

Name	Ms Veronica Macwan
Institution	Podar World School
Email id:	veromacwan@podar.net
Phone No	26424933 Mobile : 9821693004
Subject	Chemistry
ID	BTPC07_20
Title	“Reiterating a Strong Exothermic Lattice of Concepts, through Technology”

My philosophy with regard to education is that the teacher should facilitate the student in their search for knowledge (rather than deliver the knowledge) I use a combination of information technology and interactive engagement methods in the class in order to encourage the students to take possession of the knowledge base in chemistry. The right teaching strategies are crucial. With the right teaching strategies, you can communicate ideas more effectively to your students, make teaching and lesson planning easier for yourself, and can even make a real difference in students’ lives by making learning fun.

The points I consider to make teaching learning effective are

• PRACTICAL EXAMPLES	Connecting Theory with Applications
• SHOW AND TELL	Reversing Student Roles
• CASE STUDIES	Bringing “Real-Life” Scenarios into the Classroom
• GUIDED DESIGN PROJECTS	Introducing Practical Design Experience in Classrooms
• OPEN-ENDED LABS	Making Students Think Deeper
• .THE FLOWCHART TECHNIQUE	Organizing the Flow of Thought
• OPEN-ENDED QUIZZES	Moving Students Away From Memorization
• BRAINSTORMING	Encouraging Creativity
• QUESTION-AND-ANSWER METHOD	Encouraging Student Participation
• SOFTWARE	Increasing Teaching Efficiency
• TEACHINGIMPROVEMENT (Reflection)	Monitoring Your Progress
• FAST FEEDBACK FORM	Contributing Your Ideas

Computer-based technologies offer powerful new ways to provide students with direct experience in the classroom curriculum.

I will like to voice my experience about a lesson I had planned for grade 11th students in chemistry. The topic was 'Group I Metals' and 'Energetic'. This topic was taken up in two sessions of 50 minutes each.

Session I

Activity I: Demonstration and viewing videos

To provide conceptual foundation and spark interest I began the class with deduction of the trend in the reactivity of Group I metals. I could demonstrate the reaction of sodium with water in class and as other metals are very reactive they are not available for common lab test. Here it was possible for me to show my student the reaction of group I metals **through a video**. Many videos are available on the internet the one I down loaded was " Brainiac: Alkali metals".

Outcome: This was a good start for my lesson as it created curiosity in the students. By viewing this audio- visual the students could deduce the trend of reactivity.

Activity II: Picture interpretation

I downloaded a picture of a cartoon from the website

<http://www.webelements.com/webelements/elements/text/Cs/key.html>. Students had to view the picture and express their interpretation. This activity brought in lot of humor which created a rippling effect in the class.

Outcome: Students could deduce that Group I metals (alkali metals) form positive ions and have a strong affinity for group VII non metals (Halogens).

Activity III: Power point presentation

- In the previous activity students depicted that alkali metals have a great affinity for halogens. I **showed them a video** of reaction of group I metal sodium(Na) with group VII nonmetal chlorine(Cl₂) which was down loaded from the site <http://www.youtube.com/watch?v=Mx5JJWI2aaw>, which couldn't be demonstrated in the laboratory.
- Next was formation of a lattice of sodium chloride(NaCl). Few students volunteered to draw the lattice of NaCl on the **interactive board which facilitate drawing of perfect circles and use of different colours**.
- A **snapshot** of this was taken.

Session II

- **Snap shot** of the lattice of sodium chloride drawn by the students was flashed followed by a quick recap of the previous session.
- Fussing with definition: I used this strategy to enable the students to grasp the key words which frame a definition from what they have comprehended. Here I **flashed the definition**, asked the students to read

the definition, find key words, comprehend and write the definition as they have understood it.

- To make the students acquainted with the terminology which was to be used I adopted **drag and drop activity on the starboard soft ware**. In this activity the student had to match the term with its meaning and it was conducted using the interactive white board
- Construction of Born- Habers cycle -Animations play a crucial role in teaching; it helps to make abstract ideas concrete I down loaded a very good power point presentation from the following site <http://www.york.ac.uk/org/seg/salters/chemistry/DIY/ppoint/CI4.6born-haberJHU.ppt#8> and modified it as per my requirements this helped the students understand the concept very clearly.
- This was followed by calculation for which I took the help of an **online calculator**.

Activity IV: Summary

Graphic organizers are valuable instructional tools. Any content organized graphically helps retention of that content. An excellent **soft ware Match ware -Open Mind 2.0-** which I use for organizing steps of a process, planning of an experiment, classification etc. was adopted. I simply had a left to right map for the students to remember the steps for construction of the Born Haber's cycle along with the definitions as pop ups (a distinctive feature of this soft ware).

Activity V: Evaluation

Quizdom – by which students answer **multiple choice and true false questions using remotes**. This instills enthusiasm amongst the students towards the end of the class. Immediate reports in different forms such as question wise evaluation, student wise evaluation, graphical report, tabular report can be generated immediately. This saves a lot of correction work and also provide a feedback on the success of the lesson

Worksheets with more questions to solve and catering to different situations were distributed as a carry home assignment.

This is tech generation so, when we think of instructing students, we have to think of innovative ways of teaching, so in our Podar World School we **welcome i- pods and other portable listening devices** in classroom. Video, audio, and images can be loaded on the iPod and provide an excellent manner for bringing a student who missed a day up to speed. Or perhaps a student is struggling with a concept; they can watch a video a number of times on the iPod to fully understand the content. Students who are not interested in recording on their listening devices copy the power point, word files on their **flash drive** or I **email the files** to them.

Truly effective teaching strategies that can make teaching more fun and enjoyable both for yourself and your students and good lectures provide the

conceptual foundation and spark of interest that allow students to learn it on their own.

To sum up

information technology + interactive engagement methods → effective teaching + good academic results