doing this. Using part of the first session to set a group contract or guidelines for working together is a useful method of encouraging concerns, including those about language. For example at the beginning of the academic year in October 2002, one student in my group asked others to excuse his ‘poor English’; I responded that students also needed to excuse my English as I might unknowingly use expressions that were unfamiliar to them and it was important to me that they felt able to ask me what I meant. Providing suggested readings as preparation for each session can help students to feel that they can engage in discussion more easily with others because they have some knowledge to draw on (Jin & Cortazzi, 1998).

To encourage early harmonious working relationships outside the teaching session, at the beginning of the Autumn term in 2002, I asked the students to work in small groups each to prepare a short presentation on a different aspect of a particular theory. I ensured that the groups were culturally mixed, as students from similar cultures tend to work together and then regret lost opportunities for learning from each other’s cultural diversity. Students have said that this activity really helped them to begin to get to know each other at a very early stage of the course and alleviated feelings of homesickness for some of them. I recognised that although I wanted to invite questioning and feedback in my groups, some students would feel uncomfortable, fearing that I would either receive their questioning and comments as criticisms or that I would lose ‘face’. Supporting them to work together to raise questions and allowing them to give feedback anonymously or to me in a tutorial could help them to develop their confidence to engage in this kind of open dialogue. The differences in feedback could then be used to highlight distinctiveness in learning approaches.
De Vita (2002) draws attention to the varied ways in which the logic of students’ own culture and language influence the structure and style of their written work. It is therefore essential that international students be helped to develop their essay writing skills by teaching them the local conventions for presenting and structuring material. The Graduate School of Education does this through a series of Learning Skills seminars, by providing a Language Support person, and by tutors’ willingness to comment on draft assignments. I help students prepare for their written assignments by providing opportunities for critical consideration of concepts in the ‘classroom’. As the students are encouraged to discuss the relevance of concepts in their own context, it enables them to recognise that this same critical approach is being asked of them in their written work.

The principles of openness, a willingness to recognise the cultural and educational influences on the teaching and learning approach, and a desire for dialogue within the learning community can be applied to any subject discipline. Implementation of such principles can give greater confidence in ‘coping’ with a heterogeneous student body, whatever the ‘diversity in character.’

References


Coping with a Heterogeneous Student Body

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Heterogeneity dots the landscape of tertiary education in a world increasingly defined by cultural diversity. Within the context of a variegated world, there is reason to suppose that today’s students have a seemingly vast array of diverse ideas to pick and choose from when they attempt to forge a life- and world-view. As educators encounter a multiplicity of life-views and thought patterns at the frontlines of teaching, it is in this sense that we approach the issue of student heterogeneity.

Heterogeneity can of course be narrowly defined by some superficialities such as height, age, weight, colour of one’s hair and so on. Yet each of these criteria does not constitute a relevant enough source of the challenges we face in the classroom, laboratory or clinical setting. Similarly, other seemingly important differences (e.g. diversity of nationality, race, religion or gender) matter only because such social groupings partially account for the differences in learning styles and frameworks of thinking amongst the members of different groups.

In our view, the difference that counts as far as teaching is concerned is the heterogeneity that is informed by the diversity in thinking orientations and frameworks of understandings. In other words, it is the differences that are defined by one’s framework of reference that poses the most intriguing pedagogical challenge to the modern educator. Consequently, the educator must question if the diversity in thinking orientations amongst the students is as heterogeneous.
as it may seem to be. Sometimes individuals may appear to be holding extremely contrasting positions when their differences are actually just shades away from each other; the dissimilarities may not necessarily constitute deep chasms informed by the clash of the differences between all-embracing, comprehensive paradigms.

In addition, there appears to be a sense of disintegration in the way we conceive how things work in the world. For example, we are prone to dissociate engineering principles from principles governing the bio-medical sciences. Yet, not only is the integration between them possible, but it is in fact being forged within our university community to improve the respective disciplines and the society that we serve.

Such a fragmentation in our perception could have arisen because of:

- The century-long trend towards increased specialisation of the disciplines, leading to a lack of a sense of ‘interconnectedness’ of the world, and
- Our educational system that used to place a premium on memorising facts in bits and pieces without any attempts to relate the information to overarching themes in the learning process.

Thus, frameworks of understanding tend to be loosely forged such that what often comes through are snatches and bites of an incoherent mass of views and ideas that oftentimes represent knee-jerk reactions to issues rather than well thought out positions that is logically consistent with our other ideas. Against this backdrop of ideational disintegration, the teacher emerges as a resource by which students are encouraged to re-examine their frameworks of understanding to see if some of the ideas they hold are in keeping with observable reality and are in tandem with some of the students’ other ideas in their respective conceptual complexes.

In our view, the teacher ought not to form conceptual complexes for students as this would pre-empt the process of self-discovery. Rather, the teacher’s role is to:

- Encourage students to construct their own complexes,
- Help to broaden the bases of the students’ complexes, and
- Integrate the scaffoldings (ideas/concepts) around a number of basic principles.

The process is achieved through suggesting plausible alternative perspectives to interpret the phenomena in question and subjecting those ideas/concepts and their inter-relationships to a process of logical and analytical scrutiny. For example, when our Unit engages students to think of the concept of ‘the self’, students initially think of it as arising out of the individual’s personality. Though it may well be true, there is also a case for suggesting that ‘the self’ arises out of the multiplicity of interactions that are socially grounded, causing us to think and behave differently in different social contexts. Students are encouraged to conceptualise the phenomena in various ways to see if they represent diametrically contrasting positions and examine other logical ways by which the observations can be integrated and applied.

Based on this process, it is possible that students are able to construct as many alternative conceptual complexes as they wish. While some of the conceptual systems will either be more sophisticated or more faithful to empirical reality than others, they all lead to more coherent and tightly knitted ideas and concepts than if the integrationist agenda were not followed through. In other words, if there is going to be heterogeneity in thinking orientations, these differences ought to flow out of the diversity of well-integrated frameworks of thinking and schools of thought rather than out of bit-part disagreements over isolated ideas and concepts.

However, it does not mean that once these frameworks are forged, dialogues among different schools of thought are impossible to achieve. The teacher again emerges as a resource by which the process of engagement across frameworks of understanding is facilitated. Otherwise, communication between proponents of diverse schools could break down in the heat of rhetorical arguments, thereby short-circuiting the learning process. Even though a framework of understanding has been rigorously constructed, and praxis may be achieved on the basis of particular frames, there is always room for more testing, more re-formulations and more rectifications of one’s assumptions. To assume otherwise is to stagnate learning by smothering the feedback loops in rhetorical clashes in the place of dialogue across schools of thought.

To achieve all of the above, the teacher needs to have:

- Clarity of mind so that the essence of different views are surfaced and not mere superficial dissimilarities,
An undergraduate in the University Scholars Programme (USP) takes eight first-tier modules. Of these, one is a compulsory writing module and the other seven, designed to provide breadth to the curriculum, are broadly classified into two domains: Science & Technology (ST) and Humanities & Social Sciences (HSS). Currently, students from the science-based faculties take three and four modules from the ST and HSS domains respectively; students from arts-based faculties take three HSS modules and four ST modules.

From the above situation, it is evident that USP students need to cope with a rather demanding distributional requirement. In addition, although the modules in the Scholars Programme are not difficult in terms of factual content, they are generally somewhat sophisticated. Modules in the ST domain begin discussions of science/engineering/technological/mathematical concepts generally at a rather elementary level, but proceed rapidly to rather sophisticated levels within one semester. The same situation applies to HSS modules.

For instance in *Fundamental Concepts of Physical Reality*, a module that I am familiar with and had taught in semester 1 of AY 2002/03, the discussion began with the students writing a paper on their perceptions of physical phenomena, proceeding to Newtonian ideas of absolute space and absolute time, continuing through to Einstein’s relativistic space-time, and then ending with a discussion of the equivalence of mass and energy. Such a progression (typical of Scholars modules) is meant to bring the students to a non-trivial (perhaps, second-year level) appreciation of major ideas in the field even though each module generally begins from ‘scratch’.

Given the above, a problem faculty members teaching Scholars modules can expect is the difficulty of conducting a sophisticated discussion of concepts when a significant number of the students have either no background or only a rudimentary understanding of the subject. This problem is especially more acute for the ST modules perhaps because of the widespread perception that science, mathematics and engineering are difficult or, worse, merely for those who indulge in technical matters.

In any case, the faculty members teaching ST modules in the Scholars Programme have recently started discussions on how self-help material in science/mathematics can be compiled for the students. The aim is not to use this material as a substitute for the initial elementary/introductory material that each Scholars module invariably contains, but to help students recall what they ought to have encountered in high school. It is hoped that this effort can help some students

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**Self-help Material for USP Students**

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who come into the programme with deficient backgrounds in science and mathematics. At least, if the students feel less discomfort with science/mathematics, it would be a big step forward in helping them to handle their work in the ST modules. The compiled material is also intended to help students who have gone for two years of national service recall some essentials of what they have learnt in high school.

The material that we hope to put together is rather simple. There are numerous introductory books on science and mathematics that can be used. Besides, many introductory physics texts also have mathematical appendices that are focused on the basic mathematical skills/knowledge required to ‘do the physics’. A number of faculty members are currently looking through these books and appendices in order to work out a ‘roadmap’ to guide the students through this self-help material. Though this ‘roadmap’ is probably going to be our only input, it is deemed to be rather important given the huge amount of available introductory materials in science/mathematics. Indicated on the roadmap will be a sequence of readings, specific exercises or problems found in specific pages/paragraphs of selected books that the students should work through according to a timetable. In addition to readings/exercises from texts, we are looking at including CD-ROMs as interactive learning materials. As the students work through the path indicated on the roadmap, they will continually self-evaluate their progress.

We have discussed some operational details, and one possible operation mode is as follows:

• An evaluation/assessment will be set during the admission exercise,
• Results of the assessment will be used during student-mentor discussions to determine if the student requires the self-help material,
• The student will be encouraged to make use of the material if he/she does not have a strong background. However, the material will also be made available to everyone,
• The student will keep a log as he/she works through the material. Though faculty members will be available for help/consultation, the students will have to put in effort to work through the exercises/problems (i.e. it will be a student-driven effort and no model answers will be provided until the students have worked out their own solutions), and
• There will be no set time frame to work through the material available.

Ultimately, the self-help effort is meant to achieve two things: to help students learn/reacquaint themselves with some introductory mathematics/science, and perhaps more importantly, to boost the students’ confidence in dealing with mathematics and science.