CHAPTER 8

PEER - TO - PEER INTERACTION

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INTRODUCTION

Peer teaching is not a new concept. It can be traced back to Aristotle's use of *archons*, or student leaders, and to the letters of Seneca the Younger. It was first organized as a theory by Scotsman Andrew Bell in 1795, and later implemented into French and English schools in the 19th century. Over the past 30-40 years, peer teaching has become increasingly popular in conjunction with mixed ability grouping in K-12 public schools and an interest in more financially efficient methods of teaching.

Not to be confused with peer instruction—a relatively new concept designed by Harvard professor Eric Mazur in the early 1990s— peer teaching is a method by which one student instructs another student in material on which the first is an expert and the second is a novice.

Academic peer tutoring at the university level takes many different forms. Surrogate teaching, common at larger universities, involves giving older students, often graduates or advanced undergraduates, some or all of the teaching responsibility for undergraduate courses. Proctoring programs involve one-on-one tutoring by students who are slightly ahead of other students, or who have successfully demonstrated proficiency with the material in the recent past. Cooperative learning divides classmates into small groups, with each person in the group responsible for teaching others, and each contributing a unique piece to the group performance on a task. Reciprocal peer tutoring (RPT), a more specific version of cooperative learning, groups classmates into pairs to tutor each other.

The main benefits of peer teaching include, but are not limited to, the following:

- Students receive more time for individualized learning.
- Direct interaction between students promotes active learning.
- Peer teachers reinforce their own learning by instructing others.
- Students feel more comfortable and open when interacting with a peer.
- Peers and students share a similar discourse, allowing for greater understanding.

Research also indicates that peer learning activities typically yield the following results for both tutor and tutee: team-building spirit and more supportive relationships; greater psychological well-being, social competence, communication skills and self-esteem; and higher achievement and greater productivity in terms of enhanced learning outcomes.

THE LEARNING OBJECTIVES

To help first-year students to integrate into the process of study and adapt to the university life; develop hard and soft skills in active interaction; facilitate self-organization and self-understanding of both the junior students and peer instructors.

DEFINITIONS

People are embedded in a variety of social networks. A peer group consists of those who are of roughly equal status. ***Peers*** are a collection of individuals with whom the individual identifies and affiliates and from whom the individual seeks acceptance or approval. Two elements are particularly salient in this definition: ***connection and acceptance***.

First, peers are a group of people with whom an individual spends time and feels a sense of connection. Peers and peer groups are "situated through shared participation in particular types of behaviors and activities" *(Gibson, 2004, p. 4)*. Not all students necessarily feel a sense of connection with other students in their university. Only when students are united by a shared identity or by participation in common activities do they form a peer group.

Second, a peer group is one from whom an individual seeks acceptance or approval. According to Abraham Maslow's *(2005)* hierarchy of needs, seeking acceptance from others is among the most important needs for survival and happiness. Maslow hypothesized that individuals seek to fulfill increasingly complex sets of needs. Once an individual has fulfilled the basic physiological needs (such as shelter and food) and obtained personal safety, the next task is to secure love or acceptance. This often takes the form of seeking acceptance from peers. Identifying with and seeking acceptance from a peer group often go hand in hand. "Affiliation and acceptance are exclusively interrelated – each generates the other" *(Tierney, 2005, p. 51)*. Being a member of a peer group necessitates that a student feel a sense of identification with his or her peers.

We define a ***peer group*** as any set of same-age peers linked by a common interest or identity with whom individuals engage in sustained interaction. Sustained interaction suggests that individuals interact with the same set of peers on a regular basis over a significant amount of time. To ensure this sustained interaction, individuals must be invested in their peer groups and feel a sense of accountability to other members. Peer groups can refer to a student's set of close friends, a student's classmates, or a student's teammates. Students can be part of or influenced by multiple peer groups at the same time. Their success is also shaped by their position within peer groups and various social networks.

WHAT IS PEER LEARNING AND WHY IT IS IMPORTANT

The term *'peer learning'* suggests a two-way, reciprocal learning activity. Peer learning should be mutually beneficial and involve the sharing of knowledge, ideas and experience between the participants. It can be described as a way of moving beyond independent to interdependent or mutual learning.

Peer learning is not a single, undifferentiated educational strategy. It encompasses a broad sweep of activities. They ranged from the traditional proctor model, in which senior students tutor junior students, to the more innovative learning cells, in which students in the same year form partnerships to assist each other with both course content and personal concerns. Other models involved discussion seminars, private study groups, a buddy system or counseling, peer-assessment schemes, collaborative project or laboratory work, projects in different sized (cascading) groups, workplace mentoring and community activities.

Students learn a great deal by explaining their ideas to others and by participating in activities in which they can learn from their peers. They develop skills in organizing and planning learning activities, working collaboratively with others, giving and receiving feedback and evaluating their own learning. Peer learning is becoming an increasingly important part of many courses, and it is being used in a variety of contexts and disciplines in many countries.

In peer learning, students will construct their own meaning and understanding of what they need to learn. Essentially, students will be involved in searching for, collecting, analyzing, evaluating, integrating and applying information to complete an assignment or solve a problem. Thus, students will engage themselves intellectually, emotionally and socially in "constructive conversation" and learn by talking and questioning each other's views and reaching consensus or dissent *(Boud, 2001)*.

Formalized peer learning can help students learn effectively. At a time when university resources are stretched and demands upon staff are increasing, it offers students the opportunity to learn from each other. It gives them considerably more practice than traditional teaching and learning methods in taking responsibility for their own learning and, more generally, learning how to learn. It is not a substitute for teaching and activities designed and conducted by staff members, but an important addition to the repertoire of teaching and learning activities that can enhance the quality of education.

The "peer" in peer learning is a person who belongs to the same social group as the other people. Social group could be based on similarity of age, sex, social-economic background, learning or professional activity, health status etc. Peer instructor at the university is a student. Generally, peers are other people in a similar situation to each other who do not have a role in that situation as teacher or expert practitioner. They may have considerable experience and expertise or they may have relatively little. They share the status as fellow learners and they are accepted as such. Most importantly, they do not have power over each other by virtue of their position or responsibilities.

Peer teaching, or peer tutoring, is a far more instrumental strategy in which advanced students, or those in later years, take on a limited instructional role. It often requires some form of credit or payment for the person acting as the teacher. Peer teaching is a well-established practice in many universities, whereas reciprocal peer learning is often considered to be incidental – a component of other more familiar strategies, such as the discussion group.

Reciprocal peer learning typically involves students within a given class or cohort. This makes peer learning relatively easy to organize because there are fewer timetabling problems. There is also no need to pay or reward with credit the more experienced students responsible for peer teaching. Students in reciprocal peer learning are by definition peers, and so there is less confusion about roles compared with situations in which one of the "peers" is a senior student, or is in an advanced class, or has special expertise. Reciprocal peer learning emphasizes students simultaneously learning and contributing to other students' learning. Such communication is based on mutual experience and so they are better able to make equal contributions.

Peer learning in its broadest sense means students learning from and with each other in both formal and informal ways *(Boud, 2001)*. The emphasis is on the learning process, including the emotional support that learners offer each other, as much as the learning task itself. In peer teaching the roles of teacher and learner are fixed, whereas in peer learning they are either undefined or may shift during the course of the learning experience. Staff may be actively involved as group facilitators or they may simply initiate student-directed activities such as workshops or learning partnerships.

Peer learning is also optimized when incorporated as an integral component of a curriculum, paying special attention to:

- *Creating conducive learning environment.* Students must build mutual respect for and trust and confidence in one another, so that they feel free to express opinions, test ideas, and ask for, or offer help when it is needed. Peer learning can be further enhanced if the "environment of mutual help…continues over time and beyond the classroom" *(Boud, 2001)*. Thus, students are individually and collectively accountable for optimizing their own learning and achievements.

- *Learning in small collaborative groups.* Many of the key elements for effective peer learning are often incorporated in the design of small collaborative learning groups, and research shows that students who engage in collaborative learning and group study perform better academically, persist longer, feel better about the educational experience, and have enhanced self-esteem.

Furthermore, the peer support is powerful psychological ballast to critical thinking efforts. Peer learning, especially in small collaborative groups, nurtures and fosters the development of:

- self-directed learning skills, and thus lays the foundation for life-long continuing self-education;
- critical thinking and problem-solving skills;
- communication, interpersonal and teamwork skills;
- learning through self, peer assessment and critical reflection.

Peer learning also strongly motivates learning often attributed to the fun and joy of learning in small groups. The outcomes of peer learning ultimately depend on the design strategy, outcome objectives of the course, facilitating skills of the teacher, and the commitment of students and teachers. Peer learning is learner-centered education that transcends content knowledge acquisition. It optimizes student learning outcomes and provides a more holistic, value-added and quality-enhancing education, that will better prepare students for the needs of the workforce.

But it is necessary to understand that peer assisted learning is **NOT**:

- teaching by students
- targeted at weak or problem students – all participants should benefit
- a mean of reducing existing lecturer – student contact
- an environment for social chatting.

PEER-TO-PEER LEARNING AND INTERACTION METHOD

Peer-to-peer learning method is defined as:

- Interaction and learning method (technology) when the source of knowledge is not a professor but a peer student (a peer instructor).
- An educational practice and interactional framework fostering learning in many forms of life.
- One of pedagogical strategies that promote participation and interaction.
- Peer-to-Peer activity includes both trainers and trainees into campus life and promotes a sense of belonging that combats the anonymity and isolation many students experience at large universities during the first year of study.

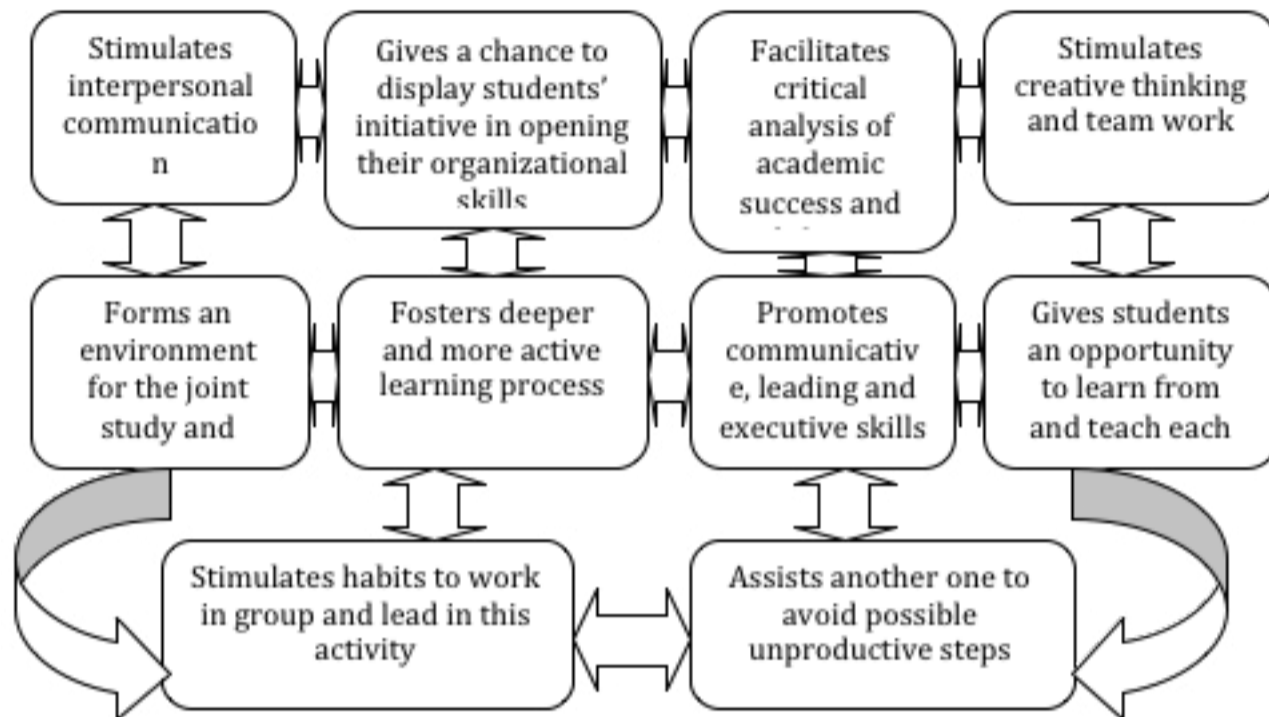**The PROS of the Peer-to-Peer Interaction Method**

Figure 1. The PROS of the Peer-to-Peer Interaction Method

The forms of peer-to-peer learning could be:

- Individual / Group Meetings
- Formal / Informal
- Regular / Situational

This method of interaction benefits both trainer and trainee because it removes barriers between an instructor and a student, facilitates better understanding of needs and motives of both an instructor and students, gives possibility to ask "indiscreet" questions and clears up subtle shades, allows to share personal experience which is not formalized in the study course and proves that motivation of an instructor could be passed on to peer students.

There are enough evidences that teaching others as a participatory teaching method is one of the most effective methods of learning – 90% of efficiency.

The Learning Pyramid

Average Retention Rates

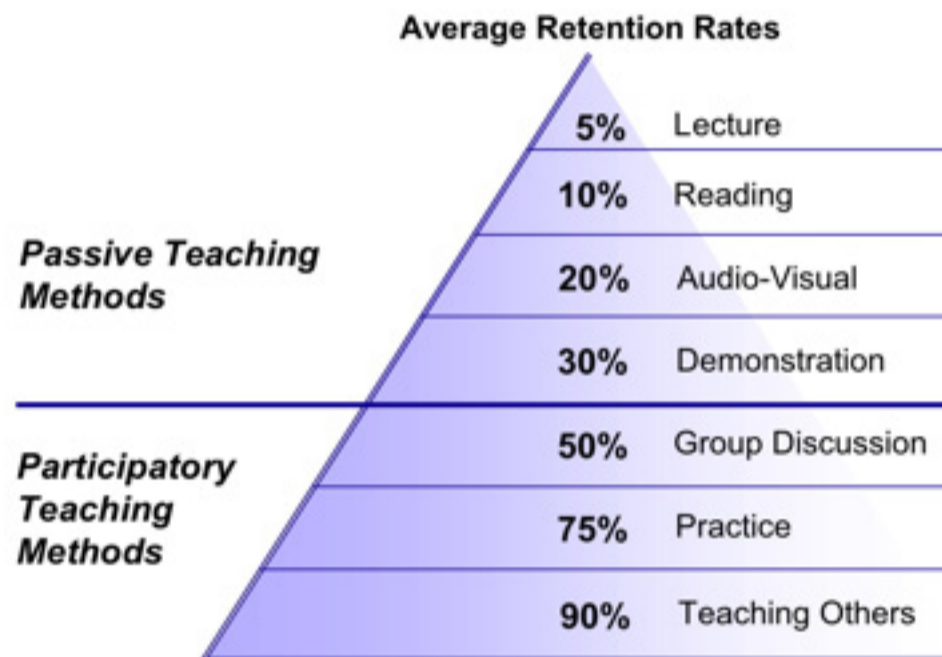|		
	5%	Lecture
	10%	Reading
Passive Teaching Methods	20%	Audio-Visual
	30%	Demonstration
Participatory Teaching Methods	50%	Group Discussion
	75%	Practice
	90%	Teaching Others

Figure 2. Interaction Methods in Teaching Activity

SCIENTIFIC BACKGROUND OF PEER LEARNING

Peer learning promotes the development of learning outcomes, teamwork, critical enquiry and reflection, communication skills, and learning meaningfully *(Boud, 2001)*. Peer learning is the acquisition of knowledge and skills through active help and support among stated equals or matched companions *(Topping, 2005)*. Peer learning as a technique is widely used to promote attainment in students *(Thurston, 2007)*. Students are motivated to review, learn, and comprehend the material when they are put into a teaching role *(Cavallaro, 2006)*. This situation regulates students in the working process, supporting each other, and thus ensuring that their learning goals are fulfilled *(Liaw, 2008)*. Peer learning within group values cooperation above competition and encourages greater respect *(Boud, 2001)*. Social constructivism argues that students can, with help from experts, grasp concepts and ideas that they cannot understand on their own. Through the process of sharing experiences and discussion to build knowledge, students would learn more. Peer learning allows students to actively convey ideas from their peer influence *(Sinclair, 2005)*.

One Vygotskian social constructivist notion, which has significant implications for peer learning, is that of the zone of proximal development (ZPD), which is defined as the "distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" *(Vygotsky, 1978,*

p. 86). The ZPD emphasizes the idea that effective learning requires support and guidance from others. This zone fosters a meeting place for learners to improve the ability of problem solving through collaboration with a peer *(Hartwig, 2008)*. Co-construction of new cognitive structures can be obtained by peer tutors acting to provide support and scaffolding besides managing the learning and activities to keep them in ZPD *(Thurston, 2007)*. A learner's knowledge can be extended beyond the limitations of physical settings through a process of negotiation and scaffolding *(Daniels, 2001)*.

Behaviorism provides one way to explain the association between motivation to learn and peer interactions. In basic behaviorist theories, relationships between people affect learning only as much as people reinforce each other (or not) in the academic arena. For example, if the peer group encourages education and learning, then the individual student within that group will value learning, because the individual is reinforced, or rewarded, for behavior that indicates that learning is valued. Students in peer groups that do not value education lack the stimulation and reinforcement needed to encourage personal learning. These peer groups presumably stimulate and reinforce other values.

Albert Bandura's social learning theory speaks precisely to the human interactions involved in learning. Observational learning is based upon learning by watching then "modeling" or acting similarly to others. If the student views and works with people who appreciate learning by engaging in learning activities, then the student too will engage in learning and might work harder at learning. Peers with positive attitudes and behaviors toward education will allow and teach each other to set goals that include opportunities to learn and achieve. If peer models do not convey positive attitudes toward learning, then the students observing these models will not prioritize learning in their own lives. They will learn to prioritize other goals.

Gordon's theory of social interaction skills focuses on three basic issues: *listening skills, I-messages and how to avoid road blocks.* They cover the core components of social and emotional learning: self-awareness, self-management, social awareness, relationship skills and responsible decision making. *Active listening* is a central skill in the Gordon's theory. It is a method in which the listener reflects back to the speaker his or her understanding of what the speaker has said. This is meant to confirm that the listener has understood the message and to give the speaker a chance to correct the listener if necessary. *I-Messages* are the statements that describe the teacher's personal feelings and experiences. Positive and confrontation I-Messages consist of three parts: a description of the student's behavior, the teacher's feeling about this and the tangible effect of the student's behavior as experienced by the teacher *(Gordon, 2003)*. Messages that are experienced as damaging fruitful interaction, for example, judging, praising or mockery are called *Road blocks*. They can be either ineffective confrontation messages where it is the teacher that has a problem or ineffective counseling messages where it is the student that has a problem *(Gordon, 2003)*. They tend to label an individual by generalizing their occasional behavior as part of their personality.

SUCCESSFUL PEER LEARNING

Study achievements might be resulted from learning in collaboration rather than learning individually, as follows:

- higher achievement and greater productivity;
- more caring, supportive, and committed relationships;
- greater psychological health, social competence and self-esteem *(Laal et al, 2012)*.

But peer-to-peer learning is not just learning or working together. Five essential elements should be met to call a learning program a collaborative one. They are:

- Positive interdependence
- Considerable interaction
- Individual accountability and personal responsibility
- Social skills
- Group self-evaluating.

For peer learning to be effective, the teacher must ensure that the entire group experiences "positive interdependence", face-to-face interaction, group processing and individual and group accountability. "Positive interdependence" emphasizes the importance and uniqueness of each group member's efforts while important cognitive activities and interpersonal dynamics are quietly at work. As students communicate with one another, they inevitably assume leadership roles, acquire conflict-managing skills, discuss and clarify concepts, and unravel the complexities of human relationships within a given context; this process enhances their learning outcomes. Thus, students' learning extends far beyond the written word and even the given task.

Other exciting and effective teaching strategies that stir students' enthusiasm and encourage peer learning are critique sessions, role-play, debates, case studies and integrated projects.

Research indicates that peer learning activities typically result in: (a) team-building spirit and more supportive relationships; (b) greater psychological well-being, social competence, communication skills and self-esteem; and (c) higher achievement and greater productivity in terms of enhanced learning outcomes. Although peer-learning strategies are valuable tools for educators to utilize, it is obvious that simply placing students in groups and telling them to "work together" is not going to automatically yield results. The teacher must consciously orchestrate the learning exercise and choose the appropriate vehicle for it. Only then will students in fact engage in peer learning and reap the benefits discussed above.

TRAINING PEER ASSISTANT LEARNING (PAL) LEADERS

Peer assistant learning encourages students to support each other and to learn collaboratively under the guidance of trained students, called PAL Leaders, from the year above.

PAL is intended to help students to:

- adjust quickly to university life;
- acquire a clear view of course direction and expectations;
- develop their independent learning and study skills to meet the requirements of higher education;
- enhance their understanding of the subject matter of their course through collaborative group discussion;
- prepare better for assessed work and examinations.

Peers play the most significant role in the undergraduates' growth and development during study. University undergraduate peers have such an important impact on each other; they are the single most potent source of influence on undergraduate student affective and cognitive growth and development during university. Furthermore, the frequency and quality of students' interactions with peers extends to a positive association with student persistence. Peers serve in a variety of leadership and mentoring capacities (e.g., health peer educators, resident assistants) and present numerous programs to enhance the development of college and university students. Peer education programs gained popularity on college campuses because peer educators can communicate with other students in ways that faculty and administrators cannot. Peer education programs continue to grow exponentially because college-age students often feel more comfortable talking with peers when it comes to sensitive issues. In addition to how peers assist other students, peer educational programs are economical and provide leadership opportunities for students. Consequently, peer educators quickly become valued and respected student leaders on many university campuses.

Code of Ethics for peer-to-peer instructors:

- Respect, promote and protect human rights
- Respect diversity of beliefs
- Facilitate gender equality and justice
- Ensure and keep confidentiality
- Not impose on the values
- Escape unpleasant personal situations but share personal information
- Provide accurate, competent and unbiased information
- Be unaware of the own disadvantages and understand that the own behavior influences the peers
- Avoid an abuse of the peer instructor status in peer-to-peer interaction.

Of as much importance are the additional benefits of PAL, such as increased cohesion of the student group, reassurance about study concerns and increased confidence. PAL offers benefits to students and staff at all levels – to the university, the course, PAL Leaders, as well as first year students.

The operation of the Peer Assisted Learning (PAL) scheme is based upon the following 20 principles and practices:

1. It supports student learning.
2. It fosters cross-year support for students.
3. It is facilitated by more experienced students, usually from the year above, who provide a point of contact for new or less experienced students.
4. It enhances students' experience of university life.
5. It is participative: students work in small groups, engaging in discussions and a variety of interactive learning activities.
6. It is timetabled.
7. It encourages collaborative learning rather than competitive learning.
8. It works on both what students learn and how they learn.
9. It creates a safe environment where students are encouraged to ask questions and receive guidance from other students about the course and its content.
10. It uses the language and terms specific to the subject discipline.
11. It helps students gain insight into the requirements of their course and their lecturers' expectations.
12. It involves active rather than passive learning.
13. It does not create dependency.
14. It encourages independent learning.
15. It helps students to develop a more positive attitude towards learning, keeping up with their studies and completing their course.
16. It gives students opportunities to improve their academic performance.
17. What is discussed is confidential and remains within the PAL Group.
18. It benefits all students regardless of their current academic ability.
19. It gives students a place and a time to practise the subject, learn from mistakes and build up confidence.
20. It gives PAL Leaders opportunities to revisit their prior learning.

After receiving training the PAL Leaders, facilitate weekly or, fortnightly timetabled study support sessions. Usually this involves second year undergraduate students supporting first year students from the same course. These groups are the same as the students normal seminar group, comprising between 16-25 students, depending on the course. For the larger groups, PAL Leaders often work in pairs – planning sessions together, sharing the workload, and supporting each other.

PAL is supplemental to teaching. Content for PAL sessions is decided upon by the group rather than the Leader and content for discussion is based on existing course materials – handouts, workbooks, lecture notes, text books and set reading. PAL sessions are intended to be structured, organized and purposeful while also being informal and friendly. In PAL, the emphasis is on everyone in the group working co-operatively and interdependently to develop their understanding. PAL is therefore about exploratory discussion led by the PAL Leaders. The more everyone in the group joins in these discussions, the better the sessions work and develop a sense of student empowerment and ownership of each session. This interdependent learning between the students who form the PAL group, and between the group and their PAL Leader, are essential if PAL is to work effectively and are likely to have longer term benefits as well.

In order to run effectively PAL requires a partnership with the course teaching team and administrative staff. Academic content is guided by Course Contacts – academic staff who meet regularly with the PAL Leaders to guide them, provide them with course timetables and assignment briefs, and obtain feedback from them. This input is essential in order to fine-tune the general principles upon which PAL is based to the more specific requirements of the course.

PEER ADVISORY GROUP WITHIN UNIVERSITY

The most wide-spread technique of peer assistant learning (PAL) leaders training is ***Peer Learning Circles.***

Two types of Circles:
- Peer-training Circles
- Peer-coaching Circles

In both types of Circles the process is based on the principle that adults learn best when they *act* on new knowledge and insight in the real world, *reflect* on their actions and learning, and *exchange* ongoing feedback in a safe setting with peers.

Benefits of Peer Learning Circles

1. Easy to start, low cost, little overhead

2. Free-standing or integrated with other programs

3. Peers share focused feedback, materials and support

4. Ideal for adult learning, networking and collaboration

5. Can use facilitator or be self-facilitated

6. Flexible scheduling to accommodate participants *(Romanko, 2011)*

Peer Tutoring Program

1. Be sure your tutors are trained

Existing research identifies adequate tutor training as an essential component of peer tutoring programs. The tutoring program offers tutoring in a variety of subjects to students with the help of high-achieving graders. "Peer Learning Circles" is selective in its recruitment of tutors. Qualified graders demonstrating high citizenship must complete an application process and obtain approval from their teachers before being paired with struggling students. The program advisor then matches tutors to students based on who seems to be a good match academically and socially. Tutors receive quality training in effective ways to work with their tutees. This program led to a significant improvement in core subject letter grades for all participants. In an evaluation of the program, participants also demonstrated increased responsibility, completion of homework assignments, and significantly improved work habits.

2. Use a reward system

What sets this peer tutoring program apart from common peer tutoring practices is the inclusion of a reward system for students to encourage participation and on-task behavior. During the sessions, the teacher supervised all activities and passed out raffle tickets to students exhibiting good tutoring or on-task behavior. Students wrote their names on earned tickets and placed them in a collection throughout each week. At the end of each week, the teacher would draw several names of students who could each choose a small prize from a box of inexpensive toys. Evaluation of the class-wide peer tutoring model with rewards for good behavior showed substantial letter grade improvements for the students. The lottery system for reinforcing participation and on-task behavior was show to overcome challenges to student motivation.

3. Emphasize confidentiality, positive reinforcement and adequate response time

The tutors are taught to demonstrate three important things during any given tutoring session: confidentiality, positive reinforcement, and adequate response time when asking questions. The training process also instructed tutors on explaining directions, designing work for extra practice, watching for and correcting mistakes, and providing positive feedback and encouragement.

4. Choose the learning exercise and the appropriate vehicle for it

Simply placing students in groups or pairs and telling them to "work together" is not going to automatically

yield results. You must consciously orchestrate the learning exercise and choose the appropriate vehicle for it. Only then will students in fact engage in peer learning and reap the benefits of peer teaching.

5. Use group strategies

To facilitate successful peer learning, teachers may choose from an array of strategies:

- *Buzz Groups:* A large group of students is subdivided into smaller groups of 4–5 students to consider the issues surrounding a problem. After about 20 minutes of discussion, one member of each sub-group presents the findings of the sub-group to the whole group.

- *Affinity Groups:* Groups of 4–5 students are each assigned particular tasks to work on outside of formal contact time. At the next formal meeting with the teacher, the sub-group, or a group representative, presents the sub-group's findings to the whole tutorial group.

- *Solution and Critic Groups:* One sub-group is assigned a discussion topic for a tutorial and the other groups constitute "critics" who observe, offer comments and evaluate the sub-group's presentation.

- **"*Teach-Write-Discuss*":** At the end of a unit of instruction, students have to answer short questions and justify their answers. After working on the questions individually, students compare their answers with each other's. A whole-class discussion subsequently examines the array of answers that still seem justifiable and the reasons for their validity.

6. Use role playing and modeling

During the first week of the program, project staff explained the tutoring procedures and the lottery, modeled each component of the program, and used role-playing to demonstrate effectively the ways to praise and correct their peers.

7. Emphasize the importance of active learning

Many institutions of learning now promote instructional methods involving "active" learning that present opportunities for students to formulate their own questions, discuss issues, explain their viewpoints, and engage in cooperative learning by working in teams on problems and projects. Critique sessions, role-play, debates, case studies and integrated projects are other exciting and effective teaching strategies that stir students' enthusiasm and encourage peer learning.

8. Teach instructional scaffolding

To reap the benefits of peer teaching, tutees must reach a point when they are practicing a new task on their own. Tutors can help prepare students for independent demonstration by providing <u>instructional scaffolding</u>, a method by which the tutor gradually reduces her influence on a tutee's comprehension. See our guide on instructional scaffolding here for further explanation.

9. Explain directive versus nondirective tutoring

A tutor who engages in directive tutoring becomes a surrogate teacher, taking the role of an authority and imparting knowledge. The tutor who takes the non-directive approach is more of a facilitator, helping the student draw out the knowledge he already possesses. Under the directive approach, the tutor imparts knowledge on the tutee and explains or tells the tutee what he should think about a given topic. Under the non-directive approach, the tutor draws knowledge out of the tutee, asking open-ended questions to help the student come to his own conclusions about the topic. Both are valid methods, but different levels of each should be used with different students and in different scenarios.

10. Explain how to provide feedback

Positive verbal feedback: Teach your tutors the importance of positive verbal feedback. Prompt students to come up with a list of standard statements which they feel may be positively reinforcing. They also need to be taught how much positive feedback to give. Giving feedback after each and every response can take too much time and diminish its effect. Teach tutors to give genuine praise after every third or fourth correct response and after particularly difficult problems. Make sure to have them practice.

Outcomes for Participants in Circles:

1. Higher results in study

2. Increased effectiveness

3. Increased productivity

4. Increased learning

5. Useful network of peers

Learning outcomes for the peer instructors

- Articulate and evaluate personal objectives and motivation of peer assistance
- Manage their own time and construct personal strategies for peer-to-peer learning
- Assume responsibility for learning outcomes of their trainees
- Develop skills in arguing, critical thinking, team building and leadership and effective communication
- Reflective psychological readiness to share an academic experience with the beginners and desire to teach the others
- Work in team or lead the team during implementation of learning tasks
- Demonstrate keen motivation for personal development, life-long learning and shape their professional and day-to-day activities in accordance to highest professional and ethical standards.

ACTIVITIES

Exercises for the Peer Instructors

ACTIVITY 1: THE PEANUT ACTIVITY

Participants: Members of peer support program planning team.

Purpose: To develop an awareness of similarities and differences among individuals and the importance of looking closely at each person's unique characteristics and talents.

Materials: A bag of peanuts with shells, enough so that each person can have one. One cup or bowl per table (to hold peanuts), paper and pencil for each participant. Venn diagram for each pair, Venn diagram transparency (for demonstration) and transparency marker.

Ask everyone to:

Step 1: Form small groups (about six each) around a table.

Step 2: Choose a peanut from the cup.

Step 3: Examine your peanut, noting its characteristics. Write a detailed description of your peanut.

Step 4: Put all the peanuts in the center of the table and mix them up.

Step 5: Now, find your own unique peanut in the pile.

Step 6: Turn to your neighbor and describe how you identified your peanut.

Step 7: Locate your Venn diagram.

Step 8: With a partner from your table, fill in the Venn diagram, choosing who will be peanuts A and B. The Venn diagram is a simple way to visualize similarities and differences. The overlapping parts of the

circles should contain characteristics that the peanuts have in common. The parts that don't overlap are for the unique features of your peanut.

Step 9: With your partner, use the second Venn diagram to fill in the circles according to your differences and similarities as people.

Discussion questions:

- Did you find your peanut? How did you recognize it?
- In what ways was your peanut the same as all the others? In what ways was it different?
- Did these differences change the value of your peanut?
- Would these differences affect what your peanut is like inside?
- Did you think your peanut would taste as good as the others?
- What does this activity show us about observations of people?

Adapted from: Katz, L., Sax, C., & Fisher, D. (2000). *Activities for a diverse classroom: Connecting students.* Colorado Springs, CO: PEAK Publications.

ACTIVITY 2: LIFE IS LIKE A BOX OF CHOCOLATES

Participants: Members of the peer support program planning team.

Purpose: To show the dangers of judging something or someone on appearance only. To encourage people to get to know someone before forming judgments and to promote respect for diversity.

Materials: Boxes of soft-centered, assorted chocolate candy with enough so that each participant can have one piece. Blank transparency and transparency marker for recording group results.

Ask everyone to:

> **Step 1:** Get into groups of four to six, around a table.
>
> **Step 2:** Take a piece of candy, a piece of paper, and a pencil.
>
> **Step 3:** Examine your piece of candy and guess what filling is inside it. No pinching, piercing, or biting!
>
> **Step 4:** Record your guess on the paper.
>
> **Step 5:** Bite into your candy.
>
> **Step 6:** Tally the correct guesses in your group.

Note: Approximately 80% do not guess the correct filling!

Discussion Questions:

- How easy was it to guess correctly? Why?
- Have you ever been judged unfairly due to your appearance, age, gender or race?
- How did it make you feel?
- Do you have any talents or abilities that people may not notice just by looking at you?
- How often do you think things about a person due to their race, looks or disability?
- Have you ever changed your opinion about a person after you have gotten to know him or her?
- What can we learn from this activity?
- How may this lesson be applied to the classroom?

Source: Katz, L., Sax, C., & Fisher, D. (2000). *Activities for a diverse classroom: Connecting students.* Colorado Springs, CO: PEAK Publications.

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