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***ELIS Launch Conference***

**Strategic questioning**

**Uncovering the Learning**

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**Activity Sheet 1: Purpose of Questioning**

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| **Reasons** |
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**Pitfalls of Questioning**

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| **Pitfalls** |
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**Activity Sheet 2: Questioning Your Questions**

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| **Question** | **Response** |
| Why do you ask questions in your classroom? |  |
| In your classroom, who is doing most of the talking? |  |
| When do you ask questions? |  |
| How regularly do you ask questions during a lesson? |  |
| What kinds of questions do you ask? |  |
| Are you distributing questions around the class? |  |
| Do you ask pupils to build on each other's answers? |  |
| How do you respond to incorrect responses? |  |
| Do you ask pupils to pose questions? If so, how and for what purpose? |  |

**Activity Sheet 3: Features of Highly Effective Questions**

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| **Features** |
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**Activity Sheet 4: Using Bloom’s Taxonomy to Design Questions**

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| **Taxonomy** | **Example** | **Questions** |
| Creating | Perform original and creative thinking: compose, construct, create, design, develop, formulate, organise, plan… |  |
| Evaluating | Judge the merit of an idea, solution to a problem, or an aesthetic work or justify a decision: judge, value, evaluate, appraise, argue, assess, choose, compare, defend, estimate, rate, select… |  |
| Analysing | Breaking information into parts to explore understandings and relationships: compare, contrast, organise, deconstruct, interrogate… |  |
| Applying | Apply information, demonstrate principles or rules, and use what was learned: apply, classify, solve, use, show, demonstrate, translate, illustrate, choose… |  |
| Understanding | Explaining ideas or concepts: classify, summarise, explain, paraphrase, interpret… |  |
| Remembering | Recognise or recall information: define, recall, memorise, name, duplicate, label, review, list, order, recognise, repeat… |  |

**Activity Sheet 5: S.C.A.M.P.E.R**

* **S:** What if I change or swap this?
* **C:** What can I blend or combine?
* **A:** What could I substitute?
* **M:** What will happen if I add…?
* **P:** How could I use this somewhere else?
* **E:** What happens when I remove…?
* **R:** What if I did this the other way?

In a group, develop three ways that you could use this model of questioning in the English Language classroom.

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| 1. |
| 2. |
| 3. |

**Activity Sheet 6: The Williams Model to Develop Extension Questions**

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| **Aspect** | **Definition** | **Questions** |
| **Paradox** | Paradoxes can be used to evaluate ideas and challenge pupils to reason and find proof. |  |
| **Analogy** | Pupils find the similarities between things and compare one thing to another. |  |
| **Discrepancy** | Pupils should be challenged to discuss what is not known or understood. |  |
| **Provocative Question** | These are questions that require thoughtful consideration to clarify meaning or develop new knowledge. Use Bloom’s Taxonomy. |  |
| **Organised Random Search** | Given a situation or body of knowledge, pupils search for other information to answer questions such as, what would you do or what would you have done? |  |
| **Tolerance for Ambiguity** | Open-ended questions |  |
| **Intuitive Expression** | Empathy questions |  |
| **Evaluative situations** | Evaluate solutions and answers in terms of their consequences and implications — pose the question what if? |  |
| **Visualisation skills** | Provide opportunities for pupils to perceive or visualise themselves in many contexts. |  |

**Activity Sheet 7: Designing the Learning Environment**

**Planning a Lesson**

**Essential learning goal:** (What do you want the pupils to learn?)

**Outcomes:**

**Key Learning Ideas:** (What skills, understanding and knowledge will they learn?)

**Assessment *for* learning:**

**Strategic Questions:** (Design approach and types of questions)

**Further Ideas**

**Inquiry and Investigation to Develop the Capacity to Ask the Right Questions**

Pupils are engaged in learning essential knowledge and life-enhancing skills through an extended inquiry process structured around complex, authentic questions and carefully designed products and tasks. Pupils investigate a problem and apply it to a real-life situation. The pupils engage in design, problem solving, decision making, and investigative activities. The process requires pupils to develop challenging questions.

**Features**

* A well-designed project provokes pupils to encounter the central concepts and principles of English language learning.
* A probing open-ended question that is rich and relevant to the text, topic or subject is the first step. Pupils have to find answers to questions and combine those using critically thinking skills to come up with answers.
* The pupil’s role is to ask questions, build knowledge, and determine a solution to the issue/question presented.
* Emphasises learning activities that are pupil-centered.
* Allows in-depth investigation fostering deep knowledge and understanding.
* Pupils collaborate, working together to make sense of what is going on and taking responsibility for their own learning.
* May include jigsaw learning. Learners working in groups are given a specific piece of a problem to work on. They become experts in that part of the problem. Other groups are working on other parts of the puzzle and becoming experts themselves. Finally groups collaborate to provide a 'total view and solution'.
* The teacher must regulate pupil success with intermittent, transitional goals to ensure student projects remain focused and pupils have a deep understanding of the concepts being investigated. It is important for teachers not to provide the pupils with any answers because it defeats the learning and investigating process.
* An atmosphere of shared responsibility with the teacher as facilitator is essential.
* Real world use of technology - pupils is expected to use technology in meaningful ways to help them investigate, collaborate, analyse, synthesise and present their learning.
* Pupils’ voices are heard and valued.
* Outcomes-based, with an artefact, presentation, or action as a result of the inquiry.
* Constructive feedback by teacher and peers.

**Sample Question Prompters**

1. **Significance:** Why is it important?
2. **Perspective:** What is the point of view?
3. **Evidence:** How do you know?
4. **Connection:** How does it apply?
5. **Supposition:** What if it were different?

**Steps**

1. **Define:** Projects start with sound instructional goals, a specific timeline, an audience identified and the formulation of an engaging question or problem
2. **Plan:** Project broken down into meaningful chunks and stages.
3. **Do:** Investigate, test, design and produce. More questions are introduced to guide the investigation. Pupils re-examine the problem (collectively) in light of what they have discovered during their research.  During this discussion, pupils supply information for the following categories:
4. **Data:** Pupils write down what they already know about the problem.
5. **Ideas:** Pupils list possible solutions to the problem.
6. **Learning Issues:** Pupils examine what deficiencies they have in their learning (What do they know? What do they still need to find out?)
7. **Action:** Pupils make suggestions as to how they might proceed.
8. **Review:** The project ends with evaluation, reflection and supposition.
9. **Abstraction:** Pupils regroup to place the problem within the context of similar problems that they have encountered in the course of their study.  Pupils attempt to link the problem with similar ones, attempting to find similarities, differences, and ways that knowledge of the old problem might help to solve the new one.

**Advantages**

* Facilitates the generation of complex questions, encouraging pupils to become independent workers, creative and critical thinkers, and lifelong learners.
* Facilitates social responsibility.
* Pupils participate in activities that encourage them to learn relevant concepts and ideas in a meaningful manner.
* It is cumulative - all new skills, information, and concepts build upon the foundation of what the pupil already knows.
* It is goal-oriented - pupils are generally more successful when they are cognizant of the goal towards which they are working.
* It is diagnostic - pupils further the learning process by engaging in frequent self-evaluation and self-monitoring; such practices aid the pupils' comprehension and help to ensure that they are continue actively to pursue their goals.
* It is reflective.

**An Example: Researching Shakespeare**

*“Reading Shakespeare requires the imagination and daring capacity to entertain ambiguity and the paradoxes of human life and history…to imagine the complex lives of powerfully historicized human beings”* Metzger*.*

Instead of the mundane research Shakespeare’s life approach, pupils could be actively involved in a creative project-based research activity or a shorter inquiry-based research.

* **Concept:** Resonance
* **Question:** Why do people continue to reject Shakespeare’s plays?
* **The tools:**
* Online survey: Zoomerang - <http://www.zoomerang.com/>
* Vox pops
* Blog or Wiki
* Internet
* **The Product:** Wiki, Ning, Moodle, short film, digital report…

**Links**

* <http://www.genyes.org/> - a highly successful PBL program
* <http://www.projectfoundry.org/pblHQ.html>
* <http://www.thinkquest.org/en/projects/index.html>
* <http://www.edutopia.org/tech-integration>
* <http://pbl-online.org/>
* <http://www.novelapproachpbl.com/21stCenturySkills.htm>
* <http://www.2learn.ca/Projects/Together/KWORDS/projecta.html>
* <http://www.bobpearlman.org/BestPractices/ProjectWorkSingapore.htm>
* <http://pblmm.k12.ca.us/>
* Google Docs, <https://www.google.com/accounts/ServiceLogin?service=writely&passive=true&nui=1&continue=http%3A%2F%2Fdocs.google.com%2F&followup=http%3A%2F%2Fdocs.google.com%2F&ltmpl=homepage&rm=false> – share ideas and documents
* Creative Techniques, <http://www.mycoted.com/Category:Creativity_Techniques>
* Creative thinking, <http://www.sasked.gov.sk.ca/docs/policy/cels/el4.html>
* Inquiry Activities, <http://www.exploratorium.edu/IFI/activities/index.html>
* Inquiry-based learning, <http://www.youthlearn.org/learning/approach/inquiry.asp>
* Introduction to Creative Thinking, <http://virtualsalt.com/crebook1.htm>
* Problem based learning resources, <http://www.techforlearning.org./PBLresources.html>
* Scenario based learning, <http://www.learningcircuits.org/2002/may2002/kindley.html>
* Socratic Questioning, <http://ed.fnal.gov/trc_new/tutorial/taxonomy.html>
* Using the Internet to promote Inquiry based learning, <http://www.biopoint.com/inquiry/ibr.html>