

Appendices

Investigating responses to diversity in a secondary environment

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Appendix A: Case study 1

Diversity: What we say and what we do—aligning policy and practice

Schools are a nurturing, foundation block of our society. A school's policy and its practices should reflect its commitment to its diversities as well as its unifying aims. However, striving for unity can end up marginalising diversity, and *vice versa*. The purpose of this study was to assess the processes for formally identifying, recognising, and addressing diversities in a methodical way school wide.

Research questions

The research questions were:

1. Do the college policies show the college's:
 - intention to address student diversity
 - perceived subject provision
 - awareness of perceived relevance?
2. How does the college adapt to the needs of its students?
3. How will the college set future goals?

Methodology

This study was in four stages.

1. Trawl of Linwood College policy statements to ascertain:
 - the extent to which the policy documents addressed diversity
 - the consistency of approach when addressing diversity types and their contextual setting.
2. Questionnaire 1 to heads of department (HoDs), which asked what HoDs perceived is the provision for diversity in their department. This was to ascertain non-context specific data that would reflect departmental practice. The questionnaire was voluntary.
3. Questionnaire 2 to HoDs (voluntary), asked what they perceived are relevant diversities to their subject areas. This was to establish the range of perceptions about diversity and whether this was reflected in *informal policy*.
4. An interview with volunteer HoDs to discuss the results of the questionnaires and the implications for their department.

Policy trawl

This looked at school policy statements on curriculum development, special teaching needs, sports education, the Treaty of Waitangi, the Parent Teacher Association, and community consultation. Department policy statements were requested from individual heads of department. Selection was based upon words or phrases implying a consideration of diversity (e.g., range, flexibility, ethnicity, etc.). These key words/themes were documented and the quantitative outcomes were used to inform the direction of the next stage.

Questionnaire 1

Questionnaire 1 was as open ended as possible and was produced through informal discussion with a number of staff. It was addressed to HoDs and asked:

- What provision do you believe you have in place within your departmental area to cater for and utilise diversity?
 1. Formal (documented within planning and policy)
 2. Informal (not documented).

The questionnaires were distributed by email. A word frequency count was employed to analyse the responses (Table 1). Word frequency counts (University of Salford, 2000) allow simple quantitative comparisons to be made.

Questionnaire 2

Questionnaire 2 asked HoDs what they recognised as diversities within their departmental areas. Like Questionnaire 1, it was open ended and distributed by email. Responses were also analysed with a word frequency count (Table 2). There was a gap of five weeks between questionnaires 1 and 2, to allow for triangulation and minimise carry-over effects from answers to Questionnaire 1 (Cohen & Manion, 1997).

Interviews

All HoDs were invited to take part in discussion of the data generated from the questionnaires. Two HoDs were available within the timeframe required by the study and were interviewed in a semistructured format (Cohen & Manion, 1997).

The aim of this part of the research was to develop a “working meaning” from the questionnaire frequency responses given in stage two, to generate further questions and the proposal of a list of “next actions” to be taken by the researcher, the departments (downfeed), and statements of implications to advise the Senior Management Team, the Board of Trustees, and HoDs (upfeed).

During the interviews, I outlined the aims of the whole project and summarised the individual projects being carried out throughout the college. I also wanted to check the results of the questionnaires with HoDs so they could consider what the actions would be taken next, at departmental and research levels. We also discussed the implications of the research for the college and college senior management.

Findings

Review of policy trawl

The college policy documentation reflected a general commitment to several diversities within the college—primarily culture, race, socioeconomic background, and educational needs, although social diversity, age, home backgrounds, and parental/guardian relations were also identified. While the policies articulated expressed a general intent to provide flexibility to meet the needs of diversity, there was no strategy to formally identify, record, and plan for diversity. Even though one of the objectives of this project was to find the strengths and goals of the existing policies, this was not possible due to the lack of context and bench marks.

The following questions were derived as a result of the policy trawl:

1. As a college, what diversities do we identify with?
2. What diversities do we commonly feel we plan for?
3. Are these the same diversities as those we believe to be relevant in our teaching?
4. How do we contextualise “relevance”?
5. How do we plan to construct and implement policy that places diversities in context settings?

The questionnaires addressed questions 1 to 3. The HoD interviews began the process of addressing questions 4 and 5.

Review of Questionnaire 1

There were seven departmental responses to the questionnaire. Two other departments only provided copies of their policy documents, which were unsuitable for this study.

Table 1 **Types of diversities provided for in departments (HoD responses). N = 7**

Types of diversity	Number of HoDs
General subject ability	6
Māori	5
Learning styles	4
Pasifika	4
Interest	4
Other cultural groupings	3
Assessment	2
Cultural differences	2
Literacy level	2
Vocationalism	2
More able students	2
Goal setting	2
Gender	1
Curriculum/subsubjects	1
International languages	1
SEN	1
GATE	1

Review of Questionnaire 2

There were six departmental responses appropriate for analysis. General subject ability was mentioned most frequently. The next most commonly identified diversity factors were: background, individual needs, attitude, previous school/educational experience, knowledge level, age/year group, gender, assessment, cultural differences, and learning styles. Lowest responses covered: values, religious beliefs, individual understandings/cognitions, school improvement needs, planning, teaching style/strategy, choice/variable outcomes, inclusion, relationships, skill types, international languages, European, Pasifika, Māori, and interest level.

Table 2 **Types of diversities indicated as relevant to individual departments (HoD responses). N = 6**

Type of diversity	Number of HoDs
General subject ability	3
Backgrounds	2
Identifying individual needs	2
Attitude	2
Previous school/educational experience	2
Skill level	2
Knowledge level	2
Economic background	2
Age/year group	2
Gender	2
Curriculum/subsubjects	2
Assessment	2
Cultural differences	2
Literacy level	2
Vocationism	2
More able students	2
Learning styles	2
Values	1
Religious beliefs	1
Individual understandings/cognitions	1
School improvement needs	1
Planning	1
Teaching style/strategy	1
Choice/variable outcomes	1
Inclusion	1
Relationships	1
European	1
Skill types	1
International languages	1
Other cultural groupings	1
Pasifika	1
Interest	1
Māori	1

Comparison of questionnaire data

The data from the six respondents to Questionnaire 2 were compared with their corresponding responses in Questionnaire 1.

HoDs indicated that the type of diversity that was provided for and that was most relevant for their departments was general subject ability. Fewer HoDs saw it as relevant than wanted to have provision for it. However, a much greater number of “related” categories were recognised in Questionnaire 2, such as: individuals’ understanding and cognitions, identification of individual needs, choice/variable outcomes, skill types, skill levels, knowledge levels, and previous school/educational experience.

When asked about how their department provided for diversity, the highest responses were for Māori, Pasifika, and “other cultural” groupings. However, all three were seen as having little relevance to subject. The latter was quite a surprising finding.

GATE, SEN, and more able students received very low recognition for either provision or relevance (Table 1 and Table 2). However, some of this may be accounted for in the increase in the “identifying individual needs” category, which scored higher for relevance than it did for provision.

The data reflected a change in awareness of diversity in the time between the questionnaires. The comparisons outlined above raised further issues such as:

- What is the significance, if any of the mismatch between the perceived provision and relevance of Māori and Pasifika considerations?
- What does “general subject ability” mean?
- Should policies adapt to address our practices, or our practices adapt to meet our policies ... or both?
- How do we standardise our perceptions of diversity, yet still maintain the integrity and complexities of our diversities?

Interviews with HoDs

The categorisation of the types of diversity was created by the researcher. Some HoDs may not have understood what could be included in these categories. Therefore, the categorisation of the questionnaire responses limited the way both questionnaires could be compared.

In two of the interviews with HoDs, we discussed the apparent discrepancy between our provision for Māori and Pasifika issues and our perception of their relevance. We agreed that the discrepancy reflected the framing of Questionnaire 2, which by its open style implied academic relevance only. Provision for these and other groupings could exist as part of our social responsibilities in education, independently of perception of their relevance to academic outcome. This is in line with the Ministry of Education’s definition of “Purpose for Education” (2005, p. 5).

Implications and next steps

We agreed to follow up the initial research in order to refine the responses, at both departmental and whole-college levels in 2006. The data generated will allow departments to plan for diversity in a more strategic manner.

Any next step on a whole-school level must consider a review of strategic planning and policy-writing procedures. A future audit of diversities and their subsequent reclassification through departments could provide a working context to then apply to the policy statements. For this to happen, strategic planning about how to respond to and celebrate diversity needs to be developed.

Conclusion

Linwood College has many diversities among its students, some more apparent than others. The college's policy documents and the provision made in departments reflect this. HoDs indicated that the awareness of context relevance was not always apparent. However the systems for assessing "appropriateness" appear to be subjective and non-systematic—diversities are catered for where it is considered appropriate to do so.

Generally, the college policy statements provide good coverage of issues regarding diversity, primarily culture, race, socioeconomic backgrounds, and educational needs. Social, home background, and parental/guardian relations are also identified. However, policy statements lack the contextual relevance required to address a consistent coverage of the Ministry of Education's "Purpose for Education".

How departments will address a range of diversities in contextual settings such as academic, social, and others is an area that needs attention.

Appendix B: Case study 2

Addressing diversity in science through schemes and teaching approaches

Aims

The aim of this study was to research how we plan schemes and teaching approaches to address diversity. First, we considered the diversities that the teachers faced within the classroom. Second, we wanted to evaluate how the Science Road Map scheme of work developed by the department allowed its staff to plan for their diverse students. We hoped that this study would identify the diversities and allow us to develop the schemes of work more efficiently.

Background

The Road Map is an electronic copy of the science schemes of work on Excel spreadsheet (an excerpt is given in Table 5). It was first developed by a teacher from the United Kingdom as a planning tool to structure his lessons in relation to the New Zealand curriculum. It was later embraced by the whole department as a useful tool to share common literacy strategies and address the different levels of literacy within our classes. It has since developed to include the activities for gifted and talented students (GATE), resources, objectives, pedagogies, levels, practical work, cultural connections, numeracy, Internet and communication technology, and homework. The purpose of the Road Map is to provide an overview of the intention of the topics and to provide staff with an active, growing, evolving scheme of work. As a consequence of professional development for staff over the previous year focused on numeracy, literacy, and GATE, the Road Map was extended to incorporate these topics and address the diverse needs of our students.

Methodology

The focus of this study was to determine science teachers' perspectives of the diversities they faced as well as how effective the Science Road Map was in aiding them to prepare for these. This project is establishing a baseline of how teachers are planning to address diversity in their teaching. This process was expected to help adapt and improve the Road Map structure. A questionnaire was filled out by four part-time¹ and five full-time science teachers. The questions were:

¹ Part-time staff refers to staff members who do not teach a full load of science classes (i.e., teach in another department or have other duties that mean they teach less than four science classes).

1. What do you consider diversity to be?
2. What diversity do you face in the classroom?
3. Rank the diversities you listed in question 2 in order of most difficult to deal with.
4. Which diversities do you feel are the most important in your class room?
5. Do you use the Road Map? How often?
6. How does the Road Map help cater for your diverse class?
7. In what ways does the Road Map help/not help you prepare for your classes?
8. Has the Road Map made you more aware of the diversities you face?

The answers to each question were collated and categorised into tables (Tables 3 and 4). Staff were given feedback on the analysis and asked to comment at a staff meeting on these. In addition, further comments relating to the development of the Road Map and resources catering to diversities were noted during departmental meetings.

Findings

Nine science teachers completed the questionnaire. We found that staff members identified a wide range of diversities (see Table 3). Diversity appeared to cover different aspects, the general consensus being that it was: “the differences between students in our classes” and included such things as: culture, learning styles, gender, ability, skills, and personality.

Table 3 **Summary of the top three diversities identified by science teachers**

Top three types of diversities	No. of teachers
Ethnic/cultural differences	7
Ability	7
Learning styles	6
Economic advantages/disadvantages	4
Gender	4
Social skills	3
Literacy	2
Age	2
World views	2
Interests	2
Motivation	2

The science teachers were also asked to rank which diversities they found most difficult to deal with and which ones they considered to be most important. The top three diversities named by each staff member were analysed. The results are summarised in Table 4.

Table 4 Diversities as ranked by teachers, in descending order

Most difficult diversities to deal with	Most important diversities in terms of relevance
Ability	Social skills, behaviour
Ethnic, cultural	Ethnic, cultural, ability
Social skills	Literacy, numeracy, gender, learning styles, educational readiness, interests, motivation
Literacy, numeracy, learning styles, gender, world views, educational readiness, motivation	

The questionnaire also asked staff how the Road Map helped them to address the diversities of their students. It was found that all teachers used the Road Map at least three times a week either to get an overall approach to the topic or a feel for how to plan their lessons at the ability level at which the students are working. Staff also found it useful as a source of different teaching strategies and up-to-date resources that could easily be modified to suit the abilities within their class:

The Road Map is a source of up-to-date resources of a variety of ability levels and strategies. [Teacher]

The latter helps to keep the socially limited students engaged in learning. [Teacher]

The questionnaire responses also allowed us to consider how the Road Map helped teachers prepare for their lessons. The most common response was that resources and activities were readily accessible. For example, the Road Map provided worksheets that were at different levels or could be easily modified to suit a different level:

Readily available shared resources and the instructions to go with them save planning time, and allow more attention to be put into them to make them appropriate to the class or individual students. [Teacher]

At a science department staff meeting, a labelling system was developed so that the level of literacy required for a worksheet could be easily identified. The size of the groups needed for activities was also identified as a key factor. This was especially important for any co-operative learning activity. Other points about the Road Map that aided preparation were: quick access, homework sheets, good content coverage, good curriculum outline, strategies outlined, extension activities, a range of starters at different levels, and easily adaptable resources.

Helps me find activities, especially good for resources. [Teacher]

It helps me prepare by giving me a generic unit plan that I can then adapt if I need to. It also has the main experiments to complete and acts as a guide. [Teacher]

Many areas of the Road Map still need developing. Teachers indicated that they wanted:

- more resources and activities (especially those including cultural aspects)
- delivery philosophies (pedagogies) to support the activities, added by teachers with specialist knowledge of the topic
- more clarity to objectives (i.e., made more specific)
- more content (e.g., experiments).

In the second questionnaire, staff were asked to comment on the importance of these areas of development for the Road Map. The order of the five responses was very mixed. Most agreed that the Road Map needed more resources and activities. This was also evident from department meetings, where electronic folders were added for GATE, homework, starter activities, and literacy activities. It is planned to add these resources as staff develop them over time with appropriate contexts. Some staff also identified aspects of the way they taught and culturally relevant activities as quite important.

Other areas of development or issues that were identified from the follow up questionnaire were:

- the importance of user friendliness (i.e., in opening and printing resources)
- copyright of activities and the Road Map
- identifying on the Road Map how the various activities address the types of diversity.

Conclusion

The project showed that the Road Map is an excellent resource to aid teachers in planning lessons that cater for a large range of diverse needs. The easily accessible resources make planning lessons easier and allow for more time to be spent on adapting them efficiently to suit multiple needs of students. The Road Map has made the sharing of resources between staff much more efficient, which has also led to a sharing of ideas about how to teach a topic. This discussion has been mainly verbal and is yet to be developed fully on the Road Map.

A push from the Ministry of Education (2002; Working Party on Gifted Education, 2001) on catering for GATE students has meant that this area has also been developed on the Road Map. This is expected to develop further as staff gain professional development on GATE students and feel more able to develop resources to suit these students. At the time of writing this report, this area is being targeted in two ways:

- individual activities that able students can work on independently
- group activities that can be used with a whole class.

Another area discussed in department meetings has been to develop “generic templates” of activities—a description of an activity, together with an example which can be adapted for any topic. This development has started across some topics and will continue as staff put on more resources.

Some areas of concern that have stemmed from this research are:

- copyright obligations for resources that could be taken by staff to other schools
- the loss of resources due to system failure (somewhat abated by constant backups)
- loss of the links to resources when alterations are made causing file pathways to be lost.
This will be solved as a more definite system for categorising resources is developed.

There is scope for the department to consider how it might embrace the idea of multiple diversities. It has started to address some aspects of diversity through the identification of aspects of motivation and the appropriate group size for activities. The Road Map is an excellent tool that will in time develop to allow all science staff to plan for ways to address multiple aspects of diversity.

Table 5 Section of the Science Road Map

Item title	National Curriculum Level	Foundation	Intermediate	Higher ability	Lesson objectives	Pedagogies	Activity	Resources	Literacy
Topic starter		*	*	*	To gauge class prior knowledge. To instil interest in topic.		Post-box or students draw their favourite animal and see if others can guess what they have drawn.	Post-box	
Defining an animal		*	*	*	To revise MRS GREN. To distinguish animal features.		Issue front page for unit. Revise MRS GREN: Could do this as a group task to list common features of all animals, or to define "animal". Text page 27.	Text: 3 Science book one, chapters 2 & 5.	See RTLB for excellent early reader booklets, Skill Seekers' series, "Amazing Animals".
Classification of animals	LW 4.1		*	*	To revise the taxonomic system with reference to at least 3 categories: kingdom, genus, species. To recognise scientific names of animals.		Classification revision: organisation into kingdoms, phyla, genera, species. Using a key.	Refer to Blooming Good unit for classification resources. Animal classification cut and paste. 3 animal ID task. Insect key (class set available from Sc) & Hwk Starter— animals 2 & 3 .	Teach higher classes singular and plural forms of the classification categories: phylum/phyla, genus/genera, species/species.
The place of animals in living systems	LW 2.1 3.1 4.1	*	*	*	To construct and interpret community trophic levels, food chains, food webs.		Living things depend upon each other for survival—food chains, food webs, trophic levels.		New vocabulary: autotroph, heterotroph, herbivore, carnivore, omnivore, parasite, saprophyte, grazer.
Adaptations of animals	LW 3.2 5.2	*	*	*	To define and give examples of animal adaptations. To explain how adaptations aid survival.		Notes on types of adaptations with examples. Text readings.	OHT notes—adaptations.	New vocabulary: nocturnal, diurnal, structural, behavioural, physiological, camouflage, mimicry.

Appendix C: Case study 3

Responding to diversity in physical education

Catering for the diverse learning needs of our students in physical education lessons was a key focus for our department in 2005. This action-research project examined how the physical education department responded to the diverse learning needs and cultural backgrounds of students.

We began the process by asking what were the needs of our Year 9 students. In particular:

- What skills should students have by the end of the year?
- What are the best ways to develop these skills within physical education?
- How can we meet their needs?

The skills we chose as most important and way we decided to teach them are presented below.

Table 6 Targeted skills and associated planned activities for addressing these

Skill	Activity	When taught
Communication skills	Adventure-based learning, small balls	Term 1
Collaborative skills	Movement, large balls	Term 2
Fair play/Olympic Ideals	Team sport, mini Olympics	Term 3
Fundamental physical skills	Athletics, touch rugby	Term 4

The action-research project involved a thorough reflection on our current practice through meetings and discussions and resulted in a team effort to reorganise our Year 9 programme and workbook.

Methodology

Our work to address diversity in physical education was based on the Carr and Kemmis action research cycle that is described by Bruce-Ferguson (2003). The methodology involved a cycle of initial reflection on practice, planning, action to improve, followed by observation. In his presentation of the five main stages in the skill development of physical education teachers, Siedentop (1991) highlights the importance of constant reflection on professional practice and expertise in order to become an effective physical education teacher. The action research cycle provided a logical methodology for improving professional practice and addressing the diverse needs of our students. We, as a department, anticipate that this will be an ongoing process in the future. The diagram below shows our first cycle of action research. The action research described here led to the planning of an Olympism unit of work.

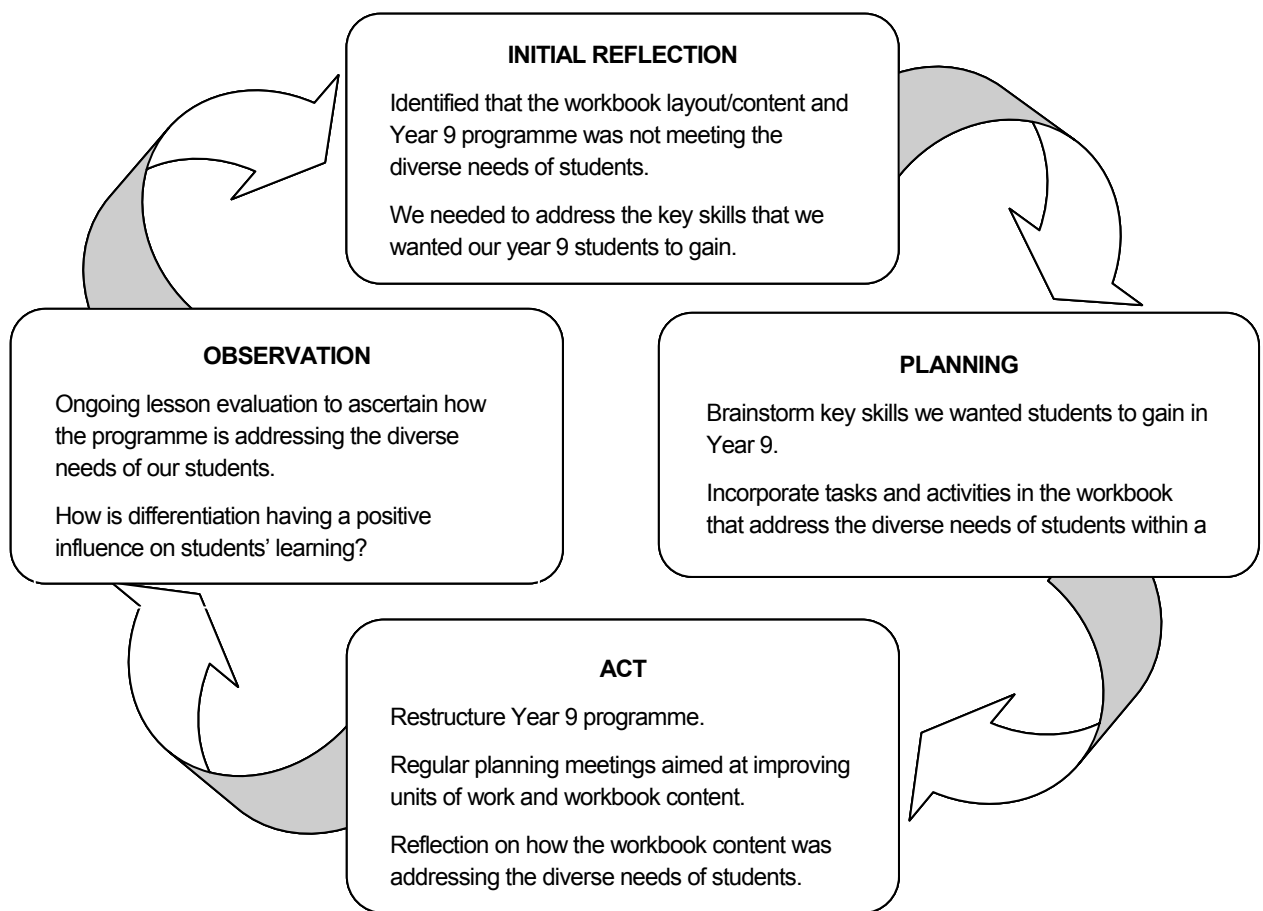


Figure 1 **Cycle of action research**

In the planning and action stages, each staff member worked independently on workbook and resource content, reporting back in departmental meetings. The focus was on ensuring our programme catered to the diverse needs of our students.

Definition of diversity

Before addressing our Year 9 programme, we discussed, as a department, what the key issues were for us in addressing diversity in our subject. We all had a broad definition of the meaning of diversity in the classroom. Zepke (2003) discusses how “diversity goes far beyond ethnic culture. It also includes gender, socio-economic class, age, sexual orientation and disability amongst others” (p. 90). Linwood College students have differing backgrounds and ranges of experiences that are unique and potentially enriching to the learning for all.

Students’ understanding of their own needs and diversities

At the start of the year, students completed a personal profile in their workbooks that was used to increase and help to build their awareness of their own unique differences. It also gave teachers an insight into how students were thinking about themselves and contributed to the relationships that

teachers built with the students. Building relationships and getting to know students is an essential component of inclusive teaching (Zepke, 2003). Thinking about what each individual has to offer, rather than the baggage they sometimes bring with them, is key to unlocking their potential. By getting the students themselves to identify their strengths and areas for development, we are helping them to become more aware of their own needs.

Students' understanding of others' diversity

Within our Year 9 programme we have placed great emphasis on students developing their own understanding of diversity. The idea that we all bring different strengths to a certain lesson and that by working collaboratively we will achieve more, is a central aim of our Year 9 programme. This is the basis for planning in the Olympism unit.

Diversity in levels of ability

A central underlying concept of the Health and Physical Education curriculum is the socioecological perspective which encourages students to take account of considerations that affect society as a whole, as well as an empathy for individual circumstance, and discover the need to integrate these. Central to this concept is “physical education is for all” and that being “physically educated” is about developing key knowledge, attitudes and values, skills, and understanding, and not simply just about being physically able. It is always pleasing to see students with intellectual disabilities from the Linwood College endeavour unit catered for with this central concept in mind, by being included in mainstream physical education classes with carer support.

A key focus in our planning has been catering for all levels of ability within classes. Adopting less direct teaching approaches and developing student-centered learning has been a central part of our work. We have now incorporated co-operative learning for both practical and workbook tasks along with differentiated learning experiences between and within classes by allocating roles to students for group work and giving them responsibilities within groups. We consider that physical education has inherent advantages when it comes to teaching social skills and collaboration to achieve a common goal. It is hoped that our explicit teaching in this area will make it easier for every department at the school to incorporate co-operative learning activities into their learning programmes.

Student voice

Part of our action on addressing diversity within classes has involved informal discussions with students to ascertain whether the Year 9 programme and workbook has catered for their needs and learning styles. Evaluating our revamped programme using student feedback within lesson time more formally using student questionnaires], is an area to target next year when we observe and reflect on the effectiveness of our programme changes.

Outcomes of the action cycle

As a result of our reflection on what we do and what we needed to do next to address diversity more directly, we collaboratively developed a unit of work on Olympism. In this unit, an awareness of diversity will be facilitated through students participating in a range of activities and celebrating the diversity of the class in a mini Olympics run in accordance with the Olympic ideal. Students will be encouraged to “investigate and experience ways in which people’s physical competence and participation are influenced by social and cultural factors” (Ministry of Education, 1999, p. 23).

A number of the practical activities in the Olympism unit will involve the students in designing games and events that will be used in a mini Olympics towards the end of the unit. Many of the Olympic ideals highlighted below are central in addressing diversity within a class.

Conclusion

In this project the action research approach was used to develop more effective teaching and learning unit of work (programmes) with a specific focus on addressing diversity. Our school vision is based on “providing learning pathways to the future”. “Celebrating differences” is stated as a key goal in our school charter.

We have found that by using the action-research methodology discussed by Bruce-Ferguson (2003), we have been able to critically reflect on our Year 9 programme and workbook. As a result we are moving away from a focus on teaching sports skills and performance to a focus on teaching social and collaborative skills through physical activities. While practical skill development is still a major part of the programme, we have reorganised our teaching to incorporate skills more holistically. Developing socially responsible students who have a broad appreciation of difference within a class has been a targeted byproduct.

Central to the planning involved in this process has been reflecting on our current practice, with a view to improving it. Becoming a “reflective practitioner” is an important step in becoming an effective physical education teacher, according to Mawer (1995). Over the coming years the Linwood College physical education department will be continuing to develop further spirals of action research to improve the way in which it caters for the diverse needs of its students.

Appendix D: Case study 4

Unity and diversity within the Integrated Studies Syndicate

Background

The Integrated Studies Syndicate (ISS) is a group of four primary-trained teachers who provide a home-room approach for low-ability and special needs Year 9 students, to ease their transition into the secondary environment. The students have a range of abilities, but all are within levels 1–3 of the curriculum, which equates to Years 1–6 of the New Zealand Curriculum Framework. Some of the students enter with a reading age as low as 6 years (in one case, at the pre-reader, word recognition stage), while their chronological age is 12–14 years.

The ISS works with students who are the most diverse in the school, and with the greatest learning needs. Students arrive with a mixture of learning, emotional, and (at times) physical needs. They also often have high dependency, established attention-seeking behaviours, and truancy issues. The syndicate caters for a high proportion of Group Special Education clients who fall within the top one percent of identified extreme behavioural needs (issues include foetal alcohol and drug syndrome, sex offending, oppositional defiance disorder, attention deficit disorder, attention deficit hyperactivity disorder, and truancy).

At the start of each year, students undergo a wide battery of tests to identify specific needs or areas of weakness to be addressed. This includes ASTTLE reading and writing tests, the Burt, Vernon, Probe, and PAT listening tests. Data from these tests are used by the ISS teachers to provide a programme of study that meets individual students' needs. Candidates with specific learning difficulties are identified through these tests for the Toe-by-Toe Programme (Cowling & Cowling, 1993). Most tests are repeated in Term 4 to gauge growth and for reporting to parents. These data are also used to aid in class placement and forward planning for Years 10 and 11.

The ISS caters for students in both Year 9 and Year 10. It allows students to continue the homeroom situation and receive greater support within their learning environment.

ISS staff approach the students in a very different manner from most secondary-trained teachers, focusing on relationships. Students entering Year 9 are generally expected to be able to work formally and informally in individual, paired, and co-operative groupings. Interestingly, students in the primary sector tend to just do this, with minimal training or direction from teachers. However, students often need to develop or be retaught these skills within the secondary environment. Why do students forget or lose these skills between primary and secondary school? Could this be an age-related deficit? Is it the change in their environment, or are they reverting back to a previous egocentric stage? These are important questions to investigate, but are outside our current research.

The syndicate teaching role is based on the creation of routines and set expectations, all the while developing positive and open relationships.

Definition of diversity

We defined diversity in education as: “Having many diverse parts, requiring collaboration between teachers, students, and colleagues to be connected”. It cannot be seen in isolation, as all students are unique in mind and thought, abilities, strengths, and weaknesses. Therefore, it is a complex system of very different parts, all connected to the learning guide (the teacher), whose function is to encourage students to achieve to the best of their ability. The staff in the ISS believe that addressing diversity is an ongoing and dynamic process.

Research question

Our research question was:

- How do we best address the diverse needs of our students?

Method

In Term 2 of 2004, we decided to examine our current practice. The syndicate teachers collaboratively discussed and analysed what we were doing and how this affected our students in terms of positive engagement in learning activities. As a result, teachers worked closely to prepare and develop an integrated class programme.

One of our biggest problems in teaching was the students’ lack of social skills. These were also the hardest for the students to learn. After much deliberation and changes in our approaches to our teaching and choosing more relevant content, the problems still existed. We concluded that in order for students to learn we needed to ignore the Year 9 academic curriculum and focus on developing social skills, which technically fitted into both the health and social studies curricula. Adding the required English components was straightforward, as we integrated material from the social skills programme we developed.

In designing a workable unit, we adapted the social skills programme currently in use in New Zealand primary schools.

Teachers started by asking their students about themselves, their hopes and ambitions, and how they wanted to be treated. Next, teachers identified their expectations for behaviour in the class, and the consequences of both good and bad behaviour. This enabled the students to see that, although they have the right to be educated, this also meant they had responsibilities. They were asked to identify these responsibilities and rate them in importance, both as an individual and from the point of view of the class as a whole. This gave students ownership of what they believed was acceptable and unacceptable performance. Interestingly, this reinforced for us how important ownership is in student performance. When students had input into how they would like to be treated, they felt acknowledgement of their needs.

We then asked the students to identify the qualities they most valued from their friendships, and to give reasons for this. We wanted them to reflect on the behaviours they would like and hopefully transfer this to how they should behave. Then we developed a collaborative class contract. This activity required students to evaluate their choices and decisions on a daily basis, particularly in the lessons following morning break or lunch times. “Stop, think. Is this a good choice?” We encouraged students to discuss and evaluate previous choices. Students were continually prompted to reflect on their agreed class contract and their behaviour in relation to it. In 2005, we revised the contract with input from the students.

Students were asked to rate their behaviours against three specific responsibilities:

1. to respect others’ right to learn without interruption
2. to be thoughtful, co-operative, and tolerant
3. to apply their best possible efforts at all times.

This simplified contract ensured that the students were able to easily evaluate their actions within the classroom environment. Students went on to develop behaviour plans specific to each homeroom, including their preferred reward systems. Each student was able to put forward their views and ideas, which allowed them to feel at ease and take ownership of the process and outcomes. Because all students had to be involved in the decision making, all were catered for, which effectively meant that each individual’s needs were met while the diversity of the students as a group was respected. They each also were expected to take responsibility for their future behaviours and actions.

The next part of our action process was to teach students how to deal with a problem. This was the first step towards students understanding the stages necessary in conflict resolution. Students needed to recognise the emotional and physical triggers for anger and their reaction to it. Staff collaboratively developed a range of activities that became an “anger toolbox” that gave students ways to process their anger and calm down. This led on to strategies for negotiation and problem resolution. Class programmes for Year 9 then moved on to looking at rights and responsibilities in wider cultural and historical contexts, focusing predominantly on the treatment of children throughout history to the present day.

Findings

While working with the students ideas to derive the class contracts and reflecting on how individuals were coping, we realised that the students in fact had multiple diversities and that teachers needed to find ways of unifying the environment to cater for and include all students. The diversity was such that students were ill-equipped to cope with the normal school day, issues that arose, and one another. Teachers met the needs of individuals through reminding them of the class contract and giving them steps for how to tackle their work as well as modelling acceptable behaviours. In this way the teachers created a tolerant or safe environment through the teaching of social skills. Students learned to deal with problems without resorting to abusive or violent behaviours. As students learned to use these skills, they were better able to work within co-

operative groupings, made fewer put downs, and showed less off-task behaviours. They also became more involved in the learning process, more frequently offering suggestions and completing set tasks.

Through systematic reflection on our teaching programme, we have reorganised and rewritten our strategic plan or framework to accommodate the needs and values that the students bring when they enter Linwood College. We use multiple groupings, that is, students are grouped differently according to the type of focus of the activity in order to bring out their individuality and diversity in a safe environment.

Relationship building between staff and students is crucial in order to create an environment of respect within defined boundaries. This study achieved this through the teaching and development of positive social skills in students.

Conclusion: the way forward

For the ISS, the way forward involves the continuing evolution of a working document—our integrated class programme—that condenses the broad diversities of individuals into a more manageable plan, without losing sight of the personal identities of students within the ISS. This is one of the successes of the ISS programme—students are valued for what they bring and share, and for who they are. A core fundamental of the ISS is developing positive relationships. This underpins the complete programme and is the heart of the ISS' success. Teachers model positive relationships daily, both as co-workers and friends, so that students can understand how to treat one another. Teachers take a keen interest in their students' holistic development. For the students, effective learning comes through relationships that are based on mutual respect, trust, laughter and enjoyment, and the belief that they are valued.

The project created new questions, to which we are seeking answers. We need more information about the social skills development within the primary schools that contribute to Linwood College. We also need ways to formally document changes in student behaviours.

Development of social skills fits ideally within the New Zealand curriculum's proposed key competencies, especially those of relating to others, managing self, and participating and contributing. These relate best to the original project, which focused on introducing social skills prior to academic learning.

We decided that the proposed key competences of thinking and using languages, symbols and texts should be further introduced in a more clearly structured manner. Classroom observations indicated that students need to practise forming questions and activities that require them to consider the implications of their answers. It has been noted that the skill of forming comparative, analytical, evaluative questions underpin enquiry learning. Reciprocal teaching, where the students ask each other questions, can aid in this development. In 2006, the ISS teachers intend to include paired writing within the programme so that students learn to write expressively and edit

work with a partner. Planning will continue on developing rubrics and how to use them with students.

In light of Garry's (2005) article "Keys to Competence" we intend to broaden the focus from the social skills to the five key competencies, which include thinking and literacy skills. Staff will teach to the key competencies to help prepare students for curricula they will meet further on in their education, but with flexibility of presentation in line with their needs.

Appendix E: Case study 5

Look and listen before you leap: diversity in a social studies classroom

The aim of the research

The aim of this investigation was to reveal and analyse the responses of a largely self-selected group of above-average students at Linwood College to a range of different teaching strategies by employing a qualitative research paradigm. The primary research question was:

- “How do able students respond to working in groups?”

What are GATE students?

It is necessary at the outset to establish what is meant by GATE students in the Linwood College setting. The Ministry of Education (2000) document *Gifted and Talented Students—Meeting their Needs in New Zealand Schools* has underpinned the GATE initiatives taken at Linwood. The document recommends the use of a broad definition of such students that includes personal qualities and high performance in areas outside of the classroom. In identifying GATE students based on their classroom characteristics, the college employed the GATE model, which incorporates factors relating to intelligence (including potential) as well as performance.

The focus of this research was the response of GATE students to group-based learning. A review of the literature suggested that such students could find group situations uncomfortable (Gillies, 2002; Gross, MacLeod, & Pretorius, 2003; Mills & Durden, 1992; Ramsay & Richards, 1997; Vaughan, 2002). There is evidence to suggest that giving GATE students’ choice over group composition is particularly important in ensuring that they can work successfully in a group situation (Clark, 1992).

The use of co-operative learning strategies involving groups based on random selection, with teacher-allocated roles, takes away this element of choice and can affect GATE students’ attitudes to group-based work. In such an environment, where all students are treated the same, the academic progress of gifted students is arbitrarily limited (Gallagher & Gallagher, 1994; Robinson, 1991).

The Working Party on Gifted Education (2001) noted that content self-selection based on student interest and strengths was significant in meeting GATE student needs. Their summary indicates that classroom processes for GATE students should be independent and self directed, creative with the chance to problem find and problem solve and open ended (Working Party on Gifted Education, 2001, p. 16). One of the qualities effective teachers of gifted students need is to be able to act as a “facilitator rather than a director of learning” (Department for Education and Children’s Services, 1996, p. 51). By implication, such a teacher empowers students by giving them greater

control over their own learning—a component of which is a freedom to choose (Conner, 2004). For maximum motivation and development, GATE students should be able to self select the content and the product of a course of study (Riley, Bevan-Brown, Bicknell, Carroll-Lind, & Kearney, 2004).

For the purposes of this project, I planed a range of types of activities to ensure that students encountered a range of different types of learning experiences. Such an approach has been indicated as being important in catering for diversity amongst students (Zepeke, Nugent, & Leach, 2003).

Methodology

The research focused on ten students in the same form class in both English and social studies contexts. As the social studies teacher, I worked collaboratively with the English teacher and used a qualitative research model that also included my personal reflections. The approach within each subject was different, producing two sets of research findings.

Ten Year 9 students were invited and participated in this study. The group was of mixed ethnicity and capability, and balanced gender.

The project took place over one month. During this time, students were asked to keep a learning journal in which to record their daily comments on what occurred in their English and social studies classes.

As researcher and teacher, I also kept a reflective journal of comments relating to the problems encountered during the research and my views on how the class responded to the three teaching strategies employed. These were:

- teacher-directed learning centring on discussion followed by individual work
- co-operative learning in randomly selected groups with differentiated roles²
- choice-based activities in which students could decide whether to work alone or with others, and they could also choose what outcome they would produce.

The students were interviewed at the end of the observation period. The social studies interviews were conducted in teacher-selected pairs based on availability and compatibility criteria, except where students had worked together as part of the same group during the classroom phase of the research. It was felt that to interview students with the group members with which they worked, might have stifled honest comment.

² The randomly selected groups were both teacher selected and student selected and differed in each class. The social studies class used both.

Problems encountered

Four problems affected the data gathering:

1. *The nature of the research group itself.* In the course of the study it became apparent that the student sample contained only three students who could be positively identified as having marked GATE characteristics. The rest were “above average”, based on their entrance ASTTLE English and mathematics scores. The fact that the student focus group was by its nature diverse but not, in the main, GATE students raised questions about the relevance of GATE-based research findings to the group. There was a valuable lesson here for me: before a research plan or proposal is defined, check out the terms that are used and ensure that they are relevant for the group and for the project being undertaken.
2. *The large number of interruptions to the programme.* The students in the sample are multitalented. They were involved in a wide range of school activities that often took them out of class during the research. Given the group-based nature of much of the work that was being done, this was a major frustration for other group members—a fact that students commented on both in their journals and in the interviews. The number of interruptions made me aware of the need to ensure plenty of time for the research process, so that the project itself is not compromised.
3. *The learning journals.* Only one student maintained a daily journal of reflections. Most students made comments weekly. Despite the written guidelines they were given to assist them in their reflections, the comments tended to relate to the nature of the work done and the amount achieved, rather than their feelings about the strategies being used. The fact that a group of above-average ability was unable to make the kind of comments I expected seems to indicate that the research tool I selected was perhaps inappropriate. The journals did, however, provide a focus for the students and a useful reference point in the interviews with which the data-gathering phase concluded.
4. *The interviews.* These provided the most valuable source of data for this research, yet the way they were structured is the aspect of the research with which I am least comfortable. I am concerned that by interviewing the students in pairs the comments of one may have influenced the comments of the other, thereby undermining the validity of some of the data gathered. If interviewing was to be a significant part of a future piece of research, I would include interviewing strategies into the literature search.

Findings

Students told me in the interviews that they favoured group-based learning activities strongly over individual work, with one important proviso: they wanted to choose the groups in which they worked when longer, high-stakes learning linked with assessment was involved. Indeed, the most important unexpected finding of the research was the importance such students placed on choice in promoting motivation and enjoyment. For them, it was the most valued factor among the

teaching strategies employed during the research. Also, personal issues could significantly affect students' enjoyment of the content being studied.

Impact of personal issues on student enjoyment

The major social studies topic that was the focus for the research was a unit on refugees. Most of the students found the study interesting and preferred it to the New Zealand-based studies with which the year began.

One student, however, found the refugee theme difficult. The major reason for her discomfort was personal—her grandmother had a long-standing involvement in helping refugees in Africa. Unfortunately, her grandmother was very unwell, and studying refugees brought her grandmother to the forefront of her mind many times. My journal notes indicated that the student exhibited uncharacteristic off-task, disengaged behaviour on two occasions, and that I had talked with her about the situation. The student expressed her discomfort, but noted that the topic being studied did interest her. She brought along a video, some letters, and some photos of the refugees in Africa that her grandmother had helped over the years. When interviewed, the student noted:

I found it hard.... like if Nana and I hadn't helped refugees, I would probably have found it very interesting. Seeing it just reminds me of when she was well and stuff. [Student]

It is commonly accepted that graphic video footage with an apparently accessible commentary is a very powerful learning tool. Most students in the research group certainly found the video a very useful resource in their individual or group-based work. The responses of the GATE students in the research group indicated the need for teachers to be flexible and understanding when using a video as primary resource for a major piece of work. One of these students noted in her journal that she and her partner had accessed the material they needed, and that watching the video was "wasting class time that could have been spent on doing our project".

Another student with a retentive memory, indicated by his very extensive general knowledge, suggested that a teacher should not presume that an absence of writing was always equated with an absence of learning.

I was taking down mental notes. So I think you've got to remember, it may not look like we're doing the work, but we're taking down mental notes. [Student]

I found the responses of both these students surprising. I read the first student's disengagement as disinterest, when in fact it was discomfort with the subject matter. The other student provided me with a similar insight over a presumption it is so easy to make: that lack of physical evidence of work must mean that learning is not taking place. In the future, I shall approach students a little differently, with a concerned enquiry rather than a direct challenge to the behaviour they exhibit.

Randomly selected groups

For an election-based activity, students worked in randomly constituted, co-operative learning groups in which some members were allocated specific tasks. The activity itself was enjoyed by the students, although the random nature of the groups produced mixed reactions:

It is good to have the groups for all the election stuff, but I personally would have rather have been in a group I'd chosen to be in. However, I can see an upside to it, which is we get to work with other people and we're taken out of our comfort zone. [Student]

If a teacher chucks you in a group with people you don't know or don't work well with, then you're not going to get much work done ... some of the group members weren't friends ... and they didn't work very well together. They were just, like bickering. [Student]

One of the GATE students found her group particularly frustrating. In her journal, she wrote:

Today working in a group was quite painful, nobody listened, they talked about other things ... Some of my team mates had good ideas, but some people's input was just stupid ... What could [have] been done in 10 minutes.... took us half an hour. [Student]

One student indicated that it was important for teachers to be aware of those students whom "it would not be a very smart move" to have particular class members work with—what was needed was a way of ensuring that students were not in a group with someone with whom they did not feel safe.

Student responses indicated some acceptance of randomly selected groups under certain circumstances. There is no doubt, however, that they much preferred groups based on individual choice. The response of these students to structured co-operative learning groups indicated tension between their preference and the currently popular strategy of co-operative learning as a means of engaging students. The students certainly appeared to be engaged, but probably would have reacted negatively if this strategy had been used extensively, as it ran counter to what they valued most: choice.

Individual work or self selected groups

A desire to explore the reaction of GATE students to group work was an important factor in the construction of this research project. It was felt that the desire of such students to excel, combined with their desire to control both outcome and process, could well lead them to prefer individual over group work. There was some evidence from the students to support this view. One of the GATE students wrote in her journal:

I find working in a group OK if everybody co-operates, but I like working by myself better because I absolutely hate it when something is not done to my full ability. And what annoys me is that I can do better than some people who don't really care about the project. [Student]

Another student wrote: "I don't think I want to do it in a pair, last time I got stuck with all the work."

Personal compatibility removed the concern students had about being let down in an activity with a high-stakes product. Indeed, all students that were part of this research expressed a preference for working in groups, as long as they could choose with whom they could work:

Choice is good because ... you know who you will work well with and who you don't, and who works well and who doesn't. [Student]

I like group work because you get to talk with other people and share your ideas. [Student]

While enjoying the freedom to choose the outcome and create their own working relationship, one of the GATE students expressed reservations about giving a class too much choice:

I don't know if our class is very good at making choices ... they choose who they want to [work with] and they're obviously friends and then they do a little bit of work and talk a little but and then at the end they realise, "Oh, we haven't done much".

On the choice of what to do. I don't know if we did very well on that. [Student]

It is clear that the students preferred working in groups rather than on their own. They felt that in groups the learning was more enjoyable, and being able to bounce ideas off one another raised the level of engagement and helped their learning. All the students preferred being able to choose whom to work with. Some students noted that they might talk more with friends, but it was also easier to co-operate closely with them, and that this could be beneficial.

The importance of choice

The most compelling finding of the research was the value students attached to choice. Choice about working on their own or with other people with whom they felt compatible appeared to increase motivation and enjoyment. Students also enjoyed being able to choose the kind of outcome they produced at the end of this section of work. In a journal entry, one student wrote:

It is an interesting assignment you have given us and is very good because it caters for *everybody* and *everybody's* needs. [Student]

One student clearly preferred a learning strategy that was less directed and maximised choice:

I love choice because it means that you're not being told what to do exactly. I like choosing what I do, not being told everything because it's too much like your parents. [Student]

Another student commented: "I really liked the choice: it gave you a chance to be creative".

The importance attached by all students to the concept of choice as a factor in motivating and engaging them in their learning was a surprise to me.

Final thoughts

The research demonstrated the fact that diversity within a classroom is very dynamic. A theme or topic that individuals might find interesting in one circumstance could be problematic if personal circumstances change.

The most significant observation to come out of the research is the importance of choice to this group of students. It helped ensure the creation of a comfortable learning environment for each student. It appeared to motivate most students by ensuring that learning was an enjoyable, creative activity over which they had control.

How might the importance of choice for these students impact on my classroom practice? If students do find the sense of being in personal control an important motivator, I shall seek to make it a greater part of my teaching practice. On reflection, it seems so obvious that student choice is perhaps one of the most effective means of catering for diversity within the classroom.

The reaction of the students to randomly selected groups has raised questions in my mind about the frequent use of group-based formal co-operative learning strategies in the classroom. Some students found randomly selected groups unsettling and sometimes threatening. I will look at ways of making the group selection process less than totally random when using such strategies.

Perhaps the most important lesson in this for me is the most basic of all: assume nothing; check it out; and look and listen before you leap.

If diversity in the classroom proved to be a dynamic concept, the research process also proved to be much more fluid than I anticipated. At the outset of this project, I expected that, with a research question devised and methodology decided upon, the research would naturally proceed on its predicted course. I had not expected that there would be such a need to adapt aspects of the process to the demands of time and place.

The most interesting lesson for me, however, was the importance of unexpected outcomes. I had thought I would gather some useful data about the preferences of students for working individually as opposed to working in groups. I had not expected that the most significant finding to come from the research would be something else: the importance of student choice. As a researcher, the two most significant lessons I have taken from the project are to follow a sound, appropriate, but adaptable methodology, and to have an open mind. Out of the tension produced by the unexpected can emerge the most valuable insights.

Appendix F: Case study 6

Co-operative learning in drama

Aim of the project

This research sought to gain the reactions from a diverse group of students in the top Year 9 class to co-operative and group work in a drama context. It involved the same class and students as the social studies project, and also used student journals, teacher observations, and interviews. Both the methodology and the problems encountered were the same as those experienced in the social studies project.

The task/process

The students in their groups had to write, produce, direct, and provide costumes and props for a play they had to create. They had studied the J. B. Priestley (1948) classic *An Inspector Calls*, which had themes of power and responsibility, the individual and the community. The class was required to incorporate these ideas into their plays.

Results

Despite holidays and absences, all groups completed the task, to varying degrees of success. However, it was felt by the teacher and some students that many students did not reach their full potential (through a range of factors, discussed later).

Interview feedback

The English interviews were done individually. This allowed students to speak freely of any difficulties they had with other members of the group or the process. The interview questions were:

- What did you think about having so much freedom/choice regarding the writing, producing, and directing of, and providing of props and costumes for, your plays?
- What were the good and bad points about having to do so much of the work in preparing for your own play?
- What did you think about having the choice of selecting your own group and/or the teacher selecting a group for you?
- Was working on your plays better or worse than you expected? Why?
- What did you feel about the group deciding who took on the roles of writer, director, costume provider, props provider, etc., and would you have preferred the teacher to have chosen the roles for you? Why?
- What did you learn about yourself in the process?

- What did you learn about group work?
- What would you do differently next time?
- How did you choose whom to work with?

There were also spontaneous questions to ascertain a deeper level of understanding, starting with “Tell me about ...” and “Explain ...”, etc.

Student choice

Group choice

The research considered the importance of choice, particularly the choice of whom to work with. This was also an issue for the English teacher. There were obvious possibilities:

- teacher selecting groups on personality, roles, ability, or a combination of these
- students choosing their own groups
- randomly selected groups.

Students were given the choice of choosing their own group or being put into groups by their English teacher. Nearly all the students chose their own groups. A few minor adjustments were made because of numbers and one socially challenged student was placed into a more appropriate group. Within this framework the students’ diverse backgrounds and cultures were less significant as personalities and the ability to interact came to the fore.

Role choice

... but if you had chosen it, then it was like no arguments, that’s what you do, like instead of “Oh, I’m not sure if I want to do that, oh I want to do this, no way, hang on ...” instead of “You’re doing that and you’re doing this”. [Student]

All the students felt that it would have been far better if the teacher had chosen the roles for them rather than letting them as a group decide who did what. Most struggled with the consequences of choosing the roles—some constantly wanted to change roles, others attempted total control of the group, and other students took the roles that required the least amount of work.

One student thought the groups could have been arranged by roles first, by allowing students to choose the role they wanted then letting them decide who worked with whom after that. Another thought there could have been more structure or greater teacher involvement in picking students for the roles or helping the students to pick the roles. He suggested an equal workload in all the roles would have been better, with every student writing a scene and being responsible for their costumes, props, direction, etc. Overall, the students wanted far more teacher intervention in this aspect.

Findings

This entry from a student journal at the start of the project reflects the general consensus:

It was good that he let us choose whether we chose our groups or not ... [Student name] is the only serious one in the group and the rest of us are cracking jokes. That is a problem of choosing our own group BUT if you put us in groups we would not be enthusiastic to work. [Student]

All students interviewed felt obliged to work with their friends. All thought this was the best way to enjoy their co-operative work, and were glad that they had done this, but also conceded that more and better work could have been achieved through teacher-selected or random groups.

Students learnt for themselves that co-operative work with their friends doesn't always mean the most fruitful results and working with friends doesn't always mean a successful result:

Interviewer: What did you think about having the choice of selecting your own group and/or me the teacher selecting a group for you?

Student: Well, everyone kind of went for picking your own group because it means you can work with your friends but that's not always good and it would have been better if we were told right you're working in this group and tough if you don't like it because in real life you have to work with people you don't like and it would be good as well as normal topics like math and English, etc., you can learn life skills and so you always get to choose the people you like it doesn't always end up for the good because then you can end up talking about what you did last Friday, etc.

Barriers to learning (in groups)

Attitudes and personalities

... when we picked the groups we thought that they would be okay to work with but it turned out some people were really, really hard to work with and it was like why don't you just agree with us. [Student]

Students found that there were more conflicts working with their friends than they had expected. Even though they were glad to have worked with them, some thought that the quantity and quality of work would have been better in random or teacher-selected groups as this would remove the issue of obligation.

One student did not enjoy the drama as much as the others, as she was the studious self-appointed leader and her friends did not always do as they were told. When asked in the interview what she had learnt about herself, she said: "That I am manipulative and bossy!" Another student commented that being with their peers kept them within their comfort zones.

Another student thought the problems of co-operative work could be overcome by choosing different people to work with and that they compromised more than they should have:

Yeah, it's like we went three-quarters of the way and they meet us there instead of meeting us halfway and discussing it all, we had to go the extra to make it work. [Student]

Not sharing the workload

... so it's really good that you do group work. The only thing is that if you have some one hard working and someone who's not they both get credited for the work. [Student]

With students choosing their roles, workloads inevitably differed. Overall the students thrived on choice, but didn't all appreciate some of the consequences. The biggest issue was with the scriptwriting. Although some students wanted to control the play's direction, they soon reneged after finding out how much work was involved. The idea was that they would write it as a group, all contributing ideas, lines, and stage directions, with one person writing it down. Most of the groups in fact had a discussion and then expected the scriptwriter to write it up at home that night. Control was also a problem. The scriptwriter in one group felt that being writer meant control over direction, which naturally caused problems;

[Student name] was the only person who wrote the stuff so it was easy for us, but I kind of felt sorry for [him]. I asked if he wanted me to write and he said no. [Student]

Absences and time

Absences were the major problem in the English research. Many of the students are involved in other school activities. Some took time off because of health or family holidays. As a result, the productions needed more time and ran into the holidays. The interviewed students felt that some momentum was lost. Over the holidays students forgot lines and what they had to bring. Some students said that a stricter time guideline would have helped them focus them more and therefore would have improved the final result.

Student growth

All of the students thoroughly enjoyed the experience of co-operative work on their plays. They all felt they had grown in confidence in relating to others and in performing dramatic presentations. One student felt she had grown in confidence as a leader. At her intermediate school she was sometimes asked by her teachers to be a leader, at other times she volunteered to be a leader. This experience reinforced her leadership qualities.

Another student gained confidence in asserting himself—when members of his group persisted in changing roles, he said no. One student became less shy, another grew more confident in dealing with people, and another felt able to say what he wanted to his peers without feeling embarrassed:

I found that I won't slack off as much. That I built my confidence. [Student]

He realised he could work with his friends and not get off task just because they were his friends.

Nearly all the students interviewed preferred to choose whom they worked with, even though they acknowledged some problems in staying on-task at times because of this. However, all conceded that there were benefits to teacher-selected or random groups:

... I felt obliged to do it with my friends, but I would have preferred it if it was quite random, not at the start, but I would have. [Student]

By allowing the students to choose and, therefore, having like-minded people and personalities in a group also meant conflict. One student commented on the fact that his group was full of leaders and suggested that groups could be based on a mixture of personalities.

Summary

Overall, it was a positive learning experience. The students grew in confidence in expressing individual viewpoints and in relating to others. They also learnt that although working with friends, might be most socially enjoyable, it was not as easy and productive as they had expected.

The students became more willing to accept working in random or teacher-selected groups and learnt that the resulting diversity can be more beneficial to co-operative learning.

As the English teacher, I learnt that:

- greater teacher facilitation was needed in allocating and maintaining roles within groups for the plays
- mental, intellectual, emotional, and personality differences were more relevant than diversity of cultural and socioeconomic backgrounds

expectations of personality conflicts and their resolution were generally addressed, and I gained professional confidence as a result.