

Going SOLO

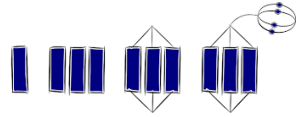
**Using SOLO Taxonomy to support
student learning in PE and Health**



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What is SOLO Taxonomy:

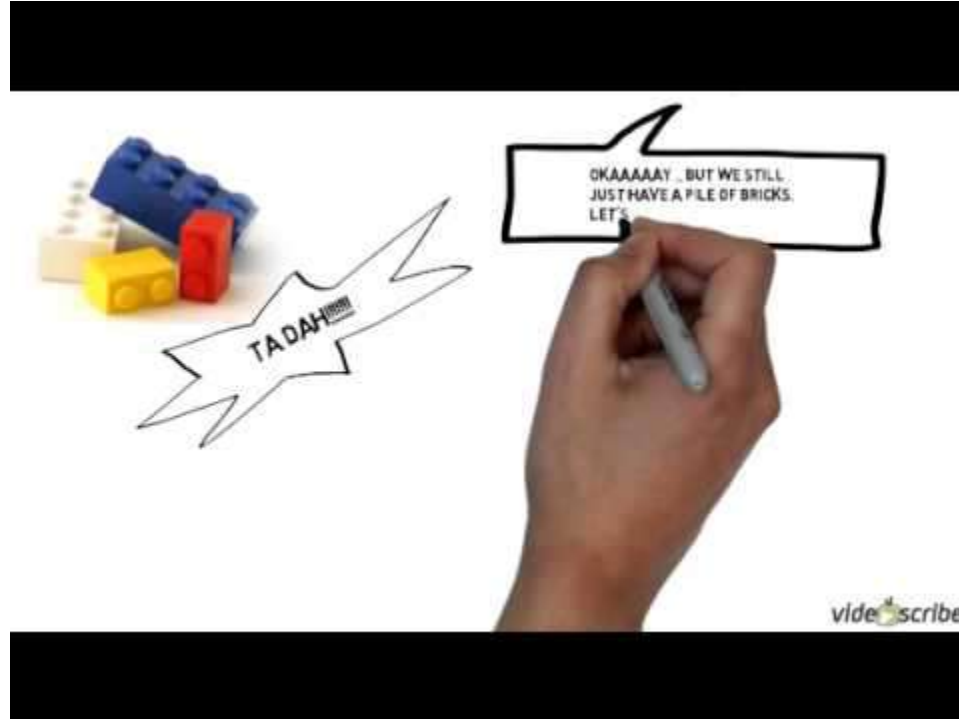


Structure of Observed Learning Outcomes

Which means what exactly?

SOLO is a model that describes levels of increasing complexity in a student's understanding of subjects.

Lets look at an example...



SOLO TAXONOMY EXPLAINED

PRE STRUCTURAL...



I DON'T GET IT!

CAN YOU HELP ME START?

I DON'T KNOW ANYTHINGS ABOUT THIS

UNI STRUCTURAL...



I CAN DEFINE THE KEY WORDS

I CAN DESCRIBE MY IDEA

I'VE GOT ONE IDEA ABOUT THIS.

I CAN FOLLOW A ONE STEP PROCEDURES

MULTI STRUCTURAL...



LOOK AT ME! I'VE GOT LOTS OF IDEAS

I CAN LIST AND DESCRIBE MY IDEAS

BUT I DON'T KNOW HOW TO LINK THEM TOGETHER

RELATIONAL...



I CAN EXPLAIN WHY THINGS HAPPEN AND APPLY MY IDEAS

I CAN CLASSIFY AND SEQUENCE

I CAN LINK MY IDEAS TOGETHER

I CAN COMPARE AND CONTRAST DIFFERENT THINGS

EXTENDED ABSTRACT...



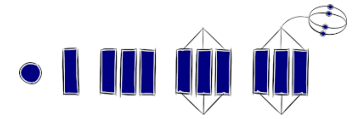
I CAN MAKE PREDICTIONS AND WRITE HYPOTHESES






I CAN EVALUATE AND GENERALISE USING MY IDEAS

I CAN APPLY MY IDEAS TO NEW CONTEXTS AND SUBJECTS

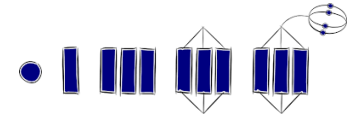
I CAN IMAGINE AND CREATE NEW THINGS USING MY IDEAS

5 levels



	Pre-Structural
	Uni Structural
	Multi Structural
	Relational
	Extended Abstract

My SOLO Journey...



WHY? I failed my SLO!

“90% of the students in Fitness for Life who did not know more than 3 health-related component of fitness, and who were in attendance at school for at least 90% of quarter 2, will be able to:

1. Identify 4/5 health-related components of fitness
2. Name 2 or more specific activities that address 4/5 health-related components of fitness
3. Apply the FITT principle to 2 or more specific activities that address 4/5 health-related components of fitness by the end of the semester in January 2015. “

From teacher centered to student centered.



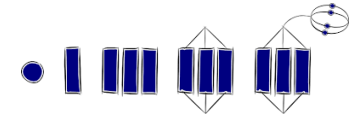
Emphasis in SOLO is for students to self- assess level of understanding/ performance

Must be able to justify where they are on learning continuum

Focus is on self-improvement: *What should I do next?*

It is OK to know nothing!

Easy to see progress = motivation



How it all started

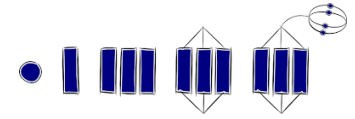
Introduced during a weight training unit

Explained the concept of the levels - provided visual map of the levels

Emphasised this was NEW for everyone - it was an experiment!

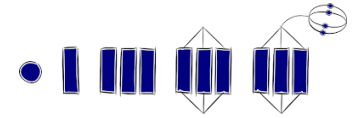
Created a [rubric](#) for each GLO targeted

Student self-assessed with date entered at level within each rubric



How it progressed

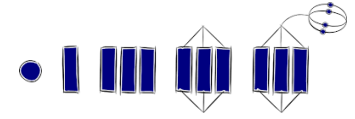
- Students re-assessed themselves during the unit
- Started to ask more questions to move themselves up to the next level
- Enabled me to target students by level
- Verbal justification during class periods
- Quick written assessments
- 2nd semester - started on Day 1



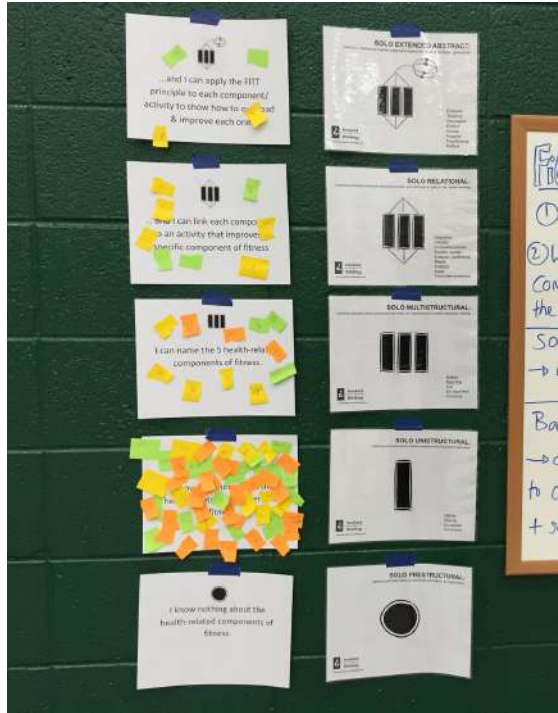
SOLO learning statements



I know nothing about the
health-related components
of fitness.



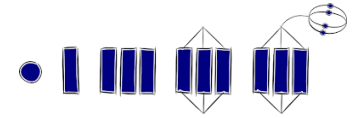
A picture is worth a 1000 words



Jan 28th

Feb 6th



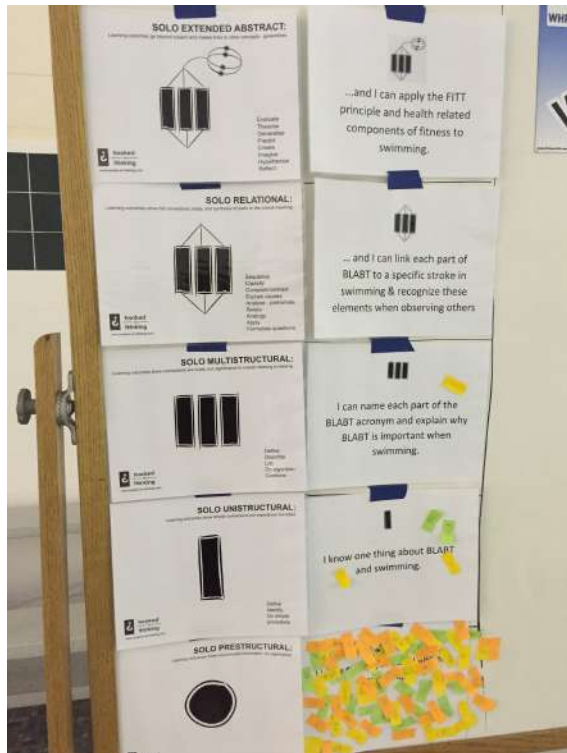
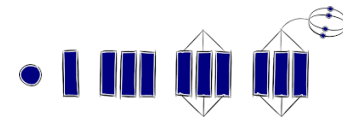


SOLO learning statements



I know nothing about BLABT
and swimming.

Swimming and SOLO



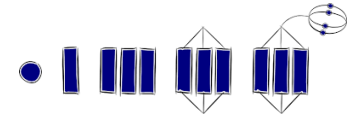
Feb 27th



March 12th



March 24th



The Magic of Post its

Created clear statements for the learning targets

Students were given post-it note

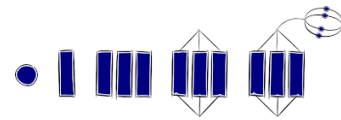
Students put initials on post-it and placed it where they felt they were on the taxonomy

Use different colours for different classes

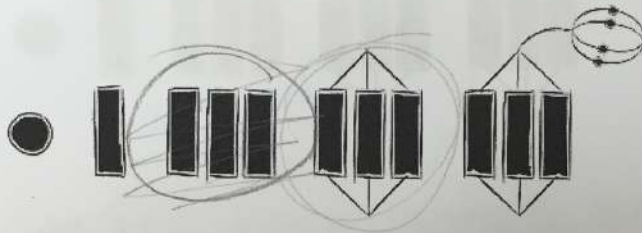
Take pictures of beginning, during, end - great visual

Students moved post-it up when they had justified why they belonged at a new level

Justify..



My current level of understanding of the health-related components of fitness is (circle the level you feel you are on):

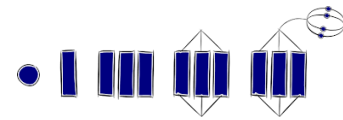


Because I know.....

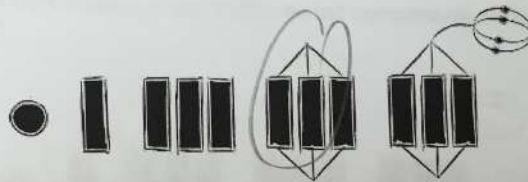
I'm on this level because I know how to apply, frequency, time, strength, exercise to my daily life.

What do you think?

Justify..



My current level of understanding of the health-related components of fitness is (circle the level you feel you are on):

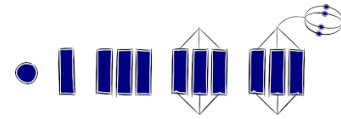


Because I know.....

cardio - run
muscle endurance - sit up
muscle strength - pushups
Body comp
flexibility ~ stretch

What do you think?

Justify..



My current level of understanding of BLABT for swimming is (circle the level you feel you are on):

Period: 5

Intensity:

Can you apply FITT and a HR COF to swimming.

F - > other area of paper
I -
T - Try diff. strokes
T - Swimming longer (muscular endurance)

Because I know..... (relate to front crawl, backstroke, components of fitness, FITT)

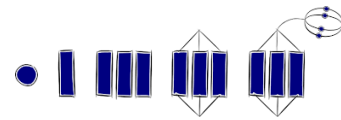
Balance - keep you up in backstroke
Length
Arms - Front crawl
Breathing
Technique

Body - Face down Nice!
Legs - Flutter Kick
Arms - Brush side of ear
Breathing - To the side
~~Type~~ - Front Crawl
Timing - Continuous Cycle of arms

F - Frequency
I - Intensity
T - Type
T - Time

What do you think?

Justify..



My current level of understanding of BLABT for swimming is (circle the level you feel you are on):

Period: 5/6

3/24/15

← Increase the time of how long you are swimming. Go from 3 min to 4 min.

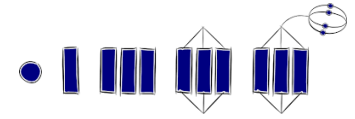
Because I know..... (relate to front crawl, backstroke, components of fitness, FITT)

	Back stroke
Body Position	eyes and belly button up.
Legs	flutter kicking.
Arms	thumbs out, rotate, pinkies in. Arm brushes ear
Breath	face is out of water, breathe normally.
Timing	Kick continuously, arms going out steady pace.

*you need flexibility in your shoulders to brush your arm to your ear.

What do you think?

Lets Practice...



Use the [template](#) to create learning statements for one topic/ unit/ concept

Think about how you can measure progress for each statement (could be multiple ways)

Ideas

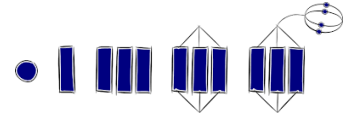
Cardiovascular fitness

Nutrition/ Food groups

Net/ wall games

Invasion games - offensive/ defensive skills

A mind map diagram with 'EPO' at the center. The branches include: 'OF RED BLOOD CELLS', 'POSSIBLE STIMULATORS', 'HIGH BLOOD PRESSURE', 'ERYTHROID POETIN', 'BLOOD VOLUME INCREASE', 'INCREASED O2 DELIVERY', 'MORE O2', and 'GREATLY IMPROVES QUALITY OF LIFE'.



Link related hexagon's together - must be able to justify link

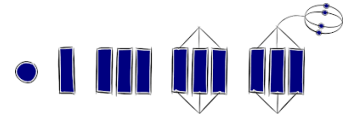
Can provide key word(s) to get started

Laminate hexagons for easy reuse with whiteboard markers

Use hexagon map to help answer posted questions

Lets Practice...

HOT Maps - Hooked on Thinking

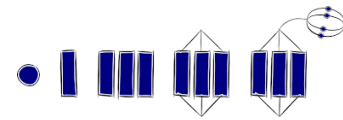


Graphic organizers which take the student from one level to another

Sample templates available for download [here](#)

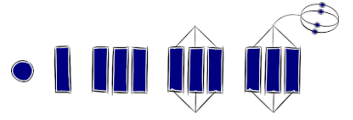
Google Draw is an excellent tool for creating your own graphic organizers

I am at the top.... now what?

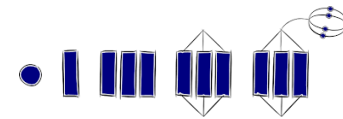


If students have mastered the concept/ skill/ idea, let them continue to explore - what do they want to learn?
Create bank of ideas/ challenges to keep students moving forward for each level
If students are struggling at the multi structural stage, what supports can you put into place?
Emphasise that is OK wherever you are - goal is get to proficiency eventually

SOLO Taxonomy Hand Signals



Don't just take my word for it...



"Yes it helped me see if i truly understood what Mrs. Bailey was teaching us."

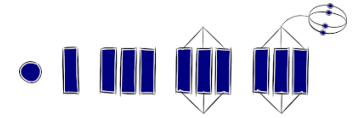
"yeah here and there, they were easy to see where I was in the learning process, if I should get help or if I am okay."

"Yes this did help me a lot because it was easier to understand where to put every piece of what topic goes with what. What I mean is that it was easier to add how a certain component of fitness could be used in daily life. So much easier."

"Yes it made me look at the whole picture, and to the origin of why we are doing this. That it wasn't all about learning the game it was why I should play and what health benefit is was to me other than the fun of it."

"It was good to see what an "A" understanding was so that you could see where improvement was necessary and prepare for

Don't just take my word for it...



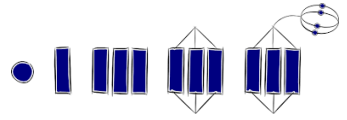
"Yes, it helped me. From the beginning, I didn't know much about any health components and how to blend them in with daily life activities."

"Yes the diagrams were helpful to me because they specifically organized where you felt your knowledge was of the activity. By the end of each unit I felt confident of where my level of understanding of the basic rules was and if I could go beyond the rules and apply it to where it fit in exercise and how it worked different muscles in the body. "

"I really thought this was helpful. It allowed me to be independent with my learning and more self directed. Because of the independent quality of this grading system, it was easier to see what I was good at and what I needed to improve on. "

"Yes, I found the SOLO Taxonomy helpful. It helped me see where I was at, and what things I needed to improve on."

Don't just take my word for it...

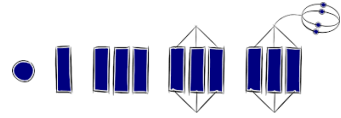


"Yes. Its been scientifically proven people retain things better and understand more with visual cues and pictures."

"SOLO Taxonomy was especially helpful. Each stage had clear characteristics, and it was easy to determine which stage I was at throughout the learning process."

But....

...Not everyone had positive things to say:



"i hated it"

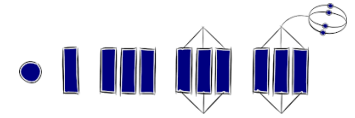
"I don't even know what that is. "

"i understood the charts and all but it wasn't my most favorite."

"I didn't find it useful for me."

"what does taxonomy mean?"

Resources



[Solo Taxonomy in Physical Education Bk 1](#)

[Solo Taxonomy in Physical Education Bk 2](#)

[Pam Hook - SOLO Taxonomy website](#) - tons of templates you can download and customize

[SOLO Taxonomy Pinterest board](#) - lots of examples from around the world

[SOLO Taxonomy Prezi](#) by Nicola Richards

[Pedagoo SOLO posts](#) - blog posts relating to SOLO; lots of great examples

[Hexagons and SOLO](#) - example from the classroom