

Getting PE Students (& Teachers) to Think!



Nicola Richards
Struan George



2011 PENZ NATIONAL CONFERENCE

St Andrew's College

Inspiration



What does our ideal Year 13 student look like?



Leads by taking action

Displays citizenship

Ability to apply knowledge



Competent mover

Able to critically analyse and evaluate

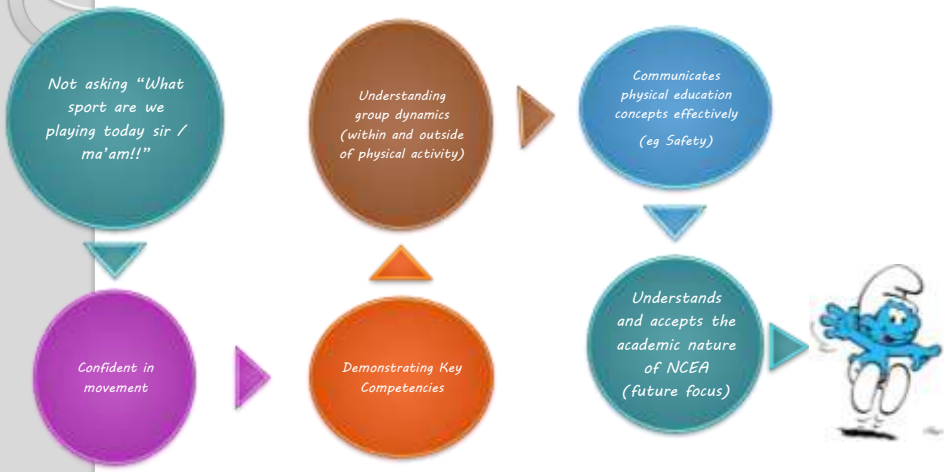
Able to make good choices about lifestyle now and in future

Formulate and advocate personal points of view

Literate - able to convey information (StAC)

Underpinned by the key competencies

What does our ideal end of Year 10 student look like?



Not asking "What sport are we playing today sir / ma'am!!"

Understanding group dynamics (within and outside of physical activity)

Communicates physical education concepts effectively (eg Safety)

Confident in movement

Demonstrating Key Competencies

Understands and accepts the academic nature of NCEA (future focus)



Our approach to thinking



- *Looking at the curriculum - What are students expected to be able to do in Junior Physical Education?*

- *Key terms*
- *Developing a 'hierarchy' of thinking*
- *Developing "Learning Standards"*

Curriculum Level:	At Level 4	Above Level 4	Towards Level 5	At Level 5	Above Level 5	Towards Level 6
Year 9	1	2	3	4		
Year 10			1	2	3	4

Learning Standards



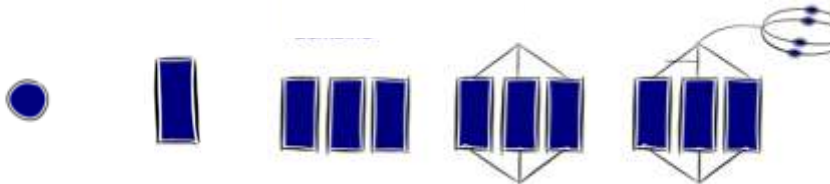
- *Putting the 'Thinking' skills into our contexts:*

Grade	Criteria
1	<i>Is inconsistent in identifying risks and causes and accessing information to make and action safe choices.</i>
2	<i>Identify risks and causes and access information to make and action strategies to minimize risks.</i>
3	<i>Investigate, understand and practice safety procedures and strategies.</i>
4	<i>Investigate and practice safety procedures and strategies to manage risks in physical activities.</i>
5	<i>Demonstrate responsible behaviours required to ensure that challenges and risks are managed safely in physical activities.</i>
6	<i>Demonstrate an understanding of responsible behaviours required to ensure that challenges and risks are managed safely in physical environments.</i>

SOLO in a nutshell



<i>Pre structural</i>	<i>Uni structural</i>	<i>Multi Structural</i>	<i>Relational</i>	<i>Extended Abstract</i>
<i>I need help I can't start the task I don't want to</i>	<i>I have one idea</i>	<i>I have a number of unrelated ideas.</i>	<i>I have a number of ideas and I can link them in a relevant way</i>	<i>I have a number ideas, I can link them in a relevant way and I can apply it in a new context.</i>



SOLO Taxonomy

Biggs and Collis 1982

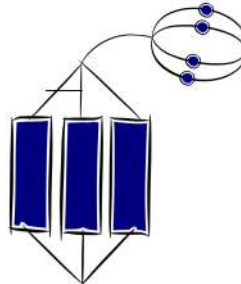
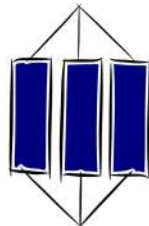
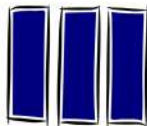


Define
Identify
Do simple
procedure

Define
Describe
List
Do algorithm
Combine

Formulate questions
Compare/contrast
Explain causes
Sequence
Classify
Analyse -part/whole
Relate
Analogy
Apply

Evaluate
Theorise
Generalise
Predict
Create
Imagine
Hypothesise
Reflect



Biggs, J.B., and Collis, K.F. (1982) Evaluating the Quality of Learning-the SOLO Taxonomy (1st ed) New York: Academic Press.

SOLO – How do we use it



- ✓ Language to tease out our learning standards and give us ideas for opportunities for students to think.
- ✓ Maps for learning, provides next steps (feedback, feed forward)

Example – learning standard



Version 1 Page 1 of 2

St Andrew's College

Physical Education and Health Learning Standard

'Safety Management'

Title: Physical and Social Safety and Risk Minimization Strategies

The Level: S10 Assessment: Internal

Developed by: Physics (2011) Review date: December 2011

The Big Idea: Students will identify, explain and evaluate risks in a range of physical and social environments and suggest and demonstrate appropriate risk minimization strategies to improve the safety of themselves and others.

Assessment Criteria

RISK MANAGEMENT

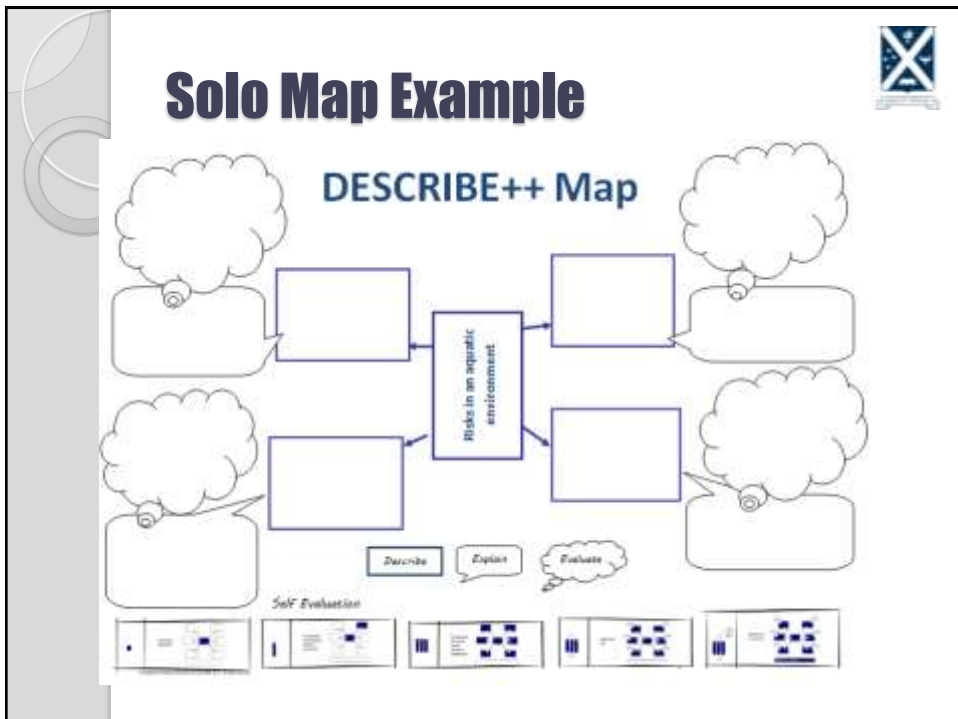
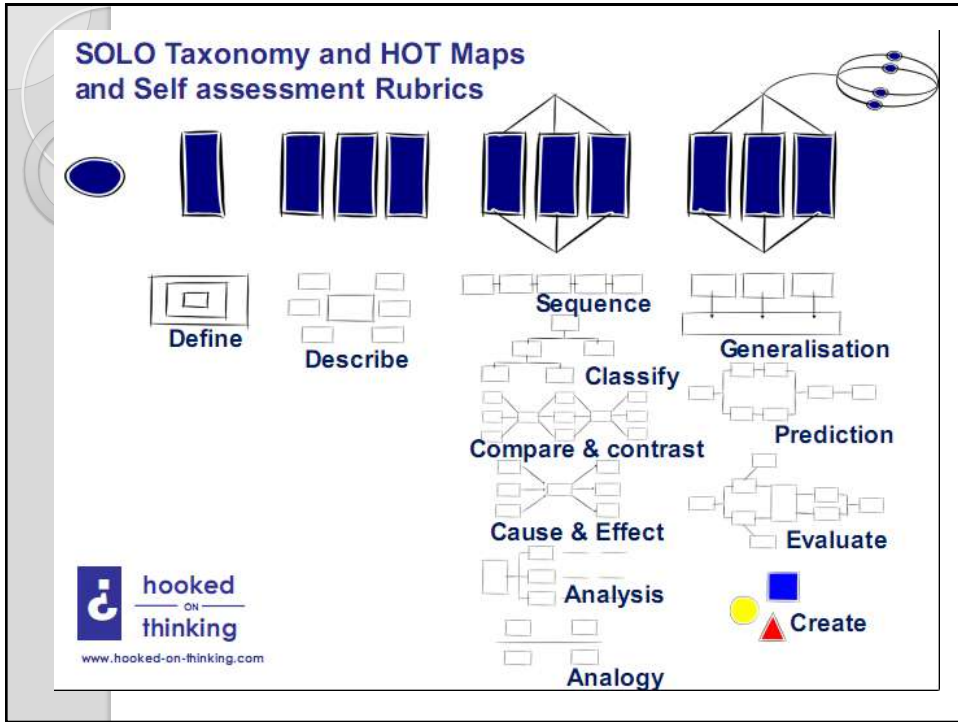
Identify

- Identify and describe risks and hazards and determine information to assess and action safe choices.
- Identify risks and causes and assess them to take an appropriate to manage risks.
- Identify, understand and describe safety procedures and strategies.
- Identify the relationship between understanding and practical safety procedures and strategies.
- Identify and describe safety measures and strategies to manage risks in various activities.
- Demonstrate appropriate communication to make risk management and take the appropriate safety to prevent activities.
- Demonstrate an understanding of practical situations required to ensure the strategies and risk management apply to physical environments.

- **"The Big Idea:** Students will identify, explain and evaluate risks in a range of physical and social environments and suggest and demonstrate appropriate risk minimization strategies to improve the safety of themselves and others."

- What can students.....

- Identify
- Define
- Describe
- Compare and Contrast
- Explain Causes
- Sequence
- Evaluate
- Reflect
- Predict.....



Barriers



- *Time “writing time”*
- *Challenging old school pedagogy*
- *Getting everyone on board*



- <http://www.youtube.com/watch?v=GABz7F7a2Pk>

Where to next



- *Reviewing the learning standards to closely represent SOLO taxonomy*
- *Seeing if it actually works - improved performance in NCEA level 1 (hard to now get data to compare to)*
- *Thinking without maps (in learning and assessment tasks)*
- *Staff buy in*