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## **EFFECTIVE TEACHING**

Electronic Learning or e Learning is reinventing the way people are getting knowledge. The desk, the chalkboard, the paper and pencil, and the knowledge-giver no longer dominate the classroom. The Internet is the biggest influence. When delivered via the Internet, the vendors' curricula can personalize learning. Any student can use the computer as a medium through which the access of information and resources manifest itself as the supernatural agency.

The Internet is dynamic. Up-to-date information on MSN or Yahoo portals, for example, is as convenient as the click of the mouse. For the Internet to continue to be effective and efficient in delivering current information into the classroom, schools must incorporate along with the clear goals, objectives, and long-term strategic plans to create the best method of delivering of the information to teachers and students. However, the content requires constant monitoring by educators to be certain that content is appropriate and synchronized with the goals and objectives of the institution.

In addition, the Internet shrinks the globe. Collaboration extends from the classroom to distant places; information is global. The ability to link multiple resources worldwide is an advantage of the Internet. It creates the avenue for an integrated curriculum, thus providing individualized learning modules for all learners.

People who do not use Internet are not even aware of what all can be achieved using it. They remain deprived of an indepth knowledge and become less effective in communication. They don't have access to a hoard of information available on the net. They are and will remain at a disadvantage till they actually start using the technology.

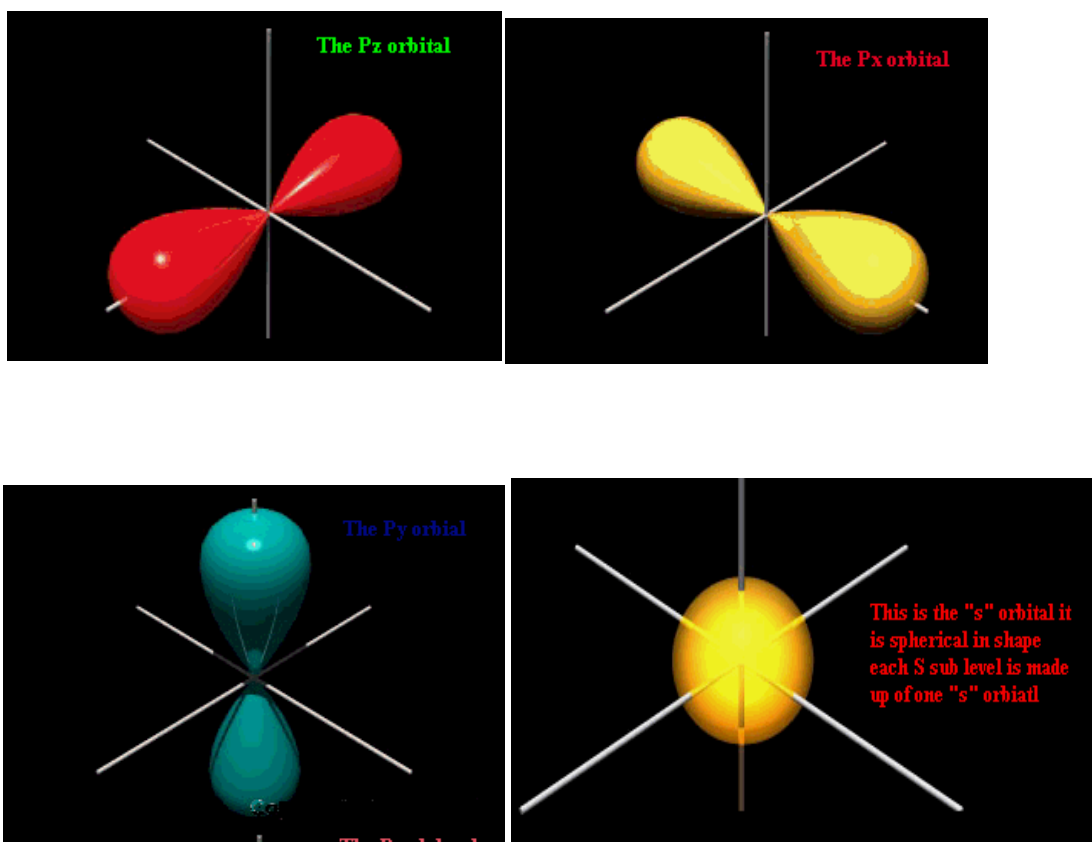
Of late schools, are paying special attention in this regard. They are providing equal opportunity to all students to learn and use computers. They encourage students to use Internet to complete their assignments and projects. The digital divide here exists in "outside the school" environment. Parents need to be supportive to a change extent support such efforts on the schools part.

The issue of availability for the economically backward class still remains a major hindrance. Here the concerned government bodies and social organizations need to take

ahead step. Projects like Hole in the Wall and Rural Internet Program have already made breakthrough in the concerned area. The idea needs to be taken forward actively.

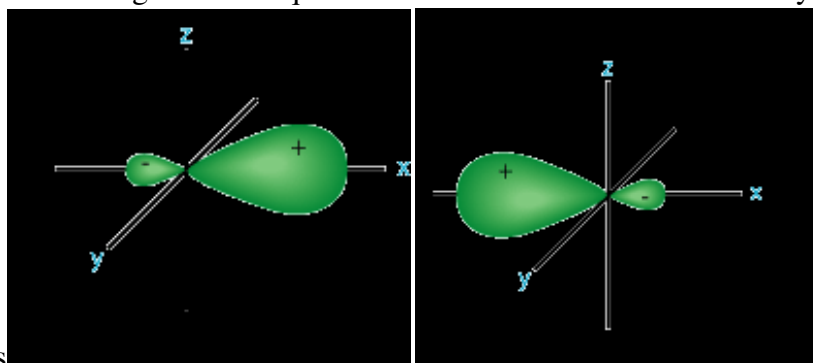
## HYBRIDISATION

The concept of hybridization is the best example which can be used by the teacher to teach with the help of latest technology. Hybridization is the mixing of the orbitals. A teacher can show the pictures of atomic orbitals on the computer with different shapes and of different colour.



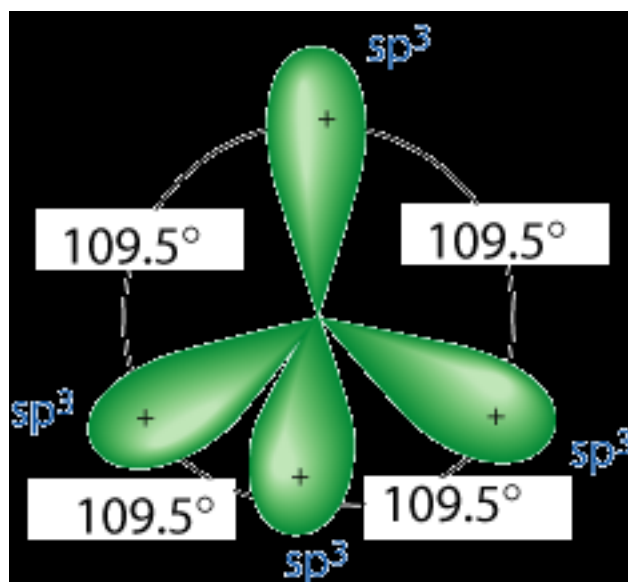
After this a teacher can show the mixing of the atomic orbitals by animation on **FLASH**. This software gives the clear picture that how these orbitals are mixing. the number of

orbitals mixing is equal to the number of hybridized orbitals



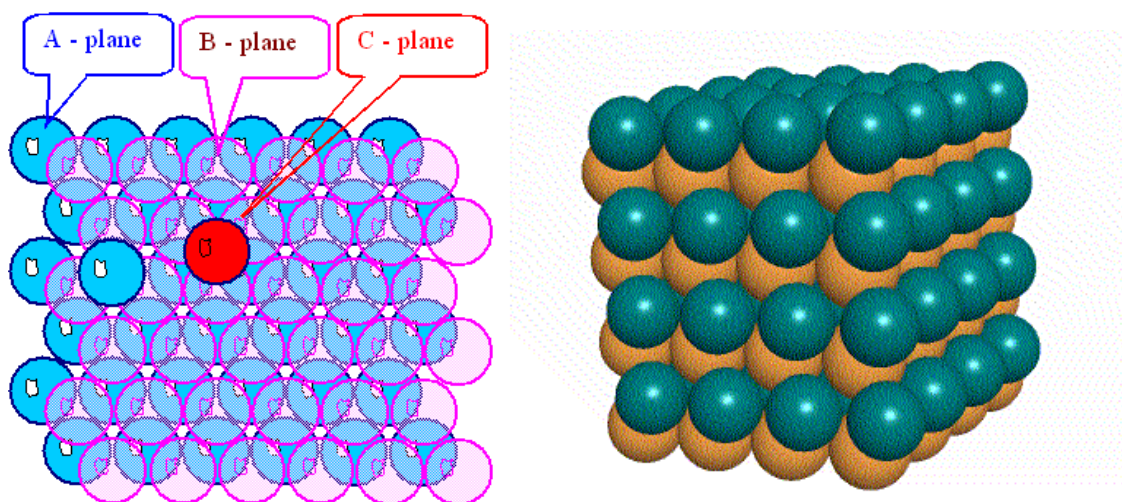
orbitals

After that a teacher has to show the overlapping of the hybridized orbitals which gives the shape and the geometry of any molecule. This figure also shows the various angle between the bonded pair of electrons. In the final step a teacher will show the **stick and ball model** to show the picture shown on the screen of the laptop.

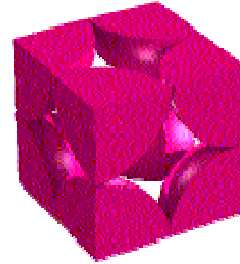
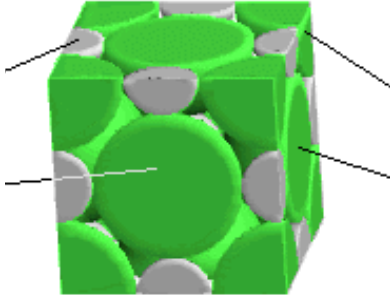
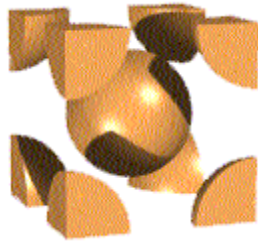


## PACKING OF VARIOUS CUBIC CRYSTALS

First of all a teacher will explain the concept of packing by using the model made up of balls to show the different layers. On computer also these layers can be shown. A teacher has to co-ordinate between the 3 D models and with the figure on the computer with proper speed of explanation to make the concept more effective.

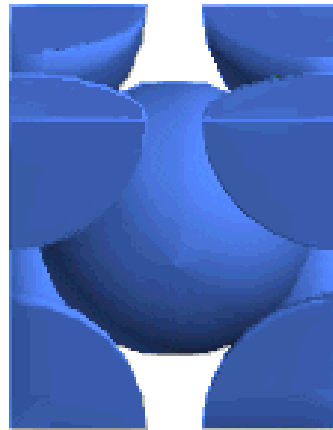


The various types of packing can be explained by showing the various figures drawn on **flash software** on the screen as well as the teacher can make these figures by using **sponge balls** and by cutting them in various shape to give the exact idea of the packing. With the help of these two tools the concept of the packing can be very easily explained in very few minutes. This topic requires approximately 2 hour to be explained effectively but with the modern technology it can be explained more effectively and efficiently which will be retained in the mind of the students.



**Face centered cubic**

**Simple cubic crystal**



**Face centered crystal**

**Body centre cubic crystal**

## **ROLE OF A TEACHER**

Teachers are at the core of any teaching and learning experience. Teachers, with their experience and knowledge are considered the sole strengths of classroom teaching. It is high time we must also realize that we cannot ignore technology being introduced as a tool for classroom teaching. Schools and classrooms are where the students are prepared to face the world and technology is what brings them face to face with the real world working

It is important for the schools and teachers to understand that introduction of technology in routine teaching can make a major difference in the learning experience by the students.

By using the modern technologies and proper software at the right time and at the right place a teacher can improve the standard of teaching .in today's life still the old methodology can not be neglected like lecture method. By making different animations by using software like Photoshop flash and 3D max the teaching learning method can be make more informative, interesting and beneficial for the teachers.

A teacher should remember that a student should use his/her maximum senses while learning. A teacher can use models which can be touched by the student, a teacher can show animations on laptop or computer by which a student uses his mind while teaching. A teacher explains the concept very clearly which should be audible to the students. One more method which can make the teaching more effective but chemistry teachers generally use it and that is by showing different chemical non explosive test which evolves some light and some gas with odour which can be retained by the students for the longer period. Even a teacher can invite any student in front of the class to do that non explosive test, it will not only help the child to understand the concept practically but also it will also motivate even another student.

When a student watches and listens, a student remembers but when a student does it, a student understands. The responsibility of the teacher is not restricted into the class but after the class a teacher can take an online test or a teacher can give homework to collect more information from the latest technology like Internet. Even a teacher can give the assignment to the students which includes the presentation in **PowerPoint, Picasso Microsoft word** and if possible the student can use sophisticated soft wares like **flash, 3D max, illusion** etc. Even to get the deep knowledge of any topic a teacher can consult the sites like google.com, altavista.com etc which give the picture as well as imaginative ideas about the concept.

Finally I conclude that a teacher should use modern technologies like ipods, laptops software and animation to make the teaching more effective so that we can make the society with new ideas. In this field the internet also plays important role.

**Respected Sir I have prepared all these animations even the concept of hybridization my self and I have used flash professional software and I want only one software on the final day and that is flash professional. Even the response of the students is excellent after the class when I used my laptop to explain them all the concepts. And all the students appreciate the good work done by me. But one thing**

**that a student added that we should also take that much pain that our sir had taken for us.**