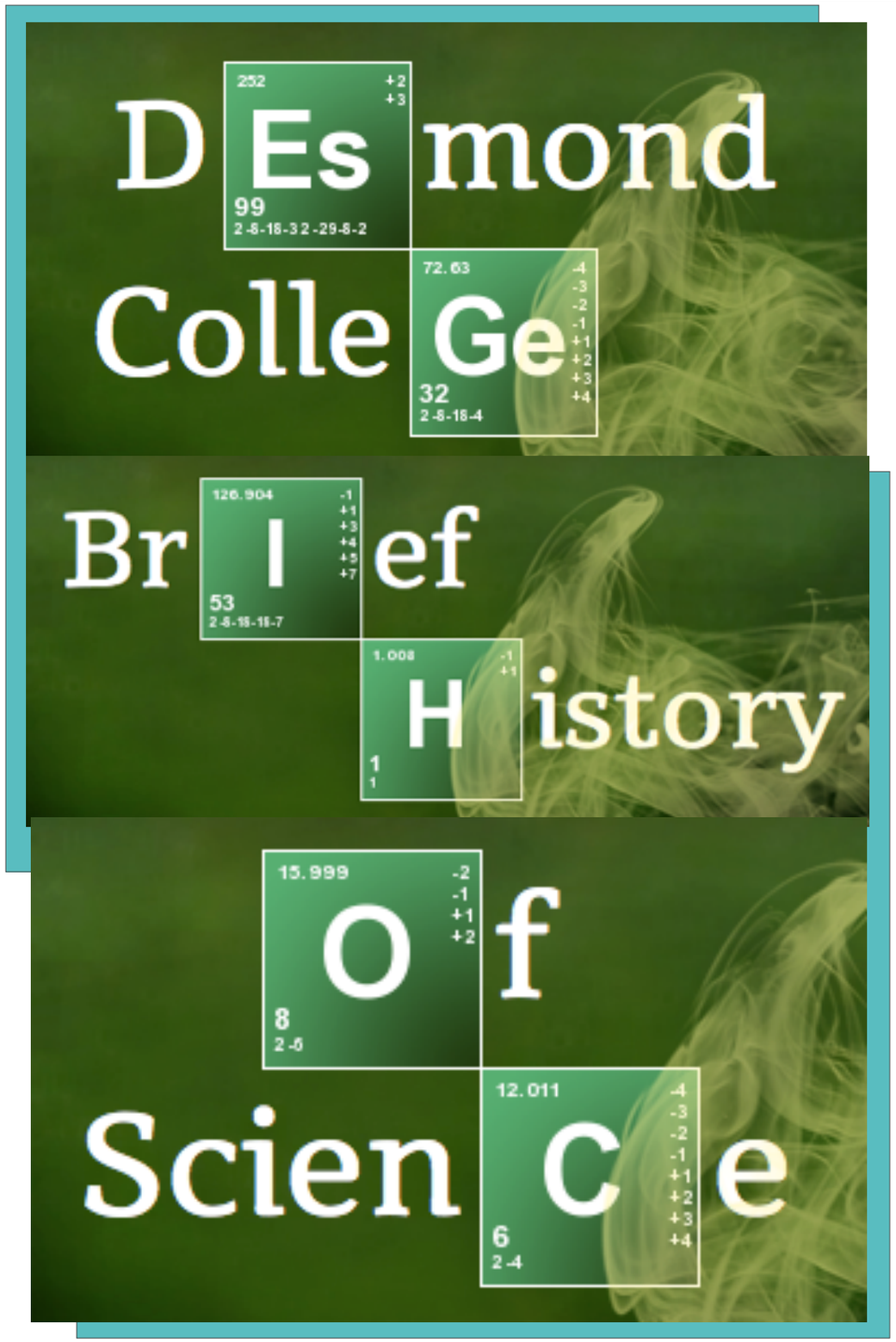
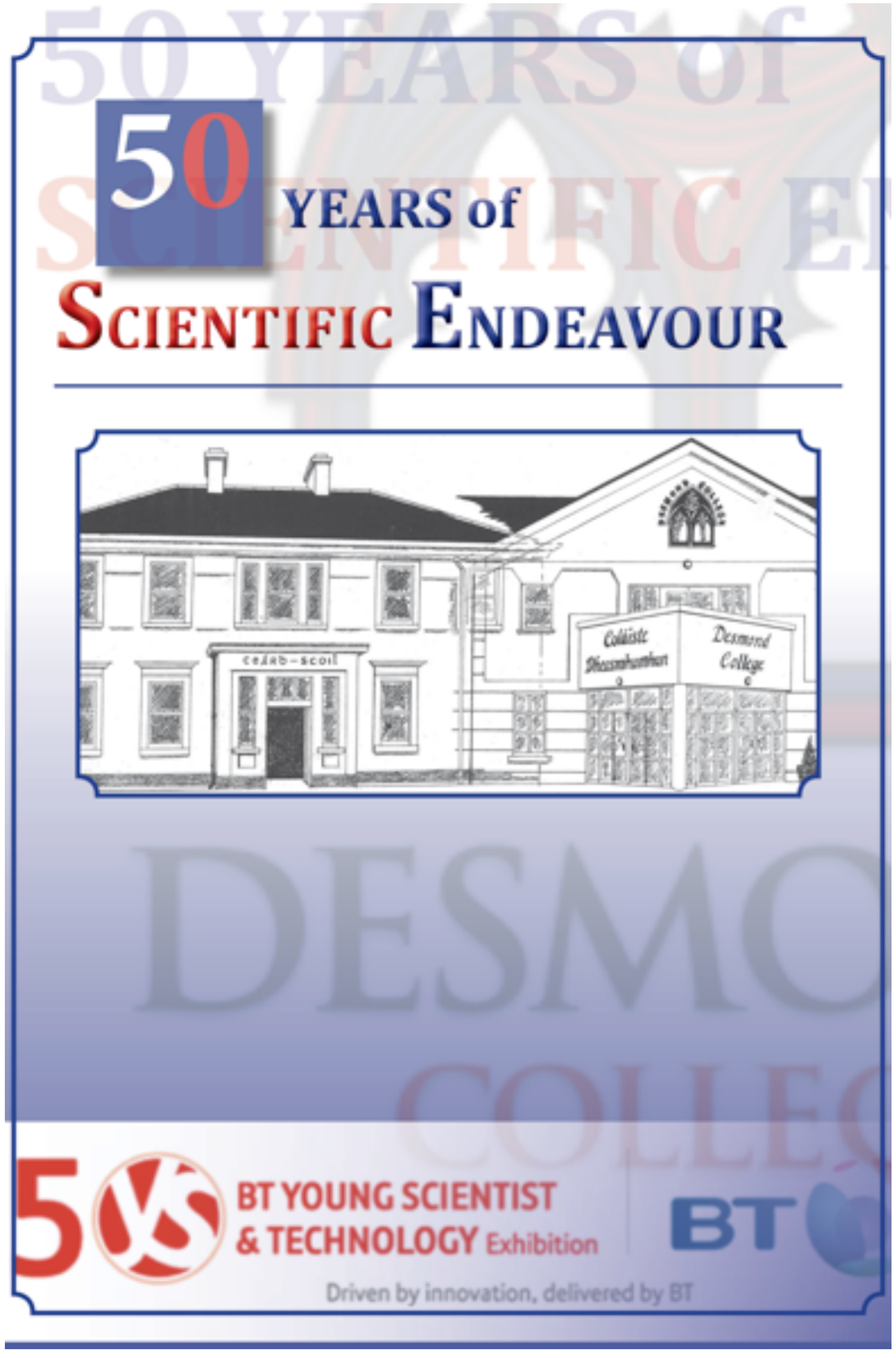

Desmond
College
Brief
History
of
Science

CHAPTER 1

Foreword

In 2014 as the 50th anniversary of the BT Young Scientist and Technology Exhibition approached, it was agreed upon to mark the occasion by compiling a list of all Science Projects our school had been associated with. In the years since, Desmond College has continued to excel in Science Competitions, and so this iBook is an updated version of the publication "***50 Years of Scientific Endeavour***" originally published in 2014.

In keeping with technology, Desmond College introduced iPads for first years in 2015, and so its fitting that this version is an ibook and has additional video/ audio features not available on the original version.



Disclaimer

Every reasonable effort has been made to ensure the information/ data contained herein is correct, factual and up to date at the time of going to print.

CHAPTER 2

Principal's Message

The Young Scientist Competition is one of the world's leading science and technology events and one which every student and parent in Desmond College is familiar. It is a high profile national event and one which causes great excitement every year in our school. Young Scientist and Desmond College are linked, it is a love affair that has grown and developed into a permanent steady committed relationship – a marriage of sorts! Desmond College is well known at the Competition having achieved much success over the years and in the local community talk of the Young Scientist Competition always turns to talk of Desmond College and the projects that have been entered by the school.

Through the competition students have learned and developed skills which have served them well in later life. Look at the list of 'Where are they now?', and you will see how many budding young scientists have indeed followed their dreams. It is a Competition that brings out the very best in young people. It encourages them to think, develop, create and invent, using imagination and the many tools of research. This planning and research always takes place outside the classroom, indeed much is discussed around the kitchen table in homes all around West Limerick, and that is the beauty of this competition – it takes science out of the classroom and makes it fun, 'cool' and exciting.

Our participation in this Competition started way back in 1966 when students from the then Vocational School first entered a project. To date we have had over **120** projects accepted – a rare achievement indeed and one that would not be possible without the commitment of quality teachers. A good teacher inspires their student, encouraging them to be independent thinkers, to question, to wonder and to follow a dream. We in Desmond and in the former Vocational School were and still are blessed with such great teachers – from Eamon O'Connell, Martin McNamara, Jim Kelleher, Connie Murphy, Richard Barry, Mike Heffernan & Mike Daly, to today's teachers Donal Enright, Marie Corkery, Aoife Culhane and the many teachers in our school today working with students as I write this - all sharing a common characteristic – they inspire their students and give them the confidence to voice and experiment with their creative ideas and visions.

This Competition highlights Desmond Colleges' commitment to Science, Technology, Engineering and Maths (S.T.E.M.) and has led us from our first project in 1966 to 2016. I watch our young students continue to explore and follow ideas with vigour and passion. Who knows maybe we have the new Steve Jobs or Elon Musk among us now, working on some amazing new project, or maybe we have some young person who is learning the tools necessary to improve our world in ways we cannot yet imagine. With science anything is possible!

With sincere thanks to all staff who have worked with and supported students in the Competition in recent years, especially Leeanne Kelly, Caroline O'Grady, Orla Fahey, Heather Mac Carthy, Damien Culhane, Tom Byrne, Colum Lowe, Sean King, Damien Culhane, Sean Sheils, Edel Boohan, Joanne Guiry, Cornelia Galwey and Liz Cregan.

A special acknowledgement goes to Donal Enright, Maire Corkery and Aoife Culhane who between them have mentored **72** successful projects. Their commitment and enthusiasm for the competition has been infectious and has been of benefit to us all. We salute you!

Vourneen Gavin Barry Principal

CHAPTER 3

Young Scientist - A Brief History

The BT Young Scientist and Technology Exhibition (Taispeántas na nEolaí Óga agus Teicneoilíochta), commonly called "the Young Scientist", is an annual competition that has been held every January since 1965 in Dublin, Ireland. Currently sponsored by BT Ireland, its intention is to encourage interest in Science in secondary and primary schools.

In 1963 two UCD Physics researchers, Rev. Dr. Tom Burke and Dr. Tony Scott, came across the concept of 'Science Fairs" while conducting research in New Mexico, America. These local school science exhibitions culminated in State Fairs and ultimately a national competition. The pair decided that this type of hands-on science was something that Irish students could benefit from so they decided to take Science outside of the four walls of the classroom, this illustrated to students that Science is all around them.
And so the BT Young Scientist & Technology Exhibition was born. The first competition was held in 1965 in the Round Room of the Mansion House in Dublin and attracted 230 entries and the first ever winner, John Monaghan, has recently retired as Chief Executive Officer of Avigen, a US Biotech company.

Rev. Dr. Tom Burke and Dr. Tony Scott conferred with Honorary Doctorates (founders of the Young Scientist & Technology Competition and Exhibition)

The success of the first year was such that the exhibition moved to the much larger venue of the RDS in year two and it has remained there ever since.

Early Exhibitions involved individuals competing under subjects related to the curriculum. In 1965 the categories were Biology, Chemistry, Geography – Geology, Mathematics and Physics. The entrants were divided into girls and boys both junior and senior, with no groups.
Re-categorisation came in the 1970s with new Science Syllabi. Biology in particular had a large uptake.
The Institute of Physics sponsored the first "special" awards 1981. This allowed the Science committee to build up a series of special prize sponsors in various fields. Group entries were also introduced and this enabled multi-disciplined managed projects to develop.

By 1990 the three established categories were Chemical, Physical and Mathematical; Social and Behaviourial; Biological and Ecological. Aer Lingus sponsored the competition for the first 33 years. When Aer Lingus ended its sponsorship in 2000, ESAT Telecom, which became part of BT Telecom, took over and introduced the category of Technology.

One of the founders of the Exhibition, Father Tom Burke, died in March 2008. 2010 was the tenth year in which the Exhibition was sponsored by BT. It has produced at least one author (Sarah Flannery) and two billionaires (Patrick & John Collison). Many of the past winners have gone on to establish international companies on the technology they developed. One of the most notable was Baltimore Technologies.

CHAPTER 4

Desmond College & Vocational School

Newcastle West Vocational School or the "Céard Scoil" came into existence in 1934 following the purchase of a one acre site from the Church Authorities and a payment of £100 to the Land Commission. Built at a cost of £3,900 the first Principal of the school was Mr. Eamonn O' Connell. The building had specialist Metalwork, Woodwork and Domestic Economy classrooms. Subjects were taught at elementary, intermediate and advanced levels. In the1940's the group certificate exams were introduced. In 1955 an additional building was added which included two practical rooms and two general classrooms with a heated cloakroom.

As pupil numbers increased over the years additional buildings were added such as the New Science Room in 1969. Eventually the student population outgrew the schools ability to maintain and renovate existing buildings, so work began on the building of a new school in June 2000, which was fully completed by September 2001 under the stewardship of the then principal, Mr. Richard Barry.

Desmond College, as it became known was originally built for 400 pupils. As numbers increased, additional class rooms were added in 2010. Ms. Vourneen Gavin Barry is the current Principal of this very busy school with over 550 students.

October 2015 sanction was received from the Department of Education & Skills for a large development at Desmond College, Newcastle West. The development, initially sanctioned last year, was further enhanced following an overall review of the campus.

The new development involves the construction of a new state of the art single-storey extension comprising of a Construction Studies Room/Woodwork Prep Area, Offices, Resource Area and specialist accommodation for pupils with special educational needs. In total, up to 800m² of new teaching spaces will be provided with associated external works to hard surface play areas, parking etc. to be undertaken.

The overall investment into the Desmond College Campus will involve expenditure in the region of €2m. Principal Vourneen Gavin Barry said that staff, students and parents are delighted with the new development which will enhance the already state of the art facilities which exist in Desmond College. She said that these new facilities will add greatly to the educational experience of each student in the school and she thanked Limerick and Clare Education and Training Board for their support with this project.

CHAPTER 5

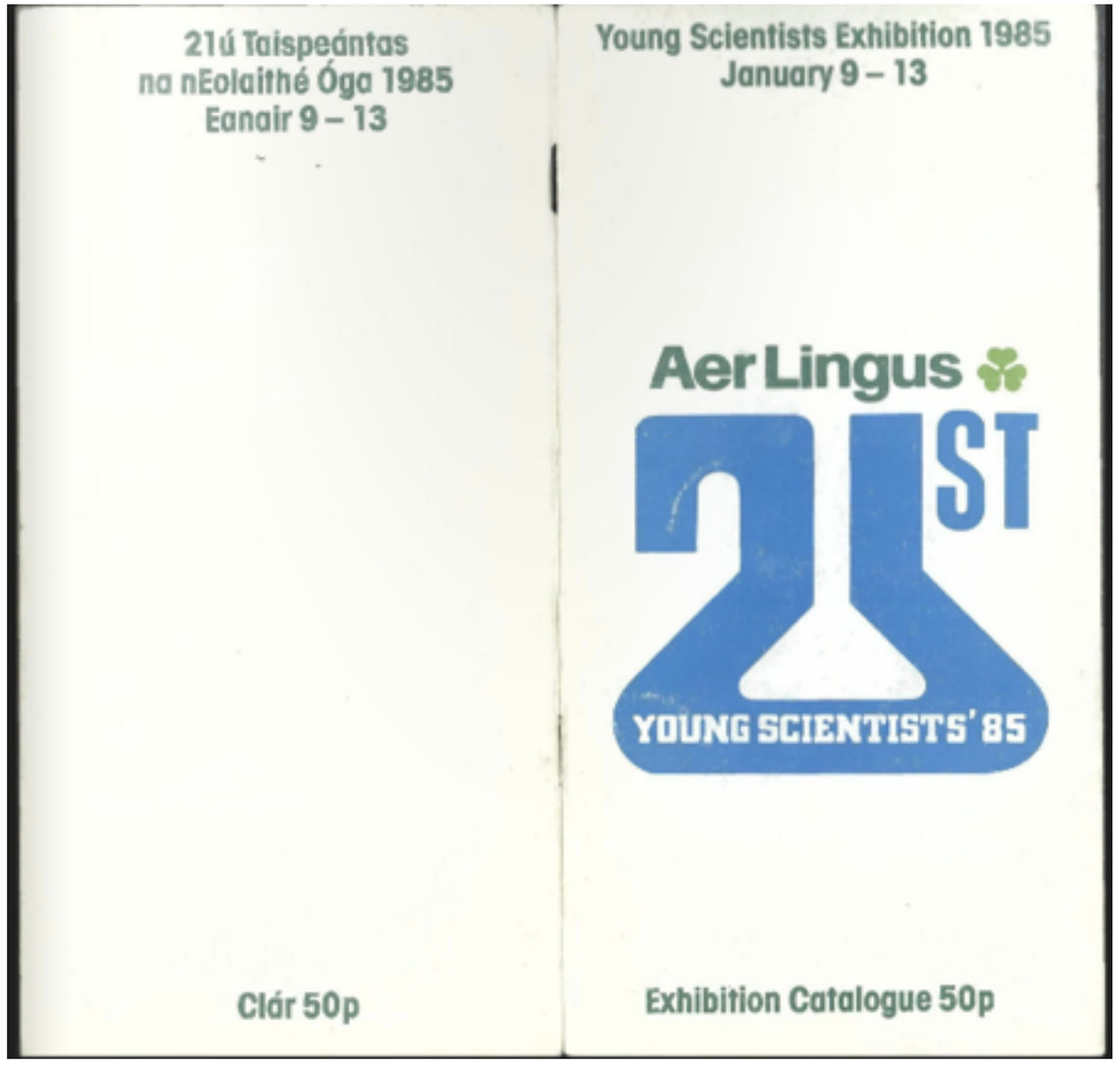
Desmond College - Science

Following the launch of the competition in 1965, Mr. Eamonn O' Connell Principal of the Vocational School, Newcastle West, entered two projects in 1966. We were the second vocational school in Ireland to have a project entered and the first from Limerick.

Mr. O' Connell's educational philosophy was that "An Education for Life", he encouraged the students to enter this newly established exhibition and later encouraged other teachers to do the same.

A glance at the titles of the initial projects are a reflection off the interests of both the students, the community and the teachers of the time, so it was no surprise to see projects dedicated to rural issues, declining populations and parochial concerns, as well as agricultural based investigations.

The 1970's saw a shift in the pattern and type of project when Martin McNamara and Jim Kelleher mentored student projects.



In the late 1970's, the other teachers who were to prove influential to students were Connie Murphy, Richard Barry and Mike Healy who gave up their lunch times and assisted students after school. It is worth noting at this point, that this was a time when all the charts, posters and displays were put together by hand. The school had one set of stencils that were used to put a "professional" look to the displays; any error meant the whole display had to be redone.

One of the first students that Mike Healy assisted was Michael Daly from Kilcolman. Michael entered projects initially as part of a group and as an individual in 1979 and 1980. Having qualified as a teacher, Michael acted as mentor to Young Scientists in 1989 and 1990 in Newcastle West Vocational School, he later went on to mentor projects in Shanagolden and Askeaton Vocational Schools.

Entering projects in the Young Scientist takes considerable effort, primarily from the students involved, but also from their parents, peers and school. A whole school approach is often to be seen in the final efforts of the students, be it in taking questionnaires, completing forms or acting as control groups. In Desmond College, we are fortunate to have subject departments like Art, Engineering and Construction who will ensure that each and every project/ student achieves its potential.

The historical evidence would suggest that this is a practice that co-existed in the Vocational school. The efforts of Martin, Jim, Connie and Richard were often supplemented by Mike Heffernan, just as Tom Byrne, Keith O' Rahilly, Sean Shiels, Damien Culhane, Heather McCarthy, Orla Fahey, Marie Corkery and Donal Enright do to this very day.

Another aspect of the success of this competition has been the willingness of trainee science students to get involved.

Michelle Liston, a former student and Young Scientist in 2008, came back as part of her University Degree and helped mentor the record-breaking amount of entries the school had in 2013, just as Tara Feely is doing in 2014.

On the 50th Anniversary of the competition, it is great to have new teachers like Marie Ryan (Mathematics), Caroline O' Grady (Science) and Aoife Culhane (Science) all willing to give up their free time to help students achieve their potential. It is a testament to the proud tradition that continues to grow and develop.

CHAPTER 6

Reflection on the Young Scientist Competition by McNamara family

For ten years (1973 - 1983), no sooner had the McNamara household waved goodbye to the last group of wandering wren boys, our thoughts would automatically turn to the preparations for the Young Scientist Exhibition, held annually at the RDS Dublin towards the end of December. My late husband Martin (R.I.P.) would be on the phone to the other participating teachers cross checking that all the experiments were finalised, the reports were written up, exhibiting posters were ready and of course, the students were fully briefed. Travel arrangements were made and departure, was usually from the Vocational School Newcastle West at an ungodly hour in the morning. The accompanying teachers volunteered to drive all and sundry to Dublin using their own cars.

That evening and the following day we would be glued to our radio and T.V. sets eagerly awaiting news from the RDS. They highlighted exhibitions from schools but not a word about the Newcastle West School! The late evening news gave an account of the overall winners but we had to wait until the arrival of the following day's newspaper to see if the students had won prizes in the various categories. I am proud to say that every year for those ten years they won a prize and/or were highly commended. It was a great achievement for a small rural vocational school and all concerned should be very proud of that success.All the experiments were very interesting but the one we readily recall is the one in 1972 conducted by the late Thomas Quaid (R.I.P.). He posed a question "Is alcoholism inherited or not?" To find out the answer he gave alcohol to four chickens, one chicken was on brandy, one on whiskey, one on stout and one on beer. The result was inconclusive but the over consumption was not good for our feathered friends!

When they arrived at the RDS exhibition hall they were on a "high" and kicked up a loud crowing racket, which they maintained for the three days. Naturally enough they stole the show and won Thomas (R.I.P) second prize in the senior section. They even made it to the National press (Sunday Press, June 3rd 1973). Even then the "politically correct" killjoy forces were showing their teeth and succeeded in stopping any further experiments on this worthwhile and socially necessary project.

Since then the Newcastle West Vocational School and later the Desmond College have kept up the tradition of entering projects for the Exhibition. Meanwhile the Young Scientist Exhibition has gone from strength to strength with most of the country's schools and colleges vying for places. It is with great pleasure and pride that we note that many of these projects have won prizes but as always it is the research, participation and cooperation between the students and teachers that was and is such a vital ingredient to success. Science has been the winner but so too have been the positive benefits for the students, teachers and the College.

Congratulations to all concerned and may the next 50 years be as fruitful as the first 50 years.

Eilish, Christina, Tommie & Aine McNamara

CHAPTER 7

Late Late Show

The Late Late Show continues to have the highest viewership of all programs. On three separate occasions our young scientist have been selected to appear live.

2012: Michael Upton & Cieran Scanlon

2013: Liam Dowling, Darren Kelly & Graham McCoy

2015: Emily Duffy

Micheal Upton, Ryan Tubirdy & Cieron Scanlon 2012

Liam Dowling, Darren Kelly & Graham McCoy 2013

Ryan Tubridy with Emily Duffy and the Homeless Wrap 2015

CHAPTER 8

The Importance of Computers

“The following article was written in 1984 by Jim Kelleher, as he looked forward to a future dominated by computers and technology.”

Jim Kelleher 1984

1984 Technology Photo: MCB Studio. Newcastle West

There have been enormous advances in scientific technology in recent years. Today, we live in an age of automation. We are faced on every side by machines whose functions are to lessen the work-load of those who operate them. Machines have always been built with this idea in mind, but today they are changing much more rapidly. Now machines are part of our everyday life and we have come to accept them as part of our human existence. However, to-day, machines have become much more functional and compli-cated than hitherto—or so we like to think. The electronic com-puter of today is no more a mystery than the abacus was some 2,000 years ago.

In Ireland, we like to think that we are advancing in the computer age now, but we are already some thirty or more years behind other parts of the world. Computers have been infiltrating our homes in many different guises. It may be the automatic washing machine, the tumble-dryer, the micro-wave oven, the dishwasher, the automatic food-mixer, etc.

In the world of entertainment the stereo, the TV, etc.—the list is endless—and in the world of motoring, it would be unusual today to find a car without some electronic components. But it is in the world of business that computers have come to be a complete asset. By the speed, accuracy, efficiency and reliability with which they can operate, one computer can take the place of many workers. In finance, communications, transport, government and police activities, computers have helped enormously in the speed at which transactions can be performed.

In the United States and other parts of the world, the space exploration programmes depend totally on the computer and its ability to instantaneously react to the unknown.

In Ireland, the pocket calculator, the cash register in the local supermarket, the scanning machine in the hospital all are part of our daily life. We have come to depend on them. In many offices now the computer calculates the wages and even prints the cheques. In some bakeries computers are used to perfect the blend of dough mixture. ln the cement factories computers check the correct mixture in the cement, and so on.

The computers of today are amazing and no doubt the computers of the future will be much more fascinating. However, there is one computer that will never be surpassed, and that is the human brain. The electronic computer is dependent on the human brain for all its instructions. It is only as good as its operator and it awaits further instructions once its operation is complete.

The development of computers has led to a change in job opportunities. Many of the jobs available for the past years in factories etc. are no longer in existence— they have been replaced by modern technology—but this modern technology is itself creating new jobs. The jobs of the future are going to be as users and manufacturers of this technology. Unfortunately the educational system is slow to change and our present system is designed basically with the current employment opportunities in mind. However, as the current employment is changing so too our educational system must chance to cope with this technology. At present, there are little guarantees that the job a student has in mind now will still exist when he/she leaves school—hence the need for change. We will need to be able to meet the challenge and use technology to further our interests. It is envisaged that in the 1990's all a person will need to know on a particular topic will be obtained by sitting in front of his TV screen and plugging in a cartridge or some manipulation of the keyboard of his home mini-computer. Hence the need to be able to use the mini-computer to the full. If we can read the changing employment trends correctly, then it would seem that we must make sure our children are educated in the

use of this modern technology. We must ensure that what employment opportunities will be available in the manufacturing and operation of this technological equipment are open to our children.

To everybody we say—"***Happy Computing***".

(Article taken from "Newcastle West Vocational School 1934-1984 FAS")

CHAPTER 9

Renewable Energy (Then and Now) by Michael Daly

Renewable energy is a theme, which has been investigated, in a number of Desmond College Young Scientist projects over the years. The vision of three students Keith Massey, Seamus Carmody and Michael Quaid in 1989 became a reality over 20 years later in a local village in Kilcolman.

During the Autumn of 1988 the boys recorded wind speed and direction data through use of an anemometer and wind vane at a chicken farm in Kilcolman and discovered that there was a natural wind funnel. Their project demonstrated that the chicken house could be run profitably with the erection of a wind turbine in conjunction with a storage facility of batteries for emergency situations. Unfortunately the farmer involved was unwilling to risk failure at that particular time and the project and its findings were shelved. We now move forward to the mid 2000's to an adjoining chicken farm in Kilcolman and the return from America of one son with modern farming and technology ideas. His vision has resulted in the erection of two wind turbines at almost the same testing site of 1989. These wind turbines in 2013, twenty four years later now run a modern farm consisting of three chicken houses and a dairy herd as well as supplying electricity to the national grid.

Use of technology

The projects of this era in the 1990s were completed without Internet, Microsoft, PowerPoint, Laptops or Printers. Research was carried out through library books or letters to relevant companies. All data was hand written in folders. Graphs were manually drawn and coloured with pencils or markers. A drawing board and tee square was used to set up a display sheet and main points were printed letter by letter with a plastic stencil, which had to be cleaned regularly to prevent smudging of the marker on the sheet. Many strong words were spoken when spelling mistakes were made in those days as there was no Tippex to rectify mistakes and the sheet would have to be started again. Pictures were taken on roll of film and developed for glueing into place.

Amazing how technology has changed in such a short time period!

Winning team at the R.D.S. Young Scientists exhibition in Dublin.
Seamus Carmody, Michael Quaid, Keith Massey with Michael Daly, Teacher.

Michael Daly (15) student – shown here talking to his classmates.

CHAPTER 10

Down Memory Lane by James (Jim) Anglim

I joined the "Tech" or Newcastle West Vocational School as it was officially called in 1972. As a first year, I was acutely aware of the importance in which science played in the school at the time. In the year ahead of me was Tommy Quaid (R.I.P.) who had entered a project that year. Coming from Monagea, West Limerick, a community that back then had more chickens than population, it was no surprise that a lot of the school projects involved poultry or were of the agricultural variety. Perhaps because of this, or maybe it had to do with the idea of exposing chickens to copious amounts of smoke that year or alcohol the following year that I initially became involved. Looking back I firmly believe that it had more to do with the encouragement of Martin McNamara.

I did my Group Certificate in 1973 and my Inter (Intermediate) Cert in 1974. We were the first class that studied to complete the Leaving Certificate in the history of the school. Several girls from the local convent joined a group of us boys, where the option of continuing to a Leaving Certificate was not an option.

The class increased to eleven when one student from Rathkeale and another from Dromcollecher joined us. If memory serves me, the class was made up of the following students: Nora Lawlor, Eileen McAuliffe, Breda Geoghegan, Joan Maloney, Pat Donavan, John Markey, Liam Wrenne, Tom McCarthy, Liam Murphy and Timmy Hayes. In those days we didn't have a school uniform.

My first entry to the Young Scientist was in 1973 and I subsequently entered on four consecutive occasions, culminating with a joint first in my category in 1976. My prize was a crisp £5 note. I have vivid memories of sitting on a bale of hay in the back of Jim Kelleher's van on our way to Dublin. I still remember the petrol fumes that emanated from the 5 gallon drum of petrol we carried to Dublin during the 1974 petrol crises.

I was the first student from Newcastle West Vocational School to continue to third level education, where having qualified and gained work experience I took up a position in Aughinish Alumina. I maintained an interest in science and I am planning to visit the exhibition in 2014. I follow the exploits of the current students via their appearances in local media and television.

CHAPTER 11

1978 Project “Future Development of Newcastle West” by Michael Healy

Students: Gerard Keogh, Michael Daly, John Cunningham & Raymond Moroney

All the rules changed on the last school day of December. The school yard had an unreal, unfamiliar, eerie quality, as it was the no-man’s land between the world of hilarity and the world of industry. The double pre-fab at the back gate had been transformed by Pat O'Connor for the Christmas Party which had evolved into a combination of music-hall, disco and circus as the hours progressed. In stark contrast to this boisterous exuberance, the science rooms on the other side of the yard exuded a sober, calm, intellectual atmosphere, as the young scientists put the finishing touches to their projects.

My first introduction to the world of scientific experiment was as a guinea-pig for Martin's (Mac) study on the effect of nicotine on the quality of the blood. The project was aborted, as the blood was not stored correctly. However, l felt proud, as l had shed my blood for the school! Martin's enthusiasm was infectious and l was hooked. Jim (Kelleher) and Connie (Murphy) were old hands at the Young Scientist and they convinced me to have a go.

But l had a logistical problem. Irene Ryan and Padraig Collery had dumped the entertainment portfolio onto me in 1973 with the result that the school tours and the Christmas Party were my responsibility. How then, could I prepare for the Christmas Concert and simultaneously supervise a group for the Young Scientist Exhibition? l found that they were not mutually exclusive. So in 1977, my four Young Scientists, Gerard Keogh, Michael Daly, John Cunningham and Raymond Moroney, set out to project a future for the development of Newcastle West. This was done in the company of Stand-up Comics, Bodhran Players and Fiddlers and they were all winners!Work for the Christmas show started after the Halloween Break as the innate talents of the students had become apparent and they were now ready “To strut their hour upon the stage” and “bestride the world like a colossus”. Lunchtime and Saturday mornings had an earnestness as our young stars shone and their personalities blossomed. All our spare hours were spent writing, laughing, drawing, cursing, concentrating and hoping that things would be fine on the day. Somewhere along the way, l stopped being “Sir” and became “Mike”. On one surreal Saturday, Room 14 contained six (F.C.A.) uniformed 3rd years preparing for a Dad's Army sketch, four young scientists in Jerseys coming from football training, two juvenile Fiddle Players from Ardagh and assorted others who formed an audience and commented on the merits of all contestants.

In 1977, the school was small enough for each student to feel that he or she represented the school in sports, as a young scientist or as a musician. The Young Scientists represented their fellow students and all students felt a degree of ownership and pride in the finished project. Many of young scientists went on to teach and continue the tradition (i.e. Mike Daly, Sheila O' Dwyer, Mike Flynn, Noel O' Grady etc.). At that Christmas Party in 1977, Gerard Keogh played Irish music with wild abandon, only after he had perfected the maps for the project! All the girls wanted to dance with John Cunningham but he still had time to list his detailed conclusions. Mike Daly became a new man and we worked together the following year on another project. After his five minutes on stage, Raymond Moroney thought he had a theatrical future, but he still had the discipline to finish his part of the project.

These four boys had worked tirelessly at collecting data and collating statistics and in the process created a blueprint for the town of Newcastle West which proved amazingly prophetic. They were proud of their work and I was very proud of them. Their project was awarded “Highly Commended”. However, we entered the same project in the Bank of Ireland National Economic Competition and it came in 1st place in the Junior Section. So the boys had a second weekend in Dublin for the Award Ceremonies.

So all the hard work paid off.

CHAPTER 12

Memories of The Young Scientist Exhibition by Connie Murphy

I first visited the young science exhibition in the late sixties. The exhibition at that time was small by today's standards but very impressive. This was to be the start of a long series of visits. When l started teaching in the Vocational School in Newcastle West in 1975, the school already had a tradition of submitting projects for the competition pioneered by Eamonn O' Connell and followed by Martin McNamara and Jim Kelleher.

During the 1976 school year l became involved with a group of students studying the socio-economic effects of the then thriving Castlemahon poultry products on the surrounding area. The project won 1st prize in a competition organised by County Limerick Enterprise Board. They subsequently revised it somewhat and submitted it for inclusion in the young science exhibition of January 1977. It was accepted and went on to be highly commended. This was the start of an eight-year continuous run of entries winning awards on several occasions.

During all this time Aer Lingus was sponsoring the competition and usually block booked Jury's hotel in Ballsbridge or the Montrose hotel in Stillorgan giving the students a very competitive room rate. The move was an excellent one as both locations were very close to the R.D.S. and provided an opportunity for all teachers and students to socialise together in the evenings. We all very much enjoyed our stays there especially the students who could be found up and down in the lifts during their free time.

On one memorable occasion in January 1982 on the Friday evening as the results were to be announced, Dublin and the east was hit by a huge snowstorm. In a strong easterly wind, drifting occurred, when 25cms of snow fell. The city ground to a halt. The Saturday and Sunday public viewing sessions were cancelled and we were left stranded in Jury's for the weekend. We left early on the Sunday morning, got stuck on the Naas dual carriageway for hours and finally reached home almost 12 hours later.

On another occasion we travelled up early on the Wednesday morning. Being January 6th it was a holy day. While passing through Borris-in-ossary at 8am people were going into mass. We saw this as an opportunity to get mass quickly but unfortunately it lasted an hour resulting in a frantic dash to the R.D.S. as on arrival stands had to be organise for judging to begin at 11 O'clock.

On one particular year Pat Broderick was investigating anti-biotic residues in foods. He picked up a carton of milk in a local shop on his way in and guess what, it tested positive during the judging. How food quality has improved since the early 1980's!

In conclusion I wish to acknowledge the hard work undertaken by all the entrant's. The amount of time and effort had to be seen to be believed. I also wish to pay tribute to the many firms and individuals who gave so freely of their time and expertise in the interest of science.

C. Murphy

CHAPTER 13

Tommy Quaid

Tommy Quaid (23 April 1957 – 10 October 1998) was an Irish sportsperson. He played hurling at various times with his local clubs Feohanagh-Castlemahon and Effin and was the goalkeeper on the Limerick senior inter-county team from 1976 until 1993. Quaid was regarded as one of the greatest goalkeepers of his generation.

Tommy Quaid was born in Charleville, County Cork in 1957. The son of Bridie (née Collins) and Jack Quaid, he was born into a family that had a strong association with hurling. His father was one of the key players on the Limerick team which beat London in the 1954 All-Ireland junior final. He won a senior Munster title the following year when a Mick Mackey-trained team shocked Clare in the provincial decider. Quaid's five children all followed in their father's footsteps on the hurling field. Séamus Quaid was a stalwart of the Feohanagh club until he emigrated to Australia. John Quaid went on to represent his county at minor and under 21 levels while Pat Quaid also served as a member of the Limerick under-21 hurling panel. Noreen Quaid also represented her County and local club in Feoghangh.

The Quaid family moved to Feohanagh, County Limerick when Tommy was just a few years old. He was educated at the local national school before later attending secondary school in nearby Newcastle West Vocational School.

The following article appeared in the Sunday Press in June 1973

THE DRINKING CHICKS – Strictly for the birds!

SIXTEEN year old Thomas Quaid, is determined that he will never drink or smoke in his lifetime - because he has seen the effects both substances had on chickens.

And he's a little bit upset too, because his drink experiment titled "strictly for the birds" ran into trouble from the Society for the Prevention of Cruelty to Animals.

Now the Department of Education has banned similar projects, under the 1876 Cruelty to Animals Act.

Thomas a final year student at Newcastle West Vocational School, said: "I was a bit disturbed at the fuss over my drinking chickens. I wanted to help people. By showing the effects of alcohol on the fowl, it could, perhaps, help bring the significance of the effects closer to humans".

His project won him second prize in the senior section of the Young Scientist of the Year competition last January.

Thomas, the second eldest of a family of three, studied the drinking habits of four chickens over a 16 week period. He started giving them alcohol when they were only one week old. One chicken was on brandy; one on whiskey, one on stout, one on beer.

The results certainly proved interesting.

The Brandy Chick - (A gradual build up to a glass a day with an equal amount of water was administered) – growth was retarded, intestines bloated, listlessness, staggering and gave the chick little to crow about. Weight, 5 lb.2 ozs.

The Whiskey Chick - Again a glass a day, with the same amount of water- Intestines inflamed; growth retarded and listlessness. Weight- 4 lbs, 12 ozs.

The Stout Chick - Build up to two bottles a day. A lot of fat around the heart. Lively enough in the cage. Weight 8 lbs 12 ozs.

The Beer Chick - Again two bottles a day –and it could consume a bottle in 12 minutes. Bloated intestines. But this was the liveliest bird of the lot. Plenty to crow about and hopped around the cage at night and day. Weight, 9 lbs 5 ozs.

Thomas also undertook a survey on the effects of alcohol on the 76 factory workers in the area - men and women over 18 and up to 60. He discovered that after drinking 31 per cent were unable to work as well then they would without alcohol; 31 per cent admitted to a loss of appetite; and 55 per cent showed a weight increase.

Two years ago, the Co. Limerick lad won first prize in the junior section of the Young Scientist contest – with his experiment on cigarette smoking chickens. By blowing smoke from a cigarette through a tube to a container of water, he concentrated the smoke in the solution and fed it to two chickens. Two other birds were given unpolluted water. The chickens on the nicotine solution had inflamed intestines and had a coating of tar on the guts. The other birds showed no ill effects. Thomas Quaid`s projects were supervised by teacher Martin McNamara, B.Agric. Sc. who said: “The experiment was a positive one and it is unfortunate that people didn`t see it in this light. The results can be of great help in our society.”

And it is interesting to note that following the findings of the smoking chickens one of the teachers in the school gave up his 30 cigarettes a day.

CHAPTER 14

Memories: by Denis Bucke

Denis worked for Paddy McCormack's for seventeen years until it closed. He emigrated to Australia for five and a half years before returning to West Limerick in 1989. Denis established a thriving business making geometrical wooden staircases providing employment for five others.

1966:

"We started my project on the first week of April with twelve chicks sponsored by Castlemahon. I put the chicks in the back corner of the boiler house, which was especially set up for the project. Timmy Geary of Castlemahon Products supplied food and different types of protein products."

"Mr. O'Connell and I fed the chickens both low and high protein diets. The chicks were separated into pairs, in six different cubicles. The chicks were fed three times a day and weighed twice a day with the results being logged. Every month we changed the diet of the chicks and continued to monitor the growth of each pair.
By November we found the best mixture of food, milk products and water that gave fastest weight gain."

January 1967 (Dublin):

"My dad drove us to the railway station in Limerick, where we met Joan Nolan and Michael Cregan (R.I.P.). We got the train to Dublin. Mr. O' Connell sister took us to the R.D.S. in Ballsbridge. I set my project up before feeding my chickens for the night. We all walked back to Mr. O' Connell's sisters house in Pembroke St. This woman looked after us so well, I will never forget it. My project came first in my category."

1968:

"Mr. O' Connell helped me to secure my apprenticeship at McCormack's Joinery Ardagh in June of 1967. I had already started my next project on the soils of Broadford parish so I continued on this while working as well. I finished the project in middle of December. I travelled to Dublin in January of 1968 with similar arrangements to the previous year.

In 1968 Michael Joseph Lynch and Mary Shine also entered projects, Mary received 3rd in her category."

"During my time in the Vocational School, the school had a girls and a boys section, we had the following teachers:"

Mr. O' Connell, Science, Gardening, and State of the Country

Mrs. Lyons, English

Mr. Toomey, Woodwork, Drawing, Mathematics

Mr. Collery, Irish

Mr. Higgins, Mechanical Drawing, Mathematics, Metalwork, Electricity Magnetism

Mr. Hennessy, Art and Classical Music

Miss Hillary Tatten, French

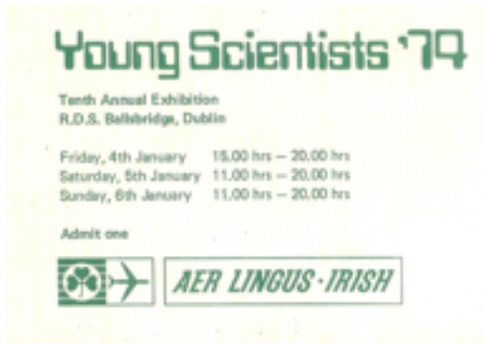
Ms. Ryan, Commercial

It was a very enjoyable experience for me.

CHAPTER 15

Eddie Mullane remembers

I represented Newcastle West Vocational School at the Young Scientist in 1974 in the Junior Biochemistry Section. My project was "To observe the effect of different diets on rabbits." Martin McNamara assisted me and I achieved first place. Here are some of the mementoes I kept from that time.



Students at the Newcastle West Vocational School being presented with cheques to mark their success in the Young Scientist of the year contest. Eddie Mullane, James Anglim, William Wrenn. Mr. Michael Herbert T.D., Rev Canon Tynan P.P. Croom, Mr. Martin McNamara science teacher and Mr. Sean Rush C.E.O. of the County Limerick Vocational Education Committee.

PRIZES FOR LIMERICK STUDENTS – Limerick Leader March 10th, 1974 Limerick Vocational students should follow the fine example of the Newcastle West school. For the past three years its students have won awards at the Young Scientist of the Year Exhibition, said Mr. Michael Herbert, chairman of the V.E.C. this week.

He was speaking at a function to present awards to three students from the school who won prizes at the R.D.S. Exhibition. Edward Mullane, Kileedy won first prize in junior biochemistry; James Anglim and William Wrenn both of Monagea, were highly commended in the senior biology and geography sections.
Mr. Herbert paid tribute to the school and said it had a very fine tradition in the field. A special word of praise went to the science teacher, Mr. Martin McNamara, and the three boys will this year take their intermediate certificates.

Chapter 16

I.C.E. Intelligent Cat's Eyes

by Aine Mulcahy & Claire Conaghan

Runner up-Group - Technology - Senior: Claire Conaghan, Áine Mulcahy, Seán Liston, Intelligent Cat's Eyes, Desmond College, Newcastle West, Limerick.

The Young Scientist Competition is one of the best memories I have from my time in Desmond College, which is mostly down to Mr. Enright, our mentor. Claire, Seán and I were one of the first groups from the school in nearly fifteen years to enter. We started work on our project, I.C.E. – Intelligent Cats Eyes, during the summer previous to the competition, putting together ideas and a proposal for the judges. The excitement we felt when we were told us we had been accepted left us beaming for weeks after, but then the work had to start.

I can remember one of my jobs was to measure the temperature of the surface of the road at various times during the day and night and chart it. We managed to source thermo chromic ink from a company in England, which is temperature sensitive ink, this became the key element in our project. Seán was tasked the job of dismantling numerous cats eyes to expose their inner pieces, a tricky process as the cases were very delicate and we then set about discovering the best way to incorporate the ink into the cats eyes.

We spent many lunch times and Christmas holidays in the computer room with our teacher going over our project in extreme detail, prepping possible questions, setting up our display and learning everything we possibly could about the workings of the ink and cats eyes. Mr. Enright gave up so much of his time to help us and without his guidance we would not have achieved what we did. He even took the responsibility of transporting and supervising three teenagers in Dublin!

Walking into the RDS to set up we were overwhelmed with the size of the competition, there was rows and rows of students setting up projects and sussing out the competition. Once we were happy with our display we went on a bit of an excursion up Grafton Street, a bit of down time before the stressful days of judging ahead.

We received quite a bit of media attention for the project and had a few television interviews which were amazing and nerve wrecking at the same time, along with the first two rounds of judging where we spoke to one or two judges. The last session was the most daunting experience I've ever had, Claire, Seán and I had to face eight judges at once firing all sorts of questions at us about the intricate workings of the project, especially regarding the ink we had used. This round left us quite excited for the prize giving later that evening.

On Friday evening everyone was brought into the arena and the long list of prize winners were called out. We were announced winners of the Patent Award. After the judging, we received earlier we were slightly disappointed but still very proud of ourselves. Having won a prize we thought that was it so when they came to the top four prizes we were beyond surprised when they announced us as the Runner Up Group. It was the absolute highlight of the competition!

The following morning we arrived into the RDS and found our display had been moved to the centre of the entrance along with the three other overall winners. The competition was such a fantastic experience from start to finish and it will be a memory I will always cherish!

I still have Intelligent Cats Eyes with the thermo chromic ink in the freezer ..... and they still work!!

Chapter 17

InVigil8 – Sean Duffy & Warren Gleeson

On the 13th of January 2012 at approximately 5:00 pm, Warren and I won the "Analog Travel Award for Design an Innovation" as well as 1st in our category. To be completely honest we could not believe it. Seconds before it we were thinking of how lucky the winner was going to be having no confidence in ourselves what so ever. To this day I still don't know what I did or said in the five minutes after the announcement. Supposedly I sprinted up and almost rugby tackled Warren when we got up there. Thinking back on it, this could possibly be the best moment of our lives.

Day 1: Almost 7 months later we found ourselves boarding a plane to London from Shannon. I don't remember much of the flight mainly because of the excitement. When we arrived in Heathrow we were on the brink of starvation because of our refusal to pay five euro for a sandwich! When we arrived in a place called the Breakfast Hut, Linda Garvey (an Analog Devices staff member who was taking us on the trip) told us that we could have whatever we wanted and she would pick up the bill. Immediately I looked to see what was the most expensive item there but chose not to abuse the company's generosity and chose a full English Breakfast. This was the start of the best week of my life foodwise. After a wander around the gadget shops we boarded the plane heading for the San Francisco airport. The flight could have done as a holiday itself, we flew Virgin Atlantic Premium Class and we had everything we could have wanted apart from enough food (I ended up eating Warren's dinner while he was asleep). After we arrived in San Francisco we drove to the hotel, settled in then went and got something to eat. We went to the Cheesecake Factory on the 20th floor of a building and I swear to this day, they make the nicest Pasta Linguine I've ever tasted.

Day 2: Day two began around 4:00 am in the morning because I couldn't get used to the time change. It wasn't all that bad I could talk to family at home, go to the pool or watch the Olympics that were on in London at the time. That day we cycled God only knows how far around San Francisco. This guided bike tour brought us through the city across the Golden Gate Bridge and into Sausalito a small town about 13km from San Francisco. Cycling across the Golden Gate Bridge was amazing even though I was afraid of heights. While we were cycling there was a small pouch on the front of the bike, which was probably to store the supplied map or a phone, inside mine however was a pack of Jacobs Rich Tea's to keep us going for the day.

Day 3: We went on a tour around the city, at first we walked around an area called The Fisherman's Wharf getting stuck in umpteen gadget shops thanks to Warren and Mr. Enright. After this we rode the duck boats around the city. This duckboat was basically a boat with wheels in the shape of a duck. We saw all the great city attractions on land and in the water including Alcatraz island. The tour guide was very entertain-

ing and we also got to drive the boat. That evening we had planned that we would ride the cable cars. Instead decided to stay put and enjoy a delicious meal at a small diner.

Day 4: This was a very action packed day which consisted of a lot of travelling. First we had to check out of our hotel then drive all the way down to San Jose. We had to go to the Analog Devices factory there and present our project to the people working there. We were guided by a young man from Waterford called Steven and he made our trip very entertaining. We were shown what actually happened at the factory but it was very complicated and most of it went straight over our heads! At 1:00 pm it was time for their break. We were brought outside to a football pitch at the back of the factory and were put onto teams in a 5 a side soccer match. We didn't think this was how very intelligent professional men spent their lunch but we all enjoyed the game. We then travelled to Stanford University thanks to the not so trusty SatNav. We were given a guided tour of the campus and almost fell in love. It was great to see there were more options other than the universities at home in Ireland. After this visit was yet more travelling. We were to get a plane to L.A.!

DAY 5: We went sightseeing in Hollywood like stereotypical tourists. To be honest it wasn't what we were expecting at all. We were picturing the beautiful Hollywood like in the films. But instead all we found was a dirty street with homeless people and young up-coming stars trying to sell you CD's. It's not all its cracked up to be.

DAY 6: We went to 6 Flags, one of the biggest theme parks in the world. We had the best craic of our lives. The rides were huge, these included Goliath and The Viper and the tallest ride in the world, Superman. We seemed to have gone on every ride except that one! It was honestly too high and Warren even got scared when he was standing underneath it. Probably the best laugh we had there was on the merry-go-round. Warren, Mr. Enright and I went to hand back our fast passes while Linda waited outside. When we came back out Linda was on the merry-go-round having the time of her life. We all joined her for one more go and capped a great day off at the theme park.

DAY 7: This perhaps may have been our most exhausting day. In the morning we got a taxi down to the California Science Centre. It was the most interesting "museum" I have ever been at anyway. It was designed to encourage young people to engage in science and it certainly succeeded in doing that. After this we went to an IMAX show that was part of the Science Centre. The IMAX Show was basically a high definition/3D documentary about Egypt, it turned out to be really interesting. That evening we drove to the Citadel Outlets. This was one of the biggest and best outlet centres in the world. We spent a whole afternoon browsing. I honestly spent half my money there but the clothes were so cheap, it was unbelievable value.

DAY 8: We went to Universal Studios. The rides there were not as scary as 6 Flags but were more entertaining. It also included rides that Mr. Enright and Linda could go on. These included the Simpsons Ride and The Jurassic Park Boat ride. We took a guided tour around Universal Studios, which showed us where everything was being filmed. It was probably the most enjoyable day of the trip.

DAY 9: We left for home via London. The journey was not as long as the one going out, London was busy with athletes arriving for the Olympics 2012.

DAY 10: We arrived home in Shannon to two very welcoming families and siblings who just came for their presents.

It was the trip of a lifetime and we were blessed to have it at such a young age. It will stay in our minds forever.

ANALOG DEVICES

CHAPTER 18

Primary Science Fair

The RDS Primary Science Fair is expanding. Each year the Fair gets bigger and better, with more and more schools looking for places. To cater for this, from January 2016, schools can choose to exhibit their project at the RDS Primary Science Fair Dublin or RDS Primary Science Fair Limerick.
Open to 4th – 6th class age groups across the island of Ireland, from January 2016 the Fair will take place both in Dublin, alongside the BT Young Scientist and Technology Exhibition at the RDS, and in Limerick, in Mary Immaculate College. Schools can choose which venue they would prefer to exhibit at when they submit their Expression of Interest for a stand.

Desmond College Students and Teachers put their experience and expertise in Science to help and support local Primary Schools in the area with their projects for the Primary Science Fair which takes place in the RDS each year. In 2016 Mary Immaculate College was added as a second venue, in an endeavour to accommodate the increasing interest from primary schools.

Teacher Marie Corkery & Aoife Culhane were assisted by the transition year students, who visited the primary schools.

Schools Assisted:
2015

- Courtney Boys National School
- Killoughteen National School
- Ashford National School
- Carrigkerry National School
- Gaelscoil O' Doghair

2016

- Monagea National School
- Scoil Iosaif National School
- Killoughteen National School
- Courtney Boys National School
- Castlemahon National School
- Raheenagh National School

CHAPTER 19

Scifest

History of SciFest

SciFest was the brainchild of the current SciFest CEO, Sheila Porter. Based on her experience of the BT Young Scientist and Technology exhibition and her involvement with the Intel Educator Academy in the United States, she approached the Institute of Technology Tallaght (ITT) in 2006 with an idea for a local science exhibition for second level students. A successful pilot SciFest science exhibition was hosted by ITT in 2006 and repeated in 2007.

With funding from the Discover Science and Engineering programme and Intel Ireland Sheila Porter was seconded from her teaching post in Loreto College, St Stephen's Green, to Intel in September 2007 to work on SciFest on a full-time basis.

Aim of SciFest

The aim of SciFest is to encourage a love of science, technology and maths through active, collaborative, inquiry-based learning and to provide a forum for second-level students at local/regional level to present and display their scientific investigations.

Participation in SciFest helps students to develop an interest in, and enthusiasm for, STEM. It allows them to learn while pursuing an aspect of the subject in which they have a particular interest. It also encourages the development of the skills sets that are required to address future global concerns of food, water and energy security, create wealth to sustain growth and to provide better health services and better infrastructure. Addressing such global concerns will create and drive the jobs and skills needs of the future

2010

Title: Marangoni Effect

Section: Senior Physical Sciences - Group

Students: Joanne Dowling & Aine Baer

Desmond College Succeed in Scifest

Maintaining their excellent record of achievement in science competitions, students from Desmond College Newcastle West captured two of the major awards on offer at this year premier Munster science event. Senior students Joanne Dowling, Katie Hurley and Paul Mc Guinness won first place in the Technology section with a project entitled “Eco - Shower”, their innovate device offers to save water when using power showers by recycling water and it also incorporates a unique timing device for eliminating lengthy showers. The judges heaped praise upon the three students and complimented them on their research as well as their working prototype.

Not to be outdone by their senior colleagues three first year students Killian Enright, Warren Gleeson and Sean Duffy built a device that enables gardeners to water their plants whilst on holidays by using the suns rays to cause evaporation thus providing an free and easy method of watering plants. At a packed Aula Maxima in the Limerick Institute of Technology , the three boys with their aptly named “Natures Little Helpers” project, reaped the reward for hours of hard work when they were chosen by a panel of judges to receive second overall prize n the Life Sciences section of Scifest beating off competition from intermediate and senior teams.

Senior Students (Left to right) Katy Hurley, Joanne Dowling & Paul Mc Guinness

(Left to right) Sean Duffy, Warren Gleeson and Killian Enright – First Years "Natures' Little Helper"


The Genetics of


To Determine The


THE
GROWTH
BACTERIA

Chapter 20

1960's

1965 NEW

Inaugural Year – No project submitted

1966

David Geary, Junior Boys Biological Science – "Milk & milk products: Home manufacture of the products from butter to calsin plastics. To show the scientific basis for the manufacture of the products and quality control of milk." Teacher: Eamonn O' Connell

Sean Flynn, Junior Boys Geography – "An atlas of a rural parish. A regional survey of a rural parish showing its value as a medium of pure research and educational, and as a base for rural planning and development" Teacher: Eamonn O' Connell

1967

Joan Nolan, Senior Girls Geography – "The historical geography of Newcastle West" Teacher: Eamonn O' Connell

Denis Bucke, Junior Biological Science – "The effect of different diets on small animals to show the value of milk and milk products and to illustrate the effects of low protein and vitamin deficient diets". Teacher: Eamonn O' Connell **1st Category**

Michael Cregan, Senior Boys Geography - "The historical geography of a declining village". Teacher: Eamonn O' Connell

1968

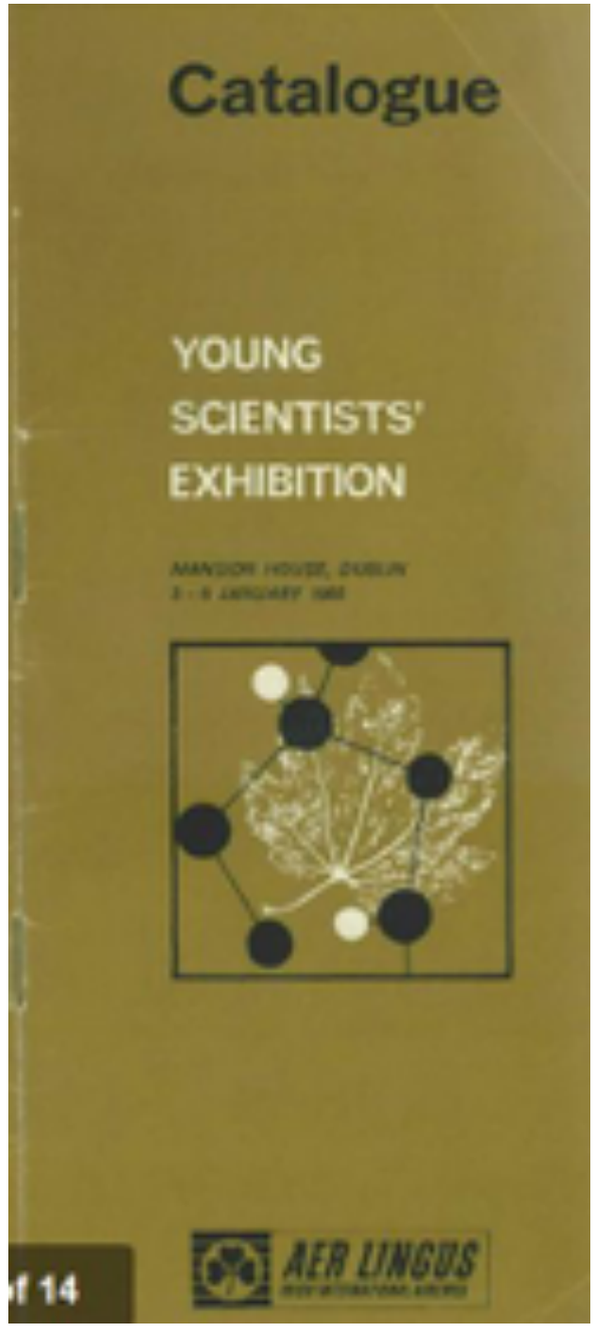
Michael Joseph Lynch, Junior Boys Geography – "Geography and parish planning, showing the influence of geographical factors on the development of a parish and on planning future development." Teacher: Eamonn O' Connell

Denis Bucke, Senior Boys Geography - "An agricultural atlas of the Broadford Parish showing, in particular, the relationship between land use and soil types" Teacher: Eamonn O' Connell

Mary Shine, Junior Mathematical- “Project Title unknown” Newcastle West Vocational School, Limerick
Teacher: Eamonn O’ Connell **3rd Category**

1969

Joseph Mullins, Junior Boys Geography – “To show the relationship physical features, land use and socio-economic development in Co. Limerick.”
Teacher: Eamonn O’ Connell



1970's

1970
No project submitted

1971
Missing Data

1972
Thomas Quaid, Junior Biochemistry – "Smoking and Cancer." Teacher: Martin McNamara **1st Category**

Martin McNamara with Thomas Quaid & Jeremiah Nolan 1972

Jeremiah Nolan, Junior Biological – Seasonal "Productivity in Grasses." Teacher: James Kelleher
2nd Category

1973
James Anglim, Junior Biochemistry – "An investigation into the production of potatoes using different manure" Teacher: Martin McNamara

Thomas Quaid, Senior Biochemistry – "Is Alcoholism Inherited or Not?" Teacher: Martin McNamara 2nd Category

1974
James Anglim, Senior Biochemistry – "A study of some common plants and animals as they occur in different soil types." Teacher: Martin McNamara
Highly Commended

Edward Mullane, Junior Biochemistry – "To observe the effect of different diets on rabbits." Teacher: Martin McNamara **1st Category**

Professor Patrick Lynch & David Kennedy Aer Lingus with Richie Ryan TD & (Edward (Eddie) Mullane) 1974

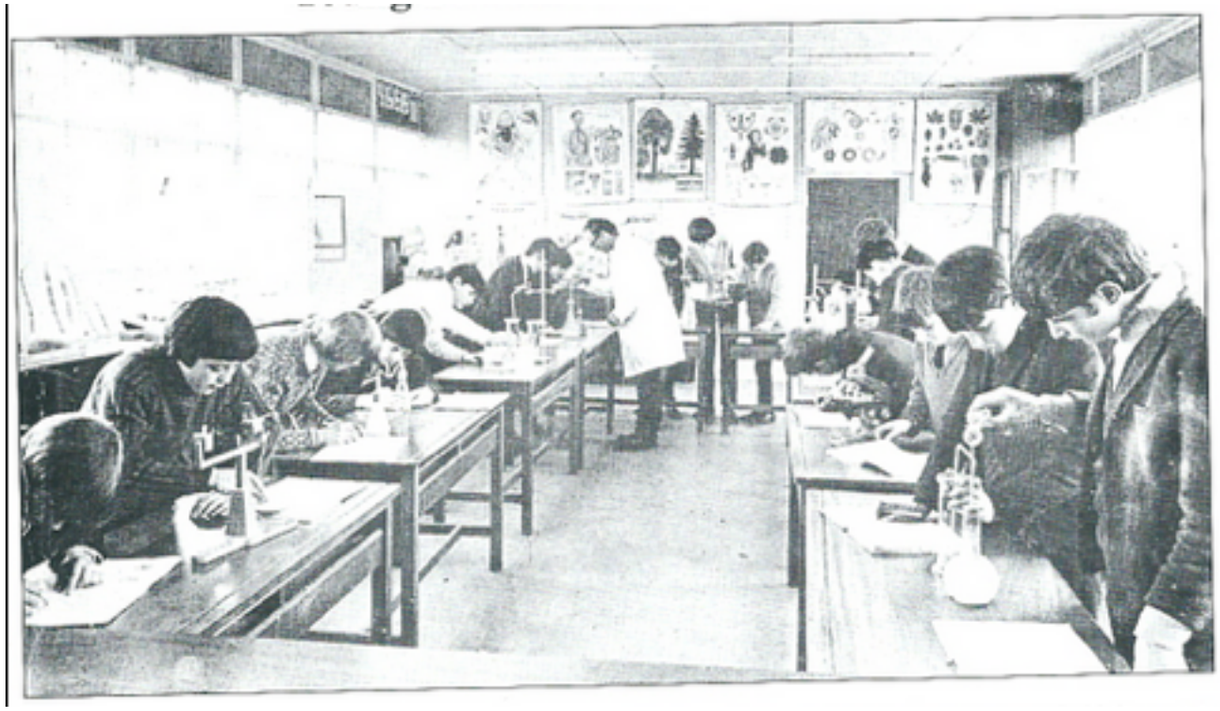
William J. Wrenne, Senior Geography & Geology- "An agricultural atlas of the Republic of Ireland." Teacher: James Kelleher **Highly Commended**

1975

James Anglim, Senior Biochemistry – "An investigation into the milking characteristics of cows." Teacher: Martin McNamara **Highly Commended**

William J. Wrenne, Senior Chemistry- "A study of silage effluent." Teacher: James Kelleher

2nd Category



Martin McNamara with Science Students

Laurence Clarson, Junior Geography & Geology- "Intensive dairying versus intensive beef production in Dromcollogher by comparison with EEC countries." Teacher: James Kelleher

3rd Category & Best Presentation

1976

James Anglim, Senior Biochemistry & Physiology – "To investigate the possibility of a 3 minute mile." Teacher: James Kelleher **Joint 1st Category**

Pat Hennessy, Senior Biochemistry & Physiology- "An investigation into the external factors affecting the anterior pituitary hormone." Teacher: Martin McNamara

1977

Tom McCarthy, Junior Biological Sciences – "To investigate some of the factors affecting photosynthesis." Teacher: Martin McNamara **Highly Commended**

Michael P. O'Connor, Intermediate Physical & Mathematical – "Mathematics for house design." Teacher: James Kelleher

Benjamin Curtin, Billy Sexton, Denis Roche & Kevin Barrett, Intermediate Group Project– "Socio-economic effects of Castlemahon Co-operative Poultry Products Ltd." Teacher: Con Murphy

Highly Commended

1978

John Quaid, Junior Biological Sciences – "An ecological study of the Glenstar waterfall area."

Teacher: Con Murphy **2nd Category**

Eamonn Walshe, Junior Physical & Mathematical Sciences – "Comparison of engine performance". Teacher: James Kelleher **Highly Commended**

Tom McCarthy, Intermediate Biological Sciences – "An investigation into some of the effects of antibiotics." Teacher: Martin McNamara

([R]Tom Mulcahy, Michael Daly, Michael Cunningham, Gerard Keogh [F] Eamonn Walsh, John Quaid & Raymond Moroney) 1978

Gerard Keogh, Michael Daly, Michael Cunningham & Raymond Moroney Group Project – "Future development of Newcastle West" Teacher: Mike Healy **Highly Commended**

(Thomas McCarthy, Michael Daly, John Liston & John Quaid) 1978

1979

John Liston, Intermediate Biological – "A progression toward modern dairy farming." Teacher: Martin McNamara

Thomas McCarthy, Intermediate Biological Sciences – "Fuel for the future - Using our excess food products." Teacher: James Kelleher

Michael Daly, Intermediate Environmental & Social Sciences – "A survey on the effects of EEC policies on the rural population of West Limerick." Teacher: Mike Healy

John Quaid, Intermediate Environmental & Social Sciences – "Some Factors affecting natural vegetation and production". Teacher: Con Murphy **Joint 3rd Category**


Fifteenth Annual
Young Scientists Exhibition 1979
January 5-7
Sole copy
Aer Lingus
Young
Scientists
'79
22
Catalogue 10p

1980's

1980

Michael Walshe, Intermediate Biological Sciences – "To observe the effect of food on cells." Teacher: Martin McNamara

Michael Daly, Intermediate Mathematical, Physical & Applied Sciences – "What are the car fuels of the future." Teacher: James Kelleher

Patrick Broderick, Intermediate Environmental & Social Sciences – "Water divining - Fact or fiction." Teacher: Con Murphy

1981

William Mulcahy, Junior Biological Sciences – "To Investigate the Diet of Rabbits." Teacher: Martin McNamara

Patrick A. Broderick, Senior Biological Sciences – "To Investigate Antibiotic Residues in Some Foods." Teacher: Cornelius Murphy **Highly Commended**

Gerard Scully, Junior Environmental & Social Sciences – "An investigation into Systems of Land Drainage." Teacher: James Kelleher

Michael Walshe, Intermediate Environmental & Social Sciences – "Life Styles and Social Patterns V Occupation and Income." Teacher: Martin McNamara

Sheila O'Dwyer, Intermediate Environmental & Social Sciences – "Social Opportunities for Teenagers" Teacher: Risteard De Barra

1982

Patrick A. Broderick, Senior Biological Sciences – "Antibiotic Residue in Some Foods" Teacher: Con Murphy
Highly Commended

(Patrick Broderick) 1982

Michael Walshe, Intermediate Biological Sciences – "Products Which May affect Blood". Teacher: Martin McNamara

(Michael Walshe) 1982

(Gerard Scully) 1982

Gerard Scully, Intermediate Mathematical & Physical Sciences – "Is Fibreglass an Effective Insulator." Teacher: James Kelleher

1983

Michael Heffernan, Junior Mathematical, Physical & Applied Sciences – "Electric Bicycle worked on Car Battery". Teacher: Mike Heffernan

(Mike Heffernan Jnr) 1983

William Colbert, Intermediate Mathematical, Physical & Applied Sciences – "Waste Paper Briquettes - Cheap Fuel?" Teacher: Martin McNamara

Michael Mulcahy, Intermediate Environmental & Social Sciences "Retirement in Newcastle West." Teacher: Con Murphy

Sociological Association of Ireland Award

(Mike Mulcahy & Liam Colbert) 1984

Liam O' Brien, Intermediate Environmental & Social Sciences – "An Attempt to Make a Parish Self Sufficient". Teacher: James Kelleher

1984

William Colbert, Intermediate Environmental & Social Sciences – "The local CO-OP and its Effect on the Parish". Teacher: James Kelleher

Michael Mulcahy, Intermediate Environmental & Social Sciences – "Small Industry in West Limerick". Teacher: Con Murphy Joint ***3rd Category & Sociological Association of Ireland Award***

1985 – 1988

No Projects submitted

1989

Seamus Carmody, Michael Quaid & Keith Massey - Intermediate Group Environmental & Social Sciences – "The Feasibility of Wind Powered Chicken Houses in West Limerick" Teacher: Michael Daly **1st Category & Solar Energy Society of Ireland Award**

Seamus Carmody, Michael Quaid & Keith Massey with Minister for Energy Michael Smith) 1989

1990's

1990

Keith Massey, Seamus Carmody & Michael Quaid - Intermediate Group Environmental & Social Sciences – "Metallic Poisoning and its Effects on a Local Community" Teacher: Michael Daly

Highly Commended

(Keith Massey, Seamus Carmody & Michael Quaid)

1991 – 1999

No Projects Submitted

scientists

stranded

AER LINGUS officials mounted a major operation thoroughout the weekend to arrange transport to various parts of the country for hundreds of exhibitors at the Young Scientists' Exhibition, and their friends and families, after the exhibition was closed on Saturday due to the weather conditions.

Yesterday evening, however, nearly 500 of the 800 students who took part in the exhibition were still in Dublin hotels, waiting for the transport situation to ease. They came from more than 20 counties and included nearly 100 from Northern Ireland.

Some 70 pupils left Dublin for their homes on the first four trains to depart from the city on Saturday, and convoys of buses and cars set out yesterday morning to attempt to reach Limerick, Coleraine and Belfast.

Aer Lingus's chief press officer, Captain Jack Millar, said yesterday that the worst difficulty was with the children trying to get to Sligo and Wexford. An emergency office was set up at Jury's Hotel by the airline officials to co-ordinate accommodation arrangements for the stranded students and to try to arrange coaches and other forms of transport.

Captain Millar described the

2000's

2000 – 2004

No Projects Submitted

2005

Claire Conaghan, Aine Mulcahy & Sean Liston, Senior Group Technology – "Intelligent Cats Eyes" - Teacher: Donal Enright

Overall Group Runner Up & Patent Award

2006

Kate Magner, Kathy Herbert & Sarah Reidy, Senior Group Technology – "ABCD A Baby Care Device" - Teacher: Donal Enright **3rd Category**

2007

Catherine Upton, Barbara McMahon & Dermot Considine, Senior Group Technology – "A Wireless Vehicle Signal Operating System" - Teacher: Donal Enright

3rd Category

Kate Magner, Senior Biological Ecological – "Hydrophobic properties of Nelumbo Nucifera" - Teacher: Donal Enright

Alicia Magner & Emma Hayes, Junior Group Technology – "Economy Class Syndrome – A Solution" - Teacher: Donal Enright

Barbara McMahon, Kate Magner, Dermot Considine, Emma Hayes & Alicia Magner) 2007

2008

Michelle Liston, James Hunt & Gerard Moran, Senior Group Technology – "A Chewing Gum Removal Device" - Teacher: Donal Enright **3rd Category**

Gemma Bucke & Grainne Bucke, Junior Group Technology – "Hypoglycemia Alert Device" - Teacher: Donal Enright **Highly Commended**

2009

Shauna Upton, Senior Individual Technology – "Tendon Contracture Rectification Device" - Teacher: Donal Enright **Highly Commended**

Emer Murphy, Junior Individual Biological – "Milk Quality of Different Breeds of Cattle" - Teacher: Marie Corkery **Display Award**

Kate Brislane, Katy Hurley & Mairead Relihan, Junior Group Technology – "Fuel Identification & Alert Device" Teacher: Donal Enright **Highly Commended**

Kevin Brosnan, Ian Mackessy & Alicia Magner, Senior Group Technology – "Everlasting LED Lights" - Teacher: Donal Enright **Display Award**

2010

Rose Magner, Eileen Flynn & Laura Herlihy, Junior Group Biological – "Alternative to Plastic Silage Wrap" Teacher: Donal Enright **Highly Commended**

Joanne Dowling & Aine Baer, Senior Group Mathematical Physical – "The Marangoni Effect" - Teacher: Marie Corkery

Kieran Harnett & Michael Upton, Junior Group Technology – "Eliminate the Hazzards of Window Blinds" - Teacher: Donal Enright **3rd Category**

(Eileen O Flynn, Laura Herlihy, Rose Magner, Joanne Dowling, Aine Baer, Kieran Harnett & Michael Upton) 2010

Laura Herlihy, Minister O Keefe & Eileen O' Flynn

On Tuesday April 27th, 17 students from Desmond College traveled to LIT to partake in the 2010 SciFest competition. A range of exciting projects were entered.

Deborah Murphy and Claire Collum made an alternative Hurley which has extra strength and spring than the traditional Hurley. Simon Geaney had an excellent project where he powered a number of LED bulbs using salt and water as the power source. Luke Barry, David Upton and Darragh O' Mahony designed and made an innovative torch that lights up on shaking. Eileen O' Flynn, Rose Magner and Laura Herlihy came up with an idea of using paraffin wax as an alternative to plastic covering to be more efficient and reduce waste. Joanne Dowling and Aine Baer entered a project which investigated "The Marangoni Effect". Tom Flavin And Christopher Scannell made a "Wellie Washer" designed to reduce spread of disease on farms. Patrick Brislane and Evan Riordan designed and made a safety device for portable goals to prevent them from falling and causing serious injury. Richard Taylor and Adam Greaney came up with an excellent idea where they used old newspaper to keep objects cool, they are currently developing the project more.

As can be seen there were excellent innovative projects entered and each of them were finished to an extremely high standard. Each individual did both themselves and the school proud. We were very successful at the competition coming away with 7 prizes in total including the 2nd overall in the competition.

Each of the students enjoyed the experience and are already researching into projects to enter into Young Scientist 2011.

Patrick Brislane, Evan Riordan with Mr T Byrne - Runner Up SciFest 2010 LIT

Joanne Dowling & Aine Baer

Tom Flavin & Chris Scannell

Eileen O' Flynn, Rose Magner & Laura Herlihy

Richard Taylor & Simon Geaney

Simon Geaney

Luke Barry & David Upton

Results

Overall Runner Up: "Safer Goal Posts": Patrick Brislane & Evan Riordan, they designed a method of securing goal posts securely.

Best Communicator: Tom Flavin for describing his project

Senior Technology Winners: Patrick Brislane & Evan Riordan.

2nd Junior Technology: "Wellie Washer", Tom Flavin and Chris Scanlan

2nd Life Sciences: "Alternative to Black Plastic Silage Wrap": Rose Magner, Eileen O' Flynn and Laura Herlihy

2nd Intermediate and Senior Physical Sciences: "The Marangoni Effect", Aine Baer & Joanne Dowling

Highly Commended: Physical Sciences "PyCrete" Adam Greany & Richard Taylor

2011

David Upton & Darragh McMahon, Junior Group Technology – "The Alchemiser"- Teacher: Marie Corkery **Highly Commended**

Edel Copse & Sarah Enright, Intermediate Group Biological "Preventing Enamel Erosion" - Teacher: Marie Corkery

Tom Flavin, John Delee & Christopher Scannell, Junior Group Technology – "The Wellie Washer" - Teacher: Donal Enright

(Chris Scannell, Tom Flavin, John Delee with Bryan Dobson R.T.E.) 2011

Press Release

The exceptional standards of Desmond College entrants to the 47th BT Young Scientist awards held in the RDS Dublin was once again highlighted this year. Innovative projects, the "Wellie Washer", the "Alchemiser" and the "Investigation into Tooth Decay" attracted huge attention among the record breaking attendance and the 520 projects on display.

Highlighting innovation in the Agricultural field the "Wellie Washer" project attracted huge interest from RTE's TV programme, Ear to the Ground, as well as press interest from The Farmers Journal and The Examiner.

The idea was conceived by second year students **Tom Flavin**, **John Delee** and **Chris Scannell** based on their own experience on their family farms.

The group have been praised by Sean Gallagher of "Dragons' Den" for their ingenuity as the portable footbath cleans and disinfects wellingtons and will be a very useful and practical way to prevent the spread of infection and disease on farms.

Winning highly commended from the judges The National Road Safety Authority were keenly impressed by the "Alchemiser" project designed by **David Upton** and **Darragh McMahon.**

Science Teacher, Ms. Corkery explained that they designed the device to prevent the ignition of a car if a person has more than the legal limit of alcohol in their system. With road deaths at an all time high, this device was designed to aid in the reduction of road deaths caused by driving under the influence of alcohol.

Transition Year students **Edel Copse** and **Sarah Enright** have dedicated their time to investigate the "Best Treatment for Preventing Tooth Enamel Erosion." This attracted widespread attention from the public and dental experts. For their project the duo carried out the investigative experiments and analysed the effects of many every day substances on teeth to come up with the best prevention of tooth enamel erosion.

Desmond College would like to congratulate the innovative students, their parents and dedicated teachers for doing themselves and the school proud.

2012

Rose Magner, Lisa Barrow & Laura O' Mahony, Senior Group Mathematical Physical- “Herba Fermentato” Teacher: Donal Enright **Display Award**

Michael Upton & Cieran Scanlon, Senior Group Technology – “Self Sanitising Handle” - Teacher: Donal Enright **Display Award**

James O' Connor, Junior Individual Technology – “You've Got Mail!” - Teacher: Donal Enright

Kate Brislane & Louise Copse, Senior Group Biological- “Soft Shell Eggs - A Solution” - Teacher: Donal Enright
Highly Commended

Tom Flavin, John Delee & Christopher Scannell, Intermediate Group Technology – “Hygiene & Bio Security” - Teacher: Marie Corkery

Mark Danagher & Cieron Nolan, Intermediate Group Technology – “Chimney Turbine” - Teacher: Marie Corkery

Mark Danagher & Cieron Nolan

Sean Duffy & Warren Gleeson, Junior Group Technology – "InVigil8" - Personal Security Device - Teacher: Donal Enright **1st Category & Analog Travel Award**

Sean Duffy & Warren Gleeson

Orlaith Condon & Nikita Derwin, Intermediate Group Biological – "Body Temperature & Time of Day" - Teacher: Marie Corkery

Connor Barry, Martin Madden & A.J. O' Connor, Intermediate Group Technology – "Calving Jack Attachment" - Teacher: Marie Corkery **Display Award**

Connor Barry, AJ O Connor & Martin Madden

Shauna Gayer & Eileen O' Flynn, Intermediate Group Biological – "Control of Wasps Using Natural Products" - Teacher: Donal Enright

Sinead Nix & Lorna Browne, Intermediate Group Biological – "Calling it Quits" - Teacher: Marie Corkery

Jack Fanning, Liam Upton & Shane Lee, Junior Group Biological – "Urine Fertiliser" - Teacher: Marie Corkery

Ms Gavin Barry, Jack Fanning, Liam Upton, Shane Lee & Ms Marie Corkery

Eoghan McMahon, John Byrnes & Michael O' Flynn

Eoghan McMahon, Michael O' Flynn & John Byrnes, Junior Group Technology – "Safe Storage of Slurry" - Teacher: Marie Corkery **Display Award**

John Delee & Tom Flavin

James O Connor

Kate Brislane & Louise Copse

Sinead Nix & Lorna Browne

Michael Upton & Cieron Scanlon

2013

In this the 49th year of the competition, 1898 projects were submitted from all over Ireland, with just 550 projects being accepted. Desmond College who has an enviable reputation in this, the biggest competition of its kind in Europe, has 16 projects accepted, involving forty one students ranging from 1st to 5th years.

Shauna Tobin & Cormac Long, Senior Group Technology – "Self Regulating Speed Ramps" - Teacher: Donal Enright

Cian Cremin & Seamus Hurley, Junior Group Technology - Heavy Duty Hover Craft - Teacher: Donal Enright **Highly Commended**

Claire Collum, Debbie Murphy & Shauna Haugh, Intermediate Group Technology – "Camogie/ Hurling Trainer" - Teacher: Donal Enright

Lisa Barrow & Orlaith Condon, Senior Group Biological – "An Investigation into the Lifecycle and Intelligence of Crows" - Teacher: Donal Enright **Display Award**

(Orlaith Condon & Lisa Barrow) 2013

Martin Madden, Conor Barry & Peter Shanahan, Senior Group Technology – "Self Leveling Wheelbarrow" - Teacher: Donal Enright **Highly Commended & Display Award**

Emma Herbert & Eamonn Browne, *Junior Group Technology – "Omni-Directional Battery Holder" - Teacher: Donal Enright*

Emily Duffy, *Junior Individual Mathematical Physical- "Mirror, Mirror What colour are you?" - Teacher: Donal Enright*

Liam Dowling, Graham McCoy and Darren Kelly, *Junior Group Technology – "A Coolant Helmet Insert"- Teacher: Marie Corkery*

(Darren Kelly, Graham McCoy & Liam Dowling with Máire Geoghegan-Quinn European Commissioner for Innovation & Science) 2013

Simon Geaney & Colin Craker, *Intermediate Group Technology – "Auto Safety Device" - Teacher: Marie Corkery*

Sean Mc Elligott & Jack O' Connor, *Junior Group Technology – "Hydro Cart"- Teacher: Marie Corkery*

Diarmuid Curtin, Alan Curtin & Conor Leahy, *Junior Group Technology – "An Enhanced Walking Aid for the Blind"- Teacher: Marie Corkery*

Steven Brosnan, Tara Geary & Courtney Singh, *Intermediate Group Technology – "A Scent Clock" - Teacher: Marie Corkery*

Sophie Bridgeman, Fiona Barrow & Caoimhe Danagher, *Junior Group Technology – "Key Glow"- Teacher: Marie Corkery*
Highly Commended

(Sophie Bridgeman, Fiona Barrow & Caoimhe Danagher) 2013

Brian Harnett, Christian White & Patrick Moriarty, *Junior Group Technology – "Enhanced Sound Proof Ear Muffs"- Teacher: Marie Corkery*

Nikita Harnett, Danielle O' Connor & Claire Normoyle, *Junior Group Behavioral - "Sports = Achievement?" Teacher: Marie Corkery*

Chris Scannell & Declan O' Connor, *Intermediate Group Biological – "An innovative water collection method inspired by the Stenocara Beetle" - Teacher: Marie Corkery*

Scifest In L.I.T.

Junior

Key Glow - Caoimhe Danagher, Fiona Barrow & Sophie Bridgeman

Shine Sign - Niamh Liston, Eimear Ahern & Ellie O' Reilly

Teacher's Pet - Leah Barry, Aine Upton & Muireann Tobin

Hydro Cart - Jack O' Connor, Sean McElligott & Conor Reidy

Intermediate

Self Leveling Wheelbarrow - Connor Barry, Peter Shanahan & Martin Madden

Why Onions Make You Cry - Shannen White, Doireann Hunt & Vanessa Dowling

The Sound of Silence - Dylan Bourke & Cassie Costello

Self Leveling Speed Ramp - Kieran Herlihy & Cormac Long

A Unique Water Collection System Inspired by the Stencara Beetle - Chris Scannell

Senior Students

An Alternative Treatment for Pancreatic Cancer - Richard Taylor

50 Shades of Black - An investigation into the Behavior, Intelligence of Crows - and Orla Condon, Eileen O' Flynn & Lisa Barrow

2014

Sean Duffy & Warren Gleeson, Senior Technology Group– "A method of deterring/ detecting the tampering of drinks." Teacher: Donal Enright
Highly Commended

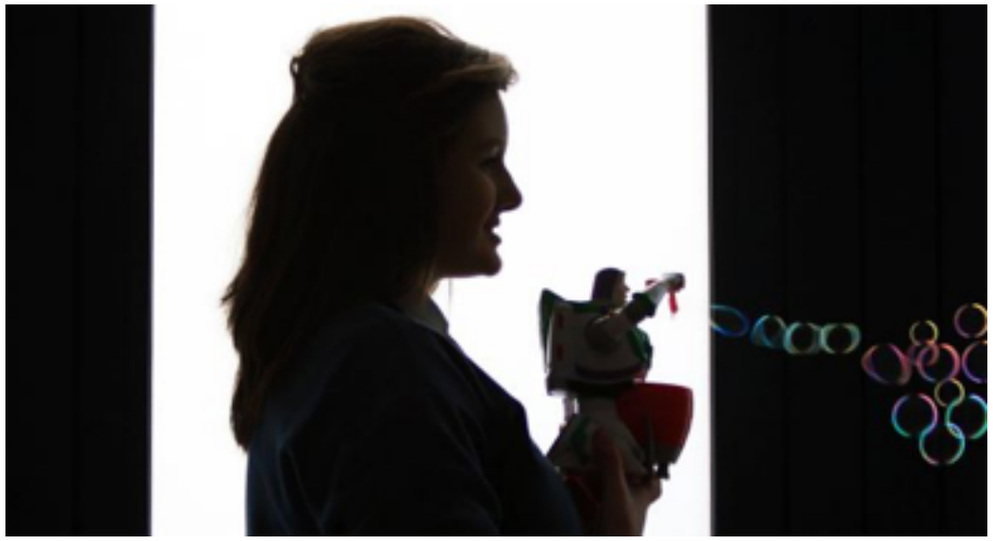
Sean Duffy & Warren Gleeson

Shauna Tobin & Steven Brosnan, Senior Technology Group – "The Bi-Cycle for Life – Water Filtration/ Transportation Device." Teacher: Donal Enright
Highly Commended & Display Award

Steven Brosnan & Shauna Tobin

Seamus Hurley & Cian Cremin, Intermediate Technology Group – "Eco Friendly Planter". Teacher: Donal Enright **Display Award**

Emily Duffy, Individual Junior Mathematical Physical – “Pop: The Science of Bubbles”. Teacher: Donal Enright



Aoife King, Individual Senior Mathematical Physical – “Mayan Mathematics - So right yet so wrong”. Teacher: Donal Enright **Display Award**

Aoife King with President Higgins

Shannon Naughton, Sarah O’ Grady & Aoife

Larkin, Junior Technology Group – “Directed Eye Dropper”. Teacher: Donal Enright

Sarah O’ Grady & Shannon Naughton

Seamus Hurley & Cian Cremin, Intermediate Technology Group – “Eco Friendly Planter”. Teacher: Donal Enright **Display Award**

Kiara Carroll, Clara Danaher & Terri Keane, Senior Mathematical Physical Group– “Forge water as

a treatment for cutaneous warts". Teacher: Donal Enright

Liam Upton, Shane Lee & Padraig Dore, Intermediate Technology Group – "An udder alarm". Teacher: Marie Corkery https://youtu.be/MK6amRD1LZQ

Julie Cantillon & Stephanie Sheehan Intermediate Biological Group– "Sun Stalking Sunflowers". Teacher: Aoife Culhane **Display Award**

Stephanie Sheehan & Julie Cantillon

Niamh Liston & Hannah Barrett Junior Behavioral Group– "Drivers attitudes toward speed detection signs". Teacher: Aoife Culhane

Niamh Liston & Hannah Barrett

2015

Laoise Curtin, Emma Roche & Aoife Larkin, Junior Technology Group– "That's Music to my Ears." Teacher: Marie Corkery **Display Award**

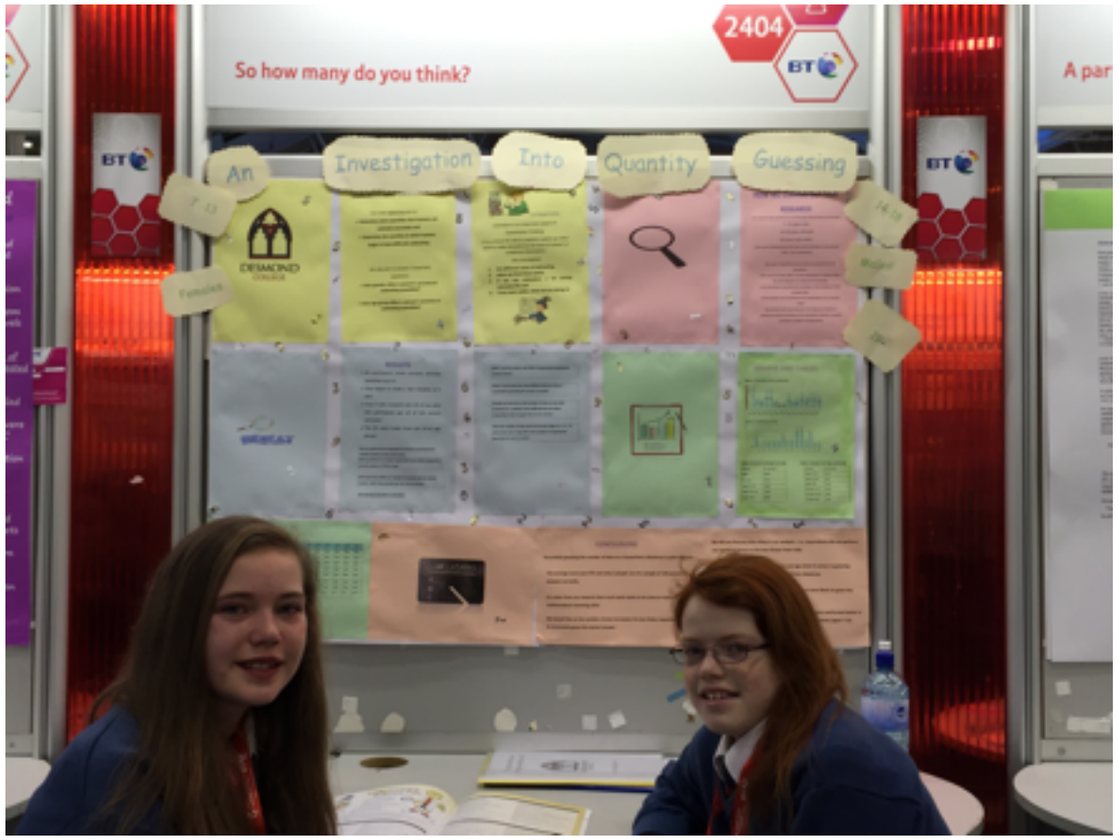
Diarmuid Curtin, Conor Kennedy & Eamon Browne, Intermediate Technology Group – "This CAN Heat Us." Teacher: Marie Corkery

Emily Duffy, Individual Intermediate Technology – "Homeless Wrap". Teacher: Donal Enright **Highly Commended & DCU Business Boot Camp**

Emily Duffy with Minister Richard Bruton

Ben Montgomery, Individual Junior Mathematical Physical – “Self-Similar Sierpinski Fractals”. Teacher: Donal Enright

Claire Nolan, Junior Mathematical Physical Group – “So How Many Do You Think???”. Teacher: Marie Corkery



Siobhan Hurley & Claire Nolan

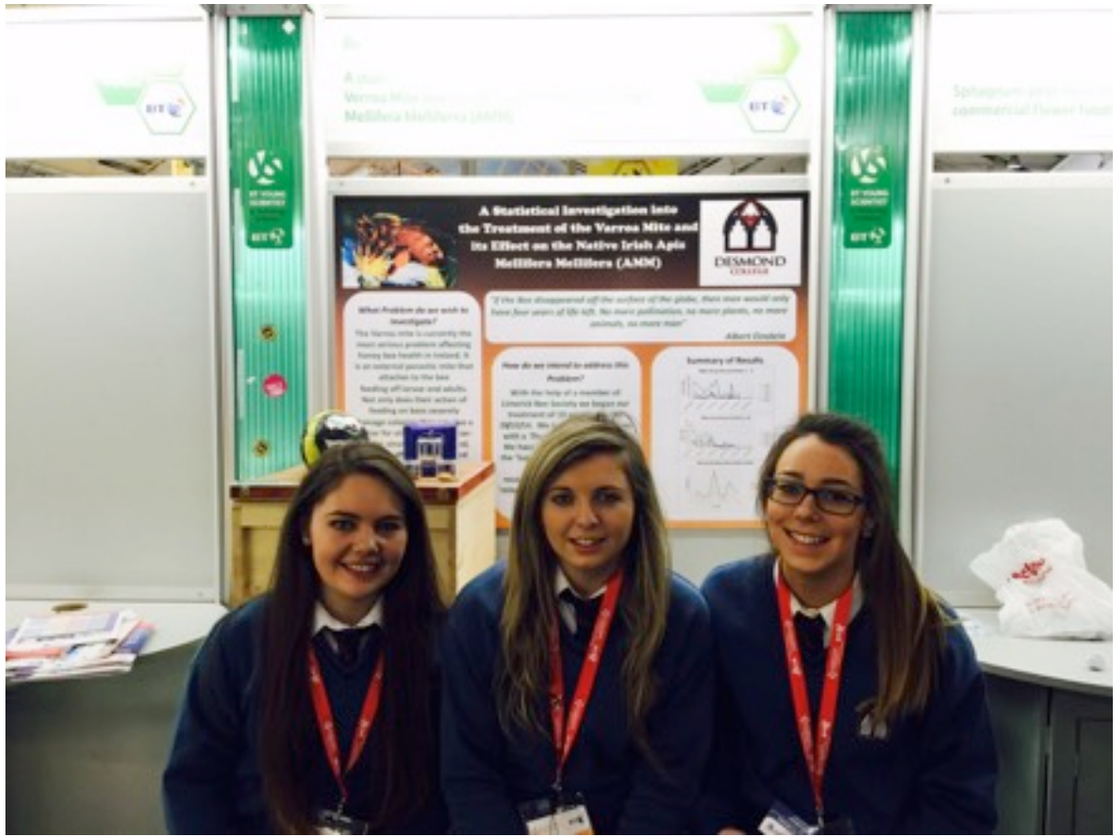
Liam Dowling & Conor Leahy, Intermediate Technology Group – “Ladder Safety Attachment”. Teacher: Marie Corkery

Liam Dowling & Conor Leahy

Kiara Carroll, Clara Danaher & Terri Keane, Senior Biological Group– “An statistical investigation into the treatment of the Verroa Mite and its effect on the Native Irish Apis Mellifera Melliferra (AMM)”. Teacher: Aoife Culhane

Terri Keane, Julie Cantillon & Kiara Carroll

Chris Scannell & Padraig Collins, Senior Biological Group– “Colostrum and Calf Management”. Teacher: Aoife Culhane



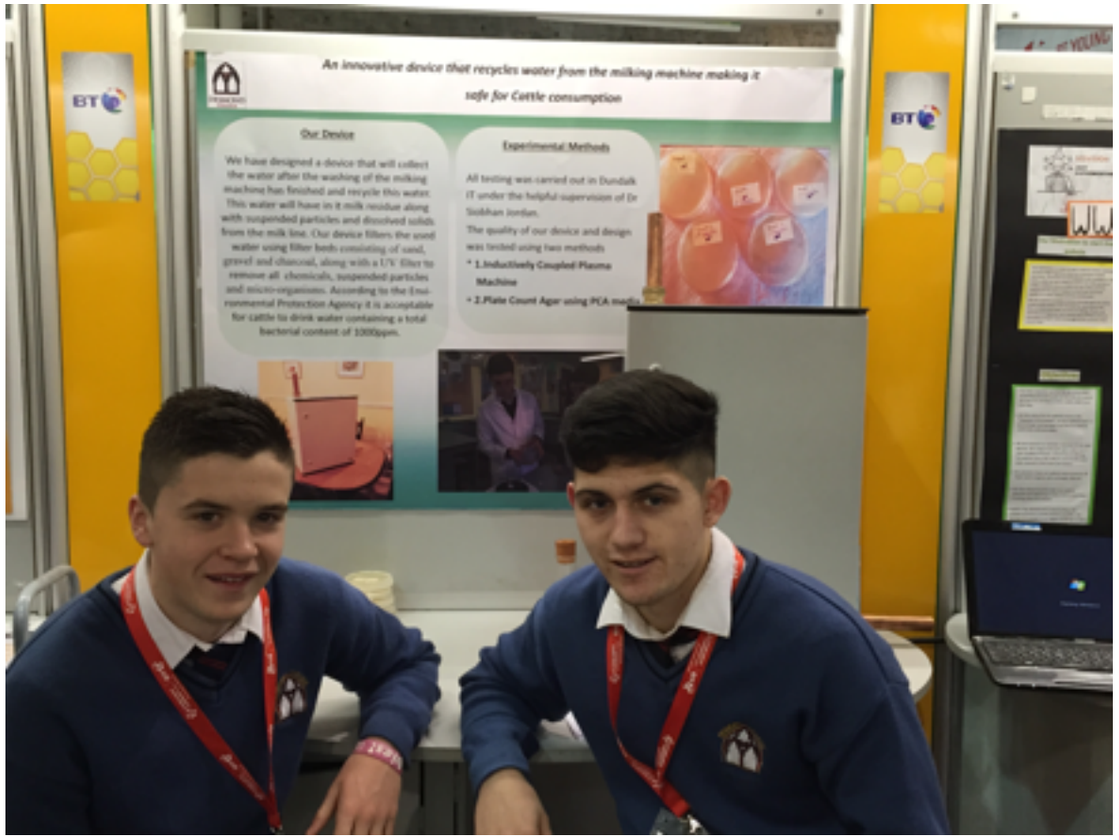
Sara Flatley & Lauren Moloney Intermediate Biological Group -"To investigate the morphological variation in the shell of Nucella lapillus at exposed and sheltered shores in Ireland" Teacher: Leeanne Kelly **Display Award**

Jack O Connor, Cillian McMahon & Conor Reidy, Intermediate Biological Group – "A Helping Hand". Teacher: Marie Corkery

Conor Rediy, Jack O' Connor & Cillian McMahon

Shane Lee & Eoghan McMathon Senior Biological Group– "An Innovative Device which Recycles and Purifies Water from Washing the Milking Machine and Transfers it to Troughs for Cattle Consumption". Teacher: Marie Corkery

Diarmuid Flynn & Jack Corkery Junior Technology Group– "Moooove Over Mammy" Teacher: Marie Corkery **Highly Commended**



Eoghan McMathon & Shane Lee

Sean Mc Elliggot & Robert Meehan Intermediate Technology Group - "Palm Powered Controller" Teacher: Marie Corkery

Alice Duffy Junior Intermediate Technology – "Horizon Correction Glasses to prevent Motion Sickness". Teacher: Donal Enright

Emma Herbert, Danielle O Connor & Nikita Harnett Senior Technology Group "Height Adjustable Crutch" Teacher: Donal Enright

Emma Herbert, Danielle O' Connor & Nikitta Harnett with Ryan Tubbridy

Diarmuid Flynn & Jack Corkery

Darragh McMathon Senior Technology Individual "E-Cooker" Teacher: Donal Enright

E-C oker

Liam Callinan & Leona Mullally Junior Mathematical Physical Group – "Is our ambulance network correctly located to best serve the Irish nation?" Teacher: Donal Enright

Emma Herbert, Eoghan McMathon, Shane Lee and Danielle O' Connor

Eamonn Magee (President of FIBKA) Donal Cooper and Guss McCoy (Limerick Beekeepers Association) pictured with Kiara Carroll, Terri Keane and Julie Cantillon

Dr Eamonn Magee President of the Federation of Irish Bee-keepers Association presented Kiara Carroll, Julie Cantillon and Terri Keane with a perpetual Beekeepers of Excellence award for 2015 for participating in the BT Young Scientist Competition.

The girls project was in the senior biological section, it was a statistical investigation into the treatment of the Varroa mite and its effect on the native Irish Apis Mellifera. The girls worked with the Docile Hives of Limerick beekeeper Mr Donal Cooper.

Press Release Young Scientist 2015

This has been a special year for those involved with Young Scientist in Desmond College. Special because of the interest that this unique competition generates each year amongst the students, special for the excitement that surrounds this, the biggest competition of its kind in Europe, and special that for one week of the year, Desmond College and its students are the focus of the national media and our students never fail to meet the challenge.

In April of each year, the Young Scientist competition is launched in Desmond College, students start to work on their proposals, research their chosen topic and get together with experts in the hope that they can have their project accepted from the over 2000 proposals that get submitted each year. Annually, the judges' shortlist 550 projects in the four different categories in both individual and senior sections. Desmond College have been entering projects in this competition for fifty years, 2015, was historic for the fact that we were successful in having seventeen projects accepted, making us the 2nd best represented school in the whole of Ireland.

Another first was the fact that previous students of Desmond College were on hand this year to mentor and assist projects/ students, its great to think that past students have had a positive experience whist in our school that they volunteer their time to ensure that this years students are as prepared as possible.

Early January saw Desmond College staff, students and parents gathered in Desmond College on Monday night for the launch of Young Scientist Week. They were accompanied by students of local national school who were mentored by the TY students assisted by Ms. Corkery and Ms. Culhane who helped prepare these students for the Primary Science Fair, held in conjunction with the Young Scientist each year.

Desmond College, which places great emphasis on the study of STEM subjects (Science, Technology, Engineering & Mathematics) was delighted to have thirty five of our students taking part in this National Competition.

2016

Stacey Flynn, Senior Biological Individual – "An exploratory study investigating the correlation between mass of samara and Hypoglycin A levels in the seeds and seedling of Acer pseudoplatanus which contribute to Equine Atypical Myopathy". Teachers: Aoife Culhane & Marie Corkery

Cillian McMahon, Jack O' Connor & Conor Leahy, Senior Technology Group – "Bovine Infertility Device". Teachers: Aoife Culhane & Marie Corkery

Sinead Liston & Hannah Barrett, Senior Behavioural Group – "A statistical investigation into the factors in which influence refugee admittance to EU countries". Teachers: Aoife Culhane & Marie Corkery

Jack Corkery & Diarmuid O' Flynn Junior Bological Group – "Burnt Bovines
An investigation into the photo-sensitive influence of Heracleum mantegazzianum on Cattle". Teachers: Aoife Culhane & Marie Corkery **Display Award**

Davis O' Brien & Danny Moriarty, Junior Technology Group – "Bee Cool Self-Temperature Regulating Bee Hive". Teachers: Aoife Culhane & Marie Corkery

Caoimhe Danagher & Sophie Bridgeman, Intermediate Technology Group – "Tremor Glove". Teachers: Aoife Culhane & Marie Corkery **Display Award**

Jamie Cambell, Mary O' Connor & Niamh O' Connell, Intermediate Biological Group – "Silage Digestibility". Teachers: Aoife Culhane & Marie Corkery

Victoria Brouder & Ciara Brouder, Junior Behavioural Group – "Thats Em:)jis for you!! Literacy and Emojis". Teachers: Aoife Culhane & Marie Corkery **Display Award**

Amy F. Ryan, Amy N. Ryan & Mairead Ryan, Intermediate Technology Group – "Blumet Bike Safety Device". Teachers: Aoife Culhane & Marie Corkery **Display Award**

Leah Barry, Aine Upton & Muireann Tobin, Intermediate Technology Group – "Female Friendly Phone Alert System". Teacher: Donal Enright **3rd Category**

Eve Montgomery, Sophie Leenders & Claire Nolan, Intermediate Mathematical, Chemical Group – "Get the Lead (Pb) Out!". Teacher: Donal Enright

Siun Ni Cheallaigh, Roisin Nolan & Alanna Slater, Senior Mathematical, Chemical Group – "Using Anthocyanin as a Souring Milk Detection System". Teacher: Donal Enright **Science Foundation Ireland Special Award & 2nd Category & DCU Business Boot Camp**

Emily Duffy, Senior Technology Individual – "Early Health Indicator For Infants" Teacher: Donal Enright

Shauna Hallinan, Senior Technology Individual – "Radio frequency identification device (RFID) system to prevent mis-fueling of vehicles" Teacher: Donal Enright

Ben Montgomery, Intermediate Behavioural Individual – "Can our language think for us?" Teacher: Donal Enright

We are the Highest School in Limerick,

and 2nd Highest School in Ireland, with

15 PROJECTS ACCEPTED THIS YEAR

INTO THE BT YOUNG SCIENTIST AND TECHNOLOGY EXHIBITION 2016!

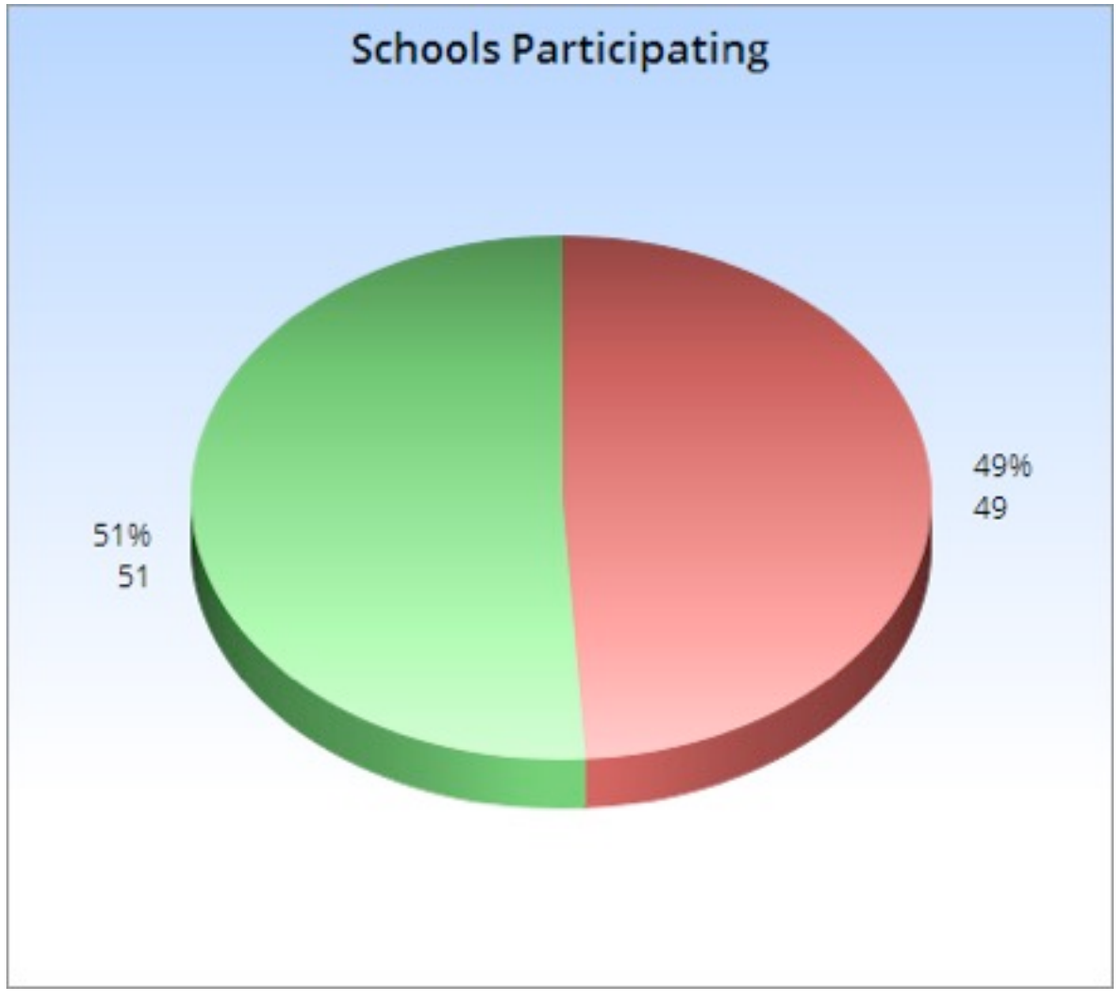
BT Ireland announced last week that a record number of schools in the Republic of Ireland have entered the 2016 BT Young Scientist & Technology Exhibition.

A total of 371 schools in the Republic submitted projects for the January 2016 exhibition which represents 51% of all secondary schools. This is an increase of 28 schools or 8% of schools since the previous exhibition.

The 52nd BT Young Scientist & Technology Exhibition has attracted a total of 2,048 entries from the island of Ireland with 4,449 students submitting their finest ideas and innovations for consideration across the science, technology, engineering and mathematics subjects. In addition, BT Ireland announced that the gender split of entrants this year is 62% female, and 38% male.

A total of only 550 projects are accepted into this prestigious competition. The projects are selected based on calibre of work submitted. Desmond College is the most represented school in Limerick for the 5th year in a row.

With 15 projects accepted Desmond College is the 2nd most represented school in all of Ireland, for the second year in a row. This is no surprise to the students and staff of Desmond College. With the calibre and quality of the students attending the school, we expect nothing less.



CHAPTER 32

Gathering of "Young Scientists" Past and Present

On 6th January 2014, a gathering took place in Desmond College of past and present Young Scientists to celebrate the 50th Year of the Young Scientist Competition in Ireland. The school has a long history of involvement in the competition which dates back to 1966 when two projects were entered from the Vocational School by mentor Eamon O'Connell.

Since then the school has had tremendous success in the competition winning numerous prizes including Group Winners, Category Winners, Analog Award Winner, twice winning the Teacher of Excellence Award (Donal Enright and Marie Corkery), various Display Awards and Highly Commended. As part of the celebrations the school produced a unique publication which was compiled and coordinated to acknowledge and celebrate the achievements of the Young Scientists from both the old Vocational School and Desmond College over the years.


JACK WILLS
PHYSICAL
TRAINING


DESMOND COLLEGE
bímis ag obair le chéile...


DESMOND COLLEGE


DESMOND COLLEGE


DESMOND COLLEGE


DESMOND COLLEGE
bímis ag obair le chéile...


DESMOND COLLEGE


DESMOND COLLEGE


DESMOND COLLEGE


DESMOND COLLEGE


DESMOND COLLEGE


DESMOND COLLEGE


DESMOND COLLEGE


DESMOND COLLEGE


DESMOND COLLEGE


DESMOND COLLEGE


SPEED LIMIT
60
YOUR SPEED
61

CHAPTER 33

The Homeless Wrap

In October of 2014, Emily Duffy a 3rd year student in Desmond College had her project “The Homeless Wrap” accepted for the 51st BT Young Scientist and Technology Exhibition. In the last year Emily has featured on numerous TV and Radio programs with her project that offers a better quality of life to those who find themselves homeless. The project won student enterprise awards and Emily attended the BT Business Boot Camp in UCD last year, the project also featured on the Late Late Show.

12 months on, the “Homeless Warp” has become the “Duffily Bag” and is currently being produced by the Mendicity Institution in Dublin. Mendicity who train some of their service users to make the sleeping bags themselves. They have had very positive feedback from Merchant's Quay, a large homeless service institution in Dublin 8, who are using some of the “Duffily Bags” during the night cafe.

The Mendicity Institution is one of Dublin's oldest charities, established in 1818. During its life-span, it has always worked towards the relief of poverty in the city. As the social organisation of poverty altered, the Institution has had to adapt to meet the current needs of a changing clientele, it continues as a food centre providing free meals on a daily basis, including Sunday brunch.

Service users assemble the “Duffily Bag” to be distributed to the homeless in Dublin.

Where are they now?

In the early years, most of our students finished their education at Group Certificate, as the years progressed most went onto the Inter (Junior Certificate) and to the Leaving Certificate. In more recent years the vast majority of our students progresses to further education.

The following pages attempt to give a brief picture as to where participating students have chosen as their career. Whether a link exists between their involvement in Young Scientist and their choice of career is a potential project in itself. It is reasonable to say that the skills acquired as part of their projects will forever be with the students.

Each year as the latest Young Scientist gets underway, our ex students follow the progress of the current students via twitter, Facebook and by visiting the R.D.S. We are grateful to those students for their continued interest and hope that their experiences in Desmond College will inspire them to assist others in their pursuit of knowledge.

S.T.E.M. Achievements of former students

Gráinne Buicke, graduated in 2015 from Dublin Institute of Technology with a First Class Honours in BSc Clinical Measurement Science, Gráinne recieved the college's gold medal for Student Academic Excellence Award 2015. YS 2008

Kevin Brosnan received a BSc in Mathematical Sciences in UL. He won the University's Gold Medal for best overall student in 2014 out of 2,634 graduates. Kevin was also awarded the Silver Medal Co-Operative Education Award. and to top it all off he won a scholarship to study towards a PhD at UL. YS 2009

Ms. Julia Madden Biomedical & Advanced materials, receiving the UL Women in Engineering Bursary Award 2007, for having attained the highest entry points to her course from Professor Kieran Hodnett, faculty of Science and Engineering

William McSweeney Phd Chemistry 2014

Dr. Niamh Fahy Post-doctoral researcher, " Musculoskeletal Regeneration" receiving her Phd from Dr James J. Browne, President of NUI Galway

Anglim, James 1973, 1974, 1975, 1976 Limerick Building College Aughinish Alumina

Baer, Aine 2010 Social Studies in Institute of Technology Tralee

Barrett, Kevin 1977

Barrow, Fiona 2013 TY Student

Barrow, Lisa 2012, 2013 Biomedical Engineering in NUIG

Barry, Connor 2012, 2013 6th Year Student Desmond College

Bridgeman, Sophie 2013 TY Student Desmond College

Brislane, Kate 2009, 2012 Biomedical Engineering C.I.T.

Broderick, Patrick 1980, 1981, 1982

Brosnan, Kevin 2009 Mathematical Sciences in University of Limerick

Brosnan, Steven 2013 6th Year Student Desmond College

Browne Eamonn, 2013 5rd Year Student Desmond College

Browne, Lorna 2012 Nursing Studies UL

Bucke, Denis 1967, 1968 Self Employed Geometric Stairs Manufacturer

Buicke, Gemma 2008 Science Education in NUI Maynooth

Buicke, Grainne 2008 Clinical Measurement Science D.I.T. Kevin Street

Byrnes, John 2012 Pallaskenry Agricultural College

Carmody, Seamus 1989, 1990

Clarson, Laurence 1975

Colbert, William 1983, 1984

Collum, Claire 2013 ITT Nursing

Conaghan, Claire 2005 Marketing Degree with Languages L.I.T.

Condon, Orlaith 2012, 2013 Sports & Recreation

Conor, Leahy 2013 5th Year Student Desmond College

Considine, Dermot 2007 Bachelor of Commerce NUIG - Lieutenant in the Irish Defence Forces

Copse, Edel 2011 Letterkenny Institute of Technology

Copse, Louise 2012 Limerick Institute of Technology

Craker, Colin 2013 Computer Science

Cregan, Michael 1967 (R.I.P.)

Cremin, Cian 2013 5th Year Student Desmond College

Cunningham, Michael 1978

Curtin, Alan 2013 6th Year Student Desmond College

Curtin, Benjamin 1977

Curtin, Diarmuid 2013 5th Year Student Desmond College

Daly, Michael 1978, 1979, 1980 Bachelor Technology Education, Thomond College

Danagher, Caoimhe 2013 TY Student Desmond College

Danaher, Mark 2012 6th Year Student Desmond College

Delee, John 2011, 2012 5th Year Student Desmond College

Derwin, Nikita 2012 6th Year Student Desmond College

Dowling, Joanne 2010 Science Ed in UL - Biological and Chemical/physical sciences with concurrent teacher education

Dowling, Liam 2013 5th Year Student Desmond College

Duffy, Emily 2013 5th Year Student Desmond College

Duffy, Sean 2012 Business UL

Enright, Sarah 2011 Mallow College of Further Education

Fanning, Jack 2012 6th Year Student Desmond College

Flavin, Tom 2011, 2012 Apprenticeship

Flynn, Sean 1966

Gayer, Shauna 2012 6th Year Student Desmond College

Geaney, Simon 2013 Performing Arts Trinity College

Geary, David 1966

Geary, Tara 2013 5th Year Student Desmond College

Gleeson, Warren 2012 5th Year Student Desmond College

Harnett, Brian 2013 6th Year Student

Harnett, Kieran 2010 Commerce University College Dublin

Harnett, Nikita 2013 6th Year Student Desmond College

Hayes, Emma 2007 Limerick Senior College & Limerick Institute of Technology

Heffernan, Michael 1983

Hennessy, Pat 1976

Herbert, Emma 2013 5th Year Student Desmond College

Herbert, Kathy 2006 Bellissimo Academy Limerick

Herlihy, Laura 2010 6th Year Student Desmond College

Hough, Shauna 2013 Pre Nursing

Hunt, James 2008 FAS - Mechanic

Hurley, Katy 2009 Sports Rehabilitation & Athletic Therapy - Carlow I.T.

Hurley, Seamus 2013 5th Year Student Desmond College

Kelly, Darren 2013 6th Year Student Desmond College

Keogh, Gerard 1978

Lee, Shane 2012 6th Year Student Desmond College

Liston, John 1979 Agricultural College Pallaskenry - Farming

Liston, Michelle 2008 BA in Mathematics and Education NUI Galway

Liston, Sean 2005 FAS – Electrician

Long, Cormac 2013 6th Year Student Desmond College

Lynch, Michael Joseph 1968

Mackessy, Ian 2009 Bachelor of Science in Product Design and Technology – University of Limerick

Madden, Martin 2012, 2013 6th Year Student Desmond College

Magner, Alicia 2007, 2009 BSc Midwifery - UCC

Magner, Kate 2006, 2007 BA - Language and Cultural Studies - UCC

MA Film Studies - UCC

Magner, Rose 2010, 2012 National University of Ireland - Galway

Massey, Keith 1989, 1990 Limerick School of Art & Design & University of Limerick

McCarthy, Tom 1977, 1978, 1979

McCoy, Graham 2013 6th Year Student Desmond College

McElligott , Sean 2013 5th Year Student Desmond College

McMahon, Barbara 2007 BA Degree - UCC

McMahon, Darragh 2011 Mathematics in Trinity College

McMahon, Eoghan 2012 6h Year Student Desmond College

Morairty, Patrick 2013 6th Year Student Desmond College

Moran, Gerard 2008 Civil Engineering at Institute of Technology, Tralee

Moroney, Raymond 1978

Mulcahy, Aine 2005 BA Degree University of Limerick

Mulcahy, Michael 1983, 1984

Mulcahy, William 1981

Mullane, Edward 1974 Self Employed

Mullins, Joseph 1969

Murphy, Debbie 2013 Pre- Nursing

Murphy, Emer 2009 BSc (Gen. Nursing) Institute of Technology, Tralee

Nix, Sinead 2012 LIT - BA in Art & Design

Nolan, Jeremiah 1972

Nolan, Joan 1967

Nolan, Ciaran 2012 Limerick College of Further Education

Normoyle, Claire 2013 5th Year Student

O' Connor, Michael P. 1977

O' Brien, Liam 1983

O' Connor, A.J. 2012 6th Year Student Desmond College

O' Connor, Danielle 2013 Leaving Certificate Student

O' Connor, Declan 2013 5th Year Student Desmond College

O' Connor, Jack 2013 5th Year Student

O' Connor, James 2012 6th Year Student Desmond College

O' Connor, Michael P. 1977

O' Dwyer, Sheila 1981(R.I.P)

O' Flynn, Michael 2012 6th Year Student Desmond College

O' Mahony, Laura 2012 BBs University of Limerick

O' Flynn, Eileen 2010, 2012 Mary Immaculate College BEd

Quaid, John 1978, 1979 Self-Employed Master Hurley Maker

Quaid, Michael 1989, 1990

Quaid, Tomas 1972, 1973 (R.I.P) FAS Limerick – Electrician

Reidy, Sarah 2006 FAS Limerick – Beauty Therapy

Relihan, Mairead 2009 St. Angela's College Sligo - Home Economics Teaching

Roche, Denis 1977

Scanlon, Cieran 2012 Drug & Medical Analysis, L.I.T.

Scannell, Christopher 2011, 2012, 2013 5th Year Student Desmond College

Scully, Gerard 1981, 1982

Sexton, Billy 1977

Shanahan, Peter 2013 PLC

Shine, Mary 1968

Singh, Courtney 2013 PLC

Tobin, Shauna 2013 Science teaching UL

Upton, Catherine 2007 Drama and Dance Teacher

Upton, David 2011 Engineering LIT

Upton, Liam 2012 6th Year Student Desmond College

Upton, Michael 2010, 2012 Engineering C.I.T.

Upton, Shauna 2009 Commerce B Comm UCC

Walshe, Eamonn 1978

Walshe, Michael 1980, 1981, 1982 (R.I.P.)

White, Christian 2013 6th Year Student Desmond College

Wrenne, William J. 1974, 1975 Aughinish Alumina – Water Treatment Engineer

Chapter 35

Buíochas

A special thanks to all those that have assisted in the compilation and printing of this publication.

BT Archive Website
Irish Times Archives
Limerick City Library
Limerick Leader Archive
Mr. Con Murphy
Mr. Jim Kelleher
Mr. Keith O' Rahilly
Mr. Michael Daly
Mr. Michael Healy
Mr. Pat O' Connor
Mr. Richard Barry
Mrs. Eilish McNamara
Ms. Claire Sheehan
Ms. Kerri Collins
Ms. Margaret O' Mahony
Ms. Marie Corkery
Ms. Vourneen Gavin Barry
Our various sponsors
Parents Association of Desmond College
RTE Archives