

Listed below is a sample of abstracts which detail the various kinds of research participating teachers have conducted as part of the TL21 programme:

Aoife Deery

Theme: Promoting an inclusive learning environment in Second Year Home Economics
This action research project set out to investigate how cooperative learning can promote an inclusive learning environment in a mixed ability Home Economics classroom. It was established that certain students had become withdrawn from the learning process. The purpose of the research was to improve the quality of learning within the class so that every student could become included. Furthermore the research extended beyond the Home Economics classroom to the wider school community as it also set out to help other teachers take control of their teaching and improve the quality of learning in their classrooms. In order to begin the process of promoting an inclusive learning environment it was essential to increase participation. Before the process of increasing participation could begin however it was firstly necessary to establish the barriers which had prevented so many students from participating. It became apparent that low levels of self-esteem were preventing students from participating in the learning process. As a result of this the project also set out to increase student self-esteem. The research began with a reconnaissance stage. During this stage data were gathered and analysed in order to formulate an action plan. The action plan would proceed over the next eight months and take place within three main cycles. During each cycle new innovative initiatives were introduced to the class. These were implemented and monitored over a number of weeks. At the end of each cycle the initiative was evaluated and the action plan was amended if necessary for the following cycle. In the first cycle the process of increasing self-esteem began. As self-esteem increased so too did participation and interestingly it was discovered that an increase in participation led to further increases in self-esteem. Increases in self-esteem and participation were brought about through the introduction of cooperative learning and the project made significant improvements in promoting an inclusive learning environment

Anne Marie Doran

Theme: Promoting the educational benefits of Home Economics in Senior Cycle
There has been a decline in the number of students' studying Home Economics at Senior Cycle in Ireland since 2001 (State Examinations Commission, 2007). My research describes the steps I took to try and improve the perceptions and status of Home Economics in the school, and how I tried to increase the uptake of the subject at Senior Cycle level through the implementation of experimental teaching initiatives. The four teaching initiatives implemented were based on the current Leaving Certificate syllabus. The research population in question were Transition Year students' consisting of sixteen students' in total, seven males and nine females. The research was conducted through the use of Action Research, where I was trying to improve my own practice. The basic action principal underpinning Action Research involves a problem, imagining a possible solution, trying it out, evaluating it and then changing your practice in the light of the evaluation (McNiff 2010). Data was collected using a range of data-gathering techniques including logs and diaries, observation methods, interviews, case studies and video recordings, conversations with critical friends and informants and questionnaires. A questionnaire was used to establish baseline data in relation to the students' attitudes and perception of the subject in the reconnaissance phase. From this data, four experimental teaching initiatives were introduced. These initiatives were designed to show the relevance and importance of Home Economics as a subject and in the students' lives and show the value of it. I believe that I can show that, following this intervention, I have succeeded in improving students' attitude to the subject and the wider school environment. I have also facilitated learning in a more independent way.
My findings support the claims made that Home Economics gives particular attention to helping young people establish values, attitudes, knowledge and skills which empowers them to make well informed decisions about their lifestyles and to act on them. My findings also support the notion that the only true form of education is the one which teachers students' to think for themselves and at the same time prepares them for both present and future life. Home Economics as a subject lends itself exceptionally well to this.

Joan**Finlay**

Theme: Improving student engagement in 1st Year Home Economics
This action research project was conducted in an all-girls single sex school. The purpose of the study was to establish if student engagement could be enhanced with educationally effective practice. The study was specifically concerned with the engagement of a class of 1st year Home Economics students.

Data for this study were collected through questionnaires, reflective journaling, dialogue with critical friends and other partners in education in addition to direct observation of students. I extensively researched the area of student engagement, and practices which may enhance it, I implementing pedagogical changes over four cycles', monitoring and reviewing each new practice.

The first cycle involved implementation of two Assessment for Learning strategies; sharing learning intentions and success criteria. It was found that by making the learner explicitly aware of their learning, it helped motivate engagement. A key finding from the first cycle and reconnaissance was there was poor cooperative skills and social support in the classroom. Working together is an important feature of learning and by introducing cooperative learning pedagogy I hoped to build on participation and improve learning. Cycles' two and three introduced cooperative learning structures which began to build on a supportive, inclusive classroom. Not everyone bought into the cooperative structure, which led to the final cycle introducing extrinsic rewards, using Slavin's STAD approach to cooperative learning. A very important feature emerged and was dealt with in the final cycle also, which was the importance of students linking new knowledge with prior knowledge. This then led to the final pedagogical change of activating student prior knowledge in a concrete way. The study supports the importance of sharing the learning with the students. It indicates an increase in engagement when students are actively participating in their learning and contends that cooperative learning does change the quality of students learning in the classroom.

Niamh**Foley**

Theme: Promoting independent learning with a Third Year music class
This thesis focused on cultivating independent learning skills in a Third Year music class. Throughout this write-up I present my progress and reflections on the introduction of innovative teaching and learning strategies. My work used the paradigm of action research and I completed investigation in four interconnecting phases. I focused on the educational initiatives of group work, peer assessment, learning outcomes and peer teaching. I explored many theories raised in educational research literature. I learned that by consulting students on their learning, they were more involved, engaged and proactive in their learning. By encouraging students to work together in groups, they were more responsible for their learning and able to critical reflect about their learning. Students must be taught the skills independent learning demands so they can reap the benefits. I demonstrated that students enjoyed and gained from having a more active and independent role in their learning. I learned that their needs to be collaboration between educational practitioners and constant reflective practice. Through my research I showed that short term gains in independent learning can be made quite easily. However, in order for there to be more long term shifts in educational practices, there needs to be collaboration between educational practitioners so that students can experience independent learning strategies in a variety of classrooms.

Sinead**Henegan**

Theme: Enhancing learning through the use of iPads in 1st Year Science and Maths
This Action Research project investigated the impact of the iPad on teaching and learning in a Maths and Science First year class in a DEIS 1 (disadvantaged) school. The iPad was used as an incentive by an Academic Scholarship programme established by the school to further encourage and enhance student learning. A small class was created in order to trial the replacement of textbooks and to introduce students to a more interactive learning environment.

This project explored if the iPad improved student engagement, increased their independence, and broadened their learning horizons whilst increasing their academic results. In addition, this brought about many challenges for the students, teachers and management involved in order to ascertain if the high financial cost of this project was worthwhile. These challenges included poor Wi-Fi availability, lack of iPad expertise from both students and teachers and making decisions on the most beneficial applications to use in order to gain the best learning outcomes. The introduction of the iPads was monitored in detail through regular assessment and by listening to all involved in the process to see what knowledge could be gained. Overall, there were many challenges overcome and lessons learned on how to deploy the iPads in the classroom and make it an engaged and productive learning environment. An in-depth analysis of how the iPad impacted across all levels of the wider school community is revealed in the final chapter. Overall, many students excelled and their learning was enhanced by using the iPad as an educational tool.

Colette

Henry

Theme: Promoting new learning practices and attitudes in Mathematics

My ultimate goal as a teacher, up until three years ago, was enabling my students' learning so that they would get good result on the Leaving Certificate exams. I wanted my students to enjoy maths, but the bottom line was always the exam results. Every angle was covered for my students. I never cut corners or left sections out. My students were given notes and examples on everything. Until that defining moment when realisation hit, that "it is not enough to do the thinking for my students". When an "A student" hadn't the confidence in his own ability to think outside the box, I realised my thinking and so my teaching had to change. I realised that we as teachers have a responsibility to enable students become confident, capable, independent learners. It is not enough for us as educators to produce spoon-fed rote learners. We need to help our students become self-reliant young people who will be creative in their problem solving, not just in school, but more importantly in the wider world outside. We have to teach them to think, probe and question. This has been the focus of the following action research. As a result of this action research I can confidently say that I have created a more positive learning environment in my classroom, where students are enthusiastic and engaged. This has been accomplished by instilling good learning habits of constant reflective practices and focused self-directed goal setting. Students have come to see me as a conduit on their journey to knowledge. Yes, I can help facilitate their learning, but ultimately the responsibility lies with them, this realisation gives a real sense of ownership to their learning. Students' involvement in their own learning, through self-assessment, learning objectives, traffic lights, mastery tests and exemplars of good practice encouraged a sense of ownership of their learning. Informing and involving parents at an early stage completed the cycle.

Mary

Joyce

Theme: Promoting active learning in Fifth Year Geography

The research for this dissertation sought to promote active learning among fifth year Geography pupils using cooperative learning approaches. Three main aims were established from the outset: 1) to enhance pupil learning 2) to make pupils aware of their peers in the learning process and 3) to develop the professional practice of teachers and to create stronger collegial relationships. Pupils were identified as passive learners in the reconnaissance stage of research, whereby teachers were assuming full control of the learning environment with little input from pupils. Four main phases of research were identified as a result. In stage one pupils engaged in pair-work strategies aimed at promoting active learning through cooperative processes. In stage two, inter-group competition through intra-group cooperation was used to stimulate pupils and to increase their involvement in the learning process further. After four weeks this strategy was replaced by assessment for learning principles, namely self and peer assessment and criteria for success. Stage three saw the continued development of assessment for learning principles within a cooperative learning framework. The final stage of the research focused on the creation of cooperative and responsible learners. Assessment for learning was again the focus through a variety of cooperative practices. Pupil's attitude to learning was significantly altered as a result of

the initiatives introduced during the phases of research. Their learning environment was changed from one of isolation to cooperation as a result of the practices and strategies used. Pupil's willingness to work with others and to assume more responsibility for their own educational experience was a significant feature. For the most part there were no major setbacks or disappointments and a steady learning curve progressed. Pupils acquired the skills necessary to become active and responsible learners as they were brought deeper into the assessment system. The quality of the work produced during the latter stages of research especially, displayed the advances being made in their own learning. A community of practice and collaboration was also established between the researcher and six colleagues. School Leadership witnessed much of this interaction and are since eager to establish such communities of practice where teaching and learning ideas can be exchanged and strategic planning carried out.

Deirdre

Murphy

Theme: An Instructional Leadership approach to student engagement in Mathematics
The purpose of this research project was to develop a positive learning environment among a group of students who were averse to learning. In order to provide the students with a positive learning experience, classroom management issues were addressed and active learning methodologies were integrated into the classroom. The classroom management issues were addressed by promoting positive relationships of learning. By showing a genuine interest in the students' welfare and being consistent in relation to discipline, a mutually respectful relationship developed.

Over the duration of the research, student engagement improved. The variety of teaching methodologies and resources utilised, engaged student interest and helped them become more receptive to learning. Partner work and co-operative learning exercises increased student participation in class. The students gradually developed their social and co-operative skills, through participating in a range of paired work activities, such as Think-Pair-Share and Place Mat. The integration of different teaching strategies and tactics into the learning environment also had a positive impact on classroom management issues. The changes made in my practices were supported by the school's professional learning community. A Teaching and Learning Club was established to develop our instructional repertoires and to provide a forum for sharing advice and support to one another. An instructional repertoire refers to the skills, tactics, strategies, concepts and organisers that are embedded into the delivery of a lesson. The TLC provided a forum for self reflection and evaluation in a collegial environment. This capacity to analyse my practice improved my teaching ability. Sharing my analysis with colleagues opened up my teaching to the influence of others.

Patrick

Murphy

Theme: Improving creative writing skills in the secondary school
This study sought to investigate whether it was possible to improve the teaching and learning of creative writing, and therefore the writing skills of the 14-17 year olds in the Irish second-level school system. It contends that this area of literacy needs to be improved and worked on in Ireland. It looks at why enabling students to write and therefore think more creatively is an area of vital importance in our education system that has not traditionally got the attention it deserves. It also gives an overview of the research that has been done internationally on how to measure improvements in (creative) writing and on how to improve the (creative) writing of students. It shows how, based on this research, three English teachers in an Irish second-level school, set about improving the writing standards of a large sample group of students (98) over a period of two years. It gives an overview of how a number of interventions were carried out by one teacher with one class group over two years to help improve their writing standard. It shows how this work was then broadened to include four other class groups taught by this teacher and two other teachers.

Through a variety of active-learning classroom interventions it was found that the writing levels of the students could be improved and that these students could retain the skills learned and sustain the improvement. The final phase of this thesis argues strongly that the teaching of

creative writing and writing is not taught as well as it could and should be because there is a lack of Continuing Professional Development in this area for teachers in Ireland. It argues that if the Department of Education and Skills fulfills its targets to improve in this area then the deficit can be made up.

Aidan

Roche

Theme: Extending blended learning in senior cycle mathematics
This Action Research thesis offers an account of how blended learning was used with the 48 students in two senior cycle second level maths classes over the period of a school year. The thesis describes a new Extended Classroom Model of Blended Learning and presents a number of implications for teaching and learning. Traditional classroom teaching and learning was complemented with asynchronous digital resources that were created and shared by the teacher on a daily basis to progress students' mathematical understanding. The creation and existence of these resources not only changed the students' approach to learning outside of class time but it brought new challenges and pedagogical opportunities into the classroom. With the Extended Classroom accepted definitions of blended learning have been challenged by this innovation, which opened the door to new possibilities for teacher and students. This study has shown that innovations used in the Extended Classroom have positively impacted on the quality and speed of the course delivery, fostered positive student attitudes towards maths and independent learning which resulted in increased attainment and participation rates in higher-level maths. It suggests how ICT initiatives can become embedded in the teaching of maths with potential for wider application in second-level maths education in Ireland.

Mary

Ross

Sloyan

Theme: Developing oral competency with senior cycle students in English
This study examines the effects of encouraging students to practise orally what they learn in part of the Senior Cycle English classroom. Traditionally, "The Language of Information" and "The Language of Persuasion" sections of the Leaving Certificate course deal exclusively with teaching students the appropriate written skills such as, the perfect interview, review, persuasive speech etcetera. Considerations such as facial expressions; body language; eye-contact and intonation are therefore largely ignored. I believe that these skills, together with confidence building and proficiency also need to be taught and learned. Therefore, I decided to look at the benefits of incorporating the practising of these vital skills in the classroom. My practice is grounded in my ontological stance of wanting to make a difference. An Action Research methodology was used with the intention of improving my own practice along with the practice of the students, leading ultimately to more orally competent young adults. The study involved a practitioner based small-scale project centred on data collected through interviews, observation, video clips and questionnaires. The study included fifteen, Transition Year mixed ability students. Data evidence demonstrated that students, to begin with, were not comfortable when speaking aloud. They were lacking in confidence and did not possess the skills involved in the different language genres. It was noted that students needed support in this area and that oral competency did improve during the intervention period. Evidence suggests that students did benefit from the teaching of the necessary skills and their oral practice. Students professed to be more proficient and confident at the end of the intervention and recognised that the skills were of the utmost importance for the world outside school particularly in today's climate of economic decline. The increase in student participation and confidence indicated that competency can be fostered with the implementation of frequent practical examples and practice. I believe that an oral component should be included in the Leaving Certificate English exam to encourage more oral work in the classroom. Oral competency is a skill that needs to be both taught and learned and I believe the teaching methodologies included in this study should be promoted in the English classroom to develop confident, articulate and communicative young adults.