

Specialist Schools Pilot 2007: Application Form

- You should use the accompanying guidance notes to help you plan your application and complete this form. Guidance on each lettered/numbered section of the application form can be found in the corresponding lettered/numbered section of the guidance.
- Copies of the guidance can be found on the DE Website.
- Please use **bullet points** and **short statements**, where possible
- Any additional information requested in the guidance should be attached to the back of this form.

SECTION A: SCHOOL INFORMATION

State specialism

SCIENCE

School name

LORETO COLLEGE COLERAINE

School address

LORETO COLLEGE
CASTLEROCK ROAD
COLERAINE
CO. DERRY

Postcode

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Email address

info@loretocollege.coleraine.ni.sch.uk

Telephone number

02870 343611

Name of Principal

Mr Brian Lenehan

SECTION B: GENERAL CASE (see Guidance page 7)

Please outline your general case (**maximum** of three pages).

Loreto College is a forward-looking and outward-looking institution with links to a local and world-wide community of schools. Our mission statement is built on Loreto's Kolkata Guidelines which commit all Loreto schools to "A holistic and person centred education" and the "integration of the spiritual, intellectual, physical and emotional development of the individual student". Loreto schools on five continents are beacons of excellence, encouraging young people to grow into local and global citizens. We are already striving to meet many of the core objectives of the Specialist School concept in Northern Ireland. We provide parents with a clear choice among a range of schools in our area – our motto is "Spirituality and Excellence".

This application builds on a firm foundation of self-evaluation and good practice. Following an initial audit of all curricular areas we have identified Science as our specialist subject, based on evidence which shows that this is an area of excellence within the school. We will build on current curricular strengths in our identified specialist subjects and, by sharing best practice, we will seek to secure whole school development and contribute to the development of good leadership in our Partner Schools. The statistics given elsewhere in the application show that we have been raising standards in comparison to other schools with a similar intake and catchment area, and in particular we have presented convincing evidence for each of the indicators below:

Attainment: Years 2003-2006

For each of the last three years our Key Stage 3 Science results have shown significant value added when compared to the Transfer Test grades for each year group. At GCSE the combined Science results showed substantial attainment above the Northern Ireland Grammar Schools' average. Attainment at post 16 has also compared favourably to similar schools.

Quality of Teaching and Learning

Pupils work well with their teachers in an atmosphere of mutual respect, showing enjoyment in their learning and achievements and responding well in class. Classroom observation has shown that teachers create a purposeful, supportive and safe environment, through effective use of praise and encouragement. The teaching is a well-judged balance of whole class, group and individual activities. Classroom organisation is efficient and adequate resources are available. A wide range of teaching methods is used and a whole school target of questioning to promote learning has been incorporated into the School Development Plan.

Curriculum Provision

GCSE students allocate 10-30% of their curriculum time to Science, while at A Level, each Science has 17.5% of curriculum time. Science options are available in each of the four A Level option blocks.

Uptake of Specialist Subject

18%, 60% and 22% respectively, study 1, 2 or 3 Sciences at GCSE. 60 A2 Science grades (A-E) achieved per year. 30% of our sixth form leavers have followed Science-based degree courses on average.

Resources

There are 10 staff teaching Science: all are Science Specialists. From KS4, Science is taught by subject specialists. Six of our staff have post graduate qualifications and all continually engage in professional development. All Science is taught within modern, well-equipped laboratories with skilled technicians in each subject area.

ICT

The Science Department has eight interactive white boards and a substantive bank of Teaching and Learning Resources held on C2K. Pupils are trained in ICT remote monitoring of experiments. Boardworks software is available in each Science subject, and this provides opportunities for pupils to participate actively during lessons using interactive white boards.

Quality of Management

The Science teachers hold positions of responsibility that collectively involve them in virtually every aspect of school life, from membership of the SLT, through Heads of Year, Heads of Careers and Curriculum Development, SENCO and Pastoral Care, to co-ordinators of Key Skills, Cross Curricular Links, Timetabling and Subject Options. Teachers hold a range of specialist qualifications in Science, Education and Management which have been used effectively to build a highly motivated team - one that takes a collegial approach in responding to change, making the best use of individual strengths.

The present academic year (2006-7) witnessed a new approach to the delivery of Science subjects at KS4. For sound academic reasons we decided to offer three separate Sciences at GCSE - Biology, Physics and Chemistry. This subject choice now offers all students the option of studying all Sciences, two Sciences or one Science to A level. It provides greater flexibility for students who require just one or two of the three Sciences for further studies, or who have an affinity for one while struggling with the others. Pupils who wish to will be able to increase their breadth of study whilst

maintaining their depth of study in Science. There will be greater continuity of contact between teachers and pupils, significantly helping to keep pupils focused and working steadily to their full potential in Science. The separate Sciences approach is a better preparation for A Level studies in the given discipline, and challenges academically gifted pupils, while remaining accessible to all who are prepared to make a reasonable effort to learn. Single specifications will make timetabling more flexible, and enable setting of classes to facilitate some of the initiatives we are considering to help implement the Entitlement Framework.

Specialist School status will enable us to meet our objective of raising achievement even further in each subject within our specialist area. This application sets out the objectives, targets and implementation strategies, which are intended both to raise standards in the specialist subjects and deliver whole school improvement, placing Loreto at the forefront of development in education for the coming years. During the four year cycle of the specialist status our objectives are:

- *To stimulate an interest in Science by applying an understanding of Science in a moral, social, economic and environmental situation, to meet the requirements of the skills based curriculum at KS3 & KS4 in particular, through increased use of ICT, AFL and differentiation to meet the needs of each pupil and through the incorporation of active learning into the schemes of work.*
- *To raise the attainment and uptake of Physics at all levels within the school by developing teaching and learning strategies based on assessment for learning, active learning and personalised learning, and extending the curriculum provision in Physics by providing further enrichment opportunities and developing e-learning.*
- *To raise achievement and uptake of Chemistry at GCSE by developing more and different kinds of active learning and assessment materials - to be fully integrated into our existing "Intended Learning Outcomes" for every lesson (Y8-14) and made available online to promote and facilitate autonomous learning.*
- *To raise the attainment in, and sustain the uptake of Biology at all levels within the school by developing teaching and learning strategies based on assessment for learning and by providing for all types of intelligence.*

Our application outlines specific measures which each subject will take to achieve these objectives, and year on year targets for each specialist subject at KS3, GCSE and A level.

Our whole school attainment targets explain how we will use our specialism to drive up attainment across the school, focusing on raising attainment in English and Mathematics as a priority in the first year. The specialist subjects will work with all subjects to raise standards, and for Mathematics and English we have set realistic and achievable targets

for improvement at KS3 and GCSE. By using programmes such as Investors in People we have fostered a culture favourable to the dissemination of best practice, and we will build on existing structures and processes to implement our objectives and targets. Chief among these are the Curriculum Development Committee, our School Development Plan, and our continuous evaluation and monitoring strategies. The main strategies for Whole School Improvement are outlined in our objective:

To raise levels of achievement across all subjects at all levels by developing the use of assessment for learning, active learning, personalised learning and e-learning strategies within the Science department and disseminating good practice to all general learning areas using cross-curricular projects, in-service training, PRSD, and so building on existing good practice and promoting self-evaluation and collegiality.

We intend to use our specialism in the implementation of the revised curriculum, in particular to offer pupils access to a wider choice of applied courses at Key Stage 4 and post-16. Some preparatory work has already been undertaken by the Coleraine Area Learning Partnership, of which we are a founder member. The first courses will be Electronics (delivered for our students by Causeway Institute of Further and Higher Education) and Business Studies and Health and Social Care (in conjunction with St Joseph's High School Coleraine). In keeping with the Curriculum Entitlement Framework which guarantees all pupils a wide range of learning opportunities suited to their needs, aptitudes and interests, the specialist subjects will pioneer active teaching strategies such as e-learning and personalised learning. Some aspects of the collaboration will provide a more joined-up and holistic approach in the delivery of personal skills and capabilities: the collaboration with the English department will ensure the integration of communication and literacy skills in new and innovative ways in Science, and the specialist departments, having already experimented with the Thinking Skills in Science programme, will ensure that thinking skills are embedded in the specialisms from Year 1.

ICT will be used to enhance teaching and learning in Science; and some of the extra funding provided by designation as specialist school will be used to accelerate our rolling programme to provide interactive whiteboards in every classroom. We will develop in Science a vision of how ICT can enhance teaching and learning within our school, and this vision will be shared with other departments.

Education for Employability is an integral element of our application, with our overall objective in this area being:

To promote and raise awareness of Science-based careers; to embed transferable skills within the schemes of work, making them integral to teaching and learning in Science; to incorporate enterprise activities within the Science curriculum, making links with local industries which involve Science-based careers; to share the success and achievements of former pupils in order to inspire and motivate current pupils.

In KS3 and KS4 each year group will participate in Science initiatives directly related to meeting this objective:

- For Year 8 pupils we will develop links with the Employability strand being delivered in Form Class
- For Year 9 pupils we will introduce the Enterprise and Entrepreneurship aspect of Employability stressing the need for enterprise and entrepreneurship in scientific careers.
- For Year 10 pupils we will introduce an Employability module specifically relating to career planning and subject choices.
- For Year 11 pupils we will deliver relevant areas of LLW specification in Science classes.
- For year 12 pupils we will organise a Careers Fair (focusing on Careers in Science and encompassing LLW perspectives such as changing employment trends and life-long learning) to enable pupils to make informed subject choices for post 16 and to help them identify their employability skills and capabilities for work.

Following a comprehensive audit of our current links with the local community we have developed a community dimension to our specialist plan. This involves partnerships with:

- Local schools, five in total, three of which are post-primary, and one of which is a special school. Our links with these schools are practical and will have the effect over four years of significantly enhancing the educational experiences of students in all the schools.
- Businesses and Employers – as well as the links with our business sponsors, from whom we have raised more than £30,000, we have built a strong relationship with Armstrong Medical, a cutting edge technological company in the Coleraine Business Park. The benefits of this collaboration, not just as resource for Science but in terms of role models for our students, are explained in detail in our application.
- Community Agencies - initial contact has been made with Kilcranny House, through Coleraine Borough Council. We have identified environmental collaborative projects with this community group as a mechanism for them to reach their aim of promoting peace and reconciliation.
- Further & Higher Education bodies – preliminary plans to strengthen collaboration with Causeway Institute of Further and Higher Education and the School of Biomedical Sciences at UUC have been drawn up.

Our school day extends from 8.30 to 4.30 with a wide range of extra-curricular activities and many services available to students both before and after school. As a result of our participation in the Specialist Schools Scheme, our school day will be further extended, with the Science laboratories becoming available to students from St Joseph's for twilight lessons, our new Sports Hall available to Sandelford students, and with evening classes (e.g. Astronomy) being offered to parents and other interested students or adults in the area. We also provide a wide range of revision classes after school hours, and we plan to extend this by opening our school facilities to students during the Easter vacation as they prepare for GCSE and A level exams.

Our specialist status links directly into our contribution towards *A Shared Future*. We are already proud of our work in this area, and we will continue to prepare our young people to be effective and responsible citizens of a shared society. We have developed regular opportunities for shared and intercultural education at many levels, including our work in the Seven Schools Project, which provides regular opportunities for our pupils to meet peers from six local post-primary schools, sometimes to work on community projects and sometimes in seminars which address directly the legacy of the troubles. Our work in this area will be enhanced by specialist school status: we will strengthen our links with Sandelford Special School and reach out to other community organisations, all of which are cross-community – for example, we will work with Kilcranny House, a community group whose objective is to promote peace and reconciliation within our local community.

We have already developed a strong self-evaluative culture through participation in such schemes as Investors In People and using the Together Towards Improvement self-evaluation process. A culture of self-evaluation permeates all levels – from governors right through to pupils, including teaching and non-teaching staff, and we are aware that the success of our action plan is dependent on regular and robust evaluation.

We are confident in our ability to deliver whole-school improvement through the Specialist School process, our application being based on a thorough audit of the school's strengths and possible areas for development. Our objectives are well designed to achieve the aims of the scheme and we have presented realistic and achievable, not aspirational, targets. Our implementation strategies are based on our proven ability to deliver high quality education in a time of change, and as an Investors in People institution we are well placed to monitor our progress and be adaptable.

We are making this application with a confident belief that the legacy of our achieving specialist status will be an enhanced educational experience in every subject area and for every person connected with Loreto College Coleraine, whether as part of our school or extended community.

SECTION C: SCHOOL PLAN (see Guidance page 8)

C1. School plan: audit (see Guidance page 8)

- a Please summarise the current position in terms of strengths and areas for development for **each subject covered by your proposed specialism** at your school, taking care to cover each of the headings indicated in the guidance notes (**maximum** of two pages per subject). This **must** include information under the following headings: attainment; teaching and learning; curriculum provision; uptake of specialist subjects; resources; ICT; quality of management.

Subject	Strengths	Areas for development
Science	<p>Considering Years 2003-2006. <u>11+ Entry Grades:</u> 75% A 12% B1 15% B2 3% C1 <u>KS3 Results:</u> 88% students – Level 6+ and 10% Level 8. Level 5 – 100% L6 – 88% L7 – 40 % L8 – 10% <u>GCSE Results:</u> 240 Entries. > 11% A* 73% ≥ B 94% ≥ C</p> <p>Mean mark scores for GCSE A* and C grades have been equal to the NI Grammar Average. Mean mark score for A*-B 3% above the NI Grammar Average.</p> <p>Quality of Teaching and Learning: Most pupils work well with their teachers in an atmosphere of mutual respect, showing enjoyment in their learning and achievements and responding well in class. Classroom observation has shown that teachers create a purposeful, supportive and safe environment, through effective use of praise and encouragement in an atmosphere of mutual respect. Teaching is a well-judged balance of whole class, group and individual activities. Classroom organisation is efficient and adequate resources are available. A variety of teaching methods are used and a whole school target of questioning has been used to promote learning. Pupils’ levels of motivation and attitude to learning are consistently high and they respond well in class, take pride in their work and work to a high standard as exemplified by ICT accreditation at KS3, GCSE coursework and Key Skills at AS level. Regular assessment and recording of pupils’ attainment is carried out, monitored and evaluated. Detailed schemes of work with suggested teaching approaches and assessment guidance are provided. Learning intentions with interactive web links for every lesson in KS3 Chemistry are available on the Science website.</p> <p>Curriculum Provision: GCSE students allocate 10-30% of their curriculum time to Science, while at A Level; each Science has 17.5% of curriculum time. Science options are available in each of the four A Level option blocks.</p>	<p>Considering years 2003-2006 Mean mark scores for KS3 Levels 6 and 8 are 2% above the NI Average. Target greater than 90% of KS3 students should achieve Level 5 or above. More students to receive targeted preparation for both Level 6 and Level 8 Attainment. Target to raise A*-A grades by 3% to meet the NI Grammar Average of 37%</p> <p>Quality of Teaching and Learning We will extend Learning intentions, with interactive web-links for every lesson in Y8-10, to cover Biology and Physics. These will include reference to the teaching strategies and skills we want to develop in each lesson. Use of classroom observation and pupil-survey to monitor quality of Teaching and Learning and to self-evaluate current practice. Identify individual learning styles so that staff are aware of the range of learning styles which need to be catered for in the classroom. In line with whole-school Assessment For Learning (afl) targets, we are currently developing standardised assessments for each topic or theme. These will be recorded on Assessment Manager and they will all incorporate a standardised means of self-evaluation. Our after-school revision programme will be extended to include KS3.</p> <p>Curriculum Provision: We will integrate LLW into the curriculum both at KS3 and KS4– Employability and PSHE. The faculty is keen to establish links with QUB, especially in Physics and Chemistry, and to develop current links with UUC. We would also like to establish a working relationship with St Mary’s University</p>

	<p>Uptake of Specialist Subject: 18%, 60% and 22% respectively, study 1, 2 or 3 Sciences at GCSE. 60 A2 Science grades (A-E) achieved per year. On average 30% of our sixth form leavers have followed Science-based degree courses.</p> <p>Resources: There are 10 staff teaching Science: all are Science Specialists. From KS4 Science is taught by subject specialists. Six of our staff have post graduate qualifications and all continually engage in professional development.</p> <p>ICT: 8 Interactive white boards and a substantive bank of Teaching and Learning Resources held on C2k. Training of pupils in ICT remote monitoring. Use of Spreadsheets to monitor progress and to set and review individual targets. Boardworks software provides opportunity for pupils to participate actively during lessons using white boards.</p> <p>Quality of Management: The Science teachers hold important positions of responsibility that collectively involve them in virtually every aspect of school life, from membership of the SLT, through Heads of Year, Heads of Careers and Curriculum Development, SENCO and Pastoral Care, to co-ordinators of Key Skills, Cross Curricular Links, Timetabling and Subject Options. Teachers hold a range of specialist qualifications in Science, Education and Management which have been used effectively to build a highly motivated team - one that takes a collegial approach in responding to change, making the best use of our individual strengths. Excellent monitoring and evaluation procedures, including the use of Excel and Assessment Manager. Ongoing Performance Reviews as evidenced in our CPD and participation in the IIP programme. Timetabled Conference Periods within and between the three Science departments, with minutes recorded. Effective ongoing financial and resource management, embracing cutting-edge educational tools. Close liaison with the Careers Department, including inviting guest speakers from the Biomedical Science Department of UUC and Mechanical Engineering of QUB. All departments contribute to an annual "Science Week" and organise participation in many extra curricular activities.</p>	<p>College with regard to providing teaching practice and mentoring for BEd students. We will continue to develop our bank of teaching and assessment materials - stored for use both internally (via our white boards) and externally (via our website). Target to increase the use of our website at KS3. This will support the need to cater for different learning styles (V, A & K) and will help promote autonomous learning.</p> <p>Uptake of specialist subject Extend enrichment activities in Science, particularly Science week and participation in Science-based competitions, which raise the profile of Science. Ensure pupils have relevant and meaningful experience of Science at KS3. Clearly highlight links between Science and Employability to encourage Science career pathways.</p> <p>Resources: Develop a Science resource and study room from animal house (currently under used). Renovate existing labs to make more attractive as learning areas. Consider developing a wireless network, using laptops that can move between labs.</p> <p>ICT: Develop our substantial website to support the autonomous learning skills of our pupils and others. [www.lcc.ukf.net]. Develop our use of remote logging to allow investigations in "the field" and promote links across the curriculum. Update data logging applications and ensure compatibility with C2K computers. Increase 'interactive' nature of white boards by use of appropriate software such as Birchfield or Sunflower. Increase access to C2K in laboratories.</p> <p>Quality of Management Provide training for technicians in response to changes resulting from the revised curriculum, updating their skills and knowledge. Develop the timetable to 'set' some Science classes (Y8-10), to facilitate workshops, LLW and guest speakers Two members are instrumental in the introduction of two strands of LLW into the curriculum. Most Science teachers have been consistently involved in the Curriculum Development Committee by meeting regularly to discuss school development planning. We will continue to develop and harness our links with professional institutions and organisations that support learning in Science eg The Royal Society of Chemistry, The Institute of Physics, Salters' Chemistry and The University of Ulster. Establish links with universities to accommodate PGCE students, in an effort to help address the shortage of Science teachers. Regular departmental time to be allocated to discussion and the identification of good practice, so that emphasis moves to Teaching and Learning rather than administrative tasks.</p>
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Subject	Strengths	Areas for development
Biology	<p>Attainment 2004-2006 Result averages GCSE Biology (CCEA) A*-A 48.4% A-B 84.9% A-C 97.3% A-D 100% (N.I averages A-C 96.9%) AS Biology (AQA) A 25.4 % A-B 48.2% A-C 71.7% A-D 90.7% A-E 100% (JCQ averages A-D 67.8%) A-Level Biology (AQA) A 33.7% A-B 52.7% A-C 71.4% A-D 86.7% A-E 95.4% (JCQ averages A-D 82.9%)</p> <p>Teaching and learning: An enthusiastic, caring and supportive Science Department who work to the whole school T&L Policy. Agreed scheme of work & Department policies which are adhered to. There is shared good practice with regard to displaying learning outcomes at the beginning of each lesson, on the front page of notes which have been provided to the pupil, and schemes of work. Pupils are made aware of their learning preference and of multisensory approaches to learning. Target setting for exam results & assessment recording for every topic being taught at both A2, AS, KS4 and KS5. Independent learning is facilitated. Pupils show initiative and confidence in using resources effectively. Pupils listen attentively to one another and take account of the opinions and views expressed. Pupils' work is displayed in the classroom and outside corridors. Learning outcomes are planned in line with pupils' abilities and supported learning activities are appropriately paced. Teaching assistants are appropriately used to enhance learning among SEN pupils.</p> <p>Curriculum Provision: GCSE Biology – 10% of allocated timetable (2hr 40min per week), mainly double periods. A Level Biology – approximately 17.5% (4hr 45 min) of timetabled provision.</p>	<p>Attainment Sustain the overall GCSE A* - C grades, improve A* - B grades, improve boys' A* - C grades. Target setting should take place for underachievers (i.e. 10 marks below the year test average). Grades should improve by 5% over the period of a term. Improve overall grades at A Level by changing from AQA to CCEA boards. Following a significant review we believe the CCEA specifications are more suited to the needs of our pupils and they award a much higher percentage of A and B grades. At 16+ increase the percentage of boys achieving A-D grades to be in line with the girls.</p> <p>Teaching and learning: In line with TTI best practice guidelines, the Science self evaluation questionnaire should be completed by the Department and areas for development should be noted. Production of self assessment sheets which may be completed by the students on a term basis to monitor their progress and areas for development. Further work on study techniques and learning strategies. Producing a study skills booklet for student reference. Early identification of areas of difficulty for students based on topic test scores and extra resources provided. Mark schemes for past papers (2000-2006) could be made available on the school Science website. Coursework should be targeted and high standards expected. Deadlines should be met by all pupils. Work should be given up in sections rather than one completed assignment. All end of topic test scores for each class should be recorded on C2K shared Departmental resources and scores for individual pupils could be compared within and between classes. Pupils should continually plot a graph of their achieved score and compare it to the year average score and keep this in their Biology file. Progress of the pupil should be tracked by the teacher on Excel and each individual test score compared with the year average. Develop assessment for learning. Strategies to improve: <ol style="list-style-type: none"> i. Questioning Techniques ii. Feedback to pupils. Revision classes provided for under achievers. Resource packages provided. Initiate peer tutoring using AS and A2 level students. Develop use of visiting speakers to promote Biology within the school. Expand on the links made with UUC (University of Ulster, Coleraine), W5 (Odyssey Centre) and Magilligan Field Centre. Facilitate "Researchers in Residence" scheme. Development of field work for Key Stage 4 students. After school revision in third term in preparation for public exams. Enter Students for Institute of Biology Olympiad and the Irish Senior Science Olympiad (DCU). Develop video conferencing with partner school. Attend Greenmount Agricultural College open day.</p>

<p>Uptake of Specialist subject: Biology is a popular Science subject, with 86 students taking it as a single Science at Y11 and 19 students in Y12 studying it for Triple Award. In Y13 there are 26 pupils who will all be retaining it to A Level and at present there are 14 A2 students.</p> <p>Resources: The HOD is also the SENCO for the school, and is a specialist teacher having a DSpLD. Two members of the department are experienced assistant examiners at AS and A2 level. The four Biology teachers are specialists in their subject including two with postgraduate specialist degrees. Three fully fitted Biology specialism labs post-16. DVD and video recorders in each lab as well as microscopes and a microscope camera & an extensive supply of DVDs. A biology technician to serve these laboratories. Extensive collection of resources are catalogued & shared between the four subject specialists. Membership of Instituted of Biology and ASE with access to resources on-line. Extensive textbook resources. A wide bank of teaching resources stored on C2K shared learning resources.</p> <p>ICT: The three Biology classrooms each have their own interactive whiteboard. There is a stand-alone computer in each lab & access to the computer suite for whole classes is readily available. Data loggers with temperature, light & pH sensors are available, & used in fieldwork outings. C2K has extensive resources. Biology Boardworks purchased by department. Valuable and effective websites are continually added to shared resources or staff resources on C2K. Using excel, student performance profiles are continually added to and built upon.</p> <p>Quality of Management: The newly appointed HOD is an experienced teacher and holds a Masters in both Biology and Education. She promotes an open door policy, good communication between Department members and encourages a collegial approach amongst staff via shared resources e.g. agreed notes produced for all pupils. Observation by HOD of all Department members as part of PRSD and of self evaluation procedures in Science Department. Regular minuted Departmental meetings. Fortnightly Departmental conference meetings. Fortnightly conference meetings with other Science HOD's. Annual subject attainment targets set and monitored. Target setting for exam results and assessment recording for every topic being taught at both A2, AS, KS4 and KS5. INSET training. Always having a Department member present at Agreement trials and courses organised by ASE. Effective monitoring and evaluating procedures, including the use of Assessment Manager and an annual review and evaluation. Feedback on INSET is evaluated in line with IIP Standards</p>	<p>Curriculum Provision HOD to negotiate with Principal to maintain current provision.</p> <p>Uptake of Specialist subject: Increase the number of students taking AS and A Level Biology and sustain the current uptake at GCSE. Provide additional guidance and advice for AS and A2 to increase the uptake of AS Biology and subsequent progression into A2. Promotion of the department and its activities may be done by information being posted on notice boards, school magazine, and school newsletter. Further promotion may be achieved by entering various Science competitions and applying for various grants e.g. Rolls Royce Award. The Biology department should also continue to have an active input into the Science day for feeder primary school pupils.</p> <p>Resources Development and better use made of greenhouse, animal house and pond. Animal House may be developed as a Science resource and study room with 'summer house' being developed as animal house. Prep room between Biology Lab 2 and 3 badly needs refurbished. Labs could be painted and new windows provided for Labs 2 and 3. New furniture for each Lab, in particular Lab stools with back supports. Continue subscription to the Institute of Biology and ASE.</p> <p>ICT: Promote independent and interactive learning through use of whiteboards and websites. Make pupils familiar with valuable Biology websites. Purchase more interactive software, particularly for 16+ students. Purchase of wireless laptop to accommodate probes and data loggers. Provide INSET training for teachers to make best use of Biology ICT software in classroom situations. Subject to copyright Mark schemes for past papers (2000-2006) could be made available on the school Science website.</p> <p>Quality of Management: Department meeting should focus on as comprehensive a range as possible of teaching and learning aspects and activities which promote betterment of pupils. Specific areas could include: Development of Department made resources to fulfil our collegial approach. Further embedding strategies for AFL in line with the Department. developmental plan. Target setting using NI Benchmarking. Staff development should be a high profile process and all relevant courses should be attended by a least one member of the department.</p>
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Subject	Strengths	Areas for development
Chemistry	<p>Attainment: 2003-2006. <u>11+ Entry Grades:</u> 75% A 12% B1 15% B2 3% C1 <u>GCSE Results:</u> 25 Entries. 23% A* 62% ≥ A 90% ≥ B 100% ≥ C <u>AS Level Results:</u> 28 Entries. > 34.0% A 56.8% ≥ B 78.8% ≥ C 89.5% ≥ D 96.5% ≥ E <u>A' Level Results:</u> 20 Entries. > 41.5% A 73.0% ≥ B 84.2% ≥ C 95.0% ≥ D 99.75% ≥ E</p> <p>GCSE: Mean mark scores when compared with CCEA Averages are well above in all categories = +8% A*, +13% ≥ A, +11% ≥ B, +4% ≥ C.</p> <p>A' Level: Mean mark scores when compared with JCQ Averages for all Examining Boards are well above in all categories. AS Chemistry = +12% A, +16% A-B, +21% A-C and +11% A-E. A2 Chemistry = +11% A, +18% A-B, +11% A-C and +4% A-E.</p> <p>Quality of Teaching and Learning: All 3 teachers are Chemistry specialists. A 4th teacher, teaching KS3 Science and GCSE Biology and Mathematics, is also a Chemistry specialist. Detailed Schemes of Work and Lesson Plans. Also, “Intended Lesson Outcomes”, with interactive web-links, for every lesson in Chemistry Y8-14. Target setting and regular reviews of performance, including assessment and recording for each topic or theme. Provision of after-school revision programmes for KS4/5. The Chemistry teachers hold important positions of responsibility that collectively involve them in virtually every aspect of school life. These include membership of SLT, Construction of the School Timetable, Head of Year, Head of Careers and Coordinators of Pastoral Care, Key Skills, Cross Curricular Development and Subject Option. The HoD served as Teacher Governor for four years. The department has a long and very successful history of participating in external events, challenges and workshops, including Salters’ Chemistry Initiatives, Royal Society Competitions, Industrial Visits and the Northern Ireland Junior Science Quiz. Very positive feedback from moderators of coursework both at CCEA and AQA. The department shares resources and expertise with UUC, including workshops on spectroscopic techniques and sharing of personnel and materials for Science fairs. The faculty participates in a “Learning at Work” Programme run by the Department of Environmental Science at UUC.</p> <p>Curriculum Provision. GCSE has 10% and A Level 17.5% of curriculum time. Some “setting” of Science classes is arranged to facilitate differentiation, allow a carousel-modular approach and ensure teaching by specialists on all occasions.</p>	<p>Attainment 2003-2006 N.B. The school no longer offers the Single Award and Double Award options. However, the total number of GCSE Science entries continues to remain in the range 220 – 235 per year. Given the more demanding nature of the “Pure Sciences”, our target is to maintain the existing distribution of grades. Improve performance of girls with respect attaining A* grades (38.5% and 28.6% A* grades for boys in the previous two years compared to 18.2% and 9.1% A* for girls).</p> <p>A Level: We will attempt to improve these grades in the following ways: AS: Achieve 100% A-E and 60% A-B grades (+6%) A2: Continue to maintain 100% A-E grades and raise A-B grades to 75% (+2%).</p> <p>KS3 Chemistry: More students to receive targeted preparation for both Level 6 and Level 8 Attainment to support the targets set by KS3 Science overall.</p> <p>Quality of Teaching and Learning: Continue to harness our interactive white-board and website resources to cater better for all learning styles (Visual, Auditory & Kinaesthetic) and to develop and support autonomous learning. At the same time, produce materials that we can share with others, particularly our Primary and Post-Primary Partners. Produce interactive materials, for most lessons, to place greater emphasis on “Active Learning”; to include more use of independent learning in the computer suite. Two members, involved in the roll-out of LLW into KS3, will assist with the review and up-date of the Scheme of Work to reflect the revised curriculum. All Chemistry teachers will continue to serve on the CD Committee. Develop Assessment For Learning strategies to improve: (1) Peer and Self Assessment and (2) Formative Assessment. Further develop “Thinking Skills” by developing strategies to incorporate theoretical aspects into the T&L of Chemistry. Investigate the use of Peer-Tutoring. Look actively for opportunities which enable us to develop our young people as contributors to society, the economy and the environment (e.g. attendance at “Science in Society” lecture series at UUC).</p> <p>Curriculum Provision. All GCSE students are required to take a minimum of two separate Sciences where post 16 Science is being considered. Timetable changes are planned, giving Upper VI classes an additional period per fortnight. Expand current provision of Revision Classes and Practical Exam Preparation sessions outside of normal class time.</p>

<p>Uptake of Specialist Subject. Around 55% of students choose Chemistry as a Separate Science at GCSE, while over 30% of post 16 students study Chemistry. Some 30% of sixth form leavers have taken up Science-based courses at 3rd level</p> <p>Resources. 3 Labs fitted for Chemistry specialist teaching to Post 16. Chemistry annual budget allocation £2850, 6.9% of the total budget. All teachers have an interactive white board with access to an extensive range of Teaching and Learning resources, stored by topic. There is substantial Department website to develop and support the autonomous learning skills of pupils. Participants in the “Learning at Work” initiative in the Environmental Science Department, UUC. Attendance at the “Chemistry at Work” Exhibition.</p> <p>ICT. Interactive white boards and a substantial website to encourage and support autonomous learning. We have encouraged pupils to contribute to the website, thereby fostering a positive, altruistic attitude to sharing. We contribute to the ICT elements of KS3 Accreditation and KS5 Key Skills.</p> <p>Quality of Management. The HOD is extremely experienced and holds a BPhil and MSc in Education Management. An “Action Research” method has been used effectively in the past to review progress, and identify areas for development, helping to promote a collegial approach to management. Excellent monitoring and evaluation procedures, including the use of “Assessment Manager” and PRSD. Conference Periods and regular Department Meetings that have minutes recorded. Setting of annual attainment targets based on previous pupil performance, N.I. benchmarking and comparisons with the results of similar grammar schools. Effective ongoing financial and resource management. One teacher is Principal Examiner with CCEA and currently involved in a review of the new GCSE specification.</p>	<p>Uptake of Specialist Subject. Currently, around 55% of GCSE students study Chemistry as a separate Science. We will attempt to raise this to nearer 60% by maintaining contact with past pupils and engaging them in more initiatives designed to foster interest in Science and provide a better understanding of the Careers Chemistry can lead to.</p> <p>Resources & ICT Already well resourced, we are equipped to provide stimulating lessons that avail of the latest in teaching developments. In addition to making more use of the Computer Suite, C2K Learning Resources and our Website, we plan to incorporate more use of computers for both data logging and interpretation of scientific data. Our membership of online resources, such as Examstutor.com, provides substantial help to pupils in terms of both learning and self-assessment. Use of this resource will be continued and developed.</p> <p>Quality of Management. We will continue to develop our proficiencies in the use of interactive whiteboard and use of Assessment Manager to monitor the progress of pupils. Continue liaising closely with the Careers Department and search for further relevant work experience placements for Chemistry students. Invite guest speakers from the Biomedical Science Department of UUC and Mechanical Engineering of QUB. We would like to set up links with universities to accommodate PGCE students, in an effort to help address the shortage of Science teachers. We will continue to contribute to the annual “Science Week” in the school and develop further opportunities to stimulate pupils and inform them better about opportunities in Science Careers. Future training needs have been identified as including preparing for the revised curriculum; Active Learning techniques and helping students become independent learners.</p>
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Subject	Strengths	Areas for development
Physics	<p>Attainment 2003 – 2006 Results Averages GCSE Physics A*-A: 56% A*-B: 78% A*-C: 98% (NI Grammar Average: A*-A: 49% A*-B: 76% A*-C: 93%)</p> <p>At A Level the percentage of students attaining grades A-E (96%) is better than the NI Grammar averages (95.5%). 2003 -2006 Results Averages AS Level Physics: A-B: 51% A-C 62% A-E 93% 2003 -2006 Results Averages A Level Physics: A-B: 57% A-C 73% A-E 96%</p> <p>Teaching and Learning PRSD records show that teachers create a purposeful, supportive and safe learning environment, where pupils are encouraged and teachers have high expectations. Pupils are encouraged and praised in an atmosphere of mutual respect. Teachers make use of a range of teaching methods including problem-solving, investigations and personal research as laid out in current schemes of work. Observations of lessons show that they are well planned, with activities that are generally well-paced and sufficiently challenging. Classroom organisation is efficient and adequate resources are available. Pupils respond well in class and show progression based on their ability. Pupils can plan and complete work cooperatively and they demonstrate a growing confidence in manipulating equipment and in their use of ICT as evidenced by ICT accreditation at KS3, GCSE coursework and Key Skills at AS level. Regular assessment and recording of pupils' attainment is carried out and monitored by HOD through meetings and discussions. Detailed schemes of work with 'suggested teaching approaches' are provided at all levels along with assessment guidance.</p> <p>Curriculum Provision GCSE Physics has 10% of curriculum time (2hr 40min per week). A Level Physics has 17.5% of curriculum time (4hr 45min per week). All GCSE students are advised to take a minimum of two 2 separate Sciences where post 16 Science is being considered. Science options are available in each of the A Level blocks, allowing students to take all three Sciences and mathematics. Revision classes are run for both KS4 and KS5 outside timetabled provision. Curriculum enrichment occurs through Paperclip Physics, Express Yourself Science and Physics Olympiad. Physics teachers organise the annual "Science Week" in the school, as well as other Physics competitions. At AS & A2 support lessons are offered to help low achievers.</p>	<p>Attainment Improve overall performance of Grades A*-C, by ensuring that coursework is completed to highest standard possible. Improve performance of girls at GCSE with respect to attaining higher grades.(54% A*-A for girls in both of the previous two years compared with 94% and 62% A*-A for boys in the same years.) Improve overall performance at AS and A level, by improving marks obtained in practical paper. Improve performance of boys at AS and A level (100% A-D for girls in past two years at AS and A levels compared to boys 65% A-D 2005; 100% A-D at A Level, 73% A-D 2005; 65% A-D 2006 at AS Level.</p> <p>Teaching and Learning Modify Teaching and Learning Policy to reflect the content of the revised curriculum. Introduce and develop thinking skills as part of Revised Curriculum at KS3 using CASE material. Develop Assessment For Learning strategies to improve (i) questioning techniques (ii) feedback to pupils based on the work by Black & Wiliam: 'Inside the Black Box' and CCEA guidance. Review and update scheme of work to reflect the demands of the revised curriculum at KS3. Introduce support lessons for low achievers - possibly using AS and A Level students in a peer tutoring role. Develop peer tutoring/mentoring using AS & A level students. Introduce Active Learning approach at GCSE based on activities on CCEA website and develop through to AS and A Level. Develop the use of Personalised Learning Plans to identify preferred learning styles and introducing a wide range of teaching methods designed to cater for these learning styles. Introduce more formal monitoring devices such as 'book scoops'. Develop the current ad hoc revision class arrangements into a more formalised provision. Develop pupils as independent learners at AS and A Level. Identify strategies to help boys improve at AS & A Level.</p> <p>Curriculum Provision Increase timetabled curriculum time from 8 periods per week to 8.5 periods per week for A level students. Provide opportunities for GCSE students to take part in Institute of Physics 'Physics Challenge'. Increase the number of students participating in Physics extra curricular activities. No applied provision currently exists, but we will keep this under review as an opportunity for future development of the curriculum.</p>

Uptake of Physics

60% of Y11 students chose Physics as a Separate Science at GCSE in 2006. 44 students (23%) study Physics post 16 (comparing favourably with a declining uptake nationally), with several recent past pupils progressing to study Physics at university level.

Resources

Two members of the department are currently assistant examiners for CCEA, one at AS Physics and the other at GCSE Physics. At A2, AS and KS4, all Physics is taught by Physics specialists. All teachers are involved in extra curricular Physics with students. Two laboratories are fitted for specialist teaching to Post 16 and fully equipped to meet the demands of current specifications. One technician with Physics responsibility. Physics annual budget allocation £2850, 6.9% of the total budget. Wide-ranging and in-depth bank of teaching and assessment materials stored for use on the C2K shared Learning Resources. Membership of Institute of Physics and access to its resources online. Membership of ASE via lab technician. Extensive text book resources – each pupil with access to modern texts. In 2005/06 the department was awarded a Rolls Royce Science ‘Special Merit Award’ to purchase ACTIVote handsets.

ICT

Classes have access to C2K network and it is available for independent work before and after school. Both Physics rooms have an interactive white board and teachers are at the forefront of developing teaching strategies to use this resource effectively. Each laboratory has C2K network points connected to interactive whiteboard with internet access. ‘Boardworks’ software provides opportunities for pupils to actively participate during lessons, using whiteboards. PL2 has 5 networked computers (school Intranet) and PL1 has 5 stand alone computers. Pupils use these to word process and produce graphs using spreadsheets. 12 SAC data loggers connected to Acorn Portable computers allow remote data logging of results, which can be transferred to C2K network for follow-up work.

Quality of Management.

The HOD is a member of the Senior Leadership team and recently completed an MSc in Education Management. "Action Research" was used to review and identify areas for development, helping to promote a collegial approach to management. Fortnightly Conference Periods are held with other Science HODs as well as regular Department Meetings that have minutes recorded. A department development plan identifies annual attainment targets, based on previous pupil performance and in areas of teaching and learning. There is effective ongoing financial and resource management and staff development is highly regarded with training needs identified through PRSD. INSET is reviewed and monitored by individuals and HOD using IIP standards. Effective monitoring and evaluation procedures include the use of Assessment Manager and an annual review and evaluation.

Uptake of Physics

Sustain the numbers studying Physics at GCSE. Investigate the reasons for progression deficit between GCSE and AS/A2 level and work to increase the number of students studying Physics at AS and A Level. Investigate the reasons for girls failing to choose Physics and then, based on these findings, work to increase the number of girls studying Physics at all levels.

Resources

Greater involvement of staff in marking of A level papers. Learning resources currently arranged on ad-hoc basis with little structure. Requires editing and restructuring to ensure it is more accessible and user friendly. Promote pupil access to Learning Resources from outside school. Currently 40% of Y10 Physics is delivered by non-Physics specialists. Ensure that this becomes 100% delivered by Physics specialists. Physics technician currently involved in many whole school areas, lessening time available to Physics. Consider requirements of revised curriculum and additional resources required to deliver this curriculum, eg APODO system for developing thinking skills (Tree of Knowledge product). Review texts available for delivery of revised curriculum with view to purchasing.

ICT

Develop use of ACTIVstudio MV interactive assessment, using handsets to increase motivation and provide instant feedback. Increase access in laboratories to C2K network – update existing computers in both labs. Update data logging applications – ensure compatibility with C2K computers. Increase ‘interactive’ nature of whiteboards by use of appropriate software such as Birchfield or Sunflower. Develop on-line resources to promote home study and introduce e-learning packages such as ‘SCHOLAR’ at post 16 and examtutor.com at KS4. Introduce the ‘Virtual Physics Laboratory’ as a teaching aid to use with C2K network and interactive whiteboard.

Quality of Management.

Greater use of Assessment Manager to monitor progress of pupils and groups of pupils. Targets to be set using N.I. benchmarking and comparisons with the results of similar grammar schools. Identified staff development needs include: Revised curriculum, assessment for learning, personalised learning, whole class Active Learning, peer classroom observation, school to school joint working within Science either face to face or through video conferencing.

b Please indicate how you currently share effective teaching and learning strategies between subject areas (specialist and non-specialist) within your school (maximum of one page).

- The School Development Plan plays a central role in identifying current good practice and disseminating this throughout the school, by developing action plans, identifying the most appropriate personnel to develop and deliver the plans followed by evaluation of their success. In the last few years, the school has used the 'Together Towards Improvement' (TTI) document as a method of self evaluation, for teaching and learning in particular.
- A well established culture of sharing and disseminating good practice exists within the school. Departments or teachers with particular strengths share ideas, best practice and teaching strategies with other staff as part of whole staff INSET. External agencies and personnel are also used in the same way.
- In the past, the school had developed a formal system of observation and review for continuous professional development. This has now evolved to become PRSD and each year one whole school development in Teaching and Learning is identified by the Curriculum Development Committee (CDC), as a shared objective for PRSD. The Curriculum Development Coordinator then works with all staff to identify best strategies for developing this objective within their area.
- The CDC meets regularly to discuss whole school teaching and learning strategies. Relevant strategies are identified and incorporated into the School Development Plan. Action plans are developed for introducing these strategies by focusing on whole school, departmental and individual teacher levels. Whole school teaching and learning has been evaluated using the quality indicators from the TTI document. Most recently the focus has been on developing assessment using Assessment For Learning strategies.
- The CDC is made up of HODs from a cross section of departments as well as members of SLT, and it has a leading role in identifying, planning and sharing good practice on a whole school basis. The CDC regularly reviews and evaluates policies within teaching and learning at a whole school level, cascading the same review and evaluation of these policies to departmental level.
- HODs produce annual reviews and evaluations of departmental attainment and performance. Recently a new framework based on TTI has been devised to help focus these reviews on Teaching and Learning. Departmental schemes of work, departmental development plans and annual targets (both in attainment and teaching and learning) are submitted to the Principal for scrutiny. Areas of best practice are shared at HOD meetings for dissemination throughout the school.
- HOYs meet regularly with Form Teachers to identify pupils who are underperforming and who may need additional support. Form teachers liaise with subject teachers, parents and pupils to identify strategies to help improvement. All parties are then involved in delivering suitable strategies.
- Learning Support is available for pupils at KS3 who need help with literacy, numeracy and organisational skills as well as helping to motivate the pupils. A mentoring system is currently in place to help individual pupils who are experiencing difficulty with literacy, numeracy and organisational skills.
- At KS3, cross curricular projects have been identified and developed between many subjects. Departments with curriculum overlap (eg Mathematics and Science) have met to standardise appropriate teaching strategies and to encourage links between the subject areas.
- In the past, parents and pupils have been consulted on teaching and learning using SETAC. The results of this survey were discussed by all staff and areas for improvement identified and included in the School Development Plan.
- Involvement in IIP has ensured that the development needs of all staff are identified and responded to.
- Within many departments there is informal colleague to colleague sharing of resources as well as effective teaching practice. The C2K learning resources allows sharing of resources on-line both between colleagues within a department and across departments.
- Provision is made for HODs to provide appropriate work for classes being covered in the main study, and this is regulated by a VP.
- Beginning teachers, EPDs and substitute teachers receive an induction programme and a VP acts as a mentor, arranging regular meetings to discuss teaching and learning strategies, as well as observing practice. Good practice observed by the VP is then shared with the whole staff and on occasions EPDs have given an input at staff meetings.
- Staff development needs are identified and appropriate INSET attended/provided. This is monitored through PRSD and IIP.
- Some departments regularly consult pupils regarding the quality of Teaching and Learning and use this evaluation to establish strategies for improving.
- The school identifies special educational needs for individual pupils and appropriate provision is made, with the SENCO liaising with pupils, parents, subject teachers, Form teacher and HOY. The SENCO has a regular input at staff meetings regarding appropriate strategies, available resources and Personalised Learning Plans. Resources are available in the staff study.
- HODs currently agreeing template for KS3 revised curriculum scheme of work.

c Please outline your links with existing post-primary schools and other providers (eg FE colleges)

Subject	Existing links	Proposals for extending and strengthening links
Science	<p>Y13 pupils have been involved in the 'GETSET – Sentinus engineering experience for female Science students.</p> <p>Y8 GETSET Roadshow run in school in conjunction with Sentinus.</p> <p>European Webcam Astronomy Project initiated in school in conjunction with European Hands on Universe. The school is currently registered with the National Schools' Observatory and can access time on telescope.</p> <p>Engineering Education Scheme is run in conjunction with local business and organised by Sentinus.</p> <p>We have a long history of successful participation in the ESAT Young Scientist Competition, The Northern Ireland Young Scientists, the BA CREST Science Fair, European Science Competitions and the International Science and Engineering Fair.</p> <p>Y12 Physics students participate in 'Science Race' an online Science Quiz held during Science week.</p> <p>Y13 pupils have participated in the Institute of Physics Paperclip Physics competition.</p> <p>Pupils have participated in 'National Science Week' activities organised by the University.</p> <p>We have shared Science equipment with the university to assist in running Science events. This is a two way exchange with the school providing resources and pupil demonstrators for the Salters' Science Summer Camp in 2006.</p> <p>A link with the GeoPhysics Research group at UUC has led to the development of FORTRAN classes as an after school enrichment programme.</p> <p>Chemistry pupils have visited the Science Department at UUC to observe spectroscopy and other techniques that require expensive specialist equipment.</p> <p>Y11/Y12 pupils have participated in the Salters' Chemistry Summer Camp.</p> <p>Y8 pupils have participated in the Salter's Forensic Science Challenge.</p>	<p>Increase number of pupils from each school who participate and liaise with schools to see if we can deliver any of their Science curriculum through this vehicle.</p> <p>Considering organising 'Ambassadors in Science' in conjunction with Sentinus.</p> <p>Astronomy lectures for parents/pupils in partnership with local enthusiasts.</p> <p>Continue to send pupils on work placements to our partner schools.</p> <p>Extend link to include Science Department within Loreto and then cascade to Partner Schools, in particular Dominican College.</p> <p>Continue with FORTRAN classes, leading to pupils participating in project work involving computer simulation.</p>

<p>ICT</p>	<p>Y10 pupils have successfully participated in the annual KS3 Science Quiz at St Dominic’s College in Belfast. Biology department has established links with Coleraine Borough Council, who send representatives to deliver lectures on environmental issues. Conservation Volunteers have help develop the school environment by planting trees and helping establish the school pond. Trips have been organised to the ECOS Park in Ballymena. LEAP has worked with Marie Curie Cancer Care in planting areas with daffodils as part of their ‘Fields of Hope’ campaign. Glasdon Wastes have been involved in helping the school establish a paper recycling programme.</p> <p>ICT Key Skills (Level 3) as well as OCR Word Processing and Text Processing (Level 2 / Level 3) delivered in collaboration with Causeway Institute of Further and Higher Education. Attendance at Information Systems Summer School at UUM. Student form UUC is on placement within ICT as part of Tutoring in Schools initiative.</p>	<p>Develop community links through environmental projects.</p> <p>Extend to include other departments, including Science.</p>
<p>Geography</p>	<p>Dissolving Boundaries Project. Run in conjunction with UUC and forming a virtual link with Mercy Convent, Sligo, using interactive whiteboard and internet technology (video links, email and web-based research) as well as face to face meetings. Representative of Ulster Farmer’s Union gives an annual lecture to Y14 pupils as part of the A2 module covering Farming.</p>	<p>Consider applying Dissolving Boundaries Project to Partner Schools.</p> <p>Continue with lectures. Possibly extend to include other schools.</p>
<p>Careers</p>	<p>University of Ulster has provided guest lecturers explaining their current Science research. Many of our partner schools have provided work experience opportunities for our pupils. A wide range of Universities have provided guest speakers to provide guidance on making an application to Higher Education and coping with university life. Coleraine Business Education Partnership is currently involved in establishing a partnership involving local schools and businesses to develop resources and teaching</p>	<p>Invite pupils from partner schools to attend these lectures.</p> <p>Develop work experience with Armstrong Medical with view to enhancing the learning experience of pupils on any work placement.</p> <p>Greater use of Sentinus and Young Enterprise to help deliver the Employability strand of LLW.</p>

<p>German</p> <p>Art & Design</p> <p>English</p> <p>P.E.</p>	<p>methods for the Employability strand of LLW. Young Enterprise organises and delivers the 'Big School Seminar' to Y8 pupils. Y13 pupils work with Young Enterprise to develop, produce, market and sell a product. Y10 pupils participated with Young Enterprise to develop and produce a product.</p> <p>Participation in annual AS/A2 German Debating competition organised by Queen's University. Participation in German workshops at both Queen's University and UUC. German Assistant shared with Coleraine Academical Institute and Dalriada – cooperation required regarding timetabling.</p> <p>Successfully involved in the Causeway Area Peace Network, winning top award in their annual calendar design competition. Participation in the Credit Union poster competition and quiz.</p> <p>Participation in creative writing competitions at both local and national level. Organising an annual Sponsored Spell to raise money for the schools designated charities. Worked in partnership with Coleraine High School in a NEELB Pilot for KS3 Media Education. Participation in Public Speaking competitions with local schools and with other Loreto Schools on a national scale.</p> <p>We compete against both St Joseph's and Dominican in local soccer, hockey and netball leagues. We also compete against the local FE college at soccer. We organise friendly games of Gaelic Football and Hurling against both Partner Schools and have made our Gaelic Pitch available to other schools to play competitive matches. Local groups eg Sunbeam Spinners, Graham Dance have used our Sports Hall for dance competitions. Host netball competition for local schools at Primary and Secondary level.</p>	<p>Maintain current links and exchange ideas and resources with other schools at workshops.</p> <p>German department would like to develop a more formal link with Coleraine Academical Institute, if possible, to maintain delivery of German as a language.</p> <p>Would be interested in opening the Art & Design Department to be used for night classes by local community groups such as the West Bann Regeneration Group.</p> <p>Organise similar competitions with partner schools to encourage and motivate students from all schools.</p> <p>Introduce Careers lectures on English /Media Careers for AS/A2 students delivered by UUC and local journalists attended by local schools.</p> <p>Continue with all current sporting links.</p> <p>Allow partner schools (Sandelford Special School in particular) to access sports facilities for Sports Day, Dance and Fitness classes. Open sports hall to community groups in evening, if possible.</p>
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Religious Education	<p>As part of Y14 RE programme students from Sandelford Special School visit Loreto and participate in activities organised and run by Y14 students. Saint Vincent de Paul and Christian Living Community – both school groups are involved in visiting local Folds and Nursing Homes; providing support and entertainment, delivering hampers, carol singing etc.</p> <p>Other Loreto Schools throughout Ireland – participating in the Justice, Peace & Integrity Conference. Other well established links include ACET, Alcoholics Anonymous, Concern, Children in the Cross-fire, Habitat for Humanity and Friends of Africa. These organisations would provide guest speakers, organise workshops or provide support for our General R E programme.</p>	<p>Continue to support this link, but develop activities to include Technology and environmental project work.</p> <p>Organise debates on Social Justice issues with Partner Schools.</p>
Home Economics	<p>The following organisations provide an input to A Level curriculum coverage by providing resources or guest speakers – Health Promotion Agency, Environmental Health Office and Bank of Ireland. The Bank of Ireland have also sponsored a Home Economics Trophy to reward attainment in the subject. The Livestock and Meat Commission provide meat vouchers to the Department. Participation in a Home Economics competition run jointly by The National Dairy Council and CEA. Loughry College provide training in food preservation methods and food safety.</p>	<p>Investigate the possibility of pupils completing the Chartered Institute of Environmental Health certificate in food safety. This is available on-line and has been jointly developed by CCEA, CIEH, C2K, DENI and QUB. It is entirely consistent with the revised curriculum and could possibly be completed outside normal curriculum time. Develop ‘Healthy Eating’ programme for use with Primary Partners and Sandelford Special School. Local EHO willing to visit school and train pupils using specialised equipment such as Ultraviolet Scanning using Glogerm. St John’s, St Malachy’s and St Colum’s Primary Schools could be involved in this training. Develop training links with Loughry College to support this.</p>
Economics	<p>The department has entered teams in the annual Proshare & Target 2.0 competitions. Winning regional and national awards in both competitions.</p>	
Mathematics	<p>Sentinus delivered a ‘Mathematics Fun Day’ to several year groups. Pupils participate in the Mathematics Challenge and Mathematique Sans Frontière competition.</p>	<p>Extend participation in these competitions to include more year groups.</p>
Drama	<p>Head of Drama meets with Head of Theatre Studies from Partner School once every half term to discuss subject changes. Theatre trips and workshops with local Drama groups.</p>	<p>Invite other schools on trips and to participate in workshops.</p>

C2. School plan: Objectives and Targets (see Guidance page 9)

Please set out your plans for development **WITHIN EACH OF THE SUBJECTS COVERED BY YOUR SPECIALISM** and through the specialism for whole school improvement. Please refer to the guidance for further details of what is expected. Where more than one target is set for each year please insert additional lines where relevant. Tables are provided for two subject objectives for illustrative purposes; please use as many as your specialism covers.

OBJECTIVE A : Subject

Specialist Subject Science *[outline objective]*

To stimulate an interest in Science by applying an understanding of Science in a moral, social, economic and environmental situation to meet the requirements of the skills based curriculum at KS3 & KS4 in particular through increased use of ICT, Assessment For Learning and differentiation to meet the needs of each pupil and incorporation of Active Learning into the schemes of work.

ATTAINMENT

Key Stage	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
3 ¹	1	<p>a) At KS3 pupils should attain:</p> <p>89% -Level 6+ 9% level 8</p> <p>(From 2003-2006 attainment of 88% level 6+ and 8% level 10)</p>	<ul style="list-style-type: none"> • Monitor and review effectiveness of current schemes of work and identify learning intentions for Science and incorporate these into schemes at team meetings. • Incorporate LLW and skills based activities into the year 8 scheme of work taking cognisance of review and implement appropriate strategies identified and incorporate these into the revised scheme of work. • Maintain opportunities for practical work to encourage active and hands on learning thereby promoting skill and capabilities. • Improve planning at AT1 by evaluating current practice and make investigation relevant to promote enquiry based learning. • Improve Science vocabulary by displaying and drawing attention to scientific words thereby developing literacy in Science. • Create an interesting and stimulating environment within the laboratories and in the corridor outside by displaying examples of good work produced by pupils and visits by pupils to industry. This will promote Science in the school. • Fostering more discernment in respect to the information available in the modern 'information' age by displaying project work that follow contradictory viewpoints e.g. fluoridation of water, IVF and pollution • Liaise with Careers department to build up links with industry so that experiences can be shared to help reflect the demands of the revised curriculum. • Review Boardworks to identify lessons which can be made more interactive and modify, and introduce Boardworks worksheets to aid delivery of the curriculum. • Continue to review and update Lornotes and lesson notes, so that ICT, Active Learning and differentiation are facilitated. • Identify underachievers using results obtained and target them for level 6 and identify higher ability pupils and target them to achieve a level 8 by after school revision and examination preparation classes.

¹ Please contact the RTU if you are unsure whether directly relevant KS3 targets can be set for the subjects covered by your specialism.

			<ul style="list-style-type: none"> • Introduce target setting in Year 10 so that pupils can identify weaknesses after their module tests and record targets on a target setting sheet and therefore personalise their learning. • Update end of module tests by using most recent KS3 examination questions. • Focus on extension tasks/exercises for higher achievers by practising examination technique. • Use ICT in at least one lesson per term to promote independent learning and presentation skills by students via interactive tutorials. Use of video conferencing links with other schools. • Introduce Science Olympiad competitions in year 10. • Use Assessment Manager to monitor performance of current year 8 and identify the likely number of pupils achieving each level. Identify underachievers in Year 8 using results of tests recorded in class against CAT test profiles. • Professionally develop staff so that they are updated in their knowledge and skills so as best to deliver the revised curriculum. • Make full use of Teaching Assistants for the benefit of pupils on the SEN Register.
	2	<p>b) Improve grades at KS3 Pupils should attain 89% -Level 6+ 9% level 8</p> <p>[From considering 2003-2006 attainment of 88% level 6+ and 8% level 10]</p>	<ul style="list-style-type: none"> • Continue to monitor and review effectiveness of current schemes of work and discuss learning intentions for Science. Evaluate how schemes reflect the requirements of the revised curriculum in year 8 & 9. • Continue to use Assessment Manager to monitor performance of pupils in year 8 & 9 and interview underachievers with a view to producing Personalised learning plans. Monitor Personalised Learning Plans at pupil, staff and parent level. • Monitor and evaluate the LLW and thinking skills activities in the schemes of work for year 8 & 9. • Self evaluate the focus on planning at AT1 by benchmarking against previous year's results • Continue to improve Science vocabulary by displaying and drawing attention to scientific words thereby promoting literacy in Science. • Incorporation of reviewed Boardworks diagrams and notes into current worksheets for year 8. • Continue to review and update Lornotes and lesson notes, evaluating the ICT, Active Learning and differentiation implemented in year 1. • Continue target setting in Year 10 & start in Year 9 so that pupils can identify weaknesses after module tests and record targets on a target setting sheet and therefore personalise their learning. • Continue to identify underachievers and high ability pupils so that targeted practice at levels 6 and 8 can continue. Introduce after school classes to raise achievement. • Target Active Learning as a shared objective in PRSD. • Share good practice with the department and with other schools. • Continue to implement ICT by incorporating ICT based learning into 2 lessons per term to promote independent learning and presentation skills by students via interactive tutorials.

			<ul style="list-style-type: none"> • Continue to professionally develop staff so that they are updated in their knowledge and skills so as best to deliver the revised curriculum. • Make full use of Teaching Assistants for the benefit of pupils on the SEN Register.
	3	<p>c) At KS3 pupils should attain:</p> <p>90% -Level 6+ 10% level 8</p> <p>(From 2003-2006 attainment of 88% level 6+ and 8% level 10)</p>	<p>In addition to activities ongoing in Year 1 & 2:</p> <ul style="list-style-type: none"> • Review effectiveness of new Key Stage 3 schemes of work for year 8-10 and assessment materials via team meetings. Ensure ICT, AFL, differentiation and Active Learning are present and use classroom observation and pupil survey to evaluate the above target. • Continue target setting in Year 9 +10 & start in Year 8 so that pupils can identify weaknesses after module tests and record targets on a target setting sheet. • Self evaluate the new notes incorporating boardworks by comparing end of module results with a similar class from the previous year. • Introduce peer tutoring of KS3 students in examination practice and revision of area that need improvement. • Continue to use Assessment Manager to monitor progress of pupils in years 8-10. Continue to identify underachievers with a view to producing Personalised learning plans. • Consider differentiation of worksheets to facilitate the arrival of next year's intake (without the transfer test) Arrange meetings with local secondary schools to compare good practice. • Continue to professionally develop staff so that they are updated in their knowledge and skills so as best to deliver the revised curriculum. • Make full use of Teaching Assistants for the benefit of pupils on the SEN Register. • Continue to introduce Science competitions along with Junior Olympiad and Young Scientist competitions • Establish twilight sessions among teachers and with partner schools to disseminate good practice via interactive whiteboards and skills-based learning.

	4	<p>d) At KS3 pupils should attain:</p> <p>91% -Level 6+ 11% level 8</p> <p>(From 2003-2006 attainment of 88% level 6+ and 8% level 10)</p>	<p>In addition to activities ongoing in Year 1 – 3:</p> <ul style="list-style-type: none"> • Review effectiveness of Key Stage 3 schemes of work and assessment materials via team meetings. This could be the first Year 8 without academic selection. Discuss findings of shared practice with local secondary schools and incorporate into schemes of work. Incorporation differentiation into worksheets. Ensure ICT, AFL and Active Learning are also present. Use classroom observation and pupil survey to evaluate the above targets. • Use Assessment Manager to monitor performance of pupils. Due to wider range of abilities (no transfer test) there will be a greater need to use Teaching Assistants and set up Personalised Learning Plans • Continue target setting so that pupils can identify weaknesses after module tests and record targets on a target setting sheet, thereby personalising learning. • Self evaluate the new notes incorporating boardworks by comparing end of module results with a similar class from the previous year. • Continue peer tutoring of KS3 students in examination practice and revision of areas that need improvement to promote independent learning and research skills using our Science website. • Disseminate examples of good practice and results of self evaluations to all other departments via the intranet. • Continue to professionally develop staff so that they are updated in their knowledge and skills so as best to deliver the revised curriculum. • Make full use of Teaching Assistants for the benefit of pupils on the SEN Register. • Continue to introduce Science competitions along with Junior Olympiad and Young Scientist competitions
4	1	e)	See Separate Sciences
	2	f)	
	3	g)	
	4	h)	

PROVISION/UPTAKE

Key Stage	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
3 ²	1	<p>i) All KS3 pupils will continue to take Science and sit KS3 examinations.</p> <p>All Year 8 pupils will continue to complete an investigation using ICT to meet the requirements of the KS3 accreditation.</p>	<ul style="list-style-type: none"> • Audit Year 8 pupils on most enjoyable aspects of Year 8 curriculum. • Implement Year 8 Revised Science programme, monitor and review. • Revise Schemes of work and common assessment materials at Year 8. • Purchase notice boards, wall charts and resources to brighten classrooms and corridors. • Liaise with Literacy co-ordinator to improve use of Scientific language in the Department. • Resource ICT and incorporate a range of practicals that extensively implement ICT activities, supporting independent and interactive learning through data logging activities and pocketbook laptops. • HOD to liaise with Careers department to develop information for HOD to share with Y10 Science classes as part of Careers input. HOD reviews and updates the information in the Y10 subject option • Science Specialist co-ordinator monitors and evaluates success of initiatives through book scoop, end of unit tests and classroom observation.
	2	<p>j) All KS3 pupils will continue to take Science and sit KS3 examinations.</p> <p>All Year 9 pupils will continue to complete an investigation using ICT.</p>	<ul style="list-style-type: none"> • Audit Year 9 pupils on most enjoyable aspects of Year 8 curriculum from previous year. • Implement Year 9 Revised Science programme, monitor and review. • Based on analysis of audit, develop units of work and assessment materials in light of curriculum review via strategy meetings and with more areas of Active Learning within the schemes. • Revise schemes of work and common assessment materials at Year 9. • HOD to liaise with Careers department to develop information for HOD to share with Y10 Science classes as part of Careers input. HOD reviews and updates the information in the Y10 subject option. • Resource ICT and incorporate a range of practicals that extensively implement ICT activities, supporting independent and interactive learning through data logging activities and pocketbooks within the laboratory. • Specialist Science co-ordinator monitors and evaluates success of initiatives above via book scoop to assess quality of work, analysis of end of unit tests and work observation reports from cross-subject colleagues.

² Please contact the RTU if you are unsure whether directly relevant KS3 targets can be set for the subjects covered by your specialism.

	3/4	<p><i>Outline of plans</i></p> <p><u>Year 3</u> All KS3 students will continue to take Science and sit KS3 examinations.</p> <p>Implement Year 10 Revised Science programme, monitor and review.</p> <p><u>Year 4</u> All KS3 students will continue to take Science and sit KS3 examinations.</p> <ul style="list-style-type: none"> Science Department to link with business partner with whom the school can develop a KS3 project based on real work in the Science community. One class group to pilot the project and display completed work during Science Week. In both years the Specialist Science co-ordinator monitors and evaluates success of initiatives above via book scoop to assess quality of work, analysis of end of unit tests and work observation reports from cross-subject colleagues. 	
4	1	k)	See Separate Sciences
	2	l)	
	3/4	<i>Outline of plans</i>	

ENRICHMENT

Key Stage	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
3/4²	1	m) To enhance range of learning experiences for pupils studying Science through integration with other subjects in school.	<ul style="list-style-type: none"> Science Specialist Co-ordinator to meet with other departments to develop cross-curricular themes at KS3 and produce a module of work in other areas of the curriculum. Liaise with Drugs coordinator to set up a Year 10 roadshow. All pupils will use the Science web site to enhance their learning Invite Coleraine Ambulance crew to give a 1hr presentation on the day in the life of a paramedic.
	2	n)To encourage pupils to take part in more Science competitions	<ul style="list-style-type: none"> Extend the Paperclip Physics task into all Science areas. Encourage more pupils to enter Science in Society competition. Establish good practice with regards to supervised use of the Greenhouse, pond and nature trail in the school grounds.
	3/4	<p><i>Outline of plans</i></p> <ul style="list-style-type: none"> Attempt to establish Video conferencing links with partner schools. Continue to establish good practice with regards to supervised use of the Greenhouse, pond and nature trail in the school grounds. 	

C2. School plan: Objectives and Targets (see Guidance page 9)

C2 (Cont)

OBJECTIVE B1: Subject

Specialist Subject Biology [outline objective]

To raise the attainment of, and sustain the uptake of Biology at all levels within the school by developing learning and teaching strategies based on Assessment For Learning and by providing for all types of intelligence.

ATTAINMENT

Key Stage	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
3³	1	a)	See KS3 Science
	2	b)	
	3	c)	
	4	d)	
4	1	e) Students should attain: A* - C 97% A* - B 85% A* - A 50% (from current position June '06) A* - C 96% A* - B 84% A* - A 48%	<ul style="list-style-type: none"> • Carry our self assessment audit of Biology Department as a basis of improvement and development. • Evaluate and revise current schemes of work at Department meetings and identify learning objectives. • Establish a Science curriculum team to review current T&L strategies for Year 11 and ensure that provision is being made for multiple intelligences. • Use staff resources on C2K to build up class performance profiles which display results of end of topic tests and exam scores. Underachievers can be identified by HOD. (There are no longer Double Award classes available and there are a wider range of pupils in the Biology classes). • Establish a focus on personalised learning approaches for those considered underachievers which will include interviews by subject teachers and target setting. • A well planned and implemented Year 14 mentoring scheme will be set up to support pupils in Year 12 who are having difficulty with particular Biology topics. • Review the use and deployment of Teaching Assistants to maximise benefits of pupils on the SEN register. • Let pupils complete a questionnaire to identify the learning / intelligence preference. • Give a double period presentation to both Year 11 & Year 12 students on study skills, learning preferences and target setting. • Each term Year 11 & Year 12 students should complete each term, self-assessment sheets to monitor their progress. • A collegial approach is adopted to notes / topic booklets provided to Year 11 & Year 12. The booklets have the learning objective displayed on the front page. • Make use of W5online.co.uk materials which encourage active and skills based learning.

³ Please contact the RTU if you are unsure whether directly relevant KS3 targets can be set for the subjects covered by your specialism.

			<ul style="list-style-type: none"> • Evaluate Boardworks and identify the best presented topics to use as interactive lessons. • Have a 'Careers in Biology' notice board outside the Biology Department. • Create a climate for learning and a stimulating environment in the labs by displaying pupils' work and having both plant and animal life evident.
	2	<p>f) Students should attain: A* - C 97% A* - B 85% A* - A 50%</p>	<ul style="list-style-type: none"> • Identify three areas of weakness from the Department self assessment audit and include them in the Department Development Plan to be addressed over three years (2008-2011). • Prepare schemes of work to take into account the new CCEA specification as part of the revised curriculum for Y11 students. • Schemes of work will include effective Assessment For Learning and Active Learning strategies which would address multiple intelligences. • All staff to be developed on the theme of multiple intelligences as a precursor to applying key learning in their classroom practice. • Continue to use staff resources on C2K to build up class performance profiles and identify underachievers. (There are no longer Double Award classes available and there are a wider range of pupils in the Biology classes). • Classroom teachers interview underachievers, and Personalised Learning Plans are set up. • Y14 mentoring scheme to include Y11 who have difficulties with certain Biological concepts or topics. • Continue to make full use of Teaching Assistants to benefit SEN pupils. • Timetable a yearly presentation (double period) on Study Skills, learning preference and target setting for Y11 students. • At the end of each term the Y11 and Y12 students to have completed a self assessment of their progress to date. • Encourage active and skills based learning through the increased application of ASE materials. These will be built upon over the year. • Provide more interactive learning opportunities within Biology lessons, particularly using the selected topics from Boardworks. • Review and update 'Careers in Biology' notice board. • Continue to ensure that the Biology laboratories create a stimulating environment which promote the subject.

	<p>3 g) Students should attain:</p> <p>A* - C 97% A* - B 80% A* - A 50%</p>	<ul style="list-style-type: none"> • Delivery of the new CCEA specification at Y11 and implementation of updated schemes of work. • Preparation of schemes of work to cover Y12 delivery of new CCEA specification as part of the revised curriculum. • Continue to use staff resources on C2K to build up class performance profiles and identify underachievers. • Classroom teachers interview underachievers and Personalised Learning Plans are set up. • Y14 mentoring scheme to include Y11 and Y12 students who have difficulties. • Presence of Teaching Assistants for SEN pupils. • Study Skills input on a yearly basis for Y11 students. • Self assessment on a termly basis for all pupils. • Continue to develop resources for active and skills-based learning. • Implement interactive whiteboard lessons and varied teaching strategies to encompass multiple intelligences for Y12 students. • Improve questioning developed as an Assessment For Learning strategy (identified by Black and Wiliam) through PRSD and peer observation. Target Y11 classes initially and incorporate eg Blockbusters and question loops.
	<p>4 h) Students should sustain:</p> <p>A* - C 97% A* - B 80% A* - A 50%</p>	<ul style="list-style-type: none"> • Delivery of new CCEA specification at Y12 and implementation of updated scheme of work. • Extend implementation of Multiple Intelligence learning strategies to both Y11 and Y12 students. • Monitor and evaluate the effectiveness of new teaching and learning strategies by consulting pupils and Biology staff. • Ongoing interviewing, monitoring reviewing and evaluating procedures as above. • Continued mentoring by Y14 students and support by teaching assistants.

PROVISION/UPTAKE

Key Stage	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
3 ⁴	1	i)	See KS3 Science
	2	j)	
	3/4	<i>Outline of plans</i>	
4	1	k) Continue to provide GCSE Biology with an uptake figure of 100 students in Y11 and retain current number of 86 pupils in Y12. Introduce fortnightly after school Biology classes for Y12 students who are attaining less than 55% in class and topic tests. (Estimated uptake of 10 students.)	<ul style="list-style-type: none"> • HOD negotiates budget to resource this number of students i.e. new text books, practical apparatus and IT software. • Y10 Careers day to include representation from Careers requiring Biology. • Use performance profiles to identify underachievers and encourage them to attend extra classes. • Supplementary resources developed for Y11 pupils to enable personalised learning and topic revision.
	2	l) Continue to provide GCSE Biology with an uptake figure of 100 students in Y11 and Y12.	<ul style="list-style-type: none"> • Purchase and extend resources to enable more active and individualise learning. • Continue to ensure Y10 Careers day includes representatives from Careers requiring Biology.
	3/4	<i>Outline of plans</i> Continue to provide GCSE Biology with an uptake figure of 100+ students. <ul style="list-style-type: none"> • Revise schemes of work and lesson content for Y11 and Y12 pupils in light of new GCSE specification; produce schemes for implementation in September '09. • Maintain monthly revision classes over the two year period. • Provide individualised learning packages on difficult topics to underachievers. • Update learning resources with extra topic support material. 	

⁴ Please contact the RTU if you are unsure whether directly relevant KS3 targets can be set for the subjects covered by your specialism.

ENRICHMENT

Key Stage	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
3/4 ²	1	m) Involve external agencies in various aspects of K3/4 Science, Biology and areas of Healthy Lifestyle.	<ul style="list-style-type: none"> • In consultation with the Drugs Coordinator organise a one day 'Drugs Roadshow' event for year 10 pupils, comprising four different presenters. • Invite W5 team to give a one day seminar to Y12 students on genetic testing. • As part of Science week invite in Horticulturist, Seamus Maguire, to give a talk on plant maintenance. • As part of Science week invite local pet shop owner, Norman McCracken, to display a number of his pets in the Animal House and talk about their care and maintenance.
	2	n) Extend provision to include a trip to Greenmount on their open day for schools.	<ul style="list-style-type: none"> • Continue to provide Health/Drug event for Y10 pupils. • Invite W5 team to give a presentation on immunology. • Continue to participate as above during Science Week. • Conduct a trip to Greenmount Agricultural College for the Y11 pupils.
	3/4	<i>Outline of plans</i> <ul style="list-style-type: none"> • Continue to include external speakers. • Organise yearly trips to Greenmount Agricultural College. 	

POST-16 (Where applicable)

Focus	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
<p>Attainment</p>	<p>1</p>	<p>o) At AS level attain: A-B 53% A-C 85% A-E 100% (from current position of A-B 52.6% A-C 84.2% A-E 100%) At A2 level attain: A-B 66% A-C 86% A-E 100% (from current position of A-B 65% A-C 85% A-E 95%)</p>	<ul style="list-style-type: none"> • Review and modify scheme of work for Y13 and Y14. • Analyse modular results of previous years and identify areas of weakness. • Identify underachievers using the class performance profiles and provide a weekly revision period for them. • Develop and purchase resources which would encourage independent learning e.g. Advanced Biology 1 and 2, student resource and activity manual. • Make better use of existing question and answer resource software e.g. Exampro and Curriculum Press. • Have monthly conference meetings devoted to effective resources at Advanced Level. • Have a study skills section with Y13 discussing learning preference, study skills, self assessment and note-making. • Supply all Y13 and Y14 students with an overview of the year including topics covered, time allocation, topic and exam test coverage. • Ensure all Y13 and Y14 keep a revision book which should contain their summary of each topic covered. This should be examined by the teacher each term. • All practical work should be written up in a laboratory book.
	<p>2</p>	<p>p) Review existing schemes of work for Y13 and Yr14 using analysis of examination results from previous years. Make adjustments to scheme as appropriate.</p>	<ul style="list-style-type: none"> • Continue to provide weekly revision classes to underachievers as identified by class performance profiles • Continue to extend resources which would allow for independent and Active Learning by consulting with partner schools on effective resources. • Continue to provide a study skills session for Y13. • As above continue to provide overview of year to advanced students and demand that both revision summary and practical laboratory book are keep up to date. • Introduce a one day revision course during the Easter holidays for AS Biology students.

	3/4	<p><i>Outline of plans</i></p> <ul style="list-style-type: none"> • Aim to maintain or improve % targets for attainment at AS and A2 by end of Year 4. • AS A-B to 55% A-C 86% A-E 100% • A2 A-B to 68% A-C 88 % A-E 100% • Continue to use the interactive whiteboard effectively. Use valuable sites e.g. BiologyMad to help review the course and provide updated information. • During the second term the subject teacher should interview all students and help them self-assess. • Extend the one day revision course at Easter to A2 Biology students - to be held on a separate day. 	
Provision/ take-up	1	q) To provide 3 Biology Classes at Y13 with at least 50 students and 2 classes at Y14	<ul style="list-style-type: none"> • Purchase resources to supplement independent and interactive learning. • Have department training sessions for best use of whiteboard in Science lessons. • Adopt a collegial approach with regards to production of notes at AS and A2 level. • Continue to participate in DCU Biology Olympiad and British Biology Olympiad. • Organise a visit to UUC to see the electron microscope and the Biochemistry department.
	2	r) To provide 3 Biology classes at both Y13 and Y14 with uptake of 50+ students in each year To promote relevance of Biology through industrial visits	<ul style="list-style-type: none"> • Organise industrial visit for all Y13 students through SENTINUS programme. • Organise ambulance crew (Coleraine Hospital) to visit Y14 students (double period) to discuss what their job entails. • Organise visit to Armstrong Medical (Business Community Partner).
	3/4	<p><i>Outline of plans</i></p> <p>To extend industrial links and curriculum provision in Biology as well as continuing to provide 3 Biology classes at AS and A2 level with 50+ students in each year group completing AS and A2 levels (CCEA).</p> <ul style="list-style-type: none"> • Planning and implementation of Human Biology at AS level. • Continue industrial visits program through SENTINUS links. • Make full use of W5 presentations for Advanced level students. 	

C2 (Cont)
OBJECTIVE B2: Subject

Specialist Subject Chemistry [outline objective]

To raise achievement and uptake of Chemistry at GCSE by developing more and different kinds of active-learning and assessment materials - to be fully integrated into our existing "Lesson Plans" for every lesson (Y8-14) and made available online to promote and facilitate autonomous learning.

Additionally, to raise the number of AS pupils completing the full A Level in Chemistry, by identifying and tackling the concerns of those who choose not to proceed to A2. Increase our support for pupils who find the mathematics of Chemistry especially difficult, identify, develop and deploy study skills suited to the discipline, facilitate autonomous learning and through positive feedback and Careers enrichment, improve the self-confidence of all pupils.

ATTAINMENT

Key Stage	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
3 ⁵	1	a)	See KS3 Science
	2	b)	
	3	c)	
	4	d)	
4 GCSE Objectives & Targets	1	e) Pupils should attain: A* - C > 95% A* - B > 75% A* - A > 45% Completion in June 2008: [75 students] From a current position of: [18 students] A* - C 100% A* - B 90% A* - A 62% NB The number of students	<ul style="list-style-type: none"> Science teachers will develop their proficiency in the effective use of our Interactive Whiteboards and associated Teaching and Learning Resources. Particular attention will be given to customising the toolbox, adding and editing resources, handwriting recognition, adding user defined buttons and arranging flipcharts. They will also receive training and support to learn how to make more effective use of the computer suite for the purposes of teaching and assessment. We will target to have 5% of lessons conducted within a room that has a minimum of one computer for every two students, by the final term. We will research different methods and styles that can be employed effectively to increase the extent to which lessons are of an active nature. Particular emphasis will be placed on the promotion of autonomous learning and mastery learning, where pupils spend parts of lessons working at the level best suited to them. Time will be required to allow teachers to reach agreement and to become fully conversant with the modus operandi and intentions of new methods being considered for adoption. We will review how our Chemistry website has developed, gather statistics on its use by our pupils and solicit opinions on how it might be improved. In particular, we will consider how it can further facilitate learning and self-assessment in school and at home, taking cognisance of the different types of learner (Auditory, Visual and Kinaesthetic).

⁵ Please contact the RTU if you are unsure whether directly relevant KS3 targets can be set for the subjects covered by your specialism.

	<p>undertaking GCSE Chemistry (Separate Science) more than tripled in September 2006.</p> <p>Recognising that this is a more demanding option for many pupils who would formerly have chosen Double Award, we believe that it is appropriate to set the above targets.</p> <p>Points in order:</p> <p>A. Interactive Whiteboards</p> <p>B. Active Learning</p> <p>C. Website</p> <p>D. Differentiation</p> <p>E. Innovation Revised Curriculum</p> <p>F. Data Logging</p> <p>G. LLW</p>	<ul style="list-style-type: none"> Fully investigate the increasing need for differentiation in our teaching, acknowledging the likely impact of non-selection at age eleven and our movement away from Single Award and Double Award Science options. Research for different methods that may be employed, consider their suitability for the task and agree upon appropriate strategies to use. Continue to develop and build upon the resources required to address substantive changes resulting from the Revised Curriculum. Identify exercises that encourage pupils to be more discerning of Information in the media. Develop assessment exercises that give positive feedback to pupils on a regular basis. Research, and where possible trial, the most up-to-date methods of electronically remote-logging experimental investigations. In particular, investigate the possibility of finding a device with a software interface that reduces or even negates the current high level of technician support required with our 'Sense and Control' devices. Identify appropriate means to develop and extend existing initiatives designed to show pupils how Chemistry is used in the world of work. Such additional methods must cause only minimal disruption to the whole curriculum. They may include inviting in scientists, including past pupils, to demonstrate elements of their work. In this same regard, continue to work on the Careers pages of our website, with the voluntary support of our senior pupils (possibly through relevant Key Skills exercises).
2	<p>f) Pupils should attain:</p> <p>A* - C > 95%</p> <p>A* - B > 75%</p> <p>A* - A > 45%</p> <p>Completion in June 2009: [An estimated 75 students]</p> <p>Recognising that this intake is exceptionally weak, when referenced using 11+ entry grades, we believe that it is appropriate to set these targets.</p> <p>These attempt to maintain the standards in spite of the dip in 11+ entry grades</p> <p>Points in order:</p> <p>A. Interactive Whiteboards</p> <p>B. Active Learning</p>	<ul style="list-style-type: none"> Teachers of Chemistry will consider how their training in the use of our interactive white boards and computer suite has impacted on teaching and assessment methods. Any negative consequences will be addressed, while the most significant advantages identified will be used to inform further developments. These can also be shared with other departments in due course. More advanced skills will be developed, including use of the tool bar, resource library, question master and activity wizards as well as organizing pages. Active Learning methods that have been selected as appropriate will be purchased and/or developed and integrated into our Y11 Schemes of Work and Lesson Notes. Progress will be closely monitored and teachers will confer regularly to consider their degree of comfort with the new methods – considering the possible need for new strategies to be developed and/or need for further training. Additionally, the website will be used to garner more samples of exemplary work from our pupils, to be included in presenting what we do well and what we consider worthy of being of help to others. Continue to examine ways of using our internet site to grab the attention and interest of our pupils and to develop their understanding of its relevance in life and work. Use the same to open up an electronic gateway for pupils to discuss relevant issues with the Head of Department. Consider how our website, and internet in general, can be used to facilitate the introduction of different kinds of assessment, including peer and self-assessment. ICT sources, of the kind we already employ at KS3, will be introduced into Y11. Introduce new resources and deploy appropriate new strategies to address the increased need for differentiation in Y11. Review progress of the same through regular conference periods. Identify suitable exercises that develop Thinking Skills and integrate them into our lesson notes. Develop and trial a number of well researched assessments that introduce the pupils to self- and peer-assessment. Research and trial two new Teaching and Learning Strategies: Mind Mapping and Each One Teach One. Find substantive relevant tasks in GCSE that can make exemplary use of the new data-logging hardware.

	<p>C. Website D. Differentiation E. Innovation Revised Curriculum F. Data Logging G. LLW</p>	<p>Purchase/design appropriate lesson and support materials.</p> <ul style="list-style-type: none"> • Begin to put in place the ideas that have been identified to build upon our current initiatives designed to show pupils how Chemistry is used in the world of work. This is likely to require timetable changes, including partial setting of classes, as well as building up contacts with individual scientists, companies and institutions. Continue to work on the Careers pages of our website, building in, where appropriate, the other initiatives mentioned just above.
3	<p>g) Pupils should attain:</p> <p>A* - C > 97% A* - B > 78% A* - A > 48%</p> <p>Completion in June 2010: [An estimated 75 students]</p> <p>Points in order:</p> <p>A. Interactive Whiteboards B. Active Learning C. Website D. Differentiation E. Innovation Revised Curriculum F. Data Logging G. LLW</p>	<ul style="list-style-type: none"> • Teachers will receive advanced skills training in the use of our interactive whiteboards. This will include improvements in storing and managing of files, as well as complex techniques of integrating other software packages. • Active Learning methods that have been selected as appropriate will be purchased and/or developed and integrated into our Y12 Schemes of work and lesson notes. Progress will continue to be closely monitored and teachers will continue to confer regularly as in the previous year. Pupils will be consulted to determine how they have taken to our new strategies and their viewpoints will be given very serious consideration. The most engaging and successful methods will be identified and used to continue the initiative into Y12. Again, we will share our experiences with colleagues. • Regarding our website, investigate the feasibility of an online Chemistry forum, where we can encourage constructive dialogue between the pupils and teachers of the school, and with the possibility of extending it to include partner schools. Liaise with our Partner Primary Schools to examine ways that our website resource might be expanded to provide support for them and to encourage further links. • Research the different methods that might be employed to permit pupils to independently select and undertake assessments which can subsequently be marked and recorded by automated means. Continue the introduction of appropriate differentiation materials into Y12 and also continue to monitor progress. • Review the success of our two new Learning and Teaching strategies and expand upon them as appropriate. Introduce two new strategies eg Jigsawing and Snowballing. Investigate possible links with other areas of the curriculum that will help the school as a whole to meet the new challenges presented by the Learning for Life and Work strand of the Revised Curriculum. • Purchase the hardware, provide training for teachers and begin to use it for one task in each of Years 11 and 12. Assess its contribution and consider the need for any changes to be made. • Review and distil out the most successful means that have been employed to help show pupils how Chemistry is relevant in the real world and how it is employed. Shift attention towards the social, environmental and moral issues surrounding Chemistry in our lives. Develop exercises intended to stimulate pupils to think about the consequences of what we use Chemistry for, and to provoke reactions from the pupils that can be considered and challenged in an unthreatening, professional manner.

	<p>4</p> <p>h) Pupils should attain:</p> <p style="padding-left: 40px;">A* - C > 98%</p> <p style="padding-left: 40px;">A* - B > 80%</p> <p style="padding-left: 40px;">A* - A > 50%</p> <p>Completion in June 2010: [An estimated 75 students]</p> <p>Points in order:</p> <p>A. Interactive Whiteboards</p> <p>B. Active Learning</p> <p>C. Website</p> <p>D. Differentiation</p> <p>E. Innovation Revised Curriculum</p> <p>F. Data Logging</p> <p>G. LLW</p>	<ul style="list-style-type: none"> • Teachers will assess how their competencies in the use of our interactive whiteboards and related resources have improved. They will consolidate what has been successful and begin to examine interactive methods that allow groups of pupils, or even the whole class to enter data on to the board remotely. • Having completed a GCSE programme that has incorporated more Active Learning, we will examine the impact upon our results and the uptake of the subject at AS level. We will distil out the best examples of successful practice and build upon them, and discontinue what has not proven effective. • Open up all appropriate areas of our website to partner schools and seek to have them contribute ideas and articles to it. Review progress and seek opinions on how to improve the website, from all those using it. • Having completed a full GCSE programme, assess the impact of deploying new resources and introducing new strategies to tackle the need for greater differentiation • Review the success of our new Learning and Teaching strategies and expand upon them as appropriate. Introduce two new strategies e.g. World's Worst and Bingo. • Extend the use of the data-logging hardware, to include one further application in each of Years 11 and 12. • Develop exercises that require pupils to identify Chemistry based issues where the scientists are not in agreement. These exercises will involve the pupils monitoring (or researching) an issue in the media, recording different shades of opinion, and expressing their own substantiated viewpoint. Continue to build our resources into our schemes of work and include lessons in the computer suite where the teacher can facilitate personalised use of the Careers materials that have been generated for Chemistry. • Delivery of the new CCEA specification at Y12 and implementation of the updated scheme of work.
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PROVISION/UPTAKE

Key Stage	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
3 ⁶	1	i)	See KS3 Science
	2	j)	
	3/4	<i>Outline of plans</i>	
4	1	<p>Maintain the current very satisfactory uptake of GCSE Chemistry:</p> <p>That is, attract 65 or more students.</p> <p>67 for 2006-8 63 for 2007-9</p> <p>Providing an average of 65 for the first two years that our new GCSE Science Options have been running.</p>	<ul style="list-style-type: none"> Survey Y10 students to ascertain the level of enjoyment and interest in Chemistry at KS3. Identify the issues and concerns that may dissuade pupils from choosing GCSE Chemistry. Consider where intervention might be effective in attracting more suitably able and interested pupils. Liaise with the Head of Careers to consider whether our Departments can do more to inform KS3 students about the opportunities in Chemistry-related fields of work. Provide a refresher course for all Chemistry/Science teachers on relevant Careers and requisite qualifications. Provide them with the means to be able to direct pupils to appropriate sources for Careers information. Investigate possible opportunities to have our KS3 pupils more directly acquainted with Chemistry related Careers. Guest speakers and/or an industrial-type visit will be included in our considerations. Display more materials (more often) that present the Careers opportunities associated with Chemistry Consider different opportunities that can be used to boost the profile of Chemistry: Extend our annual Chemistry Demonstrations Day to actively engage more pupils. Attract more KS3 pupils to our website and use it to generate more enthusiasm for Chemistry. Run more internal competitions suited to all abilities and identify similar opportunities to reward and affirm progress in Chemistry.
	2	<p>l)</p> <p>Maintain the current good balance of boys and girls choosing GCSE Chemistry.</p> <p>Raise (to equalise with boys) the percentage of girls achieving the top grade (A*) in GCSE Chemistry</p>	<ul style="list-style-type: none"> By use of pupil survey, investigate possible differences in the attitudes of boys and girls when it comes to considering further studies in Chemistry. By scrutiny of KS3 Chemistry assessments, look to see if gender plays a role in performances within specific topics. If gender issues are identified, proceed to develop strategies to raise performance. By scrutiny of past KS3 Science Papers (externally marked), investigate why fewer girls achieve Level 8. Similarly, investigate why fewer girls have recently achieved an A* Grade in GCSE Chemistry. Consider if/how our Classroom Environment could be improved to enhance learning for both boys and girls. Reflect upon the dominance of men in Chemistry literature, and look to identify opportunities to present more women in the role of keen and successful Chemist.

⁶ Please contact the RTU if you are unsure whether directly relevant KS3 targets can be set for the subjects covered by your specialism.

	3/4	<p><i>Outline of plans</i></p> <p>Continue to employ strategies from previous years as well as:</p> <ul style="list-style-type: none"> • By use of pupil survey and analysis of performances in tests, identify substantive issues that can be addressed to help raise interest and performance in Chemistry. • By improving the learning environment and working harder to address the anxieties and needs of pupils, attract more into further studies in Chemistry.
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ENRICHMENT

Key Stage	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
3/4 ²	1	<p>m) To better inform our pupils about applications of Chemistry, by:</p> <ul style="list-style-type: none"> • Bringing all GCSE Chemistry students to an exhibition of Chemistry at Work. • Bringing in one or more guest speakers from a related field • Adding to and improving the relevant information provided on our website – to include increased contacts with specialist scientists, particularly past pupils. 	<ul style="list-style-type: none"> • Liaise with the Careers Department to consider how to attract guest speakers. Identify different timetabling strategies that can facilitate the same. • Expand upon our current Y14 links with The University of Ulster to include GCSE pupils having the opportunity to meet and discuss relevant issues with University Science Personnel. • Expand the numbers of pupils visiting the “Chemistry at Work” Exhibitions at QUB, to include all pupils studying Chemistry in Y12. • Use our website to develop a school forum where pupils can receive direct assistance from the HoD and where they can be encouraged to be altruistic - helping one another (particularly those in a lower Key Stage). • Avail of the “Undergraduate at Work” initiative (in association with UUC) to provide specialist mentoring for pupils with difficulties learning Chemistry. <p>Additionally:</p> <ul style="list-style-type: none"> • Review what the school as a whole provides in regard to developing study skills. • Investigate how best to update our data-logging devices, to greatly reduce, or possibly negate the current high level of technician support that is required with Sense and Control monitors.

2	<p>n) To incorporate substantive life-long learning skills that will continue to support our pupils at Third Level and beyond. In particular:</p> <ul style="list-style-type: none"> • Provide more opportunities for them to use data logging devices. • Support and extend their 'Study Skills Training' provided in AS. • Provide significant opportunities to develop the Key Skills of ICT and Numeracy. 	<ul style="list-style-type: none"> • Put contingencies in place to facilitate guest speakers visiting to inform pupils about Careers and Post 16 courses in Science. This may possibly have requirements in respect of timetabling. • Require all AS pupils to undertake a Key Skills exercise in Chemistry. Through the display of exemplary work of past pupils, raise the standard of work being produced. • Run competitions that extend to our partner schools and which encompass activities supporting learning via our website. • Expand upon our successful Chemistry Day, held annually in Science Week. A day in each of the first two terms will be used to stimulate interest and show that Chemistry can be great fun. <p>Additionally:</p> <ul style="list-style-type: none"> • Actively promote the development of study skills techniques by regularly incorporating appropriate exemplar materials into lessons (e.g. designing mind maps). • Acquire funds required for our new data-logging devices. Find the time and support needed to train teachers in their use and to incorporate them into suitable practical activities.
3/4	<p><i>Outline of plans</i></p> <ul style="list-style-type: none"> • Expand upon the developments in Careers education, to inform pupils better about the wider benefits of Chemistry education. • Continue to support the development of numeracy and literacy skills, through dedicated exercises and regularly raising awareness. • Play a substantial role in supporting the development of Key Skills at AS Level. • Through the development of an online Chemistry forum, provide more support for pupils beyond the classroom. • Begin to build a mentoring programme that proves beneficial for both the mentor and learner. 	

POST-16 (Where applicable)

Focus	Year	Target	Describe how you will implement these targets (use bullet points and short statements)																		
Attainment	1	<p>o) To raise grade performances in AS and A2 as follows:</p> <p>AS: 2% more achieving Grade A 2% more achieving Grades A-C</p> <p>A2: 100% achieving Grades A-E</p> <p>From a current 4-year average:</p> <table border="1" data-bbox="443 663 824 1000"> <thead> <tr> <th>Grade</th> <th>AS (%)</th> <th>A2 (%)</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>34.0</td> <td>41.5</td> </tr> <tr> <td>B</td> <td>56.8</td> <td>73.0</td> </tr> <tr> <td>C</td> <td>78.8</td> <td>84.2</td> </tr> <tr> <td>D</td> <td>89.5</td> <td>95.0</td> </tr> <tr> <td>E</td> <td>96.5</td> <td>99.8</td> </tr> </tbody> </table>	Grade	AS (%)	A2 (%)	A	34.0	41.5	B	56.8	73.0	C	78.8	84.2	D	89.5	95.0	E	96.5	99.8	<ul style="list-style-type: none"> • In recognising requisite numeracy skills to be challenging for some pupils, carry out research to determine where help is most needed. Liaise with the Numeracy Coordinator (Head of Mathematics) to establish a continuum of support suited to this discipline. • Review what the school provides as a whole by way of study skills support. Identify the most important (and especially relevant) study skills for this discipline. Receive training for teachers in the development and use of the materials and strategies that have been selected. • Continue to develop resources to support autonomous learning (inclusive of all three learning styles). Examine ways to effectively oversee such work and to create incentives for the pupils to undertake it. • In unison with GCSE, we will research different methods and styles that can be employed effectively to increase the extent to which lessons are of an 'Active Nature'. New methods might include use of the computer suite, the introduction of tutorials and the adoption of new learning and teaching strategies (e.g. Mind Mapping, Quizzing and Snowballing). • Develop assessments that use comment-only marking to provide constructive feedback that helps pupils to monitor their progress in a positive manner. • Create more time, on a regular basis, for practical work. Find, or develop, assessments suitable for the purpose. Devise strategies to allow more of class time to be devoted to practical work.
Grade	AS (%)	A2 (%)																			
A	34.0	41.5																			
B	56.8	73.0																			
C	78.8	84.2																			
D	89.5	95.0																			
E	96.5	99.8																			

	2	<p>p) To continue to raise grade performances in AS and A2 as follows:</p> <p>AS: 1% more achieving Grade A 1% more achieving Grades A-C</p> <p>A2: 2% more achieving Grades A-C</p>	<ul style="list-style-type: none"> • Execute the decisions made in regard to providing more support for developing numeracy skills. Monitor progress using the results of assessments and the related feedback from both teachers and pupils. • Build up a number of exemplar materials and employ them during the first two months to train the pupils in our selected study skills techniques. Highlight a number of topics where these techniques can be employed effectively. Monitor progress by assessing the pupils' own efforts in employing the study skills and soliciting their opinions. • Review what is available to support autonomous learning. Examine how widely they have been employed and assess how effective our measures, to oversee that all pupils are using them have been. • Review progress that has been made in increasing our links with universities in ways that will help to inform our pupils about the courses that require or recommend Chemistry at A Level. Also, review developments made in linking with Study Support Officers at our local universities. Increase direct contact between universities and our pupils by means of inviting guest speakers, visits to the university and opening channels of communication via our website. • Review progress made in expanding the number of Careers covered on our website. Survey the pupils to gauge how widely used and useful the materials have been. Identify where there are gaps in our information and continue the work as before. Review our success in finding professional scientists (including past pupils) to come in to speak to our pupils about their work. Get the programme underway and assess its effectiveness in capturing the pupils' interest in and commitment to Chemistry based courses. • Employ the strategies and develop the materials that have been chosen to make lessons more active. Liaise with other departments where reinforcement of such strategies is to be recommended and where resources might be shared. • Review how effective our new positive feedback assessments (including comment-only marking) have been and update our approach accordingly. • Implement the changes considered necessary to create more time on a regular basis for practical work. Continue to develop assessments suitable for the purpose and monitor the impact these changes have made in terms of how interest, motivation and learning have been affected.
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	3/4	<p><i>Outline of plans</i></p> <ul style="list-style-type: none"> • Raise the confidence and interest of pupils in Chemistry by identifying and supporting them more with specific areas of difficulty and by raising their awareness of Chemistry related Careers. • Use pupil surveys and analyses of assessments to identify the areas where additional support may be most effective. • Enhance what we already do in regard to Careers education. Expand the number of Careers covered on our website - by continuing to engage the pupils themselves in researching the information and providing the text, images and links necessary. Find professional scientists (past pupils where possible) who are prepared to come in to speak to our pupils about their work. Make arrangements to facilitate this process. • Develop, and incorporate into our lessons, a number of recommended strategies that make lessons: (1) more active, (2) more varied, to suit all three types of learning style and (3) better designed to foster the development of effective study skills and more autonomous learning. 	
Provision/ take-up	1	<p>q)</p> <p>AS Level Chemistry.</p> <p>To increase the number of pupils choosing AS Chemistry from our current 4-year average: From 26 up to 27.</p> <p>A2 Level Chemistry</p> <p>To increase the % of AS pupils continuing with Chemistry into A2 to nearer 80%</p> <p>From a current 4-year average of 78% retention:</p> <p>Yr 2006 - 17 of 30 (57%)</p> <p>Yr 2005 - 22 of 29 (76%)</p> <p>Yr 2004 - 22 of 24 (92%)</p> <p>Yr 2003 - 18 of 21 (86%)</p>	<ul style="list-style-type: none"> • Raise confidence and Chemistry Careers awareness at GCSE. • Improve the support provided to A Level Chemistry students of all abilities, and communicate this to GCSE pupils. • Through an increased use of positive feedback assessments, capture more interest and increase the commitment of pupils to a subject area that can be seen as excessively demanding and perhaps involving an element of risk in regard to UCAS points needed to be accrued. <hr/> <ul style="list-style-type: none"> • Provide increased support for pupils of all ability studying AS Chemistry. • Identify the greatest difficulties and concerns that result in pupils dropping Chemistry after AS. Develop strategies that can be used to relieve some of these. • Raise awareness in respect of the Careers that require Chemistry and Careers strongly supported by Chemistry. Also, promote the generic skills developed in Chemistry lessons by illustrating their applications in different fields of work

C2 (Cont)
OBJECTIVE B3: Subject

Specialist Subject Physics [outline objective]

To raise the attainment and uptake of Physics at all levels within the school by developing teaching and learning strategies based on assessment for learning, Active Learning and personalised learning and extending the curriculum provision in Physics by providing further enrichment opportunities, developing e-learning and considering how to increase Applied Provision as required by the Entitlement Framework.

ATTAINMENT

Key Stage	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
3 ⁷	1	a)	See KS3 Science
	2	b)	
	3	c)	
	4	d)	
4	1	e) Students should sustain: A* - C 100% A* – B 84% A* - A 56% (from current position of A – C 100% A – B 84% A* - A 56% June 2006) The number of students undertaking GCSE Physics as a Separate Science tripled in September 2006. Recognising that this is a more demanding option for many pupils	<ul style="list-style-type: none"> Review current teaching and learning strategies and determine effectiveness of provision in Y11 & Y12, by consulting with pupils, parents and Physics staff. Revise schemes of work to take cognisance of review and identify and implement appropriate strategies. Use Assessment Manager to monitor performance of Y12 pupils and identify the likely numbers of pupils attaining each grade, particularly any likely to be at grades below C. <i>(This will be particularly important as this will be the first year in which there will no longer be double award classes available and so there will be a wider range of abilities in Y12 Physics classes.)</i> Classroom teacher interviews pupils identified as underachieving with a view to producing Personalised Learning Plans (PLPs). Individual targets are set for Y12 pupils identified as underachieving and PLPs are monitored by classroom teachers, HOD and Form teachers. Engage in research to determine why girls are underperforming at GCSE based on the Institute of Physics Report ‘Girls in the Physics Classroom – A Teacher’s Guide for Action’. Identify strategies to help girls improve without being detrimental to boys. Y14 mentors identified to offer support to Y12 students finding difficulty with particular topics. Improving questioning developed as an Assessment For Learning strategy (identified by Black & Wiliam) through PRSD and peer observation. Y11 Physics classes targeted initially. Use of ‘Go for 5 and find 5’,

⁷ Please contact the RTU if you are unsure whether directly relevant KS3 targets can be set for the subjects covered by your specialism.

		<p>who would formerly have chose Double Award, we believe that it is appropriate to set targets which are in line with this.</p>	<p>‘Snowballing’, ‘Ask the Expert’, ‘Blockbusters’ as well as rich questioning.</p> <ul style="list-style-type: none"> • The use of ‘Jigsaw’ as an Active Learning strategy to be introduced in 3 lessons at Y11. • Supplementary materials beyond those used in classroom for two topics produced and made available as a study booklet and as part of Learning Resources. In accordance with Assessment For Learning these should highlight learning intentions. • Review Learning Resources and rationalise current Physics content into appropriate folders eg homeworks, examination questions etc. Work with ICT Coordinator and ICT Technician to ensure Learning Resources can be accessed by pupils from home. • Subscription to examtutor.com paid and e-learning resources identified for development. • Develop the animal house to become a computer suite so that interactive software can be better utilised. • Review Boardworks to identify lessons which can be made more interactive and modify as appropriate. Include use of ACTIVote handsets for assessment purposes. • Review performance of students at the end of the year to inform target setting for following year and make it more realistic.
<p>2</p>		<p>f) Students should sustain: A* - C 100% A* – B 84% A* - A 56% (from current position of A – C 100% A – B 84% A* - A 56% June 2006)</p>	<ul style="list-style-type: none"> • Preparation of scheme of work to cover Y11 delivery of new CCEA specifications as part of revised curriculum. New schemes of work to include strategies identified in pupil review from previous year as well as successful ‘afl’ and Active Learning strategies. • Monitor and evaluate the effectiveness of new teaching and learning strategies by consulting with pupils, parents and Physics staff. • Continue to use Assessment Manager to monitor performance of current Y12 pupils and identify the likely numbers of pupils attaining each grade, particularly those at grades below C. Interview of students, who are underachieving, carried out by classroom teacher with a view to producing Personalised Learning Plans(PLPs). Extend this practice into Y11. <i>(Again this will be particularly important as there will be a wider range of abilities in Physics classes and early identification of these pupils will be essential.)</i> • Targets are set for identified Y11 & Y12 pupils and PLPs are monitored by classroom teachers, HOD and Form teachers. • Y14 mentoring scheme extended to include Y11 & Y12 pupils. • Implement strategies identified to improve the performance of girls at Y11 initially. Monitor and evaluate success of strategies. • Effectiveness of questioning strategy evaluated using TTI quality indicators and by consulting with pupils. Successful strategies identified and embedded into schemes of work. Continued monitoring by peer observation. Best practice shared with other departments at staff meetings and relevant INSET. • Learning intentions linked to new CCEA specification and then linked to online resources using Science website

			<p>for one third of GCSE specification.</p> <ul style="list-style-type: none"> • The use of 'jigsaw' as an Active Learning strategy to be evaluated and if successful to be extended into Y12 by identifying 3 appropriate lessons. A second Active Learning strategy to be identified from CCEA website and 3 lessons introduced at Y11 using this strategy. • Supplementary materials beyond those used in classroom for further two topics produced and made available as a study booklet and as part of learning resources. • Use of examtutor.com to produce on-line objective assessments that can be remotely marked and provide instant feedback to students. Produce standardised end of unit tests for Y11 topics which can be sat by students in the computer suite. Results from tests can be used to monitor progress at individual, class and year-group level. • Begin to use the new computer suite for interactive lessons using Birchfield Software so that pupils have more individual experience of software. • Introduce 5 lessons at Y11 based on modified Boardworks resource to ensure that they are made more interactive. At least two using ACTIVote handsets for assessment. Review and evaluate lessons with pupils to gauge effectiveness.
	3	<p>g) Students should attain: A - C 100% A – B 85% A* - A 57% (from current position of A – C 100% A – B 84% A* - A 56% June 2006)</p>	<ul style="list-style-type: none"> • Delivery of new CCEA specification at Y11 and implementation of updated scheme of work. • Preparation of scheme of work to cover Y12 delivery of new CCEA specifications as part of revised curriculum. New schemes of work to include strategies identified in pupil review from previous year as well as successful Assessment For Learning and Active Learning strategies. • Monitor and evaluate the effectiveness of new teaching and learning strategies by consulting with pupils, parents and Physics staff. • Continue to use Assessment Manager to monitor performance of current Y11 & Y12 pupils to identify the likely numbers of pupils attaining each grade, particularly those at grades below C. Classroom teacher to interview pupils identified as underachieving with a view to producing Personalised learning plans. Extend this practice into Y11. • Targets are set for identified Y11 & Y12 pupils and PLPs are monitored by classroom teachers, HOD and Form teachers. • Y14 mentoring scheme extended to include Y11 & Y12 pupils. • Evaluate strategies identified to improve the performance of girls at Y11 and determine effect. Introduce effective strategies at Y11 and Y12. • Effectiveness of questioning strategy evaluated using TTI quality indicators and by consulting with pupils. Successful strategies identified and embedded into schemes of work. Continued monitoring by peer observation. Best practice shared with other departments at staff meetings and relevant INSET. • Learning intentions linked to new CCEA specification and then linked to online resources using Science website for another third of GCSE specification so that there is now two thirds coverage.

			<ul style="list-style-type: none"> • The use of the second Active Learning strategy to be evaluated and if successful to be extended into Y12 by identifying 3 appropriate lessons. A third Active Learning strategy to be identified from CCEA website and 3 lessons introduced at Y11 using this strategy. • Supplementary materials beyond those used in classroom for further two topics produced and made available as a study booklet and as part of Learning Resources. • Use of examtutor.com to produce on-line objective assessments that can be remotely marked and provide instant feedback to students. Produce standardised end of unit tests for Y12 topics that can be sat by students in computer suite. Results from tests can be used to monitor progress at individual, class and year-group level. • Introduce 5 lessons at Y12 based on modified 'boardworks' resource to ensure that they are made more interactive. At least 2 lessons to involve assessment using ACTIVote handsets. Incorporate feedback from Y11 pupils regarding previously updated lessons.
4	h) Students should attain: A - C 100% A - B 86% A* - A 58% (from current position of A - C 100% A - B 84% A* - A 56% June 2006)		<ul style="list-style-type: none"> • Delivery of new CCEA specification at Y12 and implementation of updated scheme of work. • Monitor and evaluate the effectiveness of new teaching and learning strategies by consulting with pupils, parents and Physics staff. • Continue to use Assessment Manager to monitor performance of current Y11 & Y12 pupils and identify the likely numbers of pupils attaining each grade, particularly those at grades below C. Classroom teacher interviews pupils identified as underachieving with a view to producing Personalised learning plans. • Targets are set for identified Y11 & Y12 pupils and PLPs are monitored by classroom teachers, HOD and Form teachers. • Y14 mentoring scheme extended to include Y11 & Y12 pupils. • Effectiveness of questioning strategy evaluated using TTI quality indicators and by consulting with pupils. Successful strategies identified and embedded into schemes of work. Continued monitoring by peer observation. Best practice shared with other departments at staff meetings and relevant INSET. • Learning intentions linked to specification and then linked to online resources using Science website for another third of GCSE specification so that there is now complete coverage. • The use of the third Active Learning strategy to be evaluated and if successful to be extended into Y12 by identifying 3 appropriate lessons. A further Active Learning strategy to be identified and 3 lessons introduced at Y11 using this strategy. • Supplementary materials beyond those used in classroom for further two topics produced and made available as a study booklet and as part of Learning Resources. • Use of examtutor.com to produce on-line objective assessments that can be remotely marked and provide instant feedback to students. Standardised end of unit tests for Y11 topics & Y12 topics can be sat by students in computer suite. Results from tests can be used to monitor progress at individual, class and year-group level so that underachieving pupils and gifted pupils may be identified easily. • Introduce 5 new lessons at Y11 based on modified Boardworks to ensure that they are made more interactive.

PROVISION/UPTAKE

Key Stage	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
3 ⁸	1	i)	See KS3 Science
	2	j)	
	3/4	<i>Outline of plans</i>	
4	1	k) Sustain current level of uptake for GCSE Physics at 3 classes. 3 Y11 classes (54 pupils) 3 Y12 classes (63 pupils)	<ul style="list-style-type: none"> Undertake survey of Y11 students, who did not take Physics, to identify reasons for not choosing Physics and develop strategies to counter this. Y10 Physics schemes reviewed and updated to meet demands of revised curriculum, introducing more Active Learning and featuring strategies identified as successful by pupils. Particular attention to be given to Y10 term 1, after which pupils have to make choices. Pupils need to find the Physics content enjoyable, manageable and relevant. HOD to liaise with Careers department to develop information for HOD to share with Y10 Science classes as part of Careers input. HOD reviews and updates the information in the Y10 subject option. Y10 Science Careers day to include representation from Careers requiring Physics. Identify enrichment activities in Physics that will lead to greater motivation for the subject eg CREST awards.
	2	l) Sustain current level of uptake for GCSE Physics at 3 classes, but increase the number of students to > 55 in Y11.	<ul style="list-style-type: none"> Implement strategies identified by survey in previous year. Monitor and evaluate the success of these strategies. Updated Y10 Physics schemes implemented, introducing more Active Learning and featuring strategies identified as successful by pupils. Y10 Science classes receive Careers input from HOD, and input to subject choice booklet is updated. This will be regularly reviewed and updated in consultation with the Careers department. Y10 Science Careers day to include representation from Careers requiring Physics. Introduce an enrichment activity specifically for Y10 Physics, to be held in term 1, possibly as part of Science Week and including Y13/Y14 Physics students as mentors.

⁸ Please contact the RTU if you are unsure whether directly relevant KS3 targets can be set for the subjects covered by your specialism.

	3/4	<p><i>Outline of plans</i></p> <p>Improve level of uptake to GCSE Physics to >58 as realistic target, >60 as aspirational target.</p> <ul style="list-style-type: none"> • Continue to use strategies from years 1 & 2. • Clearly identify Y8 and Y9 Physics modules, and in each module introduce a research exercise involving a career associated with the Physics of that module, eg working as a sound engineer in the waves module. • Establish a ‘fun’ Physics event for both Y8 and Y9 groups. W5, Sentinus or other external agencies may be used. • Y10 pupils to produce posters/leaflets regarding the relevance of Physics in society.
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ENRICHMENT

Key Stage	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
3/4²	1	<p>m) Introduce a ‘Great Egg Race’ activity for Y10 Science students.</p> <p>Y11 industrial visit for all Physics students.</p> <p>All Y12 Physics pupils to participate in the IOP Physics Challenge.</p> <p>Ten Y10 pupils to gain bronze Crest Awards for completing Physics investigations.</p>	<ul style="list-style-type: none"> • Identify a suitable ‘Great Egg Race’ activity from the British Association for Advancement of Science guidance booklet ‘Ideas for Egg Races’. Negotiate with Principal to use Assembly Hall and run afternoon event for all Y10 pupils. Supervised by Physics staff and supported by Y13/Y14 Physics students. • Identify a suitable local industry (Dupont, Cheese Factory, Bushmills Distillery) that can accommodate all Y11 Physics classes and arrange a visit to observe Physics in action. Produce resource booklet to accompany the visit to ensure meaningful engagement during the visit. • Y12 Physics classes all sit initial paper and top ten students are then identified to proceed to next stage. • A single investigation is identified in Y10 which is linked to the curriculum, but can be extended to allow pupils to gain Crest Bronze award. Pupils supervised after school to complete award – using Y14/Y13 mentors.
	2	<p>n) Arrange visit from Planetarium Outreach Programme for Y9 Science to cover some of the Earth & Space content of Y9 Physics.</p> <p>Arrange guest speaker from QUB Physics department to deliver lecture from their programme as part of GCSE programme.</p> <p>Introduce a Physics Club to participate in competitions.</p>	<ul style="list-style-type: none"> • Contact Planetarium in previous year to book relevant speaker for visit to school. • Consult QUB to identify possible lecture titles early in first term and choose topic that best meets needs of GCSE Physics students. Arrange lecture and book lecturer for early in second term. • Identify competitions that would act as an initial focus for any Physics Club and recruit students from GCSE Physics classes to form teams. Organise a similar competition within the school to generate interest and act as preparation and a mechanism for choosing representatives from school. Consult with interested pupils to establish a club that will meet regularly and aim to participate in relevant competitions.

	3/4	<p><i>Outline of plans</i></p> <ul style="list-style-type: none"> • Continue to develop the initiatives from years one and two. • Develop link with the Optometry Department in UUC with view to sharing of expertise and resources. • ‘Physics is Fun’ day – with Careers input, ROKIT building, demonstrations and other fun events. • Physics for Parents seminars to enable parents to help their children.
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POST-16 (Where applicable)

Focus	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
Attainment	1	<p>o) Improve attainment to 98% A-E at AS and 100% at A Level.</p> <p>Improve the number of boys achieving Grade E or better.</p>	<ul style="list-style-type: none"> • Research methodologies designed to help boys improve and identify one strategy that can be trialled. • Include strategy in schemes of work and implement in the classroom. HOD to monitor success of this strategy. • Identify pupils at AS with lower grades from GCSE and establish PLPs for the first term following interview with classroom teacher. • Identify pupils at A2 with lower grades from AS and establish PLPs for the first term following interview with classroom teacher. Establish revision classes to prepare for AS repeat in January. • Use Assessment Manager to monitor performance of all pupils throughout the first term and identify any pupils who appear to be underachieving. Interview with HOD to identify areas of difficulty and PLPs used to set targets for January modules. • Produce 1 web-based resource per topic that pupils can access from home and create a study module based on this resources so that pupils access these independently during study time in school and at home. • Subscribe to Physics SCHOLAR programme to research and develop its use as a study and homework support.

	2	<p>p) Sustain attainment to 98% A-E at AS and 100% at A Level.</p> <p>Improve the number of boys achieving Grade E or better.</p>	<ul style="list-style-type: none"> • Continue to research methodologies designed to help boys improve and identify one further strategy that can be trialled. • Continue to implement strategy from previous year and include new strategy in schemes of work followed by implementation in the classroom. HOD to monitor success of both strategies. • Identify pupils at AS with lower grades from GCSE and establish PLPs for the first term following interview with classroom teacher. • Identify pupils at A2 with lower grades from AS and establish PLPs for the first term following interview with classroom teacher. Establish revision classes to prepare for AS repeat in January. • Use Assessment Manager to monitor performance of all pupils throughout the first term and identify any pupils who appear to be underachieving. Interview with HOD to identify areas of difficulty and PLPs used to set targets for January modules. • Produce a second web-based resource and study modules per topic so that pupils access these independently, either at home or during study time. • Develop SCHOLAR programme as a study and homework support.
	3/4	<p><i>Outline of plans</i> Improve attainment to 100% A-E at AS and 100% at A Level.</p> <p>Continue strategies from years one and two.</p> <p>Integration of successful strategies into teaching and embedding of these into our practice.</p> <p>Expansion of Assessment For Learning and Active Learning strategies into Post 16.</p> <p>Develop independent study modules for pupils to complete as homework or during study time.</p>	
Provision/ take-up	1	<p>q) Sustain two AS and A Level classes (currently 22 pupils AS and 20 pupils A2).</p> <p>Maintain the current number of girls studying Physics at AS Level at 27%.</p> <p>Maintain the number of girls studying Physics at A2 Level at 20%.</p>	<p>Engage in research with girls currently studying AS & A Level Physics to determine reasons that they chose Physics. Use the research of the Institute of Physics to identify strategies that will attract more girls into Physics.</p> <p>Use AS & A2 female Physics pupils as role models and to speak positively to GCSE students about studying Physics during period of time when subject choices are being made.</p> <p>Identify Careers involving Physics and produce a Careers display in each Physics laboratory. Use guest speakers to show pupils the Careers available through studying Physics.</p> <p>Improve attainment of students studying AS Physics by targeting individual students and developing Personalised Learning plans, which are closely monitored by classroom teachers and HOD.</p>

<p>2</p>	<p>r) Sustain two AS and A Level classes (currently 22 pupils AS and 20 pupils A2)</p> <p>Maintain the current number of girls studying Physics at AS Level at 27%.</p> <p>Maintain the number of girls studying Physics at A2 Level at 20%.</p>	<p>Use the findings of research regarding girls and studying Physics to implement strategies that will attract more girls into Physics.</p> <p>Continue to use AS & A2 female Physics pupils as positive role models to promote Physics to female GCSE students and extend to include positive male role models as well.</p> <p>Organise a Physics Careers Week during which each Physics class will carry out research on Careers involving Physics and will receive information from teachers, Guest lecturers and Careers Department about a variety of Physics Careers.</p> <p>Improve attainment of students studying AS Physics by targeting individual students and developing Personalised Learning plans, which are closely monitored by classroom teachers and HOD.</p>
<p>3/4</p>	<p><i>Outline of plans</i></p> <p>Increase the number of girls studying AS Physics by the end of 4 years to 30% and at A2 to 25%. Increase the overall number of students studying AS Physics to 25 and increase the number of students studying at A2 Level to 23.</p> <p>Continue using strategies from years one and two.</p>	

C2 (Cont)

OBJECTIVE C: Whole School Improvement

[outline objective] To raise levels of achievement across all subjects at all levels by developing the use of Assessment For Learning, Active Learning, personalised learning and e-learning strategies within the Science department and disseminating good practice to all general learning areas using cross-curricular projects, in-service training, and PRSD, and so building on existing good practice and promoting self-evaluation and collegiality.

A review of research into classroom assessment (Black and Wiliam, 1998) has shown that ‘assessment for learning’ is one of the most powerful ways of improving learning and raising standards. Current research is adding further evidence in support of this claim and the empirical evidence is underpinned by theory from the psychology of learning and studies of learning motivation. The Science department will develop expertise in Assessment For Learning strategies and take a lead role in delivering INSET to other departments.

All members of the Science department currently use interactive whiteboards and will continue to develop expertise in using this medium as a teaching resource to deliver Assessment For Learning strategies and introduce more Active Learning within the Science department. ICT will also be used to introduce personalised learning opportunities through development of the school Learning resources, the current Science website and providing e-learning opportunities using SCHOLAR and Examtutors.com.

Personalised learning is a philosophy in education that tailors education to individual needs, interests and aptitudes so as to ensure that every pupil achieves and reaches the highest standards possible. The Science department will develop personalised learning strategies, initially focusing on underachieving pupils, which it can then share with other departments through INSET and collaborative projects.

ATTAINMENT

Key Stage	Year	Target	Implementation
3	1	<p>English</p> <p>By end of June 2007 attainment in KS3 English will be:</p> <p>44% Level 7 from a starting position of 43% Level 7 in 2006.</p> <p>44% Level 6 from a starting position of 41% Level 6 in 2006.</p> <p>Mathematics</p> <p>By end of June 2007 attainment in KS3 Mathematics will be:</p> <p>9.6% Level 8 from a starting position of 9.6 % Level 8.</p> <p>58.6% Level 7 from a starting position of 58.3% Level 7 in 2006.</p> <p>27.6% Level 6 from a starting position of 26.1% Level 6 in 2006.</p>	<ul style="list-style-type: none"> Science teachers receive training in Assessment For Learning techniques, using board officers and identified external agencies, early in the first term, with view to becoming skilled in two relevant strategies. Follow up INSET planned strategically throughout the year. Science teachers trial identified strategies with Y8 pupils during first term and monitor and evaluate progress using an Action Research approach. Findings presented to whole staff group and successful strategies shared as part of INSET early in second term. All staff implement successful strategies by including Assessment For Learning in at least one lesson per topic. Peer observation used to monitor and evaluate the implementation of these strategies within departments. Science department advised of results to evaluate effectiveness of strategies across all departments. Assessment manager is set up so that each department can record two standardised assessments in the first term for each KS3 class. Individual pupil progress for KS3 English and Mathematics pupils is monitored by respective HODs and classroom teacher. Underachieving pupils identified (pupil progress tracked from attainment at end of previous year) and Personalised Learning Plans developed for each pupil to reflect individual learning needs. Science department to take lead role in developing a proforma for use in establishing PLPs, which can then be shared with other departments. Science department to share, with Mathematics and English departments, established target setting procedure, which enables individual pupils to target likely outcome in KS3 test and possible improved outcome if they raise

			<p>their performance by indicated percentages.</p> <ul style="list-style-type: none"> • Assessment Manager is set up so that each department can record a further standardised assessment in the second term and two in the third term for each KS3 class. Individual pupil progress for KS3 pupils in English and Mathematics is monitored by HOD and classroom teacher. • Pupils showing progress or sustaining high level of attainment rewarded using the merit system. Underachieving pupils identified (pupil progress tracked from attainment in previous standardised test) and Personalised Learning Plans developed for each pupil to reflect individual learning needs. • Science department to investigate the relationship between attainment in Science and attainment in English and Mathematics. • Each department will engage in an end of year review to evaluate the effectiveness of Assessment For Learning strategies employed. This will be coordinated by the Science department and lead by Specialist School Coordinator. INSET time allocated for this to happen effectively. • KS3 results analysed by Science department to determine progress in terms of attainment. • Strategies reviewed and evaluated by SLT and HODs, with targets for following year adjusted accordingly. • Interactive whiteboards purchased for departments currently without provision and training provided in their use.
2	<p>English</p> <p>By end of June 2008 attainment in KS3 English will be:</p> <p>44% Level 7 from a starting position of 43% Level 7 in 2006.</p> <p>45% Level 6 from a starting position of 41% Level 6 in 2006.</p> <p>Mathematics</p> <p>By end of June 2008 attainment in KS3 Mathematics will be:</p> <p>9.6% Level 8 from a starting position of 9.6 % Level 8.</p> <p>58.3% Level 7 from a starting position of 58.3% Level 7 in 2006.</p> <p>27.6% Level 6 from a starting position of 26.1% Level 6 in 2006.</p>		<ul style="list-style-type: none"> • Based on review of previous year Science staff plan and deliver training in Assessment For Learning strategies to staff from other departments. This could be delivered to several small groups by different Science staff members to ensure that all Science staff continue to maintain and develop their skills. Ideas from other departments to be incorporated into this training and other non- Science staff to be included in delivery of training, if they feel competent. • All staff implement successful Assessment For Learning strategies in at least two lessons per topic. Peer observation used to monitor and evaluate the implementation of these strategies within departments. Science department advised of results to evaluate effectiveness of strategies across all departments. • Assessment Manager developed to track individual pupil progress in all subjects throughout a single year and from one year to the next. Science department to share ILP proforma with all subjects, so that all subjects can become involved in producing PLPs for underachieving pupils. • Extend use of Science target setting procedure to all subjects, enabling individual pupils to target likely outcome in standardised assessments and possible improved outcome if they raise their performance by indicated percentages. • Science staff receives training in Active Learning strategies using Board Officers or identified external agencies, with view to becoming skilled in one of these strategies. • Active Learning strategy introduced into at least one lesson per topic at KS3 in the Science department. Peer observation, discussions and team meetings used to monitor and evaluate the success of strategy. • Active Learning strategy to be reviewed and evaluated by Specialist School Coordinator and successful strategies shared with other departments through INSET.

		<ul style="list-style-type: none"> • Ongoing training in use of interactive whiteboards led by members of Science Department. • New computer suite made available to all departments.
3	<p>English By June 2009 attainment in KS3 English will be: 46.5% Level 7 from a starting position of 43% Level 7 in 2006. 48.8% Level 6 from a starting position of 41% Level 6 in 2006.</p> <p>Mathematics By June 2009 attainment in KS3 Mathematics will be: 9.6% Level 8 from a starting position of 9.6 % Level 8. 58.6% Level 7 from a starting position of 58.3% Level 7 in 2006. 27.6% Level 6 from a starting position of 26.1% Level 6 in 2006.</p>	<ul style="list-style-type: none"> • Ongoing use of Assessment Manager and standardised tests to monitor progress of individuals throughout the current year and from previous year. PLPs for underachieving pupils established in all subjects and monitored by subject teacher, HOD, Form Teacher and HOY. • Active Learning strategies and Assessment For Learning strategies cascaded to all departments using PRSD - identifying a relevant strategy as a whole school target for PRSD. • Each department identifies one lesson per topic that can be delivered using an Active Learning approach and develops materials and resources to achieve this. • Each department identifies one new lesson per topic that includes an Assessment For Learning strategy and develops materials and resources to achieve this. • Active Learning approaches and Assessment For Learning strategies monitored through PRSD. • Specialist School Coordinator meets with Heads of Departments to establish areas of good practice for dissemination to other subjects. INSET day planned and delivered regarding sharing best practice. • KS3 results in Mathematics, English and Science analysed to assess value added from year 1.
4	<p>English By end of June 2010 attainment in KS3 English will be: 47% Level 7 from a starting position of 43% Level 7 in 2006. 49% Level 6 from a starting position of 41% Level 6 in 2006.</p> <p>Mathematics By end of June 2010 attainment in KS3 Mathematics will be: 10% Level 8 from a starting position of 9.6 % Level 8. 60% Level 7 from a starting position of 58.3% Level 7 in 2006. 27.6% Level 6 from a starting position of 26.1% Level 6 in 2006.</p>	<ul style="list-style-type: none"> • Ongoing use of Assessment Manager and standardised tests to monitor progress of individuals throughout the current year and from previous year. PLPs for underachieving pupils established in all subjects and monitored by subject teacher, HOD, Form Teacher and HOY. • Continued use of PRSD to promote Active Learning and Assessment For Learning strategies by identifying a relevant strategy as a whole school target for PRSD. • Each department identifies one new lesson per topic that can be delivered using an Active Learning approach and develops materials and resources to achieve this. • Each department identifies one new lesson per topic that includes an Assessment For Learning strategy and develops materials and resources to achieve this. • Active Learning approaches and Assessment For Learning strategies monitored through PRSD. • Specialist School Coordinator meets with Heads of Departments to establish areas of good practice for dissemination to other subjects. INSET day planned and delivered regarding sharing best practice. • KS3 results in Mathematics, English and Science analysed to assess value added from year 2.

4	1	<p>English</p> <p>By end of June 2007 attainment in GCSE English will be:</p> <p>100% A* - C from a baseline of 99% A* - C in June 2006.</p> <p>Mathematics</p> <p>By end of June 2007 attainment in GCSE Mathematics will be:</p> <p>95% A* - C from a baseline of 94.2% A* - C in June 2006.</p>	<ul style="list-style-type: none"> • Science teachers receive training in Assessment For Learning techniques, using board officers and identified external agencies, early in the first term, with view to becoming skilled in two relevant strategies. Follow up INSET planned strategically throughout the year. • Science teachers trial identified strategies with Y11 pupils during first term and monitor and evaluate progress using an Action Research approach. Findings presented to whole staff group and successful strategies shared as part of INSET early in second term. • All staff implement successful strategies by including Assessment For Learning in at least one lesson per topic. Peer observation used to monitor and evaluate the implementation of these strategies within departments. Science department advised of results to evaluate effectiveness of strategies across all departments. • Assessment Manager is set up so that each department can record two standardised assessments in the first term for each GCSE class. Individual pupil progress for GCSE English and Mathematics pupils is monitored by respective HODs and classroom teacher. Underachieving pupils identified (pupil progress tracked from attainment at end of previous year) and Personalised Learning Plans produced for each pupil to reflect individual learning needs. • Science department to take lead role in developing a proforma for use in establishing PLPs, which can then be shared with other departments. • English department to share, with Mathematics and Science departments, established target setting procedure that enable individual pupils to target GCSE grades based on teacher feedback following tests. • Assessment Manager is set up so that each department can record a further standardised assessment in the second term and two in the third term for each GCSE class. Individual pupil progress for GCSE pupils in English and Mathematics is monitored by HOD and classroom teacher to identify pupils who are underachieving. • Underachieving pupils identified (pupil progress tracked from attainment in previous standardised test) and Personalised Learning Plans developed for each pupil to reflect individual learning needs, based on English Department target setting procedures. • Science department to investigate the relationship between attainment in Science and attainment in English and Mathematics. • Each department will engage in an end of year review to evaluate the effectiveness of Assessment For Learning strategies employed. This will be coordinated by the Science department and lead by Specialist School Coordinator. INSET time allocated for this to happen effectively. • Strategies reviewed and evaluated by SLT, HODs and targets for following year adjusted accordingly. • Pupils use individual target setting in Mathematics, English and Science Following Y11 test in summer to set realistic attainment targets for grades in Y12.
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	<p>2</p> <p>English</p> <p>By end of June 2008 attainment in GCSE English will be:</p> <p>100% A* - C from a baseline of 99% A* - C in June 2006.</p> <p>Mathematics</p> <p>By end of June 2008 attainment in GCSE Mathematics will be:</p> <p>96% A* - C from a baseline of 94.2% A* - C in June 2006.</p>	<ul style="list-style-type: none"> • Based on review of previous year, Science staff plan and deliver training in Assessment For Learning strategies to staff from other departments. This could be delivered to several small groups by different Science staff members to ensure that all Science staff continue to maintain and develop their skills. Ideas from other departments to be incorporated into this training and other non- Science staff to be included in delivery of training, if they feel competent. • All staff implement successful Assessment For Learning strategies in at least two lessons per topic. Peer observation used to monitor and evaluate the implementation of these strategies within departments. Science department advised of results to evaluate effectiveness of strategies across all departments. • Assessment Manager developed to track individual pupil progress in all subjects throughout a single year and from one year to the next. Science department to share ILP proforma with all subjects, so that all subjects can become involved in producing PLPs for underachieving pupils. • Extend use of English target setting procedure to all subjects, enabling individual pupils to target likely outcome in GCSEs and possible improved outcome if they raise their performance by indicated percentages. • Science staff receives training in Active Learning strategies using Board Officers or identified external agencies, with view to becoming skilled in one of these strategies. • Active Learning strategy introduced into at least one lesson per topic at Y11 in the Science department. Peer observation, discussions and team meetings used to monitor and evaluate the success of strategy. • Active Learning strategy to be reviewed and evaluated by Specialist School Coordinator and successful strategies shared with other departments through INSET. • GCSE results in Mathematics, English and Science analysed to assess value added from KS3 in 2006.
	<p>3</p> <p>English</p> <p>By end of June 2009 attainment in GCSE English will be:</p> <p>100% A* - C from a baseline of 99% A* - C in June 2006.</p> <p>Mathematics</p> <p>By end of June 2009 attainment in GCSE Mathematics will be:</p> <p>97% A* - C from a baseline of 94.2% A* - C in June 2006.</p>	<ul style="list-style-type: none"> • Ongoing use of Assessment Manager and standardised tests to monitor progress of individuals throughout the current year and from previous year. PLPs for underachieving pupils established in all subjects and monitored by subject teacher, HOD, Form Teacher and HOY. • Active Learning strategies and Assessment For Learning strategies cascaded to all departments using PRSD - identifying a relevant strategy as a whole school target for PRSD. • Each department identifies one lesson per topic that can be delivered using an Active Learning approach in Y11 and develops materials and resources to achieve this. • Each department identifies one new lesson per topic that includes an Assessment For Learning strategy in Y11 and develops materials and resources to achieve this. • Active Learning approaches and Assessment For Learning strategies monitored through PRSD. • Specialist School Coordinator meets with Heads of Departments to establish areas of good practice for dissemination to other subjects. INSET day planned and delivered regarding sharing best practice.

	<p>4</p>	<p>English</p> <p>By end of June 2010 attainment in GCSE English will be:</p> <p>100% A* - C from a baseline of 99% A* - C in June 2006.</p> <p>Mathematics</p> <p>By end of June 2010 attainment in GCSE Mathematics will be:</p> <p>98% A* - C from a baseline of 94.2% A* - C in June 2006.</p>	<ul style="list-style-type: none"> • Ongoing use of Assessment Manager and standardised tests to monitor progress of individuals throughout the current year and from previous year. PLPs for underachieving pupils established in all subjects and monitored by subject teacher, HOD, Form Teacher and HOY. • Continued use of PRSD to promote Active Learning and Assessment For Learning strategies by identifying a relevant strategy as a whole school target for PRSD. • Each department identifies one new lesson per topic that can be delivered using an Active Learning approach in Y12 and develops materials and resources to achieve this. • Each department identifies one new lesson per topic that includes an Assessment For Learning strategy in Y12 and develops materials and resources to achieve this. • Active Learning approaches and Assessment For Learning strategies monitored through PRSD. • Specialist School Coordinator meets with Heads of Departments to establish areas of good practice for dissemination to other subjects. INSET day planned and delivered regarding sharing best practice. • GCSE results in Mathematics, English and Science analysed to assess value added from KS3 2007.
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C2 (Cont)

SHARING BEST PRACTICE IN TEACHING AND LEARNING

Key Stage	Year	Target	Implementation
All	1	<p>i) To identify two other departments along with Science, English and Mathematics to share best practice in Assessment For Learning strategies.</p> <p>ii) To identify one Assessment For Learning strategy that will be shared across the departments identified above.</p> <p>iii) To trial this Assessment For Learning strategy in each of these departments.</p>	<ul style="list-style-type: none"> • Departments identified to participate in this sharing of best practice initiative and initial meetings held to discuss the roles of each department and to establish the methodology for the project. • Specialist School Coordinator will undertake a baseline survey on the quality of teaching and learning within the five departments, based on the quality indicators from the TTI document. • The results of the survey will be shared with the departments and the Curriculum Development Committee. An agreed action plan regarding sharing best practice across the departments will then be developed. The plan will identify: the Assessment For Learning strategy to be trialled, the time frame for trial and the monitoring procedures. • Specialist School Coordinator in consultation with HODs and Curriculum Development Coordinator will identify examples of best practice and develop INSET resources based on these. • Departments involved in project will participate in INSET day organised by Specialist School Coordinator for dissemination of best practice. • Departments involved will engage in self evaluation using TTI to identify areas of strength and areas for development with regard to teaching and learning.
	2	<p>i) To develop best practice in Active Learning strategies within five departments and share this with whole school</p> <p>ii) To identify one Active Learning strategy that will be trialled in the departments identified in year one.</p> <p>iii) To trial this Assessment For Learning strategy in each of these departments.</p>	<ul style="list-style-type: none"> • Departments will continue to develop and embed Assessment For Learning strategy from year one. Specialist School Coordinator to monitor progress and report to Curriculum Development Committee. • Specialist School Coordinator to research Active Learning strategies being used within the Science department in year one and identify areas of best practice. Results of this to be made available to other departments involved in sharing best practice project. • Each department will identify an Active Learning strategy and trial this strategy in the coming year. • Specialist School Coordinator in consultation with HODs and Curriculum Development Coordinator will identify examples of best practice and develop INSET resources based on these. • Departments involved in project will participate in INSET day organised by Specialist School Coordinator for dissemination of best practice to whole school audience. • Departments involved will engage in self evaluation using TTI to identify areas of strength and areas for development with regard to teaching and learning

	3/4	<p><i>Outline of plans</i></p> <ul style="list-style-type: none">• Departments will continue to develop and share best practice in Assessment For Learning and Active Learning strategies.• Specialist School Coordinator will continue to identify best practice from the participating departments and organise INSET do disseminate best practice across the whole school.• Best practice in the use of ICT in developing Independent Learning will be shared by Science department with whole school.• Specialist School Coordinator will carry out a follow-up survey on the quality of teaching and learning within the five departments, based on the quality indicators from the TTI document.
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BUSINESS / EMPLOYER INVOLVEMENT

Key Stage	Year	Target	Implementation
All	1	<p>k) To provide enrichment activities involving business partners to support the development of the Learning for Life and Work curriculum.</p> <p>To provide enrichment activities using UUC to support the development of the Learning for Life and Work curriculum.</p> <p>To involve business partners in supporting student work placements so that the experience becomes more meaningful.</p>	<ul style="list-style-type: none"> • Employees of Armstrong Medical and Nicobrand provide an input at Y10 Careers Day. • Groups of pupils visit Armstrong Medical Site or Nicobrand factory to see real Science in action. • Managing Director of Armstrong Medical gives lecture on enterprise and entrepreneurship – telling his ‘life story’. • Biomedical Science representative provides input at Y10 Careers Day to highlight the range of Employability opportunities available within this field of Science. • Armstrong Medical provides work experience opportunities for post-16 pupils. • In consultation with the school, Armstrong Medical develops a support pack for students coming for work experience. • Work Experience monitored and evaluated by Careers Department in consultation with Armstrong Medical and student on placement.
	2	<p>l) To expand the involvement of business partners in delivery of the revised curriculum by introducing a real life problem-solving module produced by cooperation between Science teachers and business partners.</p> <p>To expand the involvement of UUC in delivery of the revised curriculum by providing learning opportunities using the facilities at the School of Biomedical Science.</p> <p>To involve business partners in supporting student work placements so that the experience becomes more meaningful.</p>	<ul style="list-style-type: none"> • Continue with activities from year one. • Identify several real life problems using parameters/constraints set by business partners and incorporate it as a lesson within Science curriculum. • Pupils are set a design brief to solve the problem (eg heating air using wire – what is the correct resistance needed?) working to real life constraints. • Staff from school and university liaise to establish a realistic problem-solving activity that meets requirements of revised curriculum and needs use of specialist equipment only available at university. • Educational visit arranged to the School of Biomedical Science so that pupils may generate and collect real data using specialist equipment such as an electron microscope. Pupils analyse the data generated back at school in follow-up exercises. • Work experience extended to include job shadowing. • Support pack modified based on feedback from previous year’s evaluation.

	<p>3/4</p>	<p><i>Outline of plans</i></p> <p>In addition to plans from Years 1 & 2:</p> <ul style="list-style-type: none"> • Armstrong Medical to become involved with Primary Science event by providing judges for competition. • Armstrong Medical becomes involved in Young Engineer scheme by providing a ‘real life’ practical problem. • Employee of Armstrong Medical delivers lecture to Y13/Y14 students on a particular Science topic that is part of curriculum eg hydraulics, absorption of CO₂ by soda lime. • Careers day as part of Science Week with business partners involved, providing a stall and Careers/business lecture. • Develop a Science Fair in conjunction with UUC, Armstrong Medical and Nicobrand. • Develop link with Optometry Department in UUC so that they can become involved in helping to deliver optics section of Physics curriculum as well as adding greater scope to Employability theme of revised curriculum.
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OBJECTIVE D: Education for Employability as integral element of CEIAG

[outline objective]

To promote and raise awareness of Science-based Careers; to embed transferable skills within the schemes of work, making them integral to teaching and learning in Science; to incorporate enterprise activities within the Science curriculum, making links with local industries which involve Science-based Careers; to share the success and achievements of former pupils in order to inspire and motivate current pupils.

PUPIL BASED TARGETS

Key Stage	Year	Target	Implementation
3	1	<p>e) To raise pupil awareness of the Employability skills developed through studying Science.</p> <p>f) To develop an awareness of Employability opportunities within Science and possible scientific Careers.</p> <p>g) To introduce pupils to Progress File and highlight its relevance to Education for Employability.</p>	<ul style="list-style-type: none"> Identify and develop links with the Y8 Employability strand of LLW currently being delivered through form class. Identify these links on scheme of work and design lessons to support these links. Prepare and deliver lessons that identify the key skills obtained through the study of Science and then emphasise how these are transferable skills that will be required in future employment. Reinforce idea of skills (I can) and qualities (I am). Pupils produce posters on transferable skills developed through studying Science. As a follow-up to the Y8 Big School Seminar delivered by Young Enterprise, the Science department will collapse the timetable to enable a skills awareness seminar involving input from local business groups eg University of Ulster, parents, and partner schools. Pupils complete a written report about the seminar and place into Progress File as part of 'Career Planning' section. Science Department and Head of Careers review and evaluate the strategies from Year 1. Successful strategies are identified and these are continued into Year 2.
	2	<p>d) To introduce Y9 pupils to the enterprise and entrepreneurship aspect of 'Employability'.</p> <p>e) To develop research and information management skills.</p> <p>f) To highlight the need for enterprise and entrepreneurship in scientific Careers.</p>	<ul style="list-style-type: none"> Continue with successful strategies from Year 1. Liaise with the Head of Careers, who is responsible for producing the Y9 Employability scheme, and arrange a scientific Careers information seminar on enterprise and entrepreneurship for students with input from local businesses, Causeway Enterprise Agency and QUB. Following the seminar, Y9 pupils engage in research about enterprising individuals and entrepreneurs on a local and global level as part of their Science lessons. They produce posters/leaflets for display around Science department and at PTM. Pupils complete a written report on the seminar and their research findings and update 'Career Planning' section of their Progress File.

	3	h) To introduce a discrete Employability module in Y10 Science, specifically relating to career planning and subject choices.	<ul style="list-style-type: none"> • Arrange setting of Y10 Science classes to facilitate collapsing the timetable so a 'Career Planning' element can be delivered as part of the Y10 curriculum provision e.g. Careers requiring Science; information session with Careers Department, Science Teachers and Business partners. • Each Science department, in consultation with the Head of Careers, to introduce a 'Career Planning' module into the scheme of work for delivery in the first term. Emphasis will be placed on the importance of making well-informed decisions at this stage of their Personal Career Plan. • Each pupil produces a written 'Careers in Science' section to be incorporated into their Progress File to show at least one Science-based career they have considered.
	4	<p>i) To introduce the 'working in the local and global economy' strand of Employability.</p> <p>j) To explore the opportunities for working within Science as part of the local and global economy.</p>	<ul style="list-style-type: none"> • Introduce lessons promoting an awareness of the opportunities to travel and work in the global economy within the scientific Careers area. • Contact past pupils who are working abroad in scientific Careers and ask them to share their experiences by contributing to the school website and/or videoconferencing. • Students to research companies offering Science-based Careers in Northern Ireland and present findings to rest of class.
4	1	<p>k) To identify relevant areas of LLW specification that may be covered successfully in Science classes.</p> <p>l) To develop lessons to cover Module 3 of LLW Specification- Explore how consumer choices and environmental considerations impact on work issues in the local and global economy.</p>	<ul style="list-style-type: none"> • Liaise with the LLW Coordinator and identify relevant areas to be covered within Science classes and develop schemes of work to cover this area of the revised curriculum. • Pupils identify one environmental issue and identify how it affects the workplace and subsequently how promoting this environmental issue will create jobs. Completed as group work using Active Learning strategies such as Jigsaw with groups presenting findings. • Explore possible links with Sentinus for environmental project work. • Involve pupils in environmental project work with Primary Partners. • Invite guest speakers from Glasdon Recycling, Coleraine Borough Council and other similar organisations to deliver input covering curricular area.
	2	<p>m) To deliver relevant areas of LLW specification in Science classes at Y11.</p> <p>n) To organise an industrial visit to show real Science in action and help cover this aspect of Module 3 of LLW Specification – Learning for Life and Work.</p>	<ul style="list-style-type: none"> • Science department and Careers department to explore possible companies in the Coleraine area to organise an industrial visit, eg Armstrong Medical, Nicobrand, Seagate Limavady, Bushmills Distillery etc • Identify a contact person. Teachers visit in advance to arrange focus of visit and to develop teaching materials, which address both Science involved and LLW aspects, e.g. use of technology in the workplace, Health and Safety in the workplace, working in teams, multi-skilling etc. • Pupils complete report of visit and produce suitable display materials.

	3	n) To organise a Careers Fair for Y12 pupils focusing on Careers in Science and encompassing LLW perspective – changing employment trends and life-long learning.	<ul style="list-style-type: none"> • Liaise with Careers Department and Partner Schools to establish contacts, format and timing of event. • Partner Schools attend event, which may be rotated in future around each school. • Invite speakers from industry, universities, local employers and professional bodies. Utilise the wealth of talent amongst staff and parents of all three Partner Schools. • Arrange input from Careers Officer/ University Careers Staff to illustrate the changing employment trends at a local and global level and to explain the concept of life-long learning. • Pupils complete report for inclusion in their Progress File.
	4	<p>o) To provide assistance for Y12 pupils in Career Planning.</p> <p>p) To enable Y12 pupils to make informed subject choices for post 16.</p> <p>q) To help Y12 pupils identify their Employability skills and capabilities for work.</p>	<p>Continue with strategies developed in years 1-3.</p> <ul style="list-style-type: none"> • Collapse timetable to arrange an Employability Skills Workshop, with inputs from a variety of sources such as Sentinus and WISE (Women in Science and Engineering). • Establish a ‘Science Career Clinic’ to enable students to discuss career options with relevant staff. • Liaise with Head of Pastoral Care and Progress File Coordinator to develop a module on skills in Science, reflecting the transferable skills needed for employment. • Heads of Science subjects produce information booklet highlighting the relative strengths of their subjects in developing Employability skills and capabilities for work.

SHARING BEST PRACTICE IN TEACHING AND LEARNING

Key Stage	Year	Target	Implementation
All	1	<p>iv) To integrate the Education For Employability programme within the schools CEIAG provision.</p> <p>v) To develop an accessible Careers advice and guidance provision.</p> <p>vi) To allow pupils access to individual Careers Guidance.</p>	<ul style="list-style-type: none"> All Y8 Form Teachers will be delivering Education for Employability as part of LLW programme. Head of Careers designs and produces Education for Employability programme and identifies subject areas that can help deliver different aspects of the programme as part of their curriculum. Head of Careers liaises with departments to ensure that each department is contributing to Education for Employability programme. Each Head of Department produces a written submission for Y10 and Y12 Subject Choices booklet and speaks to each class regarding the career opportunities afforded by their subject. Y10 pupils receive a specific Careers Education module delivered through Form class, involving Career Planning and using the Progress File to record and evaluate the module. Y12 pupils receive Careers Education in discrete timetabled provision. As part of this the pupils will prepare a presentation on Careers considered. A large percentage of Y12 pupils interviewed on an individual basis by the Careers Officer, supported by Careers teachers within the school. Timetable is collapsed on one day so that Y12 pupils can receive interview skills training organised by Sentinus and participate in mock interviews involving personnel from local businesses. Y14 pupils participate in Trial Interviews with personnel from local businesses and universities. Local businesses, employers and universities asked to participate in Y13 lecture programme to promote awareness of Employability opportunities in all subjects.
	2	<p>iv) To coordinate and manage meaningful and relevant work-related learning opportunities.</p> <p>v) To develop the use of the Progress File as an integral element of the whole school Employability programmes.</p>	<ul style="list-style-type: none"> Continue with strategies from 1st year. All Form Teachers at Y8 & Y9 will be delivering Education for Employability as part of LLW programme. Review current work experience placements to ensure they are meaningful and worthwhile. Armstrong Medical to receive support in developing meaningful work placement plans. Careers Department liaise with all subjects to encourage visits to local employers and businesses. Pupils continue to participate in enterprise competitions such as Target 2.0 and Young Enterprise. Science department organises visits for relevant year groups to business partner to observe Science in practice in the real world. Pupils in all year groups complete the Career Planning section of Progress File as part of Form Class. Pupils from relevant year groups will complete the Experiences of Work section also.

	3/4	<p><i>Outline of plans</i></p> <p>Year 3</p> <ul style="list-style-type: none">• Continue with strategies from previous 2 years.• All Y8, Y9 & Y10 Form Teachers will be delivering Education for Employability as part of LLW programme.• Y10 pupils will complete an Action Based Project as part of Learning for Life and Work GCSE coursework. <p>Year 4</p> <ul style="list-style-type: none">• Continue with strategies from previous 3 years.• All Y8, Y9, Y10 & Y11 Form Teachers will be delivering Education for Employability as part of LLW programme.• Y11 pupils will complete GCSE in LLW in June 2010.
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WORK RELATED LEARNING

Key Stage	Year	Target	Implementation
All	1	<p>r) To increase the level of work-related learning experiences at KS3</p> <p>s) To deliver specific elements of LLW through Science.</p> <p>t) To plan for an industrial visit at KS4.</p>	<ul style="list-style-type: none"> • Careers and Science Departments liaise to organise a ‘Skills Awareness Seminar’ for Y8pupils as a follow-up to the Young Enterprise Big School Programme and an ‘Enterprise and Entrepreneurship Seminar for Y9 pupils. • Invite guest speakers from local businesses and universities. • Seminars will adopt an Active Learning approach and include activity-based workshops, with group work. • Students will prepare a written report for inclusion in their Progress Files and presentations will be made to the class, with work subsequently displayed at prominent positions around the school. • Identify relevant areas of LLW that can be covered in Science and incorporate into schemes of work. • Investigate suitable companies willing and able to host an industrial visit. Eg Armstrong Medical, Nicobrand, Tobermore Concrete and Dupont.
	2	<p>l) To introduce an industrial visit into KS4 curriculum (Y11).</p> <p>m) To investigate the possibility of expanding our applied provision by cooperation with our Partner School.</p> <p>n) To improve the quality of work experience by engaging with business partner to develop this area.</p>	<ul style="list-style-type: none"> • Liaise with identified company and agree learning intentions for the visit. • Devise and prepare resources including pupil booklet to record learning experiences, which will contribute to career-decision making process. • Plan follow-up lessons in Science classes to allow adequate opportunities for pupils to evaluate the experience and assess the impact of the visit on Personal Career Plans. • Pupils record visit and their learning experiences in Progress File. • Liaise with St Joseph’s, one of our Partner schools, to identify how pupils from our school may access Business Studies and/or Health and Social Care at their school. • Look purposefully at timetabling arrangements with St Joesph’s that will enable pupils from Loreto to attend Business Studies and/or Health and Social Care lessons at St Joseph’s. • Offer Business Studies and/or Health and Social Care as option for Y13 pupils in September 2009 to gauge likely uptake of subject. • Plan joint timetabling arrangements that will enable pupils from Loreto to attend St Joseph’s on one afternoon per week to learn Business Studies and/or Health and Social Care, with lessons continuing beyond the normal timetabled provision. • Armstrong Medical provides work experience opportunities. Careers teachers work with Armstrong Medical Staff to develop a meaningful programme for students to follow on work experience.

3/4

Outline of plans

- Monitor and review the progress of the plan to date and update the plan to include new targets for Years 3 and 4.
- Along with continuing the successful elements of the plan from years 1 & 2 we will:

Year 3

- Organise a Science-based Careers Fair with guest speakers from a range of professions, industries and universities.
- Identify enterprise programmes for more year groups – involving business partners and Young Enterprise.
- Introduce timetabling arrangements that will enable pupils from Loreto to attend St Joseph's on one afternoon per week to learn Business Studies and/or Health and Social Care.
- Use minibus to transport pupils between Loreto and St Joseph's.

Year 4

- Introduce enterprise programmes for more year groups – involving business partners and Young Enterprise.
- Continue to expand the Y13 Work Experience Programme.
- Explore new contacts and opportunities ensuring students are placed in relevant organisations, including 3rd Level Summer Schools and Nuffield Scheme.
- Continue to develop applied provision to include 2nd cohort of students studying Business studies and/or Health and Social Care.
- Consider widening Work Experience Programme to include other year groups.

OBJECTIVE D: (Optional)

[please outline objective, associated targets and how you will deliver these targets]

C3. School plan: Brief outline of intended use of Year 1 (2006/07 financial year) specialist school annual grant (see Guidance page 14)

Item	Cost (£)
Additional staff resources (teaching staff)	
2 posts of responsibility – (i) Specialist School & Community Links Coordinator, (ii) Science Specialism Coordinator	£7000
Additional staff resources (non-teaching staff)	
1 additional ICT and Science technician to work in supporting community projects, helping with whiteboard training and developing resources (The technician will be used to jointly support community and school plan and is funded jointly from both).	£10000
Staff development	
INSET - teacher cover to release teachers and technicians for joint planning arrangements and training for Loreto Science staff– 24 days cover required.	£4800
INSET - teacher cover to release English and Mathematics staff for joint planning arrangements and training to deliver their input to plan – 5 days cover required.	£1000
INSET - teacher cover to release Careers and other staff for planning arrangements and training to deliver LLW – 2.5 days cover required.	£500
Equipment and materials in specialist subjects	
Required software licences for Science ICT packages.	£2000
Materials, resources, reprographics and administration costs.	£2500
Other	
Travel costs for educational visits and competitions.	£500
Visiting speakers.	£800

Additional resource made available to Mathematics and English departments to ensure that they meet their targets.	£2500
Pool of resources available to any department to access to enhance learning within their learning area.	£7400
Total	£39000

SECTION D: COMMUNITY PLAN (see Guidance page 14)

D1. Community plan: audit (see Guidance page 18)

Please see the guidance for details of the areas which **you are required to cover** in your community audit.

- a Please summarise any consultation which you have had with partner schools and community organisations mentioned in your community plan or other relevant organisations (**maximum** of one page).

Partner School:

- Initial contact made with Principals of all partner schools to indicate the nature of the specialism and to discuss their willingness to become involved in such a partnership.
- Meetings held between Principal of Loreto and the three individual Principals of the St John's, St Malachy's and St Colum's Primary Schools schools to identify the particular needs of primary schools in the specialist area and to determine how our specialist provision could be used to help them deliver the curriculum. Areas of focus were on access to Science laboratories and apparatus, INSET for staff in particular Science areas and developing teaching materials that will become part of the legacy of the partnership. Follow-up discussions were used to establish an action plan for the four years of the specialist status and to consider how the partnership may develop beyond those four years.
- Exploratory meeting held between Principal of Loreto and the School's specialism coordinator with Principals and Heads of Science of the Partner Secondary schools to identify the particular needs, in the specialist area, of each of the Partner Secondary schools. Areas of focus were on access to specialist Science apparatus, joint INSET for staff in the Specialist area, particularly in regard to the Revised Curriculum, and developing resources that will become part of the legacy of the partnership.
- Subsequent discussion were held between the Specialist School Coordinator and Heads of Science to establish action plans for the four years of the specialist designation and to consider how the partnership might be developed beyond this time.

Businesses and Employers

- Initial contact was made between Chair of the Board of Governors and Managing Director of Armstrong Medical to garner support for a partnership between school and Armstrong Medical. Follow-up contact was then made by Principal.
- A meeting was held between the Managing Director, Principal and Specialist Science Coordinator to discuss the type of involvement, in which business partners might become involved. These discussions centred on pupils visiting industrial site, business providing lectures for students in Science, Business and Careers as well as problem solving exercises set by the business partner.
- Follow up contacts were used to agree an action plan for the four years of the specialism.
- Contact was made with between Principal and Managing Director of Nicobrand to discuss possibilities of future partnership working.

Community

- Initial contact made with the Health Promotion Agency and Coleraine Community Care Team for Older People with a view to developing a collaborative working arrangement to promote Falls Prevention and Healthy Living Strategies with Older People, involving partnership links with Allied Health Professionals i.e. Physiotherapy, Dietetics, Podiatry etc.
- Meeting with David Porter from the Health Promotion Agency and the Heads of HE and PE held to discuss possible joint projects with primary partners.
- Contact made with representative of Coleraine Borough Council and Kilcranny House to identify environmental projects involving Loreto and Kilcranny House Community group.

Further & Higher Education

- A meeting was held with the Causeway Institute of Further and Higher Education to identify how access to applied provision in the specialist area might be developed in the next four years.
- Initial contact was made with the School of Biomedical Sciences at UUC to discuss interest in a partnership arrangement. A follow-up meeting was then held with Senior Lecturer, James Dooley to establish the nature of involvement in a partnership and how it might be developed. A further meeting was then held to agree an action plan for the four years of the specialism.

b Partnerships with other schools

Please list the names of the schools (including post-primary) which you intend to partner as part of your community plan. Please outline what you are currently doing with each of them to collaborate on teaching and learning activities in the specialist subjects, and identify areas where this needs to be developed (maximum of two pages).

Partner School:- St John's Primary School	
Partnership - Strengths	Partnership - Areas for development
<p>Pupils from P7 participated in Annual Science Week 'Mission to Mars' Competition.</p> <p>Contact has been established to discuss partnership arrangements and there has been an on-going dialogue regarding the development of this partnership. Discussions are at an advanced stage and an action plan has been agreed and developed.</p>	<p>Access to laboratories, materials and resources to capture the imagination and stimulate the interest of pupils and identify Careers in Science.</p> <p>Developing resources, particularly teacher expertise and simple experiments that may be brought back to the primary school and disseminated.</p> <p>Developing an 'Environmental Outreach Programme' considering recycling, sustainable energy, sustainable environment and creating an environment trail in school.</p> <p>Developing a Healthy Eating and Lifestyles programme – access to HE rooms and PE resources.</p> <p>Develop use of ICT in teaching Science, involving use of Interactive whiteboards – resource development and training in use of boards.</p>
Partner School:- St Malachy's Primary School	
Partnership - Strengths	Partnership - Areas for development
<p>Initial contact was established to discuss partnership arrangements and there has been an on-going dialogue between Specialist School Coordinator and the primary school regarding the development of this partnership. Discussions are at an advanced stage and an action plan has been agreed and developed.</p>	<p>Developing a Healthy Eating and Lifestyles programme – access to facilities/pupils/teachers in this area. Sports Day using our facilities.</p> <p>Access to laboratories, materials and resources to capture the imagination and stimulate the interest of pupils. Possibility of provision of after school club.</p> <p>Develop use of ICT in teaching Science, involving use of Interactive whiteboards – resource development and training in use of boards.</p>
Partner School:- St Colum's Primary School	
Partnership - Strengths	Partnership - Areas for development
<p>Pupils from P7 participated in Annual Science Week 'Mission to Mars' Competition.</p> <p>Following initial contact between Principals to discuss partnership arrangements, there has been an on-going dialogue regarding development of the partnership. Further discussions have taken place between the specialist coordinator and an agreed action plan has been developed.</p>	<p>Access to laboratories, materials and resources to capture the imagination and stimulate the interest of pupils.</p> <p>Developing resources, particularly teacher expertise and lesson plans that may be brought back to the primary school and disseminated.</p> <p>Developing an 'Environmental Outreach Programme' with view to establishing an 'Eco – school'.</p> <p>Developing a Healthy Eating and Lifestyles programme- access to HE rooms and PE resources.</p> <p>Develop use of ICT in teaching Science, involving use of Interactive whiteboards – resource development and training in use of boards.</p>

Partner School:- Sandelford Special School	
Partnership - Strengths	Partnership - Areas for development
<p>Sandelford pupils currently visit Loreto and work with Y14 pupils on a range of activities as part of RE programme. Some of the activities are Science based.</p> <p>There was an initial discussion on partnership arrangements between Principals to agree broad areas of interest. Subsequently there has been a continuing dialogue between the Specialist School Coordinator and teachers at Sandelford regarding development of the partnership. The discussions are well advanced and an action plan has been agreed and developed.</p>	<p>Developing an Environmental Group within the school. Role for LEAP (Loreto Environmental Awareness Project) group to engage in joint working.</p> <p>Developing a Healthy Eating and Lifestyles programme – access to HE rooms and PE resources -using sports to develop social interaction of pupils with special needs.</p> <p>Making resources for Design and Technology – creation of a Technology club and support for developing practical element of Technology.</p> <p>Develop use of ICT in teaching, involving use of Interactive whiteboards – resource development and training in use of boards.</p>
Partner School:- St Joseph’s High School	
Partnership - Strengths	Partnership - Areas for development
<p>There were no existing formal links in the specialist area but contact has been established to discuss partnership arrangements. There has been an on-going dialogue between Specialist School Coordinator and the Head of Science regarding the development of the partnership. Areas for development have been identified and an agreed action plan has been established.</p>	<p>Science teachers in St Joseph’s are all Biology specialists. They would like some help in delivering Physics (and possibly Chemistry) sections of KS3 and DA Science at GCSE.</p> <p>Provision of specialist Physics equipment is poor. Provide access to equipment and laboratories either as a timetabled provision or after school.</p> <p>Loreto to provide revision classes for GCSE DA Physics students initially and develop to include GCSE DA Chemistry.</p> <p>INSET developed and delivered by Loreto teachers in Physics teaching.</p>
Partner School:- Dominican College	
Partnership - Strengths	Partnership - Areas for development
<p>There were no existing formal links in the specialist area but contact has been established to discuss partnership arrangements. There has been an on-going dialogue between specialist coordinator and the Head of Science regarding the development of the partnership. Areas for development have been identified and an agreed action plan has been established.</p>	<p>Science teachers in Dominican feel isolated, with few opportunities to share ideas and practice with other colleagues in their specialist subject. They would welcome opportunities to discuss teaching of particular topics within their specialism.</p> <p>Joint INSET - particularly for the revised KS3 and KS4 curriculum.</p> <p>Sharing of resources – equipment, notes, ICT expertise in interactive whiteboard as a teaching tool.</p> <p>Electronic sharing of resources – pooling of notes, questions etc on a shared website.</p> <p>Joint Lectures held in one of schools – attended by other school.</p> <p>Joint trips – travelling in one bus to cut down on teacher supervision and cost.</p>

Support for identified community groups

Please list the groups in your local community which you have identified for support in the plan. Please outline what learning activities in the subjects covered by your specialism are currently being provided by your school or other local agencies for these specific groups, and ways in which learning experiences in the specialist subjects could be extended (**maximum** of one page), based on consultation.

Community Group:- Kilcranny House	
Existing Provision	Areas for Development
<p>No current involvement in the specialist area outside discussion regarding involvement in Specialist School projects. Works with school as part of Seven Schools Project. Kilcranny House is a local community group which works in promoting peace and reconciliation. They would like to extend their links within the local community by working with school groups involving a range of activities. Currently they have few programmes with an environmental focus, but would like to develop this area.</p>	<p>We will develop environmental programmes, which will allow them to work with cross-community groups to further their aims and objectives. We will help them develop and produce new resources that will enable them to use environmental schemes to promote peace and reconciliation. By working in partnership with the staff of Kilcranny House and Conservation Volunteers we will help them plan and plant their grounds to sustain biodiversity.</p>
Community Group:- Armstrong Medical	
Existing Provision	Areas for Development
<p>No current involvement in the specialist area outside discussion regarding involvement as a Business Partner.</p>	<p>We will develop the staff in Armstrong Medical so that they have awareness and understanding of the learning needs of work placement pupils from all schools. We will work with staff from Armstrong Medical to develop an understanding of the whole purpose of Work Experience to assist them in creating effective work placement projects.</p>
Community Group:- Community Group to be identified by Health Promotion Agency (HPA)	
Existing Provision	Areas for Development
<p>The Health Promotion Agency currently runs Falls Prevention workshops for older people in identified community groups within the Coleraine Area. The Agency is keen to develop this programme into other community groups in other areas of Coleraine but finds difficulty in providing suitable accommodation.</p>	<p>We could provide the HPA with facilities to run a Falls Prevention programme within the area surrounding the school. HPA to liaise with Community groups and identify interested group. HPA to liaise with school regarding type of facilities required and timing. By working in cooperation with the HPA and the identified community group we could open up school facilities as required.</p>

D2. Community plan: Objectives and Targets (see Guidance page 18)

Please set out your plans for development within the subjects covered by your specialism, focusing on learning outcomes. Where more than one target is set for each year please insert additional lines where relevant.

OBJECTIVE A1: primary / other non-post-primary partners

[outline objective]

To raise pupil achievement in Science in Primary Partners by providing curriculum support to assist primary teachers in delivery of the Science element of the 'World Around Us' strand of the KS2 revised curriculum and to raise interest in Science in Primary Partners by providing enrichment activities and facilities to allow Primary School Pupils to have an enhanced experience of Science.

	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
Subject 1 Science	1	<p>a) By June 2008 all P7 Pupils from St John's, St Malachy's and St Colum's Primary Schools will be able to safely use simple laboratory equipment to complete experimental work devised by Primary Teacher in consultation with Community Links Coordinator as part of the world around us section of the revised KS2 curriculum.</p> <p>b) By June 2008 P6 teachers from St John's, St Malachy's and St Colum's Primary Schools will have jointly designed and developed materials and resources appropriate for differentiation in The World Around Us and linked to Aptitudes and Dispositions in the revised curriculum.</p> <p>c) By June 2008 Science teachers from Loreto and Science Coordinator from St John's Primary School will have jointly designed and developed an Environment Outreach Programme that will provide opportunities for pupils in the St John's Primary School to develop an awareness of the environment and how they can impact on it, based on the revised curriculum at KS2.</p>	<ul style="list-style-type: none"> • Appoint a Community Links Coordinator from within the school to manage the community links for the duration of the specialism and to ensure continuity and a legacy beyond this time. • Carry out audit of current Science provision within the Primary Partner Schools to assess individual school needs in terms of particular topics to be covered and access required to the range of Science laboratories available. • Provide time and facilities for staff from all schools to meet and plan for implementation of revised curriculum. • Consult with schools and teacher responsible for timetable at Loreto to identify when schools may best access laboratories. Produce resources for Science module to be covered, in consultation with Primary Science Coordinator and including follow-up exercises for return to the Primary School. • Primary pupils visit school for one complete day to include elements of Careers, Skills Development, Problem solving etc • Liaise with Primary Partners and Conservation Volunteers to identify possible Environmental Projects that can be worked on jointly with Loreto and Partners. These may be school based, e.g. developing a pond, environment trail etc, or they may be community based. • Identify learning outcomes from revised curriculum which can be delivered through an environmental project. • Produce an action plan to develop an environmental project based on identified

			<p>learning outcomes.</p> <ul style="list-style-type: none"> Review and evaluate each of the learning outcomes to inform refinement of 2nd year targets.
	2	<p>a) By June 2009 all P7 Pupils from St John's, St Malachy's and St Colum's Primary Schools will have safely completed a further piece of experimental work, using simple laboratory equipment, devised by Primary Teacher in consultation with Community Links Coordinator as part of the world around us section of the revised KS2 curriculum.</p> <p>b) By June 2009 all P6 pupils from St John's Primary School will have completed an Environmental Project, based on the revised curriculum at KS2, from which they will have an awareness of the environment and how they impact on it.</p> <p>c) By June 2009 Science teachers from Loreto in partnership with the Science Coordinator from St John's will have designed and developed a resource booklet that will enable an environmental project to be cascaded to the two other Primary Partner Schools.</p>	<ul style="list-style-type: none"> Continue with strategies from year 1 regarding access to laboratories. Identify one Primary Partner willing to participate in an environmental project. During term1 liaise with Primary Science Coordinator in identified Primary Partner and Conservation Volunteers to determine nature and format of project, which best suits needs of Primary Partner. Produce resources and training package for Primary Partner to trial as part of an environmental project during term 2. During term 3 the identified Primary Partner carries out environmental project, using resources and supported by Loreto Link Teacher and a technician. Follow-up work could be in Loreto laboratory facilities. Monitor and evaluate effectiveness of resources and modify as required. Review and evaluate each of the learning outcomes to inform refinement of 3rd year targets.
	3/4	<p><i>Outline of plans</i></p> <p>a) <i>To provide St John's, St Malachy's and St Colum's Primary Schools with Interactive Whiteboards, Boardworks Software and training.</i></p> <p>b) <i>By June 2010 to have produced a resource booklet, in collaboration with one Primary Partner, that will enable an environmental project to be cascaded to other primary schools.</i></p> <p>c) <i>To cascade environmental project to other Primary Partner Schools.</i></p> <ul style="list-style-type: none"> Liaise with Science Coordinators in other Primary Partners and produce an action plan for roll out of environmental project. Provide training support and modified resources for environmental project. Purchase 1 Interactive whiteboard for each Primary Partner along with Boardworks Science Software. Loreto teachers provide training in use of boards and technical support is provided by a technician. Biology Department, Home Economics Department and PE Department design and develop a 'Healthy Lifestyles' programme for use with P7 pupils. 	

OBJECTIVE A2: primary / other non-post-primary partners

[outline objective]

To help motivate and empower pupils within our Partner Primary Schools as learners, by developing ICT resources that support meaningful learning opportunities in the classroom.

	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
Subject 1 Science	1	<p>d) By June 2008 all P7 Pupils from St John's, St Malachy's and St Colum's Primary Schools will be able to manage and communicate information using ICT by investigating and solving a Science problem devised by Primary Teacher in consultation with Community Links Coordinator as part of the world around us section of the revised KS2 curriculum.</p> <p>e) By June 2008 one teacher from each of our Primary Partner Schools - St John's, St Malachy's and St Colum's - will have received training in the use of an interactive whiteboard as an aid to learning Science.</p> <p>f) By June 2008 P7 pupils from our Primary Partners will have had opportunities to generate ideas, design a way to test ideas and present their ideas using ICT as part of a problem solving exercise in Science.</p>	<ul style="list-style-type: none"> • Appoint a Community Links Coordinator from within the school to manage the community links for the duration of the specialism and to ensure continuity and a legacy beyond this time. • Community Links Coordinator liaises with primary schools regarding the nature of Science problem to be set as a problem solving exercise. • Community Links Coordinator designs and produces a design brief for use with P7 pupils in a problem solving activity. • Primary pupils visit school for one complete day and participate in problem solving activity. • Purchase and install interactive whiteboard in each Primary Partner School, with software – aim for same year group in each school to ensure training is easier to devise and deliver. • In partnership with Primary Teachers identify learning outcomes from revised curriculum which can be delivered through use of an interactive whiteboard and develop resources to achieve this. • Primary Teachers receive training in the use of the interactive whiteboard. • Initial technical support is provided by a technician from Loreto, aiming to create less dependency on this support as the programme rolls out. • Primary Science Boardworks purchased for use with interactive whiteboards. • Review and evaluate each of the learning outcomes to inform refinement of 2nd year targets. • Review and evaluate the problem solving exercise and the role of ICT in pupils' learning.

<p>2</p>	<p>d) By June 2009 all P7 Pupils from St John’s, St Malachy’s and St Colum’s Primary Schools will have researched background information for a problem solving exercise using the internet on the Loreto C2K network</p> <p>e) By June 2009 all P6 pupils from St John’s Primary School will have been able to present a report, using an interactive whiteboard, to explain their involvement in the Environmental Project, communicating their awareness of the environment and how they impact on it.</p>	<ul style="list-style-type: none"> • Continue with strategies from year 1 regarding use of ICT as a meaningful learning resource. • Continue training in the use of interactive whiteboards. • Community Links Coordinator in consultation with Primary Whiteboard users to look critically at Boardworks material and edit to suit the demands of the revised curriculum in terms of content and degree of Active Learning. • Pupils provided with guidance on delivering a presentation in terms of establishing context, awareness of audience and purpose of presentation. • Community Links Coordinator to be part of audience when presentations are made and award certificates to pupils to acknowledge achievement. • Monitor and evaluate effectiveness of resources and modify as required. • Review and evaluate each of the learning outcomes to inform refinement of 3rd year targets.
<p>3/4</p>	<p><i>Outline of plans</i></p> <p>d) <i>By June 2010 to have provided opportunities for P6 pupils from all Primary Partners to participate in an environmental project and produce a presentation using ICT to explain their learning.</i></p> <p>e) <i>To cascade whiteboard training to other teachers within each of the Primary Partners.</i></p> <ul style="list-style-type: none"> • Liaise with Science Coordinators in other Primary Partners regarding the roll out of environmental project and the use of ICT in reporting on it. • Provide training for one Primary Teacher so that they can deliver training and support to other teachers. • Each Science Department within Loreto to look at how problem solving activities fro use with primary schools can be developed, using ICT as a medium for research, handling data and communicating findings. 	

OBJECTIVE A3: primary / other non-post-primary partners

[outline objective]

To improve the Applied provision at KS4 by offering GCSE Electronics as an enrichment course available to all Post-Primary Partner Schools and delivered by Causeway Institute of Further and Higher Education.

	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
Subject 1 Science	1	g) By June 2008 the Electronics Department of CIFHE have determined whether they can in principle deliver Electronics at GCSE for pupils from Loreto.	<ul style="list-style-type: none"> • Appoint a Community Links Coordinator from within the school to manage the community links for the duration of the specialism and to ensure continuity and a legacy beyond this time. • Community Links Coordinator engages in negotiations with Director of CIFHE to establish the criteria for delivering Electronics as a GCSE. • Director of CIFHE liaises with Electronics Department to establish if staff have expertise and are willing to deliver GCSE Electronics to Loreto students.
	2	f) By June 2009 CIFHE and Loreto will have agreed on a schedule and mechanism for delivering Electronics GCSE. g) By June 2009 pupils in Loreto and Post-Primary Partners will be able to choose GCSE Electronics as an enrichment subject.	<ul style="list-style-type: none"> • Director of CIFHE to liaise with Community Links Coordinator to establish the times of teaching and mode of delivery – pupil movement or teacher movement. • Loreto timetabler seeks to provide suitable blocks during school timetable that may allow pupils to begin lessons during school time and then extend beyond the school day. • GCSE Electronics made available to Loreto students at Y12 and Y13. • Community links Coordinator consults with Post-Primary Partners to offer GCSE Electronics, if arrangements can be made for joint lessons.
	3/4	Outline of plans f) <i>By June 2010 10 pupils from Loreto and Post-Primary Partners will have studied for GCSE Electronics.</i> g) <i>By June 2010 10 more pupils from Loreto and Post-Primary Partners will have studied for GCSE Electronics</i> <ul style="list-style-type: none"> • Liaise with Post- Primary Partners regarding timetabling, transport and other issues concerned with delivery of GCSE Electronics by CIFHE. • Provide transport for pupils from Post-Primary Partners. Monitor and evaluate uptake and success of GCSE electronics.	

OBJECTIVE B1: post-primary partners

[outline objective]

To assist in planning and preparing for delivery of the revised curriculum at KS3 & KS4; to help raise standards in Science subjects at all levels; to promote career paths in Science and to develop the use of ICT as an effective teaching and learning tool in Science.

	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
Subject 1 Science	1	<p>a) By June 2008 staff from each of the Post-Primary Partner Schools will have designed and developed a plan to inform the implementation of the KS3 revised curriculum within each of the schools particular to Science subjects.</p> <p>b) By June 2008 Science staff in each of the Post-Primary Partner Schools will have designed and developed a common planning and delivery format to enable the sharing of resources and expertise across all schools.</p> <p>c) By June 2008 Y13 and Y14 students in each of the Post-Primary Partner Schools will have attended joint lectures in both Careers and curricular areas.</p> <p>d) By June 2008, pupils from at least one of the Post-Primary Partner Schools will have entered a Science competition such as Crest Awards or ESAT Young Scientist, having received guidance from staff in Loreto.</p> <p>e) By June 2008, staff from Post-Primary Partner Schools will have planned and designed a joint Science Careers Fair.</p> <p>f) By June 2008, staff from Post-Primary Partner Schools will have planned joint lectures for Science and Careers at Post 16.</p> <p>g) By January 2008, one staff member from Sandelford special School will have received interactive whiteboard training.</p> <p>h) By June 2008, staff from Sandelford Special School will have designed a series of lessons that can be delivered using an interactive whiteboard.</p>	<ul style="list-style-type: none"> • Community Links Coordinator liaises with all Partner Schools and arranges time for joint planning. • Provide time for Science Staff from Loreto, Dominican and St Joseph's to plan and share expertise for implementation of the revised curriculum at KS3. • Provide time for Careers teachers from each school to plan for a Science Careers Fair. Liaise with local businesses, UUC and CIFHE to ensure suitable venue and to involve as much of community as possible.. • Dates for meetings arranged by Heads of Science at start of year. Venues rotated so that staff have opportunity to visit other schools. • Partner schools produce schemes of work and lesson plans suitable for implementation of the second year of the revised curriculum within their school. • Provide opportunities for sharing resources and expertise either through arranged meetings or via internet links. • Research possible lectures for Y13/Y14 Science students both in Careers and curricular areas. • Organise joint lectures for Y13/Y14 Science students both in Careers and curricular areas. • All schools to invite Partner Schools to lectures and to consult with each other in advance of organising lectures to avoid duplication. • Create a link from individual school websites to a joint Science page where staff can share resources electronically eg worksheets, PowerPoint presentations etc. • Raise the profile of Science within the schools by entering Science competitions. • Teacher in charge of preparing pupils for competitions in Loreto to liaise with Partner Schools to identify possible projects for entry into ESAT Young Scientist. INSET training provided for Science Teachers in Partner Schools. • Purchase and install interactive whiteboard for Sandelford Special School.

			<ul style="list-style-type: none"> • Organise and facilitated whiteboard training for selected staff member of Sandelford Special School. This person must be willing to train other teachers within Sandelford Special School in future years. • Science teachers from Loreto and staff from Sandelford Special School meet to share ideas and resources regarding interactive whiteboards. Loreto Science staff assists Sandelford Special School in planning series of lessons. • Monitor and review progress to ensure targets are being met and inform planning for the coming year.
2	<p>a) By June 2009, an educational visit to the Science Olympiad will have been jointly planned, supported and completed.</p> <p>b) By June 2009, Science teachers from the Post-Primary Partner Schools will have met once per term to jointly plan in preparation for new AS specifications and to engage in advanced planning for the revised curriculum at KS4.</p> <p>c) By June 2009, pupils from one of the Partner Schools will have competed in ESAT with assistance in design and development.</p> <p>d) By June 2009, staff from Sandelford Special School will have developed resources and delivered a series of lessons using an interactive whiteboard.</p> <p>e) By June 2009, pupils from Sandelford Special School will have experienced a series of lessons delivered using an interactive whiteboard.</p>	<ul style="list-style-type: none"> • Staff in each of the Post-Primary Partner Schools to collaborate in the rationalisation of transport and teacher cover when arranging educational visits eg travelling to Science Olympiad. • Identify visits that schools may be planning as individual organisations and make arrangements for travelling together to minimise transport costs and teacher supervision. • Dates for meetings arranged by Heads of Science at start of year. Venues rotated so that staff have opportunity to visit other schools. • Provide time for one meeting per term between Science teachers of each of the Post-Primary Partner Schools to collaborate in planning in preparation for new AS specifications and advanced planning for the revised curriculum at KS4. • Loreto Science Staff offer support to one of the Post-Primary Partner Schools in the preparation of one project to be entered in the ESAT Young Scientist competition. • Loreto Science teacher helps prepare project with pupils from Partner School and supervising teacher from Partner School. • Joint travel and accommodation arrangements made. • Staff from Sandelford Special School prepare resources during first term for delivery in the second term. • Monitor and review progress to ensure targets are being met and inform planning for the coming year. 	

Subject 2* Biology Chemistry Physics	1	<p>a) By June 2008, Science Staff in St Joseph's will have identified two topics in DA Physics that would be enhanced by delivery through a team-teaching approach involving a specialist Physics teacher from Loreto.</p> <p>b) By June 2008, Physics teachers in Loreto will have produced lesson plans and resources to ensure delivery of two identified topics.</p> <p>c) By June 2008, the need for specialist equipment within Post-Primary Partner Schools to ensure the effective delivery of the revised curriculum will have been identified through an equipment audit.</p> <p>d) By June 2008, Science Staff from the Partner Schools will have held one joint planning session per term, to develop strategies and resources for delivery of the new Science AS specifications.</p> <p>e) By June 2008, a Post-Primary Partner Schools web-link for sharing resources will have been established.</p>	<ul style="list-style-type: none"> • Head of Physics in Loreto meets with teachers of Science in St Joseph's to discuss topics that may require specialist input. • St Joseph's Science Staff identify two topics in DA Physics that would be enhanced by delivery to Pupils in St Joseph's through a team teaching approach involving a specialist Physics teacher from Loreto. • Loreto Physics Department seeks to develop lesson plans and resources for the topics identified. • Partner schools perform an equipment audit to identify current resource strengths and specialist equipment needs to ensure the effective delivery of the revised curriculum. • Specialist equipment as required by Partner schools purchased on behalf of schools or provided by Loreto as required. • As part of scheduled meetings individual departments can discuss and exchange ideas about how to deliver various parts of the new specifications. Resources can be shared and new resources can be produced for sharing. • Loreto Science Webmaster creates a specific work area for Post-Primary Partner Schools to up-load and down-load resources. • Monitor and review progress to ensure targets are being met and inform planning for the coming year.
	2	<p>f) By June 2009, Loreto Physics specialists will have delivered two identified topics from the Physics section of the Double Award specification to selected Science pupils in St Joseph's.</p> <p>g) By June 2009, two Science teachers from St Joseph's will have engaged in team teaching of Physics topics with a Physics specialist from Loreto.</p> <p>h) By June 2009, Loreto Physics specialists will have developed INSET materials to support non-specialists in delivery of the identified topics in future.</p>	<ul style="list-style-type: none"> • Y12 pupils identified by St Joseph's staff will be receive a 1hr teaching input from Physics specialists at Loreto on 4 separate occasions. • Loreto purchases the Institute of Physics CD Resource for non-specialists and negotiates with Institute of Physics to provide an introductory workshop. • St Joseph's teachers receive training and become involved in team teaching to help them develop confidence and experience of teaching Physics topics. • Loreto Physics teachers develop resources for pupils and teachers – made available on-line for future use. • Organise a joint INSET day for non-specialists teachers to receive training in specialist subject teaching. • Monitor and review progress to ensure targets are being met and inform planning for the coming year.

* If applicable

3/4

Outline of plans

- a) By June 2010 to extend the teaching of Y12 pupils from St Joseph's by Loreto Physics specialists to a whole class group.*
- b) By June 2011 to extend the teaching of pupils from St Joseph's by Loreto Physics specialists to include Y11 pupils.*
- c) By June 2011 to extend teaching of Y12 pupils from St Joseph's to include input by Loreto Chemistry specialists, using existing Physics model for Chemistry topic in Double Award Science.*
- d) By June 2001 to continue to hold termly meetings between Science departments from all Post-primary Partner Schools to develop further collaborative activities with initial focus on joint planning for delivery of the new AS/A2 specifications and then the revised KS4 curriculum.*

Review and evaluate strategies from first two years and use results to inform and develop strategies for years three and four.

Once pattern of pupils attending Loreto for additional Physics lessons is established, then increase the number of pupils each year until all DA students from St Joseph's attend.

In consultation with Head of Science at St Joseph's, identify two Chemistry topics from DA Science that would be better delivered by a Chemistry specialist.

Loreto Chemistry Department develops resources to deliver topics to selected St Joseph's pupils.

INSET materials developed so that non-specialist teachers gain confidence and experience in delivering material outside their specialism.

Partner schools provide strategies for dealing with wider ability ranges.

Continue to support Sandelford Special School in terms of ICT technician support and ongoing whiteboard training.

Selected staff member from Sandelford Special School cascades whiteboard training within the school.

OBJECTIVE B2: post-primary partners

[outline objective]

To extend curriculum provision at KS4 and Post 16 to enable Loreto and partner schools to move closer to delivering the requirements of the entitlement framework.

	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
Subject 1 Science	1	<p>a) By June 2008 relevant staff from the post primary partner schools will have engaged in preliminary discussions to jointly plan for mutual provision enhancement.</p> <p>b) By June 2008 Partner Schools will have identified an appropriate mechanism to deliver future provision enhancements ie movement of pupils or movement of teaching staff.</p> <p>c) By June 2008 Partner schools will have agreed in principle to the nature and extent of provision enhancement.</p> <p>d) By June 2008, staff from Loreto and Sandelford Special School will have created a joint action plan to improve the Technology provision for Sandelford Special School.</p> <p>e) By June 2008, pupils from Sandelford Special School will have participated in a sports day using facilities at Loreto College.</p>	<ul style="list-style-type: none"> • Principals of Partner Schools meet as part of Coleraine Area Learning Partnership (CALP) to identify and agree areas for collaboration. • Principals from Loreto and St Joseph's confirm intentions to increase provision for each school by seeking to establish Business Studies and Health and Social Care on Loreto Curriculum as well as Economics on St Joseph's. • Principals meet to discuss and identify strategies to overcome possible problems that may be encountered eg transport, timetabling, staffing etc. • Dates for meetings arranged and agreed at start of year. • Decision made on the nature and extent of provision enhancement as well as mechanism being agreed. • Joint Action Plan for delivery of enhanced provision with respect to Loreto and St Joseph's designed and produced. • Joint Action Plan for delivery Technology provision to Sandelford Special School designed and produced. • Principal, PE Department and Community Links Coordinator liaise with Sandelford Special School to arrange sports day. • Each Partner School identifies provision enhancement on own School Development Plan.

	<p>2</p> <p>a) By June 2009, two additional Applied subjects will be available as options in Loreto at Post 16 within the Entitlement Framework Strategy and the local area plan.</p> <p>b) By June 2009, one additional Academic subject will be available as an option in St Joseph's at Post 16 within the Entitlement Framework Strategy and the local area plan.</p> <p>c) By June 2009, pupils from Sandelford Special School will have used the Technology facilities on at least one occasion to complete a simple Technology Project.</p>	<ul style="list-style-type: none"> • Principals and timetablers from each school identify two days per week when suitable common 'blocks' may be established to accommodate joint arrangements. • Timetable adjustment made for implementation in September 2009 term. • Transport arrangements using school minibuses agreed and planned. • Business Studies offered as an option for Y13 pupils at Loreto. • Health and Social Care offered as an option for Y13 pupils at Loreto. • Economics offered as an option for Y13 pupils at St Joseph's. • Head of Technology liaises with Sandelford Special School to plan for use of Technology facilities. • Head of Technology, Principal, and Community Links Coordinator liaise with Sandelford Special School to arrange for use of Technology facilities.
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	<p>3/4</p> <p><i>Outline of plans</i></p> <p><i>By June 2010 to have established at least one Business Studies class at St Joseph's involving Y13 pupils from Loreto.</i></p> <p><i>By June 2010 to have established at least one Health and Social Care class at St Joseph's involving Y13 pupils from Loreto.</i></p> <p><i>By June 2010 to have established at least one Economics class at Loreto involving Y13 pupils from St Joseph's.</i></p> <p><i>Review and evaluate uptake of new subjects from first year and develop strategies to sustain/ increase during year four.</i></p> <p><i>By June 2011 to extend the provision enhancement, if possible, to include Dominican College.</i></p> <p><i>By June 2011 to extend the provision enhancement, if possible, to include Dominican College.</i></p> <p>a) By June 2011 to extend the provision enhancement, if possible, to include KS4.</p> <p>b) Continue to organise Sports Day with Sandelford Special School and develop use of Technology facilities.</p> <p>c) Once systems have been established between Loreto and St Joseph's then extend the practice to include Dominican and look to expand into KS4.</p> <p>d) Review and evaluate entire programme to ascertain value for money and cost effectiveness of providing increased provision.</p>
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OBJECTIVE C1: wider community groups including business/employers

[outline objective]

To support local businesses in gaining a better understanding of the role of work experience and assist local pupils from a range of backgrounds in obtaining a meaningful and relevant work placement.

	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
Subject 1 Science	1	a) By June 2008 Senior Management of Armstrong Medical will be aware of the importance of work placements. b) By June 2008 representatives of Senior Management from Armstrong Medical staff will have designed and produced customised work placement learning plans for at least one pupil.	<ul style="list-style-type: none"> • Careers staff arrange a training day for Senior Management from Armstrong Medical. • Sample workplace learning plans are shared with Armstrong Medical Senior management. • Armstrong Medical in collaboration with Careers Department identifies appropriate work placements within their company. • Careers staff and Senior Manager from Armstrong Medical liaise to jointly produce customised plans for different work placements within their company.
	2	By June 2009: a) All staff from Armstrong Medical will be aware of the importance of work placements. b) Armstrong Medical will have implemented a workplace learning plan for at least one Y13 pupil.	<ul style="list-style-type: none"> • Training cascaded from Senior Management to rest of staff involved in work placements. • Review and evaluate plans produced in previous year with view to improving the work placement experience of Y13 pupils. • Pupils identified for work placement with Armstrong Medical. • Pupils placed with Armstrong Medical for work experience. • Monitor and evaluate the experience of pupils placed with Armstrong Medical. Armstrong Medical receives written feedback.
	3/4	Outline of plans Increase the number of pupils on work placement with Armstrong Medical. Increase the range of work placements offered by Armstrong Medical both in terms of the variety of experience and the range of pupil ages involved. Continue to monitor and evaluate the actual experience of pupils placed in Armstrong Medical and adapt workplace plans as appropriate. Work placements offered to other Partner Schools, using plans established by working with Loreto. Work with Armstrong Medical to develop teaching materials based on 'real-life' Science that occurs during work placements.	

OBJECTIVE C2: wider community groups including business/employers

[outline objective]

To work in partnership with a local community group to design and produce new resources that will enable them to use environmental schemes to promote peace and reconciliation within the local community.

	Year	Target	Describe how you will implement these targets (use bullet points and short statements)
Subject 1 Science	1	<p>a) By June 2008 staff from Kilcranny House will have identified an environmental project, for which pupils from Loreto Environmental Awareness Project can produce resources.</p> <p>b) By June 2008 Pupils from Loreto Environmental Awareness Project will have produced appropriate resources to support an Environmental Project run by Kilcranny House to promote peace and reconciliation.</p>	<ul style="list-style-type: none"> • LEAP liaises with Kilcranny House Community group to identify the help required to develop an environmental project. • LEAP liaises with Kilcranny House link person to develop resources. • Pupils from Loreto produce resources needed for Kilcranny House to establish their environmental project.
	2	<p>b) By June 2009, Kilcranny House community group will have completed an Environmental Project supported by Loreto Pupils.</p>	<ul style="list-style-type: none"> • Review and evaluate resources produced during previous year. • LEAP liaises with Kilcranny House link person to establish the help required to complete the Environmental Project. • LEAP liaises with Kilcranny House to develop action plan and determine the extent and nature of support required. • Pupils from Loreto help community group complete their environmental project.
	3/4	<p><i>Outline of plans</i></p> <p>Continue to develop Environmental project from years 1 & 2.</p> <p>Work in partnership with Coleraine Borough Council and Conservation Volunteers to identify and implement further environmental projects involving Kilcranny House or the same project with other local community groups.</p>	

OBJECTIVE D (optional)

[please outline objective, associated targets and how you will deliver these targets]

D3. Community plan: Brief outline of intended use of Year 1 (2006/07 financial year) specialist school annual grant (see Guidance page 20)

Item	Cost (£)
Additional staff resources (teaching staff)	
1 additional Part-time Science teacher to release current staff member to act as Community Links Coordinator, to support planned primary, secondary and community projects.	£18000
Additional staff resources (non-teaching staff)	
1 additional ICT and Science technician to work in supporting community projects, helping with whiteboard training and developing resources (The technician will be used to jointly support community and school plan and is funded jointly from both).	£10000
Staff development	
INSET teacher cover to release teachers and technicians for joint planning arrangements and training for both Loreto and partner schools – 24 days cover required.	£4800
Equipment and materials in specialist subjects	
Materials, resources, reprographics and administration.	£2500
Specialist Science equipment to partner schools.	£3200
Other	
Transport costs	£500
Total	£39000

SECTION E: SCHOOL AND COMMUNITY PLANS – MONITORING AND EVALUATION (see Guidance page 20)

Please outline your monitoring and evaluation strategies. Your summary should relate to the questions outlined in the plan and show clearly the composition, structure and inter-relationships in your arrangements (**maximum** of one page).

A. Monitoring of targets at subject and individual levels, assessment of quality of teaching and learning

- Appoint Senior Teacher to monitor and review progress of both School and Community plans and to report to all interested parties once per term. Termly progress reports on Science activities prepared by staff running these and shared with SLT, all staff and BOG, to include attendance/uptake and student evaluation.
- Termly progress reports on activities related to raising standards which have been allocated resources.
- Improved use of data held in Assessment Manager related to targets set .
- Lesson observations – already part of PRSD cycle, leading to sharing of good practice throughout the school through PRSD reports or other methods.
- Tracking of student progress (*through entry profile, CAT tests, Assessment Manager*) with a view to early identification of students underperforming.
- INSET evaluation by questionnaire to teachers (already in place through IIP) and further evidence of impact on teaching and learning through feedback from pupils.
- Feedback from a sample of parents on strategies implemented to improve Teaching and Learning and those measures identified to support underperforming pupils.
- Annual reports by HODs on cross-curricular topics/ themes cross-referenced against content of subject schemes.
- Analysis of public examination results at whole school, department and individual level (*including comparisons with NI Grammar Average, gender, predictions, Value Added from Baseline data and Residuals*)
- Involvement of SLT in process of monitoring and evaluation including classroom visits, monitoring of pupils underperforming and input into meetings and reporting.

B. Involvement of Governors and sponsors in monitoring and evaluation

- The Co-ordinator will update BOG termly based on above reports.
- Annual update by Principal to sponsors on use of funds.
- AGM to provide an opportunity for all interested parties to comment on all aspects of the scheme.

C. Community partners' involvement

- Report submitted annually to parents as part of Annual Governor's Report. Report to be made available to Sponsors.
- Sponsors invited into school to see school and plan in operation.
- Audit of Principals and appropriate staff and students in partner schools, to be reported to Principal and BOG.
- AGM as above.
- Regular contact/feedback from Partners that is used to influence future planning and strategies.

D. Data available for analysis

- Public examination results at KS3, GCSE, AS and A-Level, NI grammar schools benchmarking data, CAT baseline tests and grade predictions. School Development Plan.
- Extra curricular timetable and attendance records, schemes of work, hard copy of teaching materials, minutes of departmental meetings, whole-school INSET plans and reports, samples of students work from all year groups.
- Audits of partners, parents, staff and pupils.
- Audits of (i) Number of hits on Science website. (ii) Contributions to Learning Resources as evidence of sharing good practice. (iii) Numbers of students accessing Learning Resources from home.

E. Accountability

- Accountability Structure :
BOG – Principal – SLT/VP Coordinator – Assistant Coordinator – HODs – Science Teachers.
- Financial Accountability:
BOG – Principal – Bursar -SLT/VP Coordinator – Assistant Coordinator – HODs – Science Teachers.

SECTION F: OUTLINE OF USE OF YEAR ONE SUPPORT GRANT (see Guidance page 21)

*All figures to include professional fees and VAT where appropriate.

Brief description of proposed capital project	Cost* (£): These should indicate whether expenditure is classified as capital or recurrent	Brief statement on how this expenditure will support your targets
Contribution to new build		
Refurbishment or adaptations		
<p>Conversion of existing animal house into a computer suite with 15-20 internet access computers and interactive whiteboard.</p> <p>Refurbishment of Biology Laboratories.</p>	<p>Capital expenditure -£50000</p> <p>Capital expenditure -£3000</p>	<p>Providing a new computer suite with sufficient computers for whole classes to use will enable us to meet our target of using ICT to promote independent learning. It will also enable us to use, in classroom teaching, the Learning Resources being developed jointly with Partner Schools and will enable us to make use of Active Learning software packages such as Birchfield and Sunflower and SCHOLAR.</p> <p>Biology Laboratories are part of older buildings within the school and are currently in need of refurbishment. This will support our plans to encourage more pupils to take up Biology at all levels by creating a more attractive learning environment.</p>

IT equipment/resources/software

Remote logging devices with ability to be connected to computer networks.	Capital expenditure - £15000	Remote logging devices are already successfully used within the school and by investing in newer technology we can reduce the high dependence on technician support required with our 'Sense and Control' devices and increase their use as an ICT learning tool.
Interactive whiteboards and projectors for 9 other departments within the school.	Capital expenditure - £30000	As part of our plan we hope to develop the use of interactive whiteboards as a Teaching and Learning tool by increasing its active use in Science. We then hope to cascade this to other departments through training and sharing good practice.
Interactive whiteboards and projectors for Primary Partners.	Capital expenditure - £10000	As part of our Community Plan we hope to develop the use of interactive whiteboards as a Teaching and Learning tool within Primary Partners.
Interactive whiteboards and projectors for Post-Primary Partner - Sandelford.	Capital expenditure - £3000	As part of our Community Plan we hope to develop the use of interactive whiteboards as a Teaching and Learning tool within Primary Partners.
APODO Skills capsule	Capital expenditure - £1300	To improve thinking skills within the classroom by providing ready-made problems to solve.

Other furniture and equipment

<p>Resource funding for Biology Department. Resource funding for Chemistry Department Resource funding for Physics Department</p> <p>Resource funding for subjects other than the specialist area.</p>	<p>Recurrent expenditure - £3120 Recurrent expenditure - £4000 Recurrent expenditure - £3700</p> <p>Recurrent expenditure - £8000</p>	<p>All Departments within the Specialist area are hoping to engage in new initiatives which will transform their practice and provide interesting and meaningful learning experiences for pupils of science. This funding will enable them to purchase goods or services, such as photocopying that will enhance their provision in the first year of designation. In particular the money will be used for producing materials for Active Learning strategies, paying transport costs for visits, entry fees to W5 and other similar activities identified in our bid.</p> <p>We are intending to become a Specialist School and want to improve in all areas, not just our designated specialism. This money will allow other departments to improve the quality of their teaching and learning through specific, identified projects related to Assessment for Learning, Active Learning, e-learning and other strategies identified in our bid. This may be to access training, develop resources etc.</p>
<p style="text-align: right;">Total Capital:</p>	<p style="text-align: right;">£111120</p>	
<p style="text-align: right;">Total Recurrent:</p>	<p style="text-align: right;">£20000</p>	
<p style="text-align: right;">Less sponsorship</p>	<p style="text-align: right;">£31120</p>	
<p style="text-align: right;">Less other sources of committed funding (please specify source)</p>		
<p style="text-align: right;">Total grant sought from DE</p>	<p style="text-align: right;">£100000</p>	

SECTION G: SUMMARY OF SPONSORSHIP (see Guidance page 23)

Sponsor/Source of sponsorship	Value of sponsorship	Nature of sponsorship (eg cash, furniture, equipment)	Are there any conditions attached to the sponsorship?	Financial year(s) in which sponsorship is available	
				Cash	Goods
Mr Gerry McConville/Northern Bank, 22 The Diamond, Coleraine BT52 1DA	£500.00	Cash	No		
Mr Liam Rafferty/Carhill Car Sales, 56 Carhill Road, Garvagh, BT51 5PF	£1000.00	Cash	No		
Messrs Dan & Columb Henry/R Benson & Son, 9 Dunmore Street, Coleraine BT52 1EL	£500.00	Cash	No		
Mr Kevin Lynch/KPL Group, 414A Ballyquin Road, Dungiven, Co Derry, BT47 4NQ	£1000.00	Cash	No		
Mr Samuel Moore/S&T Moore, 11-15 Bridge Street, Coleraine, BT52 1DR	£1000.00	Cash	No		
Mr & Mrs Pat Burns/Couples, 4 Railway road, Coleraine, BT52 1PD	£1000.00	Cash	No		
Messrs Colm & Leo Diamond/A Diamond & Son Timber Ltd, 35 Newmills Road, Coleraine BT52 2JB	£1000.00	Cash	No		
Total Carried Forward	£6000.00				

Sponsor/Source of sponsorship	Value of sponsorship B/Fwd £6000.00	Nature of sponsorship (eg cash, furniture, equipment)	Are there any conditions attached to the sponsorship?	Financial year(s) in which sponsorship is available	
				Cash	Goods
Mr Chris Downing/Ulster Bank, Coleraine Business Centre, PO Box 118, 30 The Diamond, Coleraine, BT52 1YD	£1000.00	Cash	No		
Mr Seamus McKillop/Semple & McKillop Ltd, Consulting Engineers, Suite 6, Ormeau House, 91-97 Ormeau Road, Belfast, BT7 1SH	£500.00	Cash	No		
Mr John Dowds/Fairview Developments, 2-4 Milltown Road, Ballymoney, Co Antrim, BT53 6LE	£1000.00	Cash	No		
Mr John Armstrong/Armstrong Medical Ltd, Wattstown Business Park, Newbridge Road, Coleraine, BT52 1BS	£2000.00	Cash	No		
Mr Gerry Loughrey/Gerry Loughrey Architects, 22 Foyle Street, Derry, BT48 6AP	£1000.00	Cash	No		
Mr Brian McKeefry/B P McKeefry Limited, 114 Grove Road, Swatragh BT46 5QZ	£1000.00	Cash	No		
Ms Denise Whyte/Gilligan and Partners Limited, Consulting Engineers, Suite B, 174-184 Ormeau Road, Belfast BT7 2ED	£1000.00	Cash	No		
Total Carried Forward	£13500.00				
Sponsor/Source of sponsorship	Value of sponsorship B/Fwd £13500.00	Nature of sponsorship (eg cash, furniture, equipment)	Are there any conditions attached to the sponsorship?	Financial year(s) in which sponsorship is available	
				Cash	Goods

Mr Dermot Loughran/Brendan Loughran & Sons Ltd, 11 Termon Road, Carrickmore, Omagh, BT79 9JW	£1000.00	Cash	No		
Mrs Maureen Donaghy, 3 Portna Road, Kilrea BT51 5SW	£500.00	Cash	No		
Mr Joseph Bradley/Patrick Bradley Limited, Craigall Quarry, Kilrea, BT51 5XR	£1000.00	Cash	No		
Mr Gerry Mullan, 42 Glen Road, Garvagh, BT51 5DD	£1000.00	Cash	No		
Mr Gerry McAfee/McAfee Properties, 20 New Row, Coleraine, BT52 1AF	£1000.00	Cash	No		
Mr Rex Humphrey/Nicobrand, 189 Castleroe Road, Coleraine, BT51 3RP	£5000.00	Cash	No		
Mr Graham McQuillan/Northstone (NI) Ltd, 7 Creagh Road, Toomebridge, BT41 3SA	£1000.00	Cash	No		
Mr Stephen Rogers/Limavady Printing Company Ltd, 26c Catherine Street, Limavady, BT49 9DB	£1000.00	Credit on orders placed	No		£250 in goods per year
Total Carried Forward	£25000.00				

Sponsor/Source of sponsorship	Value of sponsorship B/Fwd £25000.00	Nature of sponsorship (eg cash, furniture, equipment)	Are there any conditions attached to the sponsorship?	Financial year(s) in which sponsorship is available	
				Cash	Goods
Mr Michael Hegarty/FM Corr Associates, 1 Bayview Terrace, Londonderry, BT48 7EE	£1000.00	Cash	No		
Mr Michael McEvoy/WH McEvoy Ltd, Chartered Quantity Surveyor, 7 Wellington Park, Belfast, BT9 6DJ	£2500.00	Cash	No		
Mr Raymond Kelly/Macaulay Wray Solicitors, 35 New Ros, Coleraine, BT52 1AH	£100.00	Cash	No		
Mr Richard Davidson/RHK Davidson & Co Ltd, 33-35 Bushmills Road, Coleraine, BT52 2BP	£20.00	Cash	No		
Mr Patsy Trolan, Patmar Ltd, 2 Ballymena Road, Ballymoney, BT53 7AB	£500.00	Cash	No		
Mr Patrick McCloskey/McCloskey & O’Kane Building Co, 16 Windyhill Road, Limavady, BT49 0RA	£1000.00	Cash	No		
Mr M Young, Managing Director, Younger Homes Ltd, 1 Hall Street, Maghera, BT46 5DA	£1000.00	Cash	No		
Total Carried Forward	£31120.00				

I confirm that the information provided in this application is correct.

Signature..... Date.....

Title i.e. Chair, Principal etc.

Please return the completed form **both** in hard copy **and** by email to:

14-19 Team
Department of Education
Rathgael House
43 Balloo Road
BANGOR
BT19 7PR
14-19Team@deni.gov.uk