**

**Ardgillan College**

**Castelands**

**Balbriggan**

**Co. Dublin**

76129H

**School Self-Evaluation Report**

**NUMERACY**

Evaluation period**:** *March to April 2016*

Report issue date: *April 2016*

**School Self-Evaluation Report**

* 1. **The Focus of the Evaluation**

*A school self-evaluation of teaching and learning in Ardgillan College was undertaken during the period March 2015 to April 2016. During the evaluation, teaching and learning in the following curriculum area was evaluated:*

* *Numeracy*

*This is a report on the findings of the evaluation.*

* 1. **School Context**

*Ardgillan College is a new school, now six years old. The college opened in 2009 with 68 students and 6 staff, under the patronage of DDLETB. Our school has now grown to a student population of 770 and a teaching staff of 55.*

*We currently offer a full Junior Cycle programme and we have just implemented our 3rd TY Programme which has been very well received by our students and parents. This year and our 2ndcohort of students will sit the Leaving Certificate exam in June 2016. Our students are in Mixed Ability classes in Junior Cycle (apart from Maths and Irish which are banded). We have banding in English, Irish and Maths at Senior Cycle and our option subject groups are mixed ability. We work hard at being an inclusive school and we have an SEN register which will be communicated to and available to all staff so that they know how best to cater for the individual needs of our SEN students.*

*As a new and developing school our focus is on establishing our subject teams, developing the necessary curricular programmes and encouraging collaboration among our staff as well as putting the necessary structures in place e.g. our positive Code of Behaviour (Mol an Óige) and student supports/pastoral referrals.*

*Ardgillan College promotes a happy and caring school environment where pupils and staff are encouraged and supported to reach their full potential. The emphasis is placed on quality teaching and learning, positive behaviour and the pursuit of standards of excellence in all areas of college activities. Our philosophy is based on excellence, team work, respect, tolerance and understanding while appreciating the diversity of our changing world.*

**2. The Findings**

*A school self-evaluation of Numeracy was undertaken in the 2013/2014, 2014/2015 and 2015/2016 school years between September and April.*

*During the evaluation we looked at the following data:*

* *Junior Cert results 2013, 2014 and 2015*
* *Leaving cert results 2015*
* *Junior Cert results in Maths 2012, 2013, 2014, 2015*
* *Competency tests results for our first year group and re-testing all of the second year group*
* *Staff survey on our Numeracy Initiatives and Teaching & Learning Strategies used in our school.*
* *Student Surveys on our school*
* *Student survey on Numeracy*
* *Parent Surveys on our school*
* *Student Surveys for all 2nd and 5th year maths classes.*
* *Individual Subject Department WSA Forms on Approaches/Strategies to Literacy & Numeracy*
* *WSE/MLL surveys on students, staff and parents*

*We looked at Numeracy using the following model:*

***Quality of Learner Outcomes:***

***Attainment of Subject & Programme Objectives:***

* *We used the PDST tool for analysing results in the Junior Certificate exams. This was done in order to use it as an indicator of existing standards. Taking cognisance of our school context and the fact that we are a new and growing school with a young staff we were very happy with some subject areas e.g. Art,Wood & English but know that we have to improve in other subject areas. Findings are available to all on the Shared Folder and individual subject teams are expected to set themselves realistic targets for the future and record them in the respective subject department plans.*
* *Review of the examination data in Junior Cert Maths indicates:*
* *Our uptake at higher level decreased with 65% taking higher level in 2015 in comparison with 67% in 2014.We hope to have 70% of our students sitting the Higher Level paper in 2016.*
* *In 2015 3% of our students achieved As In HL (6% nationally) down from 1.5% in 2014 (10.7% nationally). We would hope to improve on this in 2015. Our forecast is for 6%.*
* *In 2015 16% of our students achieved Ds in HL (12% nationally). Our forecast is for 20% Ds but this is in the context of 70% of our cohort taking HL as opposed to 55% nationally.*
* *Review of the examination data in Leaving Cert Maths indicates:*
* *In our very first leaving certificate year group our uptake of students taking the HL paper was 31%. This was 4% higher than the national figure of 27%. In 2016 we hope to have at least 40% of our LC students sitting the HL paper.*
* *In 2015, 1% of our students achieved an A in HL (3% nationally). We would hope to improve on this in 2016. Our forecast is for 4%.*
* *In 2015, 13% of our students achieved D grades at HL (7% nationally). In 2016, our forecast is for 18% but this is due to our increased numbers taking the HL paper (approx. 40% of our cohort as opposed to 27% nationally).*
* *We are tracking the results in Maths of all of our Maths groups but with a particular eye on our selected class group 2a.The class are being assessed using competency tests issued by the PDST and analysed using the official PDST analysis tool.*
* *A number of staff focus groups met this year (SSE, Resource Department & our ongoing Numeracy Group) to review our initiatives and to encourage and support all members of school community in fully implementing our strategy.*
* *We surveyed our staff with regard to teaching and learning and discovered that we have strengths in the area of AFL and teachers regularly use different strategies in their classrooms. Collaboration between members in particular departments is strong with 98% of staff collaborating with other members within departments and sharing resources staying in line with previous years results. Specific to Numeracy, 93% of teachers regularly use the common approach to percentages, fractions and decimals posters in their teaching. 57% of our 2nd year students who were surveyed agreed that teachers are using the numeracy posters in class. While 57% is a significant number, it may be necessary to determine the effectiveness of using these numeracy strategies in all classrooms in the coming year. 93% of staff give exam results in fractional form and encourage their students to work out their percentage and decimal equivalent and 90% of our 2nd year pupils agreed while 52% of our 5th year pupils agreed. 60% of our fifth years agreed that staff encourage students to try different approaches when solving problems rather than seeking the answer straight away.*

*97% of staff found that the introduction of the Exam Booklet for mock exam was worthwhile. 75% of second year students agreed that teachers use the common exam cover sheet on class tests while 55% of fifth year students agreed.*

* *2nd and 5th Year students and parents were also surveyed with regard to school life. The majority of students enjoy going to school and feel safe and cared for feel there is a good atmosphere in the school. 70% of students agree that teachers talk to them about how to improve on their learning. We need to look at the quality of feedback being given to students about their learning and if the students are aware of the reports that are being sent out. It should be noted that 95% of 2nd and 5th year parents feel that school reports give a good picture of how their child is doing. 86% of 2nd and 5th year students feel their work is checked regularly in school. Next year we will assess the exam cover sheet and consider adding a section for parents to sign in a bid to improve the quality of feedback and confirm that parents are receiving the feedback.*
* *Individual Subject Departments filled in the WSA Forms with measurable targets Numeracy specific to each subject team for this academic school year. These targets are available on our shared folder. Subject department targets need to be assessed, measured and new targets or new approaches to achieve existing targets need to be established for next year 2016-2017.*
* *Group 2a where retested this year using the PDST competency test B. The majority of students that were assessed remained similar or showed a slight improvement in all areas in comparison to last year. (It should be noted that students carried out the same test as last year as recommended by the PDST).*

*Similar testing began on all our first year groups this year where we were especially interested to see how students performed in the area of fractions. 4 out of the 6 groups performed exceptionally well (>75%). All of these first year groups took part in a bridging programme developed by our maths department, where fractions were a huge focus for the first 2 weeks of first year. As fractions had previously been observed as a problem area for first years these results seem to show a huge improvement and the success of the bridging programme.*

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| **Quality of Students’ Learning Experiences**   * **Learning Environment** * **Engagement** * **Learning to learn** |
| **Numeracy Strategy:**  As part of our Numeracy Strategy we have agreed and implemented the following:   * Maths Week - to take place once a year in October with all teachers and students getting involved through quizzes / Countdown / Problem Solving etc. * Posters – common method for getting percentages/decimals and fractions is displayed in all classrooms with this common method to be used by all teachers. * Keywords for Maths to be displayed in Maths classrooms. * Exam coversheet to be used which incorporates Literacy and Numeracy and AFL. * Maths page in the student journal. * School Journal has a page to allow students to keep track of test scores * The Journal for the next school year will contain an information page for parents on what is involved in Literacy and Numeracy and what our strategies are as a school. There will also be tips on what parents and students can do. * Implement a bridging programme in first year where students have a two week period to recall the topics that they have studied at primary level. * A Problem Solving module has been introduced for TY students. * A Paired Maths Programme whereby TY students collaborate with 2nd year students once a week. |
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| **AFL:**  As a staff we agreed we would employ the following AFL strategies if/when appropriate:   * Sharing aims of lesson * Sharing Criteria for Success * Comment Only Marking * KWL * Questioning * Traffic Lights * Lollipop Sticks * Hot Seat * Group Work * Think/Pair/Share * Peer Assessment * Two stars and a wish * Exam Cover Sheet for House Exams   When we looked at the results of our staff survey we were happy with the number of strategies being employed by teachers in their classrooms but have agreed that a CPD session on AFL would be desirable in the next academic year. |
| **Assessment:**  As a staff we are open to different methods of assessing our students and looked at the following:   * Different ways/methods to assess * Continual Assessment * Comment Only Marking * Exam Cover Sheet for House Exams to allow students to calculate their own grades and percentages * 92% of teachers use our Exam Cover Sheet to provide the students with constructive feedback and to allow the students to calculate their own percentages and grades as part of the numeracy strategy. We will continue to encourage this practice and will aim for 100% of staff using this feedback tool next year. The staff survey showed that numerical strategies (in particular using a calculator, calculating percentages and decimals and fractions) are used frequently by teachers and again we will continue to encourage this practice. * Another initiative was that all subject teachers promoted the use of a common calculator– **Casio** Scientific Calculator FX-83ES. 51% of staff said that they were not enforcing this so further encouragement of this will have to begin for the coming year to improve this result. |
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| **Transfer from Primary to 2nd level:**  Conscious of how difficult the transition can be for our new First Years we tried to ease the transition from NS to 2nd level for our students by the doing the following:   * Having an Induction booklet available to all students and their parents with the relevant information they will need and a FAQ section. * Improving our links with National Schools, visiting 6th class teachers of incoming students and exchanging books/texts/curriculum content/ideas with the 6th class teachers. * Identifying our SEN students and putting the necessary supports in place. * Our Bridging programme for 1st Years allows all pupils a few weeks to recap on important topics from Primary School.   **Problem Solving for Transition Year Students:**  A problem solving module was introduced for all transition year students to bridge the gap between Junior Cycle and Senior Cycle Maths. Problem-solving is a mental process that involves discovering, analysing and solving problems. The ultimate goal of problem-solving is to overcome obstacles and find a solution that best resolves the issue. This programme is an initiative developed to help improve critical thinking, team-work and solving word problems in all subject areas, not just numeracy specific subjects.  **Paired Maths programme:**  This initiative provides opportunities for our school to plan and develop a framework for linking Transition Year students with first year students in order to support the development and enhancement of mathematical and numerical competencies among our students. The TY students perform the role of peer tutors to the younger first year students.  **Communication to the school community:**  We also have an information page for parents and students in our school journal as to what is involved in literacy and numeracy and what our different strategies are. |

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| **Quality of Teachers’ Practice**   * **Preparation** * **Teaching Approaches** * **Management of Students** * **Assessment** |
| **Peer Observation:**  As a staff we agreed to observe the classes of our colleagues to see/share examples of best practice and to encourage the sharing of ideas/methodologies. We agreed to partake in a minimum of 3 peer observations each this academic year. Our survey told us that 90% (increase of 13%) of our staff has been involved in peer observation this year with 11% of staff opting to do 3 or more. |
| **School Journal:**   * The journal has a page to allow students to keep track of test scores. * The Journal contains an information page for parents on what is involved in Literacy and Numeracy and what our strategies are as a school. |
| **Staff Meetings:**   * Numeracy is on the agenda for both staff meetings and departmental planning meetings. |
| **Subject Dept. Co-ordinators:**  We agreed that each subject team would have a co-ordinator which will be rotated at  least every two years and that all members of the subject team will have a clearly  defined role within the team.  This was to encourage collaboration and sharing of best practice and also the sharing of  knowledge and consistency re: Assessment, AFL, Peer Observation, New JC etc.. In our  survey 98% of staff felt that their subject department members collaborated on a regular  basis and share resources with only 1 teacher disagreeing.  **33 Hours – meetings:**  To help with school planning we agreed to use our 33 hours to allow time for planning both at whole school level and within individual subject departments.   * Policy planning groups   + Literacy   + Numeracy   + SSE   + AFL   + Library   + Green schools * Subject Department Planning   We believe this is time well spent and will continue with this practice next year |

* *These investigations were carried out using our Ardgillan College Self Evaluation Questionnaires/Surveys (see Appendix) and in various different meetings/focus groups with the different members of our school community.*
* *The findings of our Self Evaluation of Teaching and Learning in Ardgillan College are contained in Appendix 2 (Individual Student & Parent Feedback Forms &Teacher Feedback Forms) of our School Self Evaluation folder.*
* *A summary of these findings are outlined below.*

**3. Summary of school self-evaluation findings**

**3.1** Our school has **strengths** in the following areas:

*In general:*

* *A highly qualified and committed teaching staff that is enthusiastic and open to developing new ideas.*
* *Well-motivated students*
* *A broad balanced curriculum*
* *Positive examination outcomes for our students*
* *A drive to encourage students to take higher level where possible*
* *Good ICT facilities*
* *Positive Reinforcement – Mol an Óige*
* *Good Discipline*
* *Collaboration among staff/Committees*
* *Good use of AFL across the curriculum*
* *Students have opportunities in the classroom to develop numerical skills.*
* *Individual strengths of students fostered.*

*In relation to Numeracy:*

* *A commitment to enhancing numeracy across the curriculum*
* *A focus by subject departments of the topic of numeracy in subject areas – 3 strategies identified by all subject teams.*
* *Effective learning support*
* *A range of strategies already in use to support numeracy such as our 1st Year bridging programme, our TY problem solving module, our exam cover sheet, staff in support of maths initiatives and the use of a common calculator.*

***3.*2** The following areas **are prioritised for improvement**:

* *Continue to implement Whole School Numeracy Strategy with a continued focus on fraction, decimals and percentages.*
* *Continue to promote the use of the exam cover sheet. In the coming year we hope 100% of our staff will be using the sheet on all class tests and not just for in-house exams.*
* *All staff encourages our students to participate in various activities that take place outside of maths class.*
* *Posters in classrooms (common approach to calculating decimals, fractions, percentages) needs to remain a prime focus for the coming year as 57% of our 2nd year students who were surveyed agreed that teachers are using the numeracy posters in class. While 57% is a significant number we need to increase this percentage further so that all of our students are benefitting from this strategy. On the other hand 93% of teachers regularly use the common approach to percentages, fractions and decimals posters in their teaching. This may indicate that teachers are regularly referring to the posters themselves rather than in the classroom in front of the pupils.*
* *Maths Week will continue in the next academic year as it continues to be a huge success.*
* *Bridging Programme for First Year Students will be implemented again next year.*
* *We have Literacy and Numeracy page in our School Journal so that all members of the school community (students, parents and teachers) are clear on what is involved and the role they have in improving the literacy and numeracy of our students.*
* *Measure targets from the school year 2015-16 and set new numeracy targets for the next school year. (Subject department level)*
* *Re-enforce the whole-school common approach to using calculators strategy across all subjects.*
* *AFL/Comment Only Marking/Group Work – to continue to develop our Teaching and Learning Strategies which will support the numeracy of our students.*
* *Problem solving in TY will continue next year with 2 periods per week at 15 week durations.*
* *Paired maths programme will continue next year between 1st and TY classes.*

***Appendix 1: Legislative & Regulatory Framework – School Policies***

**Ardgillan Community College – School Policies**

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| **Policy** | **Ratified** | **Reviewed/To be Reviewed** |
| Admissions Policy | 2015 | Annually |
| Anti-Bullying Policy | 2014 | Annually |
| Internet Acceptable Usage Agreement | 2013 | Annually |
| Child Protection Policy (Children First) | 2015 | Annually |
| Code of Positive Behaviour | 2014 | Annually |
| Critical Incident Plan | 2014 | Annually |
| Data Protection |  | Adopt Data Protection Acts 1988 to 2003. |
| eLearning Policy | 2013 | Annually |
| Extra-Curricular/School Trips | 2015 | Annually |
| Guidance Policy | 2015 | Annually |
| Healthy Eating Policy | 2013 | Annually |
| Health & Safety Statement | 2013 | Annually |
| Homework Policy | 2015 | Annually |
| Literacy Policy | 2013 | Annually |
| Numeracy Policy | 2014 | Annually |
| Pastoral Care Policy | 2011 | Annually |
| RSE Policy | 2012 | Annually |
| School Improvement Plans x 3 | 2015 | Annually |
| SEN Policy | 2011 | Annually |
| SPHE Policy | 2011 | Annually |
| Staff Induction Policy | 2011 | Annually |
| Substance Use Policy | 2011 | Annually |
| Suspension & Permanent Exclusion Policy | 2013 | Annually |

***Appendix 2 -General Self-Evaluation***

* *Ardgillan College Self Evaluation Questionnaires/Surveys*

***Appendix 3: Self Evaluation of Numeracy in Ardgillan College***

* *Teacher Feedback*
* *Student Feedback*
* *Cat Results for incoming 1st Years*
* *JC Results/Leaving certificate results – Maths Department*
* *Competency tests (first years, Second years and 3i maths class)*
* *2nd and 5th year numeracy surveys.*
* *Parent surveys 2nd and 5th years.*
* *WSE/MLL survey results*

***Appendix 4: Tools/Strategies we will continue to use for AFL and Peer Observation***