Sharing Ideas on a differentiated curriculum

Name_____ School_____

Email Address_____ Country _____

Differentiated learning *involves providing students with different avenues to acquiring content; to processing, constructing, or making sense of ideas; and to developing teaching materials so that all students within a classroom can learn effectively, regardless of differences in ability.*

Differentiated learning, according to Carol Ann Tomlinson (as cited by Ellis, Gable, Greg, & Rock, 2008, p. 32), is the process of 'ensuring that what a student learns, how he/she learns it, and how the student demonstrates what he/she has learned is a match for that student's readiness level, interests, and preferred mode of learning'. Differentiation stems from beliefs about differences among learners, how they learn, learning preferences and individual interests. 'Research indicates that many of the emotional or social difficulties gifted students experience disappear when their educational climates are adapted to their level and pace of learning.' Differentiation in education can also include how a student shows that they have mastery of a concept. This could be through a research paper, role play, podcast, diagram, poster, etc. The key is finding how your students learn and displays their learning that meets their specific needs.

http://en.wikipedia.org/wiki/Differentiated_instruction

In light of the above definition, what **academic** subjects, programs or initiatives have been particularly successful in your school? Please be specific.

_____

_____

_____

_____

_____

List the names of any specific subjects that you may like to share with other members of the workshop.

_____

_____

_____

_____

What **co-curricular** programs or initiatives have been particularly successful in your school? Give details.

_____

_____

_____

_____

Why do you think that these programs have been successful? What makes it all work?

_____

_____

_____

_____

_____

But not all teacher view students as reluctant learners. And this group of teachers resist, when asked to perform the function of a sheep dog, rounding up the reluctant learners and directing them down paths where students would rather not go. These teachers would prefer to engage the students, rather than compel them to act against their will. These teachers argue that learning is not just about imposed standards and standardisation, it is about personal growth including initiative and responsibility.

Loader, David, *Jousting for the New Generation,* Acer Press, Melbourne, 2007

In light of the above extract, to what extent have any of these programs helped to stimulate student initiated learning and development?

_____

_____

_____

_____

_____

_____

YEAR 10
2012 SUBJECT CHOICE FORM

2011 Year Level: Student Code: Name:

Compulsory Units

Issues in Running the Country	10BXI	Chapel	10CXH	
Ideal and Reality: American History (Semester 1)	10HXG	***SELECT ONE*** Religion: *Ethics* ☐ **OR**	10RXE	*10RXE*
Assassins & Terrorists (Semester 2) **OR**	10HXA	Religion: *God and Art* ☐ **OR**	10RXA	*10RXA*
Towards a Violent Century (VCE focus) (Semester 2)	10HXV	Living Faiths: World Religions and World Views ☐ **OR**	10RXL	*10RXL*
Form Period	10FXM	The X (Chris) Files ☐	10RXF	*10RXF*
Physical Development	10PXD			

Based on results and testing in Year 9, the Mathematics Faculty will select students for Accelerated, Enrichment, Mainstream and Modified Mathematics courses. Students will be notified regarding their selection in these courses.

SEMESTER 1

*Place a tick in **ONE** box.*

Plays and Playwrights		10EPC	*10EPC*	Theme Study 2		10ETC	*10ETC*
English as a Second Language		10ESC	*10ESC*	Writing Workshop 2		10EWC	*10EWC*
* Literary Legends		10EXLL	*10EXLL*				

SEMESTER 2

English Core		10EXS	*10EXS*	English as a Second Language		10ESD	*10ESD*

STEP 1: SELECT COURSE PREFERENCES

Subjects marked with an asterisk * are Year 10 Only Enhancement Units

While students may select Enhancement Units, acceptance into these units will be dependent on students' results.

Elective Units

To complete your selection of elective units you must choose a total of 10 units from the subjects listed below and over the page.
These units will be studied sometime in Semester 1 or Semester 2.

Each LOTE you choose counts as 3 units. If you wish to continue with a LOTE subject, place a tick in the box next to your choice.

Language other than English (LOTE)

Chinese Advanced 3 and 4		10LCG	*10LCG*	10LCZ	*10LCZ*	10LCH	*10LCH*
Chinese as a Second Language 3 and 4		10LCC	*10LCC*	10LCX	*10LCX*	10LCD	*10LCD*

French 3 and 4		10LFC	*10LFC*	10LFZ	*10LFZ*	10LFD	*10LFD*
German 3 and 4		10LGC	*10LGC*	10LGZ	*10LGZ*	10LGD	*10LGD*
* LOTE & Communication (French)		10LXFC	*10LXFC*	10LXFD	*10LXFC*	10LXFE	*10LXFE*

INSTRUCTIONS FOR SELECTING SUBJECTS FROM THE REMAINING ELECTIVE UNITS

If you **have not** chosen a LOTE subject from the list above mark your electives with the numbers **1** to **10** in **order of preference.** Write a **'1'** next to your **most preferred** elective unit, a **'2'** next to your **second most preferred** elective unit, and so on until you have selected a total of **'10'** units.
If you **have** selected a LOTE subject from the above list then you must write your next preference as number **4,** and so on to number 10. **If you have selected two LOTE subjects you will require approval from your Head of Year.**

Subjects marked with an asterisk * are Year 10 Only Enhancement Units

While students may select Enhancement Units, acceptance into these units will be dependent on students' results.

The Arts (Art, Drama, Music)

Foundation Studies in Art & Design		10AFS	*10AFS*	* The Great Theatre of the Modern Age		10DXMT	*10DXMT*
Advanced Painting Methods		10AAP	*10AAP*	Songwriting		10ISW	*10ISW*
Digital Animation		10ADA	*10ADA*	Modern Band Techniques		10IBT	*10IBT*
Drawing for Design		10ADD	*10ADD*	Music Skills Enhancement		10ISE	*10ISE*
Media Studies		10AMS	*10AMS*	Music Extensions		10IME	*10IME*
Stop-Motion Animation		10AMA	*10AMA*	Music Styles		10IMS	*10IMS*
Photography		10APX	*10APX*	Music Production		10IMP	*10IMP*
* The Great Theatre of the Past		10DXDT	*10DXDT*	Music Technology		10IMT	*10IMT*

Commerce

History of Business		10BHB	*10BHB*	Response to One World		10BXW	*10BXW*
Australian Entrepreneurs		10BAE	*10BAE*	Business Computing		10BBC	*10BBC*
Economics in Society		10BXS	*10BXS*	Savings and Investment		10BSI	*10BSI*

Geography

Made in Australia		10GAM	*10GAM*	Life in the Extremes		10GXL	*10GXL*
Australia & its Asian Neighbours		10GAN	*10GAN*	Meteorology & Climatology		10GXM	*10GXM*
Rivers and Beaches		10GBR	*10GBR*	Urbanisation : Growth of the City		10GXU	*10GXU*
Environmental Issues		10GEI	*10GEI*	Developmental Issues		10GXI	*10GXI*

Hazard Geography		10GHZ	*10GHZ*	*Action on Sustainability: Now and in the Future		10GXAS	*10GXAS*
* Out in the Field: Applied Geography		10GXOF	*10GXOF*				

History

Beginner's Guide to Ideas 1		10HAP	*10HAP*	* People & Power in the Medieval World		10HXPP	*10HPP*
A History of Espionage		10HES	*10HES*	Australians at War 1		10HWO	*10HWO*
History of Flight		10HFL	*10HFL*	Australians at War 2		10HWT	*10HWT*
Beginner's Guide to Ideas 2		10HMP	*10HMP*	*War and Religion		10HXWR	*10HXWR*
Winners & Losers in History		10HWL	*10HWL*	Politics: Democracies and Dictatorships		10HPD	*10HPD*

Hospitality

Cooking 1		10OCX	*10OCX*	Cooking 2		10OCY	*10OCY*

Information Technology

Computer Building and Maintenance		10CBC	*10CBC*	Multimedia Tools and Techniques		10CMT	*10CMT*
Computer Games Programming		10CGP	*10CGP*	Operating Systems and Networking		10COS	*10COS*
Programming		10CBP	*10CBP*	Web Authoring		10CWA	*10CWA*
Digital Video Movie Making		10CDV	*10CDV*	*Unit 1: IT		10CXIT	*10CXIT*
Building and Programming Electronic Systems		10CES	*10CES*				

Mathematics

Mathematics in Commerce & Financial Systems		10MCF	*10MCF*	Discrete Mathematics		10MXM	*10MXM*

Physical Education

Racquet & Individual Sport		10PRI	*10PRI*	Sports Physiology		10PXP	*10PXP*
Sports Administration		10PXA	*10PXA*	Passion to Play AFL		10PPA	*10PPA*

Science

Beasts on Land, in Air and in Water		10SBL	*10SBL*	*Preparatory Chemistry		10SXCH	*10SXCH*
Bad Science		10SBS	*10SBS*	*Preparatory Physics		10SXPH	*10SXPH*

Chemistry Around You (Practical)		10SCY	*10SCY*	*Introduction to Psychology		10SXPY	*10SXPY*
Space Science		10SLS	*10SLS*	Science of Conflict		10SOC	*10SOC*
Origins		10SOR	*10SOR*	*Thinking Like an Electrical Engineer		10SXTE	*10SXTE*
Robotics		10SRO	*10SRO*	Genetics, Our Future		10SGE	*10SGE*
Sports Medicine		10SSM	*10SSM*				

Technology

Furniture Structures		10TFS	*10TFS*	Motor Vehicle Appreciation		10TVA	*10TVA*
Things that Move		10TTM	*10TTM*				

STEP 2: REVIEW PROPOSED COURSES

The grid below MUST be completed prior to the submission of this form. It is vital that each student has considered the minimum course requirements and a balanced course over Years 9 and 10. Those subjects available as Year 10 Enhancement Units are listed over the page.

LOTE
Students who take a double LOTE course in Year 10 will be allowed a reduced number of compulsory units
Example: Geography - 2 units, Science 2 - units. Please see your Head of Year for further advice.

AREAS OF STUDY (AOS)
We have arranged our other units into Areas of Study (AOS). You are required to select a certain number of units from particular AREAS OF STUDY. This makes sure that you receive the broad general education for which Trinity is noted.

To ensure you have selected courses that will meet the curriculum requirements, please write your subject selections (record subject codes only) in the box below under "RECORD OF SUBJECT SELECTIONS" and then check that you have selected the appropriate number of units as indicated in the checklist below.

Record of Subject Selections

YEAR 9 SUBJECT COMPLETED Please write the subject codes of the 9 Electives you have completed in 2010 below	YEAR 10 SUBJECT SELECTIONS Please write the subject codes of the 10 Electives you have selected for 2011 below

Please note that staff may recommend students for Curriculum Support.

STEP 3: COURSE REQUIREMENT CHECK

Please refer to the above course selections and check that you have met the curriculum requirements below and place a tick in the box.

Area of Study	Total Number of Minimal Units that must be completed by the end of Year 10	Place a tick in the box below if the requirement is met over a 2 year period.
The Arts	2 Elective Units	

IMPORTANT
We recommend that you take a photocopy of this information for your reference.

(Art, Music & Drama)		
Commerce	1 Compulsory Unit and 1 Elective Unit	
Geography	3 Elective Units	
Science	3 Elective Units	

Please return this form to Mr Bishop no later than:
MONDAY 2 AUGUST 2011

Parents Signature: _____ Student Signature: _____

Date: / / 2011 Date: / / 2011

Course Selections Approved by Head of Year

Head of Year Signature: _____

Date: / / 2011

2012 Subject Course Codes

Subjects marked with * are Year 10 Enhancement Units

The Arts (Art, Drama, Music)

10ADD	Drawing for Design
10AFS	Foundation Studies in Art & Design
10APP	Advanced Painting Methods
10ADA	Digital Animation
10AMA	Stop-Motion Animation
10AMS	Media Studies
10APX	Photography
10ISW	Songwriting
10IBT	Modern Band Techniques
10ISE	Music Skills Enhancement
10IME	Music Extensions
10IMP	Music Production
10IMS	Music Styles
10IMT	Music Technology
10DXDT	* The Great Theatre of the Past
10DXMT	* The Great Theatre of the Modern Age

Commerce

10BHB	History of Business
10BBC	Business Computing
10BSI	Savings and Investments
10BXS	Economics in Society
10BXW	Response to One World
10BAE	Entrepreneurs

Curriculum Support

10QCS	Curriculum Support

English

10EXLL	* Literary Legends
10EPC	Plays and Playwrights
10ESC	English as a 2nd Language
10ETC	Theme Study
10EWC	Writing Workshop

Geography

10GAM	Made In Australia
10GAN	Australia & its Asian Neighbours
10GBR	Rivers and Beaches
10GEI	Environmental Issues
10GXI	Development Issues
10GXL	Life in the Extremes
10GHZ	Hazards Geography
10GXU	Urbanisation
10GXM	Meteorology & Climatology
10GXOF	* Out in the Field: Applied Geography
10GXAS	* Action on Sustainability: Now and in the Future

History

10HAP	Beginner's Guide to Ideas 1
10HES	A History of Espionage
10HFL	History of Flight
10HMP	Beginner's Guide to Ideas 2
10HWL	Winners & Losers in History
10HWO	Australians at War 1
10HWT	Australians at War 2
10HXWR	*War and Religion
10HXPP	* People and Power in the Medieval World
10HPD	Politics: Democracies and Dictatorships

Hospitality

10OCX	Cooking 1
10OCY	Cooking 2

Information Technology

10CBC	Computer Building and Maintenance
10CGP	Computer Games Programming
10CBP	Programming
10CDV	Digital Video Movie Making
10CES	Building and Programming Electronic Systems
10CMT	Multimedia Tools and Techniques
10COS	Operating Systems and Networking
10CWA	Web Authoring
10CXIT	*Unit 1: IT

LOTE

10LCG	Chinese Advanced
10LCC	Chinese as a Second Language
10LFC	French
10LGC	German
10LXFC	* LOTE & Communication (French)

Mathematics

10MCF	Mathematics in Commerce & Financial Systems
10MXM	Discrete Mathematics

Physical Education

10PRI	Racquet & Individual Sport
10PPA	Passion to Play
10PXA	Sports Administration
10PXP	Sports Physiology

Religion

10RXE	Ethics
10RXL	Living Faiths: World Religions and World Views
10RXF	The X (Christ) Files
10RXA	God and Art

Science

10SBL	Beasts on Land, in Air and in Water
10SBS	Bad Science
10SCY	Chemistry Around You (Practical)
10SLS	Space Science
10SXTE	*Thinking Like an Electrical Engineer
10SOR	Origins
10SXCH	*Preparatory Chemistry
10SSM	Sports Medicine
10SOC	Science of Conflict
10SGE	Genetics, Our Future
10SRO	Robotics
10SXPY	*Introduction to Psychology
10SXPH	*Preparatory Physics

Technology

10TFS	Furniture Structures
10TTM	Things that Move
10TVA	Motor Vehicle Appreciation

TRINITY GRAMMAR SCHOOL, KEW

PROPOSAL: NEW YEARS 9/10 UNIT

INTRODUCTION

FACULTY
Science

PROPOSED U NIT TITLE
Stretching the Boundaries

NOMINATED TEACHER(S)
Doctor X (Note the course is designed so that it is not dependent on a particular staff member. Depending on the interests of the staff/students different content strands can be used to teach the key understandings.)

COURSE DETAILS

COURSE OUTLINE
The overarching essential questions are:

1. How do scientists investigate the natural world?
2. What sets the methods of Science apart from the methods of other disciplines?

The content broadly covers:

- The use of models in science: model for forces between particles, model for surface energy, model for surface area to volume ratio.
- Investigations of interactions at boundaries.

There are many available content areas and a selection can be made to explore boundaries and the ways in which scientists investigate the natural world.

KEY UNDERSTANDINGS
Students should

1. Grow their understanding of a range of Scientific Methodologies and of some limitations in these;

2. Know and understand that a surface is an interface between two or more phases; and

3. Be able to apply these scientific understandings in a range of context s by:
   A. Relating the properties of materials to the forces between their constituent particles;
   B. Describing some ways in which changes in the surface energy of a liquid can alter its interaction with adjacent materials (particularly as these ideas can be applied to surfactants);
   C. Applying their knowledge of the properties of materials (A above) and of surface energies (B above) to a build deeper understanding of some biological, chemical, geological or physical phenomena which occur at boundaries;
   D. Knowing the relationship between surface area and volume, and applying this understanding in a selection of biological, chemical, geological or physical contexts;

ASSESSMENT METHODS

- Practical investigations
- Written reviews of scientific models.
- Tests
- Projects- both theoretical and practical

INTENDED BENEFITS

This unit is proposed as a Year 10 enhancement unit. The Essential questions should enable the students to learn more about the methods of science and for them to realise that understanding the natural world is an ongoing endeavour which involves models and data collection. The content is designed to be challenging and therefore suitable for our more able Yr 10 students.

CURRICULUM RELATIONSHIPS

PRE-REQUISITES

A global B+ and a B+ average in science subjects undertaken in Yr 9.

APPROPRIATE YEAR LEVEL

Year 10 only

ENHANCEMENT AND VCE

Year 10 General Enhancement

RESOURCES

STAFFING

The unit is not dependent on one staff member. Heather Evans would like to teach it in the first year. The course content has been written so that a variety of pathways can be followed to teach the key understandings. As a consequence, the unit could be taught by a number of our current science staff.

PROFESSIONAL LEARNING

Professional reading to enhance staff understanding of the key understandings and some time to collect more resources.

FACILITIES

Science class romm.

CONSULTATION

INTRA-FACULTY

The unit has been discussed at a faculty meeting and drafts of the plans for the unit circulated.

RESOURCES

No additional resources are required.

Application Form
Yr 10 Thesis Study Unit - Semester 2

Name: *Benjamin X*

Form: *10C*

Current grade average in all subjects: *A+*

Area of interest: *History (Renaissance)*
(eg. Drama, Science, Engineering, Literature)

Project Outline (approx. 100 words in length):
Medieval Christianity was divided into the Eastern Orthodox Church (Greek) and the Roman Catholic Church (Latin). Resultantly, in 1431 Pope Eugene IV changed the course of a council summoned by his predecessor (Martin V) through moving it to Ferrara and then to Florence, attempting to achieve unification with some of the Eastern Churches. This thesis will discuss the prospects of the Council of Florence (1431 – 1445) in four areas. Firstly, the effect that the council had on Florence, the city's culture and art; secondly, the effect that the council had on the standing of the Medici Family and the political leverage that it gave them as benefactors of the council; thirdly, the purpose of the council and reasons for its failure; and, finally, it will examine how the council's failure to achieve unification affected the Great Schism in regard to the fall of Constantinople to the Ottoman Turks.

Approx word length of project: *10,000 words*

Suggestions for staff mentor: *Mr. X*

THESIS UNIT: 2010

Student's Name:	Form:	Thesis:	Mentor:
A	10A	Cloud Computing: Implications for the future	Mr Rob Flavell (RJF) *Primary mentor Mr James Lawson (JAL)
B	10C	Evolutionary Biology: The Evolution of the Universe	Dr Brad Rundle (BJR)
D	10C	Historical Novella (Rwandan Genocide): Men of Africa	Mr Nick Browne (NGB)
D	10C	Across the Great Divide: A Political History of Renaissance Christianity	Mr Nick Smith (NGS)
H	10D	Biological Field Study & DNA Analysis of the ? Wasp	Dr Brad Rundle (BJR)
H	10D	The Internet & Our Brain (Technology use & Brain plasticity)	Mr Simon Le Plastrier (SCL) *Primary mentor Rev Matt Campbell (MRC)
H	10F	The Economy of China (The rise of China)	Ms Jennifer Poore (JJP)
I	10F	Fantasy Novella: Artemis	Ms Kate Hall (CAH)
K	10D	Novella: Ethics & Genetic Engineering (Title TBC)	Mr Joe Hewett (JAH) * Primary mentor Rev Chris Leadbeatter (CJL)
L	10E	Biological Field Study & DNA Analysis of the ? Wasp	Dr Brad Rundle (BJR)
M	10F	The Battle of Britain: A Turning point in World War 2	Dr Dianne McDonald (DCM)
M	10F	Art Thesis: Hand drawn Comic	Mr John Waller (JTW) *Primary mentor Rev Matt Campbell (MRC)
N	10C	Social Networking: Effects on Youth Today	Mr Tim Bence (TEB)
P	10F	Menageries of Europe: A compulsion for the Exotic (Private Zoos of the Renaissance)	Mr Nick Smith (NGS)
R	10F	Novella: Awakening	Mr Christopher Bantick (CDB)
S	10A	Astrophysics: A Guide to the Cosmos	Mr Andrew Settle (ATS)
S	10F	Art Thesis: My Creative Outlet	Ms Genevieve Dillon (GMD)
T	10B	Psychology: The Psychology of attraction (Original research)	Ms Caroline Angus (CEA)

THESIS UNIT: 2010