The Junior Certificate
School Programme

Mixed Ability Teaching and Learning

Laois Education Centre

April 2014
Agenda
Mixed Ability Day 2

JCSP Overview
Updates
Resources

Research
and
Rationale

Assessment for
Learning

Coffee and
Book Display

Sharing Practice

Lunch

Planning for
Mixed Ability

Sharing Practice

Conclusion and
Evaluations
What is the JCSP?

A Social Inclusion Programme

The JCSP is an intervention within the Junior Cycle aimed at those students who are identified as being at risk of leaving school early perhaps without completing The Junior Certificate.

All JCSP Students sit the Junior Cert examinations
JCSP - AIMS of the Programme

To retain students

To bridge the gap

To build strong and positive learning foundations

To make school relevant and accessible to young people who find it difficult to cope with the school system.
The JCSP Programme promotes:

- Whole school approach
- Active teaching methodologies
- Student centred learning
- Engaging students in relevant real life experiences

The JCSP Profiling Framework is a student focused framework to support differentiation in the mixed Ability Classroom
Updates

Thanks to all those in the *Mixed Ability Teaching and Learning Group*

Today’s presenters from that group:

- **Barbara Davis, JCSP Librarian**
- **Louise Kenny & Bernadette Flanagan – Maths**
- **Bébhinn O’Leary – Modern Languages**
- **Mick O’Riordan (on behalf of Erica Keane, Gaeilge)**
Updates

• Thanks to teachers involved in Statement review – History, Home Economics, Science, Maths

• New Maths statements aligned with Project Maths (Common Introductory Course)

• Great response to numeracy competition
New Resources: Differentiated Teaching and Learning

- Glossary
- Reflection poster
- Planning templates
- Draft pair-work rubric
Junior Certificate School Programme

Demonstration Library Project
MIXED ABILITY RESEARCH

Barbara Davis
JCSP Librarian
Presentation Secondary School
Warrenmount
DISCLAIMER

I am not a Mixed Ability expert, by any means, nor am I a teacher.
I do not have an agenda or strongly held personal opinion about Mixed Ability.
I am simply a librarian who would like to help by sharing some interesting research.
DIFFERENT GUISES

- Mixed Ability
- Tracking
- Setting
- Streaming
- Grouping
- Differentiation
- Ability Segregation
- Homogenous/Heterogenous
WORKING DEFINITION

‘The practice of evaluating and sorting students into categories for the purpose of providing differential instruction within or across classrooms’

(Worthy, 2010)
INTERNATIONAL RESEARCH
1960s

Willig’s early research suggested that inequalities may result from ability grouping in primary schools.

Lacey and later Hargreaves developed the theory of differentiation-polarization, suggesting that an academically oriented value system led to a polarization of the student body into pro- and anti-school sub-cultures. This impacted on students’ behaviour and values.

Relevant Research: (Willig, 1963; Lacey, 1966; Hargreaves, 1967)
Lacey’s research suggested that behaviour issues were more disruptive in lower sets and that streaming engendered anti-school cultures with low-stream students resisting rules and attempting to subvert them.

Barker Lunn found greater participation in school activities and positive attitudes to school among children in non-streamed schools, particularly in those of average or below average ability.

(Adapted from Hallam & Ireson, 2004)

1980s

Evidence suggested that in mixed ability classes, the behaviour of students of lower ability tended to improve.

(Slavin & Karweit, 1985)

Oakes found that behaviour among peers in a mixed ability setting was more supportive compared with the behaviour in lower ability classes, which was often characterised by hostility and anger.

Oakes also found that ability grouping often ended up being a proxy for sorting by socioeconomic class.

(Oakes, 1982, 1985)
1980s

Some researchers suggested that mixed ability classrooms would allow students to help each other, with more capable students providing support and encouragement for the less able.

(Reid et al., 1982)

Others contended that students enjoyed lessons more when they were grouped into others of a similar ability.

(Kulik & Kulik, 1982)
1990s

In the 1990s Boaler studied pupils studying mathematics in two contrasting grouping systems, mixed ability and sets.

Boaler recorded dissatisfaction amongst students in the higher sets. Students expressed difficulties in coping with the fast pace of the lessons and the pressures of consistently working at a high level, suggesting there was little time for consolidation of learning.

(Adapted from Hallam & Ireson, 2004)
Relevant Research: Boaler, 1997b
1990s

In Sukhnandan and Lee’s 1998 review of evidence they summarised:

‘research suggests that streaming and setting, compared with mixed-ability teaching, have a detrimental effect on the attitudes and self-esteem of average and low ability students. Research suggests that poor attitudes and low self-esteem can lead to a decrease in achievement which can create a vicious circle from which it is difficult for low ability students to escape.’

(Sukhnandan & Lee, 1998)
TRANSITIONS

‘The late 1970s and early 1980s witnessed a growing support for mixed-ability teaching, consistent with the more general public concern for educational equality that was pervasive at the time. But in the 1990s, concerns with educational equity have been eclipsed by discourses of ‘academic success’, particularly for the most ‘able’, which has meant that large numbers of schools have returned to the practices of ability grouping.’

(Boaler et al., 2000)
2000s

In 2006, Van Houtte’s research found that the polarization effects derived from streaming had a lasting impact on the student population.

(Van Houtte, 2006)

This is concerning given the fact that there is evidence that inaccurate placement in groups influences pupils’ subsequent attainment. Those with similar attainment placed in different groups made differential progress. Allocation to sets or streams was found to be a somewhat ‘arbitrary affair’ not based on ‘prior academic achievement or ability’.

(Hallam & Ireson, 2007)
In 2007 Susan Hallam and Judith Ireson explored secondary school pupils’ satisfaction with their ability grouping placements. They found that a substantial proportion of pupils expressed a wish to change set. Though schools promote the idea of movement between sets, in practice this is not always the case.

Several limiting factors were presented; the gap between work that has been undertaken in different sets, limitations on class numbers and timetabling presented serious challenges.

(Hallam & Ireson, 2007)
In a retrospective study of ‘tracked’ grouping in a mathematics department in a comprehensive school in London, researchers recorded how the banding in mathematics was fuelled by “unhappiness” from parents who considered setting to be the most ‘natural’ and ‘effective’ context to teach this subject.

(Venkatakrishnan & Wiliam, 2003)

The dominant ideology of the school was also seen as a key factor in the success of different grouping styles.
The effect of ability grouping among gifted students was also explored. The big-fish-little pond effect suggests that many gifted students may suffer decreases in academic self-concept when they are grouped with similarly able students. However, their levels of boredom may also decrease due to the provision of greater challenge.

(Preckel et al. 2010)
Rublin and Noguera (2004) commented on the importance of not implementing plans from the top down, without teacher input, support, and professional development, suggesting teachers needed to be involved in critical reflection about their belief and practice.

(Worthy, 2009)
IRISH CONTEXT
Moving Up

Emer Smyth
Selina McCoy
Merike Darmody

ESRI
Moving Up - ESRI

- In Ireland the NCCA commissioned the Education Policy Research Centre of the Economic, Social and Research Institute (ESRI) to engage in a longitudinal study of students’ experience of curriculum in the first three years of their post-primary schooling, looking in depth at first, second and third year students.

- *Moving Up* presents the views of the key people involved in the process, including school principals, teachers, parents and students themselves, and examines the ways in which schools can ease the transition to post-primary education.
MOVING UP: FIRST YEARS

- Streaming is now practised in only a minority of post-primary schools and is less common than in the 1990s.

- Where streaming does occur, it tends to result in the labelling of students as ‘smart’ or ‘stupid’.

- Many students in streamed groups say that their teachers move too quickly or too slowly when covering subject material in class.
MOVING UP: FIRST YEARS

- Students in the higher stream classes take longer to settle in to post-primary school. Many experience difficulty in handling the increased pace of learning and volume of work alongside all the transition challenges.

- Students in streamed schools, especially those in the lower streams make less progress in reading and mathematics during first year.

- More schools now ensure that each first year class group is made up of students with a wide range of abilities.

- Mixed-ability grouping in first year is a better alternative to streaming as it leads to improved progress in literacy and numeracy and can give students more confidence as learners.
EXPERIENCES OF SECOND YEARS

‘What emerges in the research is that while schools may believe that streaming enables them to better meet the learning needs of particular students [...] the second year study shows that the practice may benefit the more able students, but does not benefit students in the lower streams. Instead, it contributes to lower educational aspirations, and increased disaffection from, and disengagement with school life. [...] There is little evidence of students moving between streams, and it is this ‘cementing’ of students’ position in ability groupings that appears to have the most negative consequences.’
EXPERIENCES OF SECOND YEARS

‘Students in the lower stream are more likely to be male and working class; they are offered fewer subjects, experience more didactic teaching, receive less homework and spend less time doing it. They are more like to feel that the pace of class-work is too slow, indicating perhaps that teachers have lower expectations of students in lower streams or feel they need to spend more time reinforcing coursework.’
EXPERIENCES OF SECOND YEARS

‘While schools do not want their students to fail, they can find it difficult to change established structures and practices. There can be a variety of background factors that militate against change. Adopting a mixed-ability approach to teaching is challenging, requiring significant support and professional development at school level. Schools may come under pressure from parents, the community or within the school itself to maintain the status quo, and may fear (and face) cream-off of more able students to nearby school.’
GEARING UP FOR THE EXAM: THIRD YEARS

‘Ability grouping has a significant effect on student outcomes: students in lower stream classes achieve lower grades in the Junior Certificate exam than similar students in other classes. Their underachievement reflects less access to higher level subjects, a slower pace of instruction and lower expectations among teachers and students.’
Inclusive Learning Environments
CREATING INCLUSIVE LEARNING ENVIRONMENTS IN IRISH SCHOOLS: TEACHERS’ PERSPECTIVES

- Research has consistently shown that teacher perceptions and attitudes are key to successful inclusive practice.

- Interviews revealed that mixed-ability teaching was not necessarily the norm in Irish secondary schools.

- Major concerns about the potential impact of mixed ability grouping on academic progress and examination results for more able students.

- There was also a perceived pressure from some staff and parents towards banding.
CREATING INCLUSIVE LEARNING ENVIRONMENTS IN IRISH SCHOOLS: TEACHERS’ PERSPECTIVES

‘...inclusive thinking and action at all levels; adequate funding at systemic level; proactive leadership within schools; responsive support infrastructure; ongoing professional development and time for joint planning; developing collaborative relationships between schools, parents and support agencies; and effective interventions by support agencies.’

(Shelvin et al., 2009)
Bibliography

- Boaler, J. (1997b) When even the winners are losers; evaluating the experiences of ‘top set’ students, *Journal of Curriculum Studies*, 29, 165-182.
Bibliography

Assessment for Learning
Assessment as Learning
Self-Assessment
Assessment for Learning
Success Criteria
Assessment of Learning
Evaluation
Feedback
Formative
Learning Outcomes

Teaching
Peer-Assessment
Assessment
for Learning
Learning
Information
Concept Map
Effective
Questioning
Summative
Marking
Diagnose
Exit Pass
Soup
Goals
Progress
Standards
Test
Evaluation
Feedback
Formative
<table>
<thead>
<tr>
<th>Assessment OF Learning (Summative)</th>
<th>Assessment FOR Learning (Formative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happens after learning takes place</td>
<td>An integral part of learning process</td>
</tr>
<tr>
<td>Information is gathered by teacher</td>
<td>Information is shared with learner</td>
</tr>
<tr>
<td>Information is usually transferred into marks</td>
<td>Information is available on quality of learning</td>
</tr>
<tr>
<td>Comparison with performance of others</td>
<td>Is linked to learning outcomes and success criteria</td>
</tr>
<tr>
<td>Looks back on past learning</td>
<td>Looks forward to the next stage of learning</td>
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</table>
Assessment for Learning: Key Elements

1. Learning Outcomes and Success Criteria
2. Effective Feedback
3. Effective Questioning
4. Self assessment - Students as owners of their own learning
5. Peer Assessment - Students as Instructional resources for each other

Assessment for learning strategies need to be phased into practice over time.

*AfL Assessment for Learning – A Practical Guide 2010 p38*
Learning Outcomes

Learning Outcomes are an explicit description of what a learner should know, understand and be able to do as a result of learning.

(Learning and Teaching Institute, Sheffield Hallam University)
“Lessons are guided by syllabus-linked learning outcomes that are shared with the students.”

*SSE Guidelines*

**Example:** Students will be able to:

- Plan a balanced breakfast menu for two
- Demonstrate understanding of the concept of plate tectonics
- Describe the environmental effects of a natural disaster.
### Separating the Learning Outcome from the Context of Learning

The context of learning is simply the *actions, activities and/or tasks* students will be doing to achieve the Learning Outcome.

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Context of Learning</th>
</tr>
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<tbody>
<tr>
<td>Write clear instructions</td>
<td>How to bake a cake</td>
</tr>
<tr>
<td>Present an argument for or against a controversial proposition</td>
<td>Four corner discussion on the statement, “student benefit should be reduced”</td>
</tr>
<tr>
<td>Identify alliteration</td>
<td>Lake Isle of Innisfree</td>
</tr>
<tr>
<td>Identify the parts of an organ</td>
<td>Dissection of heart</td>
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</table>
Clarified Learning Outcomes

• Clear: focus on what will be learned in the lesson, as distinct from what students will do in the lesson
• Useful: focus is on concepts, skills or knowledge that is used rather than focusing on imparting knowledge
• Can be transferrable to a similar context

If the learning outcome is free of context it can illustrate to students that there are many reasons for learning the concept.

<table>
<thead>
<tr>
<th>Learning Outcome with Context</th>
<th>What students thought they were learning</th>
<th>Learning Outcome without Context</th>
<th>What students thought they were learning now</th>
</tr>
</thead>
<tbody>
<tr>
<td>To write instructions to make a sandwich</td>
<td>“I would learn how to make a sandwich”</td>
<td>To write instructions</td>
<td>“We would be learning how to write instructions”</td>
</tr>
<tr>
<td>To know why Samuel Pepys is important in understanding the events of the Great Fire of London</td>
<td>“We would be learning about what happened and what he wrote. We would also learn how to put a fire out.”</td>
<td>To know how primary sources help us to find out about the past</td>
<td>“We would learn how other people lived in previous centuries.”</td>
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We Are Learning To
Write a letter to a friend
Coffee Time
Differentiation

Tomlinson (1999) suggests that at its most basic level, differentiating instruction means ‘shaking up’ what goes on in the classroom so that students have multiple options for taking in information, making sense of ideas and expressing what they learn.

This means that a range of learning possibilities is available for students to acquire the content, understand the information and meet the learning objectives.
How do we differentiate?
Teachers can differentiate...

- **Content**
- **Process**
- **Product**

...according to their students’

- **Readiness**
- **Interest**
- **Learning Profile**

Adapted from *The Differentiated Classroom: Responding to the Needs of All Learners* (Tomlinson, 1999)
Learning Outcomes

Know
- Facts
- Vocabulary
- Definitions
- Information

Understand
- Concepts
- Essential Truths
- Big Ideas

Do
- Skills
- Thinking
- Planning
- Synthesis
Differentiation

How?

Assessment for Learning
<table>
<thead>
<tr>
<th>All students must</th>
<th>Most students should</th>
<th>Some students could</th>
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Differentiation

What’s working well in your class?
Louise Kenny
Bernadette Flanagan

Differentiated Teaching and Learning: Maths
Mick O’Riordan
On behalf of Erica Keane

Differentiated Teaching and Learning: Gaeilge
Gaeilge Resources

- www.folensonline.ie
- www.gillmacmillan.ie
- www.edcodigital.ie
- www.irishstudysite.com
- www.jcspraoi.com
Gaeilge Resources

- www.lurgan.biz
- www.scoilnet.ie
- www.cogar.ie
- www.gaeilport.com
- www.seomraranga.com
- www.muinteoirigaeilge.ie
- www.potafoical.ie
- www.logainm.ie
Bébhinn O’Leary

Differentiated Teaching and Learning: Modern Languages
Lunch
Planning for

Differentiated Teaching and Learning
Resources on laptops

- Planning a topic - Must, Should, Could template
- Websites for Art and History
- Websites/apps for Maths
JCSP Supporting Teaching and Learning

http://www.jcspliteracy.ie
Top Tips!

- Take stock of where you are
- Celebrate achievements/successes
- List strategies that work for you
- Think about needs of students
- Consider new strategies
- Get advice from or observe a colleague
- Start small with a favourite topic/subject
Plan and prepare: space, activities, resources, feedback and assessment

Make learning intention clear

Communicate high expectations

Reflect on your practice; keep notes

Seek student feedback

Share with colleagues
Useful resources

- http://www.jcspliteracy.ie/
- http://www.pdst.ie/node/3248
- www.differentiationcentral.com
- www.worldofteaching.com
- www.elsp.ie
- www.worksheetswork.com
Thank you for your contributions!