

The COPE Model for Promoting Cooperative Learning in Classrooms

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Students of the 21st century are expected to acquire essential soft skills such as creativity, communication, critical thinking and collaboration. In order to cultivate such skills, it is necessary to embrace a form of teamwork based on cooperative learning in which students can interact with each other and exercise their skills in an appropriate environment. A key characteristic of cooperative learning is to assign a designated role to particular team members, making each important to contribute to the achievement of team mission. However, it remains unclear how many roles should be constituted in one team and how students with different personality types should be grouped together. This paper therefore adopts the framework of DISC personality and Kolb's experiential learning cycle to develop a synthesised model called COPE which composes of four crucial roles of teamwork: Communicator, Overseer, Philosopher and Empathist. Each of the roles can be well aligned with the four personality types which are classified by their focus when working towards the completion of a given mission (task-focused or people-focused) and their preferred mode of idea expression (expressive or passive). The COPE model offers designated roles for students to accomplish in classroom settings. In addition, it offers a cyclical rotation of the roles which is believed to be theoretically appropriate for students to learn to work with others effectively and to adapt themselves to work on a newly given role professionally.

Key words: *COPE, Cooperative learning, DISC personality, Kolb's learning mod.*

The 21st Century Learning Skills

It is commonly accepted that students of this generation are expected to acquire 21st century learning skills in order to become effective in their future career. Four essential skills have been listed, composing of creativity, critical thinking, communication and collaboration (Trilling & Fadel, 2009). To be more precise, creativity is the ability to use imagination or



original ideas to produce novel pieces of work or solutions. In other words, it is the act of making new and imaginative ideas real and useful. This skill is not only limited to the production of an artistic work, but also involves practical solutions of daily life situations (Romero et al. 2012). Second, critical thinking is the intellectual ability to clearly and logically think about something as well as to analyse and synthesise gathered information to arrive at a rational conclusion for a particular issue. This is generally expressed by the ability to generate possible solutions and choose one that can effectively solve a single problem (Cavus & Uzunboylu, 2009). Third, communication is the ability to convey information to others which could be done either verbally or nonverbally, or both. To a large extent, this ability is expressed in the forms of written and spoken information. However, it also includes taking in information through listening, empathising and observing (Osakwe, 2009). Finally, collaboration refers to the ability to work with others who may have different personalities and styles in order to create a piece of work productively and efficiently (Laal, et al. 2012).

Cooperative Learning

Taking the fourth skill mentioned above on board, various instructional strategies have been developed to provide opportunities for students to work together in pairs or small groups. Among many other terms, collaborative learning and cooperative learning are predominantly discussed (Panitz, 1999). Despite their distinctive characteristics which will be discussed in the following paragraph, they appear to share some common classroom characteristics. For example, they both rely on active engagement rather than passive learning through lectures. Therefore, students are assumed to be taking a certain level of responsibility of self-directed learning. In this setting, the role of teachers is shifted to facilitate students to learn through class activities, rather than to be the centre of focus. They therefore set learning outcomes and assign a task for students to accomplish. In addition, its goal is to instil social skills in students and allow students to share learning experiences. It is believed that this collaborative environment also promotes students' communication skills (McInnerney & Roberts, 2009).

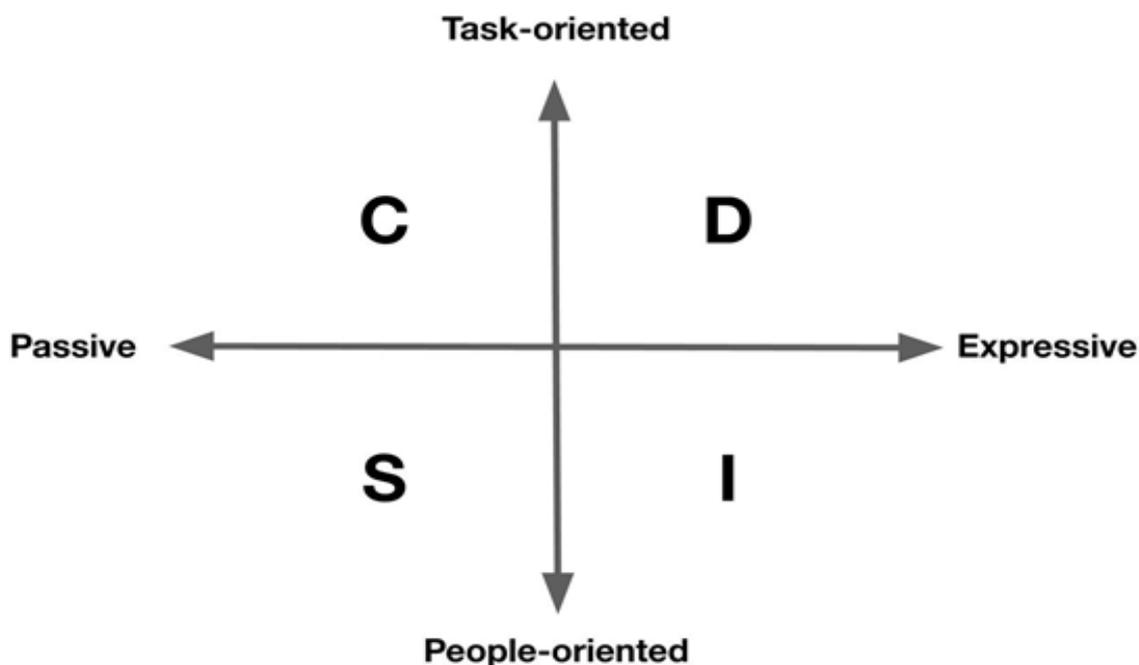
Attempts have been made to classify these two modes of learning. On the one hand, in collaborative learning, students tend to work collectively to achieve a common goal in their own preferred directions. Therefore, group members are accountable to one another and are supposed to use their potential to complete the task. Based on this, the group dynamic generally depends on the group members. No roles are clearly set for each of the group members. On the other hand, cooperative learning is relatively more structured as each student is assigned to be responsible for a specific role. The goal cannot be completely achieved unless each role is performed successfully. In other words, the success of the group depends upon the efforts of everyone involved. It is also noted that some make a sensible distinction calling collaborative learning group work, while cooperative learning is seen as team work (McInnerney & Roberts, 2009; Julie Yazici, 2005).

DISC Personalities

Marston's DISC theory is a psychological framework based on individual difference which has been used to classify individuals' personality and behaviour style into 4 main categories (Sugerman, 2009). This classification does not rely on levels of intelligence and aptitude, but how people tend to react to others and how they respond to challenges. Two dimensions are of importance to divide the 4 personality types. The first dimension considers whether the person focuses more on the people who she or he works with or the task being assigned. The second dimension concerns how the individual tends to express herself or himself which could potentially be unreserved or reserved (Slowikowski, 2005).

Those who are task-oriented and unreserved tend to be direct and decisive, embrace challenges, and dislike routines. Their given name is *dominant* (D). In addition, there are those who tend to be also unreserved but shy away from the assigned task to focus more only people whom they work with. This group is called *influence* (I) whose characteristics are enthusiastic, persuasive, impulsive and optimistic. In contrast, those who sit in opposite ends to the D type are those who emphasise more on people and tend to be more reserved when expressing opinions. They are called *steadiness* (S) whose characteristics are empathetic, supportive, friendly, patient, reconciling, dependable and reliable. Finally, those focusing more on their assigned task, yet expressing their opinions passively are called *compliant* (C) whose distinct qualities are orderly, analytical, accurate, precise, conscientious and systematic (Sugerman, 2009; Slowikowski, 2005; Rosenberg & Silvert, 2012).

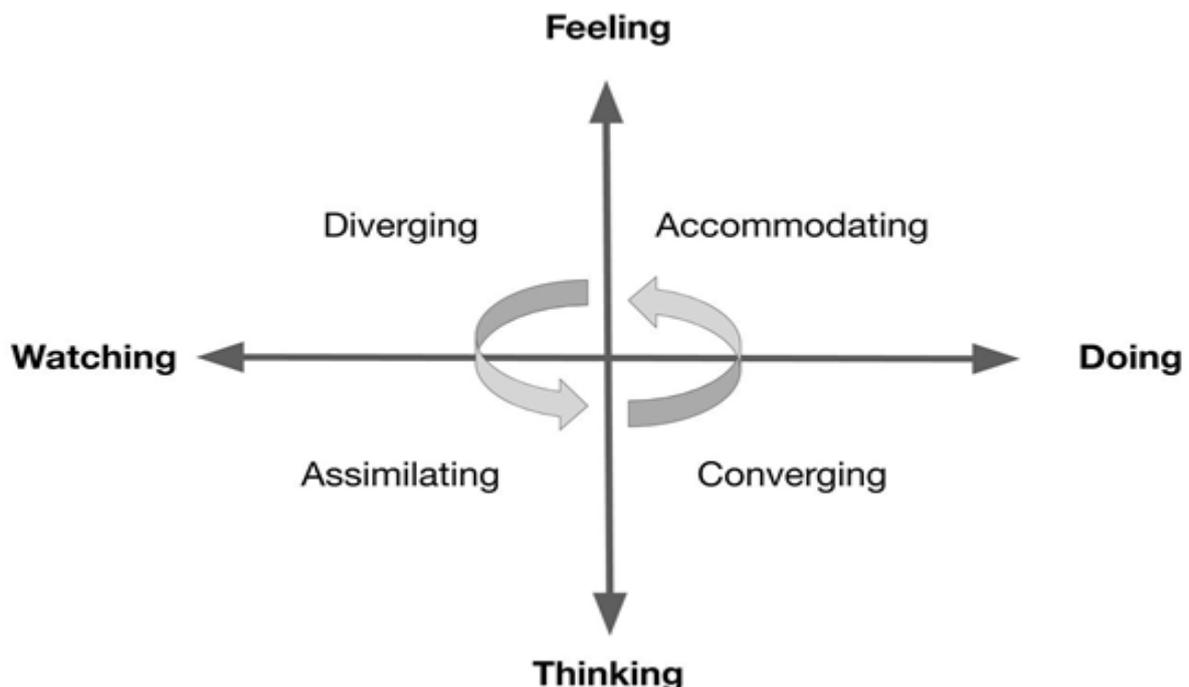
Figure 1. The DISC personality types



Kolb's Learning Model

In the educational arena, a somewhat similar form of classification is applied to describe learning behaviours. Proposed by Kolb in 1984 is the experiential learning cycle which is composed of a four-stage cyclical process. The four stages signify four different modes of retrieving information (Kolb, 2007): concrete experiences (feeling), reflective observation (watching), abstract conceptualisation (thinking) and active experimentation (doing). Not only the four modes of preferred learning style that can be classified, this framework also suggests how learners can proceed their learning in a cyclical manner (feeling-watching-thinking-doing). Theoretically, learners can enter at any stage and follow the cycle sequentially as they move on from one mode to the next; they can vertically build on their understanding and horizontally acquire other modes to retrieve information. To be more precise, learners can begin with having a concrete experience through senses (feeling). Subsequently, they can start reflecting on the experience without physical contact (watching) in order to gain information about what happens. Once they can cultivate reflective experience, it allows them to further develop an abstract thinking in which known information is transferred to make sense of another set of information in another context. Of course, such application of knowledge should be made tangible through active experimentation allows abstraction to become more evident (Stice, 1987; Sharlanova, 2004; Vince, 1998).

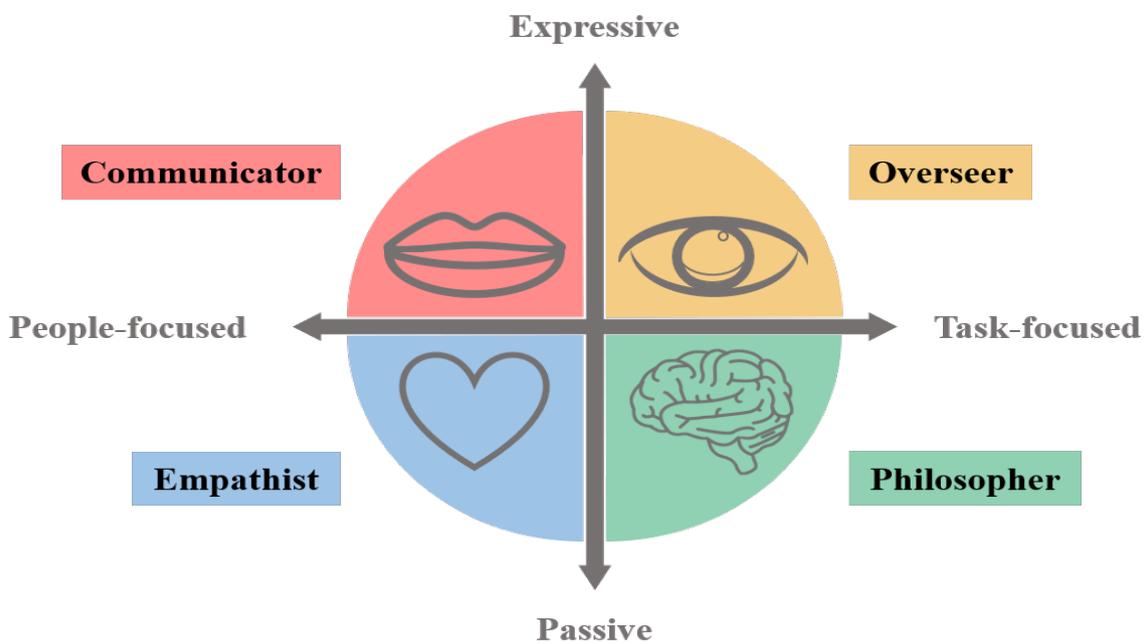
Figure 2. The Kolb's learning model



The COPE Model for Promoting Cooperative Learning in Classrooms

Taking the two aforementioned frameworks into consideration, we propose the COPE model for promoting cooperative learning in classrooms. The COPE model adopts the two dimensions (people vs. task) and (expressive vs. passive) discussed in the DISC personality in conjunction with the cyclical rotation pointed out in Kolb's learning model. However, it is important to note that the four personalities are discussed as four main roles contributing to achieving a team mission whereby new category names are assigned to reflect their contributions in the classroom (see Figure 3).

Figure 3. The COPE model for cooperative learning in classrooms



First and foremost, those who are predominantly driven by relationship when working as a team, having a people-oriented mind and are likely to express their ideas with no reservation, are called a *Communicator* (C) whose role is perceived as the *mouthpiece* of the team. This type of personality is similar to those holding the I characteristics according to DISC. A communicator takes the role of both intergroup and intragroup communication. In other words, he or she has to link up other team members and to convey findings and discussions into simple words in order for other teams to understand what is going on within the team when class discussion is being carried out. Simply put, a good communicator serves the team well by advocating and explaining digested information to the audience.

Second, those who tend to be task-focused and expressive are classified as an *Overseer* (O) whose personality is aligned well with the D type according to DISC. This group of students

function well as a group leader who takes control of team dynamic and progress. Therefore, their major role within the team is to maintain the flow of a designated task as the *eyes* of the team and to engage in critical decision-making when diverse opinions emerge. In order to deal with the team from a birds' eye view, an overseer has to be competent to express their thoughts openly rather than passively and to be able to efficiently communicate with other members. Furthermore, an overseer is understood to be a problem solver as well as a challenge embracer whose idea may help guide the direction of the team towards the completion of tasks being assigned.

Third, the C personality according to DISC is owned by those focusing on tasks assigned with a passive mode of expression. Based on their nature of being thinkers, we therefore term their role as a *Philosopher* (P) whose major contribution is to reflect on work progress from the start until task completion and meticulously record results gained from analysis or observations. Serving as the *brain* of the team, a philosopher employs his/her passive nature in the group to critically pay attention to minor details of the task which may be overlooked by other team members. Little focus is made by a philosopher in general to impress other team members; however, their full determination is to complete the tasks given. Despite their strength in an analytical mode, a philosopher may be reluctant to take leadership or to directly express their thoughts.

Finally, those possessing the S personality according to DISC are believed to assist others emotionally and physically as entrusted supporters who encourage other team members and reconcile possible conflicts that may arise. A new title as an *Empathist* (E) is carefully chosen to reflect their contributions. They generally are people-oriented so they tend to be emotionally sensitive and understanding. In addition, they are likely to be less expressive which makes them take a passive role as a good listener who can encourage other team members empathetically. With all these characteristics being possessed, an empathist is perceived as a *heart* of the team. This role is as equally important as the others as effective teamwork cannot escape from internal conflicts.

The COPE model is aimed not only to facilitate educators to see a variety of learners in the classroom, but also to develop social skills of the learners which can be done through a cyclical rotation of the four roles. Acknowledgement is given to Kolb's experiential learning cycle as it suggests how rotation should be done. However, this paper suggests that the rotation to an adjacent quadrante could be either clockwise or counter-clockwise as long as the same direction is applied to all learners. The aims of this rotation are twofold. First of all, it is necessary for learners to learn to adapt to other roles besides their own preferred mode of contribution. This is due to the fact that our students will have to work with others who have different personalities in real life which require them to be able to adjust themselves to various people and various settings. Second of all, once they put themselves into others'

shoes, they will understand others more deeply which can help them interact with others more understandably and sensitively. This certain practice will sufficiently help students learn more about who others are in addition to who they are. This experiential learning of course extends students' ability to collaborate with others empathically.

The rationale for the one-step rotation is due to the fact that we do not want the changed role to be too challenging for learners to cope with. Each of the roles in the COPE model is constituted by two characteristics as pointed out earlier. For example, an overseer is the one who is task-focused and expressive, while an empathist is people-focused and passive. It would be considered inappropriate to immediately change the role from an overseer to an empathist, or vice versa. This is because learners have to swiftly change the two characteristics all at once. It is recommended that they should slightly and continually change their role one by one. To elaborate, once an overseer has repeatedly worked his/her role for a good number of times and mastered crucial skills for being a team leader, this learner has to learn to change his/her role to be either a communicator or a philosopher. By being a communicator, the learner could remain his/her expressive nature of idea expression while starting to build a characteristic of a people-oriented team member. On the other hand, by being a philosopher, the learner could remain his/her task-focused mind while adapting to become more reserved when sharing their opinions. The same principle is applied to the other roles.

Of course, throughout a complete cycle of rotation, every single learner in the class can build on their existing characters and build up ones that they may lack in the first place. The fruitfulness of this rotation is believed to help cultivate a growth mindset among learners (Boyd, 2015) and interpersonal as well as intrapersonal understanding (Bruffee, 1993). By utilising the COPE framework, learners in the more passive quadrants would be driven by the task to learn to become more active. On the other hand, the more active-natured learners would be encouraged to listen to others' opinions through their new roles. In addition, first-hand experiences with other roles resemble *putting oneself in other's shoes* which would promote empathy for others, an essential social skill required for team learning. Ultimately, each activity demands students to be responsible for their designated roles and respectful for others perspectives.

Practical Implications in Classrooms

This final section serves to share practical implications in the classroom and thus it relies less on the existing literature. Therefore, rather than making any solid claim, we aim to explore this more empirically in the near future.

Designated Roles

Based on our experience in running hands-on activities in classrooms where students work as a team, we summarise some important roles which are considered as a starting point for those who may want to apply this framework in classrooms in Table 1. Each team member is made aware of the roles and is asked to faithfully work on the tasks being assigned without interfering others' tasks. It is important to note that these roles are not exclusive. Different classrooms may have different expectations of learning outcomes and different contexts. So, these can be modified according to the immediate context as long as the fundamental principle of the COPE model remains intact.

Table 1: List of designated roles for each assigned position in a team

Member	Designated roles
Communicator	<ul style="list-style-type: none"> - Concentrate on the delivery of information discussed in the team - Be prepared for questions during presentation - Translate scientific terms into layman language - Link up with other team members
Overseer	<ul style="list-style-type: none"> - Initiate each phase of work progress - Manage the workflow including task allocation and time management - Make decisions for the team where diverse ideas emerge - Be the middleman for the team
Philosopher	<ul style="list-style-type: none"> - Calculate, analyse, and critique minor details - Suggest alternative methodologies for the task - Keep the rule as planned - Record the findings
Empathist	<ul style="list-style-type: none"> - Support the team physically and emotionally - Encourage team effort - Resolve any conflicts that may arise during work progress - Facilitate the others when appropriate

Depending on the available time, a class can be designed to introduce multiple tasks or activities. Technically, the missions are given especially to the Overseer and the Philosopher who work side by side for the purpose of knowing what to achieve and what constraints are given. The Overseer would have to help allocate various tasks to the members according to their designed roles. Careful attention when tasks are distributed is monitored by the Philosopher. In each of the phases of work progress, the Communicator as a representative of

the team would share the results and progress with the class, and deal with some questions from the teacher who works as a moderator to pick up questions and/or suggestions from the class. Although not evident, the support from the Emphathist is required throughout the progress both physically and emotionally. It should be noted that the role of the teacher is changed to be a moderator to drive class discussion and to conceptualise the outcome of the task and introduce an opening question for the next task. Above all, the role of a teacher implementing this model should be to facilitate students with an adequate amount of materials as well as to provide challenging questions as a scaffold for them to build upon their prior knowledge.

How to Classify Students into Roles?

A practical question may emerge by many as to how students would pick the role they prefer and how the teacher would know who the students potentially are so that the appropriate role is given precisely. First of all, we believe that the teacher who is responsible for looking after the whole class for a certain period of time would know his/her students well. Through a series of interactions, personality traits may be repeatedly revealed. However, we argue that the implementation of the COPE model is not limited to a familiar classroom. It is possible to promote the use of a classification method for the first-time engagement in an unfamiliar classroom as well as those with limited record of learners' prior knowledge and learning style.

Below is our actual approach which we use to classify students into the four roles, even though we are meeting them for the first time (Table 2). We propose the use of a picture capturing a scenario of four differently posed people in a lift reacting to a late-comer to determine the suitable role in the COPE model. Regarding this scenario, the teacher allows five-minute decision time for learners to select which is of their best relevance and rank the other possibly accepted reactions. It is crucial to emphasise that their first choice must match their personality not preference. However, this restriction is more flexible when they consider the other alternatives reaction. Although some may not want to choose one or some of the reactions, we would encourage them to rank anyway as this may be of importance to deal with the problem when none selects some of the roles.

The specific scenario is that there are four people in a lift which carries them all to the same floor. The capacity of the lift is to carry 5 people at a time as indicated in the notice board. These four people are about to be late. So, they are in a hurry for a morning meeting. However, a voice can be heard from a distance asking to keep the lift door open. One person (a late comer) slowly walks from afar with no obvious intention to speed up as the four people are waiting. The question to consider here is to choose which reaction that best describes their expected response to this certain situation which explains below.

Table 2: Illustration of the “4 people in the lift” scenario with explanation of their reactions to the late-comer as well as their corresponding roles in a team.

Person	Reaction to a late-comer	Assigned role
Person A	The first person who reaches the open button for the late comer who has no reluctance to greet the late comer while keeping the lift open, and smiles to everyone in the lift sending a message that it is alright, just wait a bit.	Communicator
Person B	The one who is easy and has no major concerns towards the situation. However, it would be nice to wait for the late comer. No verbal greetings would be made from this person, but a smiling face to let the late comer feel no pressure.	Empathist
Person C	Although no harsh reactions are made to the late comer, this person feels like it is unfair for others to keep waiting as time is running. The late comer should wait for another lift to come. An obvious reaction is to constantly check the time which the others including the late comer can see.	Overseer
Person D	Not only being afraid of going to be late, this person also looks at the sign posted immediately as to check how many people can actually be carried by this lift. Although five people can fit in, this person is a bit uncertain if the actual weight is going to exceed the limit. However, all these reactions are expressed quietly without obvious signs of discomfort.	Philosopher

To elaborate more, when the teacher is about to divide students into the different roles, the teacher should not tell the whole thing including the four designated roles of the team learning. Students should be free to think and choose what best describes their reaction in the scenario only. After the students choose and rank their preferred reactions, the teacher can start pointing out that their selection will help them form a team with a combination of four personality traits. Ideally, the teacher can have equal distribution of the number of students who choose each of the four traits. However, it is often not the case. Therefore, with sound judgement, the teacher can make use of their alternatives. For example, if few students choose Person D, but many choose Person B, the teacher can search for those choosing Person B as the second or the third rank to be responsible for being a Philosopher. The students have to be made aware that they will have to complete all the four tasks. So, some may not work on their preferred tasks in the first place.

In the case of having an irregular number of learners in the classroom making it necessary to include more than four students per group, it is possible to allow more than one student to collaborate in the same role according to their preference within the team. The COPE model does not imply that it has to be four students in each team, but four different roles. Therefore, up to two or three students can work in the same role within the team. However, despite this practical aspect, based on our experience, it is always more effective to have four people in a team so each member can exercise their role efficiently.

Conclusion

The COPE model for promoting cooperative learning in classrooms has been proposed as a theoretical framework for dividing and grouping students into a team of four which consists of a Communicator, an Overseer, a Philosopher and an Emphathist, whose roles are designated according to the DISC personality traits which incorporate two main binary classifications of personalities: people-focused versus task-focused and expressive versus passive. Proposed here is also how the roles should be assigned as well as rotated, according to the principle of Kolb's learning model. It is believed that this model can help manage team learning in classrooms where students know what their roles are and in what ways they can effectively contribute to work progress in order to accomplish the team mission. Also, it points out the importance of role rotation which assists students to learn various roles of contribution and to understand differences and similarities of each role so that they can be well prepared for future work.



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