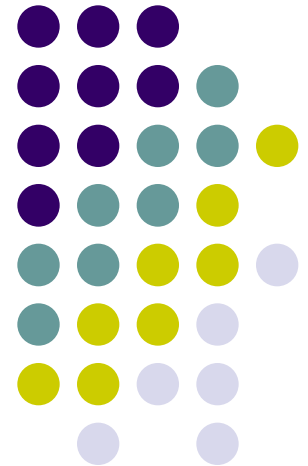


Paradigm Shift: Teacher Centered to Student Centered





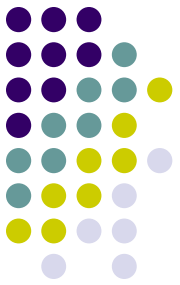
Paradigm Shift

- Old – Instruction Paradigm
 - An educational institution exists to provide instruction.
- New – Learning Paradigm
 - An educational institution exists to produce learning.



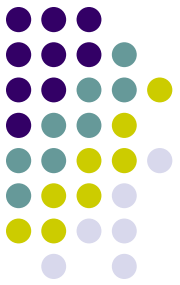
Instruction Paradigm

- Mistakes the means for an end – takes the means or method, called “instruction” or “teaching”, and makes it the end purpose.
- Most common teaching method used is LECTURE
 - Does this method promote student learning?
 - Think back about your own learning – how did you learn?
 - What do you remember best?



The Lecture Model

- Economical – Able to cover large amounts of information in a short period of time
- Teachers are in the active role and students are in a passive, receptive role
 - Students are listeners NOT learners
- What research tells us:
 - Most people only remember 20% of what they hear.
 - The longer the lecture, less of the information ended up in the students' notes.
- Evidence indicates that students learn and retain more information when they are actively involved in the learning process



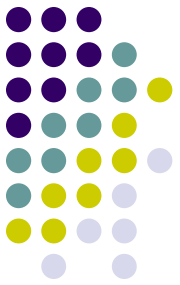
Learning Paradigm

- Uses student-centered/active learning techniques to get students involved in the learning process
- Focuses on the student's needs, abilities, interests, and learning styles
- Acknowledges student voice as central to the learning experience for every learner
- Requires students to be active, responsible participants in the learning process



Background Research

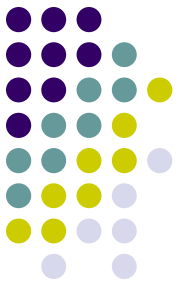
- Theorists like John Dewey, Jean Piaget, and Carl Roger's whose collective work focused on how students learn is primarily responsible for the move to student-centered learning.
- Central to their ideas is that students actively construct their own learning – known as Constructivism



Constructivism

- Theory of learning which supports humans construct meaning from current knowledge structures.
- Learners construct new knowledge from their experiences; they incorporate the new information into an already existing framework.
- NOTE: Constructivism does not suggest one particular pedagogy
 - Constructivism is associated with pedagogic approaches that promote active learning – learning by doing.

What is student-centered/active learning?



- Any well-structured, teacher-guided, student-centered activity that “substantially involves students with the course content through talking and listening, writing, reading and reflecting.”
- Learning is most meaningful when topics are relevant to the students’ lives, needs and interests.
- The students has to be engaged in higher order thinking tasks such as analysis, problem-solving, synthesis, and evaluation.
- These activities allow students to apply what they have learned early on in the academic process and/or give them a context/application for new material.



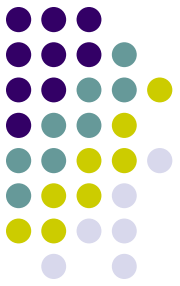
- Instructional activities should involve students in doing things and thinking about what they are doing.
- Students are not just memorizing information, but they are allowed to work with and use the information alone or with peers.
- Their diverse thoughts and perspectives are a necessary input to every class.
- Learners are treated as co-creators in the learning process.

Examples of Student-Centered Teaching Strategies



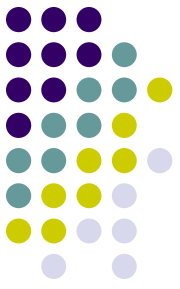
- Interactive Lecturing
- Group Work
- Discussion Forums
- Role-Playing
- Hands-On Projects

Research on Interactive Learning



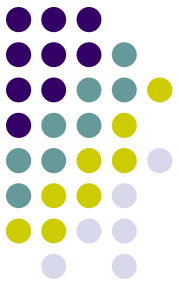
- 1997 study compared pre- and post-course test results for 6000 high school and college science courses.
- Findings showed significantly more improvement in students knowledge that used interactive-engagement methods than those that did not.

Research on Interactive Learning



- 1999 study on the effect of college lectures reported:
 - The longer the lecture, the less of the material ended up in the students' notes.
 - Interactive classes commonly involve breaking up the lectures into multiple short lectures with a higher percentage of material being retained from each.
 - Interactive classes included a short, interactive activity between the short lectures
- In interactive lecture formats, students remembered more of the lecture material directly after the class and 12 days later than the control class that heard the same lecture without the interactive breaks.

Role of Faculty



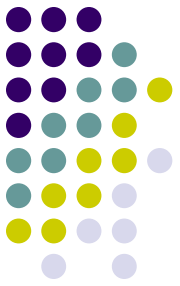
| OLD | NEW |
|--|--|
| Faculty as disciplinary experts who impart knowledge through lecture | Faculty as Designers of learning environments applying best teaching methods |
| Actor on stage | Coach interacting with a team |
| Delivering a lecture | Designing and playing a team game |



Role of the Student

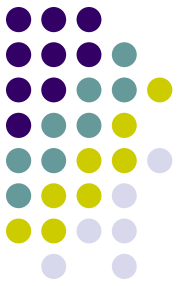
- Moves from the role of note taker to active participant in the learning process
- Allows students to take control over their learning and, therefore, forces them to take more responsibility in the classroom

Benefits of Student-Centered Learning



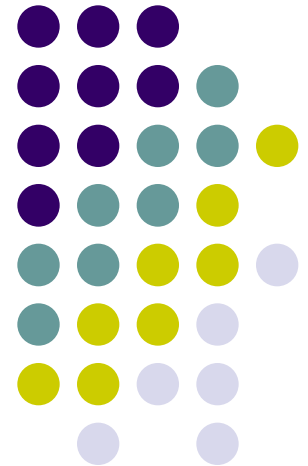
1. Permits opportunities to connect the content to real life
2. Provides opportunities for higher order thinking as opposed to passive listening
3. Promotes greater student-faculty and student-student interaction
4. Increases student retention
5. Provides for improvement of social interaction skills, greater acceptance of others, and a greater sense of “community” in the class
6. Encourages alternative forms of assessment
7. Encourages innovation in both teaching and student involvement

Challenges to Implementing a Paradigm Shift



1. Lack of confidence in trying new methods
2. Fear loss of content coverage
3. Loss of control over the class
4. Lack of prepared materials for use in the class
5. The ego of the professor
6. Lack of background or training in the use of active learning approaches

Examples of Student-Centered Learning Activities

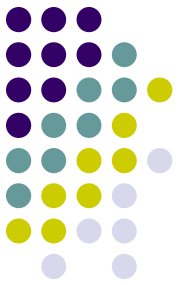




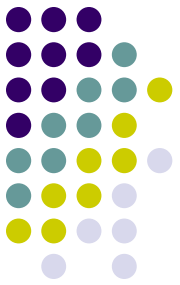
Group – Read - Present

- Group your class in to teams and form their team as an mini organization
- Allow them to do various activities as the team and in competitive manner
- Allow them to read the chapters, summarize it, make power-points, come be prepared to present, if you are given the chance
- Allow them to evaluate the presentations and improve

THINK – PAIR – SHARE



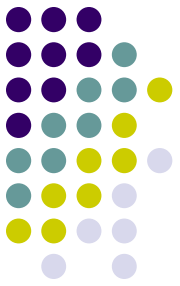
- Begin by saying: “It’s your turn. Look at your neighbor – the person sitting to the left or right of you. Make sure no one is left out. Nudge your neighbor and tell him/her the most important fact you’ve just heard in the last 10 – 20 minutes. Find out what your neighbor thinks is the most important fact. You have 1 minute to talk to each other.”
- When the minute is up, resume your lecture.



Variations of Pair Share

- Share one thing you just learned;
- Share one question you still have;
- State three things you now know that you didn't now before;
- Ask your neighbor a question about the topic and see if he/she can answer it;
- Tell your neighbor how you can use the information you just learned.

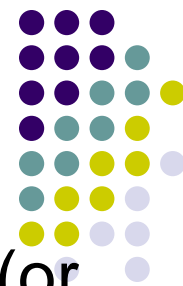
PASS THAT QUESTION



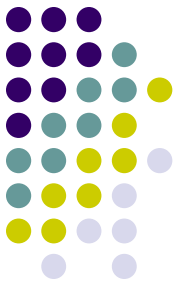
- Get ALL your learners involved in creating and answering questions.
- Before beginning, give each learner a blank index card. Tell them you will give them direction at some point during your presentation of what to do with it.

- At the ten minute mark, stop talking and say:
“You are now going to test the knowledge of the person on your right (or left). On your index card (or a scratch sheet of paper), write down a question that pertains to the information you’ve just heard. You must know the answer to your own question. Pass the card to the person on your right (folks sitting at the end of a row, pass the card all the way down to the other end of his/her own row).”

“Take a minute to read the question you’ve been passed and to write your own answer to it. Then pass the card back to its original owner. Check the answer and let your neighbor know if he or she got it right.”



Bonus Tip: Pass That Question

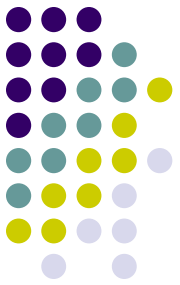


- Pass That Answer:
 - Instead of writing a question, learners write an answer to a question and the person on the right guesses what the question is and writes it on the card.

OR

- Students write an answer to a question you give them and then they compare their answers. You ask a few volunteers to state their answers and then you tell them if they were correct.

JIGSAW



- Each member of the jigsaw assumes responsibility for learning a specific part of the content. Each student/group must master the content to teach that content to other in group/class.
- NOTE: This could be done with an entire class with small groups teaching content to the rest of the class.



Steps for Jigsaw Activity

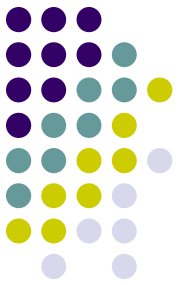
- Task Division
 - Subject Matter is divided into its requisite parts. (Best done by teacher)
- Home Groups
 - Each team consists of several team members who are assigned different requisite parts of the subject matter
- Expert or Focus Groups
 - Students assigned the same topic meet in the Expert Group to discuss information, master the topic and plan how to teach the information to his/her Home Group.
- Return to Home Groups
 - -Students return to home groups to teacher the information to their own group members.
- Summary Activity
 - All of the parts must be put together in the form of a report, a quiz, presentation, or completion of questions.



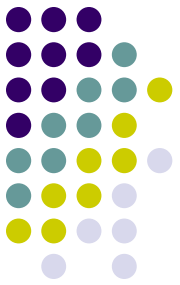
Getting Started

- Early steps in a paradigm shift is an attempt to use the tools and ideas of a new paradigm within the framework of the old – Faculty should make gradual tweaks to their current learning plans
 - Example: Teachers incorporating Think-Pair-Share activities into current lectures
- Begin to speak within the new paradigm. Make your understanding of this new paradigm public and speak the language

In Conclusion...



“Only as you begin to experiment with the new language will you realize just how entrenched and invisible the old paradigm is. But, as you and your faculty begin to speak the new language, you will then also begin to think and act out of the new paradigm.”



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- Barr, R. and Tagg, J. (1995). "From Teaching to Learning: A New Paradigm for Undergraduate Education," *Change*. November/December, pp. 13-25
- McCombs, B. and Whistler, J.S. (1997). *The Learner-Centered Classroom and School: Strategies for Increasing Student motivation and Achievement*. San Francisco: Josey-Bass Publishers