



# **Science Buddies**

# **Engaging Students and Parents in Science Education at Primary and Post Primary level**

Dr Sharon Lawton

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# Introduction – Science for Life Programme



- CIT Access Service initiative in collaboration with CIT School of Science
- The role of Science for Life is to promote Science in schools
- Encouraging, supporting and motivating students to study Science
- School based initiatives
- CIT based initiatives
- The programme is involved in many collaborative projects both within CIT and externally.

# **Delivering Equality of Opportunity in Schools**



- Delivering Equality of Opportunity in Schools (DEIS)
- The Action Plan for Educational Inclusion May 2005
- Department of Education and Skills policy instrument to address educational disadvantage.
- The action plan focuses on addressing and prioritising the educational needs of children and young people from disadvantaged communities, from pre-school through second-level education (3 to 18 years).
- DEIS provides for a standardised system for identifying levels of disadvantage and an integrated School Support Programme (SSP).
- 849 schools are included in the programme. 657 primary schools (336 urban/town schools and 321 rural primary schools) and 192 second level schools.
- http://www.education.ie/en/Schools-Colleges/Services/DEIS-Delivering-Equality-of-Opportunity-in-Schools-/#sthash.BSxB5RpG.dpuf

#### **Traditional Irish education route**



Pre School

- Primary School
- Post Primary School
- Third Level



#### **Introduction – Science Buddies**



- Science Buddies collaborative programme
- St Patricks College, post primary school
- Home School Liaison Coordinator
- Three main educational tiers
- Parental engagement
- Student engagement

# Science Buddies - Programme design



- First or second years
- Trained in delivery
- Transition year students supervisory role
- Science teachers follow up with revision
- Parents trained (HSLC)
- Programme delivery to primary school pupils

# Science Buddies – programme design



- Science for Life
- St Patricks College
- Liaison with Science teachers
- Liaison with HSLC
- Liaison with primary schools
- Liaison with HSLC (primary schools)
- Liaison with parents





Three post primary school teachers

 Three students - all three had participated in both aspects of programme delivery

 Two parents – parents of students in both the primary and post primary school

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- Teachers Questions
- Q1 What did you perceive were the aims of the Science Buddies Programme?
- Q2 Do you think the programme was beneficial for (a) the school, (b) the pupils, (c) the parents and (d) the teachers?
- Q3 Which aspects of the programme were most successful?
- Q4 Which areas of the programme need improvement?
- Q5 As a teacher what were the benefits of the parents and students working together - Do you think the programme will have a lasting impact; as opposed to a fun day i.e. has it inspired students to continue their science education?



- Students Questions
- Q1 Did you enjoy the Science Buddies programme?
- Q2 What was the most enjoyable part as (a) a post primary student and (b) a primary student?
- Q3 What was the least enjoyable part?
- Q4 If this programme were delivered in another school, what changes would you suggest I make?
- Q5 Did you think it was easy to talk and explain science in front of your class?



- Parents Questions
- Q1 What were the aims of the programme?
- Q2 What was the benefit of it being an intergenerational programme?
- Q3 What was the most enjoyable part of the programme?
- Q4 What was the least enjoyable part of the programme?
- Q5 If this programme were delivered in another school what changes would you suggest I make?

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#### **Results – Teachers**



- Independent and cooperative learning
- The programme enabled smoother transition between primary and post primary school
- School and community relationships: teachers & students, inter student relationships, parents & teachers - beneficial to the school and academic performance
- Importance of soft skills
- Brings science into the home

#### **Results - Students**



- Positive educational experience
- Learning
- Career inspiration
- Soft skills



#### **Results - Parents**



- Engagement (HSLC)
- Science into the home
- Family engagement



#### **Conclusion**



- Overwhelmingly positive impact on teaching and learning within St Patrick's college
- Science was fun

Science as a third level possibility

Science as a career possibility



Breaking down of educational barriers

#### **Future Work**



Other schools

Junior cycle students – delivery



Senior cycle students – training and experimental design

# **Thank you & Questions**



Dr Sharon Lawton,
Science for Life Officer,
Access Service,
Cork Institute of Technology.
Cork, Ireland.

E: sharon.lawton@cit.ie

T: 00353(0)214335108

M: 00353(0)879564937

