Levels of HOT SOLO Map Implementation

(after Moersch LoTi scale and Swartz and Perkins' Tacit, Aware, Strategic and Reflective Use))

Level 0: Nonuse

Is SOLO use in your classrooms something you have yet to get around to?

Description:
A perceived lack of time to understand or to introduce SOLO Taxonomy as the common language for student understanding of learning outcomes. Reference to learning outcomes is predominately based on teacher WALT statements and there is little reference to or evidence of SOLO, HOT Maps or rubrics in student work.

Classroom Observations:

- No visible evidence of SOLO symbols or HOT SOLO coded Maps and self assessment rubrics in the classroom

Teacher Comments:

- "I really don't have the time to deal with SOLO taxonomy anyway."
- "Using SOLO taxonomy and HOT SOLO Maps is the least of my problems this term. Have you seen my class roll?"
- "Using SOLO Taxonomy gets in the way of what I am supposed to be doing in literacy and numeracy."
- "I am still waiting for someone to copy and laminate the HOT SOLO coded maps and self assessment rubrics for my classroom wall."

Level 1: Tacit Use

Who is using the HOT SOLO coded maps and do they know why they using them?

Description:
HOT SOLO coded maps and rubrics are used by teachers in the planning and assessment of teacher-directed lessons.

Classroom Observations:

- HOT SOLO Coded maps and rubrics are used by teachers during the lesson. They are introduced to students with no explanation of their learning outcome or their purpose.

Teacher Comments:

- "These SOLO coded maps and rubrics are fabulous. I can snap shot what they know at the beginning of the topic and then find out how much they have improved at the end. SOLO Taxonomy is great!"
- "I basically give the SOLO coded maps to the kids, and they fill them out. The kids love it."

Level 2: Aware Use

Is the focus more on HOT SOLO coded map use or on the connection with student learning outcome?

Description:

The SOLO coded maps and rubrics supplement the existing teaching program or complement selected projects, inquiry, PBL, science fair, extension activities, enrichment exercises etc. The SOLO coded maps used mainly reinforce lower cognitive skill development (unistructural and multistructural learning outcomes) relating to the content under investigation.

Classroom Observations:

- Student projects include SOLO coded map use focussed on lower levels of student learning outcomes.
- There is greater emphasis on the SOLO coded map use rather than student understanding the SOLO Taxonomy learning outcomes. (e.g., "My students' project used the HOT Compare and Contrast Map. The topic was the “Treaty of Waitangi”.)

Teacher Comments:

- "My students have used a number of SOLO coded Maps during the year. Some of their SOLO coded maps are very well completed"
- "When students finish their work early, they often go back to their SOLO coded maps and make them tidier."
- "My students have put their SOLO coded maps on the class wiki."
- "My kids talked about their SOLO coded maps on VoiceThread. They love the way their voices sound on the computer."
- "We are running a syndicate meeting focused on our use of the SOLO coded maps this month."

Level 3a: Strategic Use (Integration by teacher)

Are differentiated learning outcomes a planned focus of HOT SOLO coded mapping and rubric use in the classroom?

Description:
SOLO coded maps and student self assessment rubrics are thoughtfully integrated to complement planned learning experiences. HOT SOLO coded maps are employed throughout the learning experiences to reinforce cognitive skill development relating to the content under investigation across multistructural, relational and extended abstract levels.

Classroom Observations:

- Student use of SOLO coded maps and self assessment rubrics is seen across all levels of learning outcomes from unistructural to extended abstract.

Teacher Comments:

- "My students just completed a research project to **determine the causes** behind their avoidance of the school's drinking fountains."
- "I designed a performance task for my students that required them to conduct web-based research and related data gathering to **support their predictions** for the Auckland Zoos elephant action plan "
- "My students created a multimedia presentation that **analysed the issue** of illiteracy among 18-25 year old New Zealanders."

Level 3b: Strategic Use (Integration by teacher made explicit to students)

Are the SOLO differentiated learning outcomes planned for in the learning experiences, HOT maps and self assessment rubrics shared with students?

Description:
Emphasis is placed on student action and on issues resolution that require higher levels of student cognitive processing and in-depth examination of the content. The learning purpose of HOT SOLO coded learning experiences, HOT maps and self assessment rubrics is shared with students in a manner that provides for student understanding of their own learning process. Emphasis is placed on student identification of the differentiated learning outcomes within the class and individual learning experiences.

Classroom Observations:

- Students designed an editable daily information wiki to assist their school community with various "safety", “health”, “environmental sustainability” and “celebrate your local community” issues when getting to and from school. Included on the wiki were map directions to school based on the time of day, streaming

webcam updates on traffic flows around the school, local history and current events newsreports, historical buildings, neighbourhood watch sites, “walking bus routes” and "just-say-no" strategies to use with strangers. The information collected for the wiki was supplied from student-generated surveys, field investigations, and personal interviews. Students can explain their learning purpose, use of HOT map, self assessment rubric and learning outcome with reference to SOLO Taxonomy (multistructural to extended abstract) in the context of the design activity.

Teacher Comments:

- "The creation of the information wiki was based on student concern over increasing traffic chaos around the school gate and their desire to persuade the local community to make the trip to and from school, a safer, healthier and more interesting learning experience.

Level 4: Reflective Use (by teacher and student)

Are your students and teachers reflective users of the differentiated learning outcomes taxonomy (SOLO Taxonomy) in the design, implementation and assessment of their learning experiences?

Description:
Learning outcomes are understood as process, product, and/or tool for students to find solutions related to an identified "real-world" problem or issue of significance to them. Thinking about differentiated learning outcomes provides a seamless medium for information queries, problem-solving, and/or product development. Students have ready access to and a complete understanding of differentiated learning outcomes through SOLO Taxonomy, and have access to HOT mapping, self assessment rubrics, and an array of learning outcome coded ICTs and thinking interventions. The curriculum for learning is personalised, with the content emerging based on the needs of the individual learner.

Classroom Observations:

- Students designed an interactive web site for English for speakers of other languages (ESOL) students in local cluster schools to increase their opportunities for English language conversation. The site included options for real-time conversations, tutorial sessions, and multilingual online bulletin boards.

Teacher Comments:

- "Every student understands the language of learning through SOLO differentiated learning outcomes and is able to plan, monitor and self assess their own learning outcomes. Don't all students?"