Some Basic Active Learning Strategies



Engaging students in individual or small group activities—pairs or trios especially—is a low-risk strategy that ensures the participation of all. The sampling of basic activities below can be adapted to almost any discussion or lecture setting. Using these strategies, or variations on them, ensures that you'll hold your students' attention in class and throughout the semester.



令學生在個人或小團體活動,特別是成對或三人,是一種低風險的策略,可確保所有人參與。以下基本 活動的採樣可適用於幾乎任何討論或課堂。使用這些策略,或者對它們的變化,保證你會整個學期掌握 住學生課堂上的注意力。

Ice Breakers	<u>Scenarios / Case</u> <u>Studies</u>	Shared Brainstorming
<u> Think / Pair / Share</u>	Reciprocal Questioning	<u>3 - 2 - 1 Format</u>
Write / Pair/ Share	<u>Numbered Heads</u> Together	Note Check
Student Summaries	Roundtable	<u>Background Knowledge</u> <u>Probe</u>
Question and Answer Pairs	<u>Corners</u>	Generating Questions
<u>One Minute Paper</u>	Problem-Based Learning	Jigsaw Teamwork
Focused Listing	Ten-Two Strategy	Rotating Chair Discussions
Two Column Method	Peer Survey	



破冰 思考/成對/分享 寫/成對/分享 學生摘要 成對問答 一分鐘筆記/任意紀錄 聚焦清單 兩欄法 方案/案例研究激盪分享交互質疑3 - 2 - 1 格式集思廣益檢查筆記圓桌會議背景知識的探討角落產生問題基於問題的學習拼圖團隊合作10-2 策略主席輪流討論同儕調查

(1)Ice Breakers 破冰

Those things that get people talking quickly and personally about their goals, fears, expectations for the session before them. Ask them, for example, to consider what one thing each hopes to gain from the workshop and what one thing each hopes to offer during the workshop, then have the group get up to rove the room for five minutes gathering a sense of what others have come to gain and to offer. At the end of the workshop, this might become a way for individuals to measure what they've accomplished and gained overall. Or, as another example, you might consider having participants fill out a 3x5 card with their names and phrases/words in response to questions you've given all of them; the participants then don these cards as name badges and walk around the room meeting as many people as possible, interviewing others about the ideas/information on the card or large-size name tags; after five minutes you can ask participants to return to their seats and jot down names of folks who might be contacts after the session or jot down an individual goal for the session.



這些事情讓人們迅速交談且自主的面對他們先前的目標、恐懼、期望。例如問他們,考慮研討會期間希 望得到的一件事情是什麼或是希望提供什麼,再花五分鐘去讓他們閒聊,了解其他人希望得到或提供什 麼。在結束這次研討會,這可能成為個人的一種評估方式,評估他們自己已經在整體上完成了或得到了 什麼。或者,又例如,你可能考慮讓參與者填寫一份 3x5 大小卡的名稱和短句/字回答問題,你已經給 所有的人,然後參加者將這些卡的像姓名徽章樣的別著並在房間內走動,盡可能與越多的人交流,採訪 別人的想法/信息,五分鐘後,你可以要求學員回到自己的座位上,並記下可能在會議結束後的接觸的 人名字或記下一個個人目標。

(2)Think/Pair/Share 方案/案例研究

Have attendees turn to someone near them to summarize what they're learning, to answer a question posed during the discussion, or to consider how and why and when they might apply a concept to their own situations.

Works well with pre-planned questions and with ideas that emerge during a workshop from a larger group discussion. The objectives are to engage participants with the material on an individual level, in pairs, and finally as a large group.

The activity can help to organize prior knowledge; brainstorm questions; or summarize, apply, or integrate new information. Approximate time: six to eight minutes. The procedure is as follows: 1) individuals reflect on (and perhaps jot notes) for one minute in response to a question; 2) participants pair up with someone sitting near them and share responses/thoughts verbally for two minutes, or they may choose to work together to create a synthesis of ideas or come to a consensus; 3) the discussion leader randomly chooses a few pairs to give thirty-second summaries of ideas.

Translation

令參加者轉向靠近它們的人,總結一下他們的學習,回答在討論過程中提出的問題,或考慮何時以及如 何他們可以在自己情況下應用一個概念。妥善操作預先計劃的問題和想法,從大的小組討論著手。目標 是令參與者參與教材的規模是在個人層面上,然後成對,最後在一個大組。

該活動可以幫助組織既有知識;集思廣益的問題,或總結,應用,或整合新的信息。大致時間:六到八 分鐘。該過程如下:

 個人反思(也許記筆記)一分鐘,回答問題;2)參加者對與坐在他們附近的一個人,口頭分享反應/ 想法兩分鐘,也可以選擇攜手合作,創造一個綜合的觀點或達成共識;3)討論帶領者隨機選擇的給予 幾隊三十秒的想法摘要。

(3)Write/Pair/Share 寫 / 成對/分享

The format for this strategy is identical to the think-pair-share, except that students process the question asked of them by writing about it rather than reflecting. After a brief time to note their thoughts, each student turns to a partner to discuss. The activity closes with the instructor calling on random students to summarize their responses. As with the think-pair-share, the instructor may choose to skip the summary portion of the exercise depending on circumstances.



這種策略的模式是相同的思考,成對共享,但是請學生他們過程中回答的問題是寫下而不是反應。經過 短暫的時間來注意他們的想法,每個學生找一個合作夥伴進行討論。該活動將結束於教師隨機點學生總 結他們的答覆。由於與思考成對共享,教師可以根據情況而定選擇跳過這項工作總結部分。

(4)Student Summaries 學生摘要

During a class session, the instructor pauses and asks students to explain to a partner the central concepts just presented. The activity can be altered in several ways. The instructor can request that students write or think individually prior to discussing with a partner, making the activity resemble a think/write-pair-share.



在一類會議,教師停頓並要求學生解釋於對方的剛剛提出的核心概念。該活動可以在幾個方面被調整。 指導教師可以要求學生合作夥伴討論之前逐個寫或思考,活動類似於思考/寫-配對-分享。

(5)Question and Answer Pairs 成對問答

The objective here is to engage individuals with readings and then to pair them to answer particular questions. This helps to deepen the level of analysis of presentations/readings, and helps engage participants in explaining new concepts, as well as considering how/where to apply the concepts to their own thinking/work setting. Approximate time: five to ten minutes. The procedure: 1) participants respond to a presentation (video, panel, readings) and compose one or two questions about it; they may do this in class or you may ask students to bring questions with them; 2) the participants pair up; A asks a prepared question and B responds; then B asks a prepared question and A responds; 3) the leader may ask for a sampling of questions and answers in order to bridge to a full group discussion.



這裡的目標是令個人閱讀,然後配對他們回答特定問題。這有助於加深級別分析於報告/閱讀,並幫助 學員進行解釋的新概念,以及考慮如何/在何處應用這些概念到自己的思想/工作環境。大致時間:五到 十分鐘。程序:1)參加者回應簡報(影像,面板,讀)和撰寫一個或兩個問題任由他們在課堂上發 揮,或者你可能會指定學生們準備問題,2)參加者配對;A問一個問題準備給B回應,然後B問了一 個提問和準備回答A;3)領導者可能會要求取樣問題和答案,以銜接一個完整的小組討論。

(6)One Minute Paper/Free Write 一分鐘筆記/任意紀錄

Ask participants to write for 2-3 minutes on a topic or in response to a question that you've developed for the session.

Again, this is particularly useful in those moments where facilitators/teachers are asking participants to move from one level of understanding to another, from presentation of new ideas to application of ideas, from considerations about self to situations involving others. The moments of writing provide a transition for participants by bringing together prior learning, relevant experience and new insights as a means of moving to a new (aspect of the) topic. The writing offers participants a moment to explore ideas before discussion, or to bring closure to a session by recording ideas in their minds at that moment. A minute of writing is also a useful thing when discussion takes a turn you didn't expect – when a particularly good question comes from the group, when discussion keeps circulating around a basic idea rather than inching its way into potential applications or deepening of ideas. Useful with other active learning tools.



要求學員在回答問題時就某一已經制定了的課題寫 2-3 分鐘。再一次的強調,這是特別有用的地方,尤 其在協調人/教師要求參與者從一個層面移動到另一個層面的理解的特定時刻,新的想法從演示到應 用,從自我思考到涉及他人的情況。寫作的時刻為參加者提供一個轉變,通過整合以往的學習經驗以及 新的見解的方法得以改變為一個新方面的主題。寫作為參與者在討論之前提供了時間探索思路,也可以 在使一個主題結束前,使他們得到新的看法。一分鐘的寫作也是一個有用的東西,尤其當討論是一個你 沒想到的主題時-當一個很好的問題來自組別時,當討論一直圍繞一個基本的想法循環,而不是緩慢地 將其潛力應用或深化思想。與其他主動學習的工具搭配起來特別有用。

(7)Focused Listing 聚焦清單

These listings are great follow ups to short presentations (whether via video or in person speaker) during which participants are asked to absorb information that is new and that is vital to the discussion to follow. For example, with an early American Literature session focused listing might start with asking: "What is literature?" Or "Based on your reading of Thomas Jefferson's letter about "the novel," what phrases describe the founders' fears about young women and men reading novels?" Then, as a full group, take five to ten minutes to for students to speak and record on a flip chart/white board as many associations as possible for this prompt. The listing works well to introduce a topic, as an exercise joining/synthesizing two sets of information (lecture plus follow up reading, two lectures), and as something to return to as a wrap up so that participants can compare before/after thinking – and, always, it will give you a chance to see if/where participants pick up on topics/ideas as you had anticipated, to gather a sense of interests/insights of the specific group before you, to establish a base from which you can begin to extend concepts of the workshop to participants' particular concerns.



這些清單都是簡短的報告很有效的依循方法(不論是錄影帶或是真人演講),讓與會者吸收信息是新的 且至關重要於討論。例如,在美國文學課程一開始的聚焦清單可先問:"什麼是文學?"或者說:"根據 你的閱讀 Thomas Jefferson's 的信中對"小說"的創始人形容,什麼詞句描述了擔心年輕男女看小說? "接著,作為一個完整的群體,需要五到十分鐘為學生發言,並在活動掛圖/白板記錄許多聯想盡可能為 此提示。運作良好的清單引入一個主題作為加入/合成兩套練習資料(講座+跟進閱讀,兩次講座),以 及一些點題作為一個總結,使學員能夠比較前/後的思路-並且一如既往的,它會給你一個機會,看看 /,參加者是否你所預期的選擇些主題/想法,並在你預期前已有特定一組的興趣感/洞察力,建立一個 基礎,你可以開始探討研討會中參加者的特別關切點。

(7)Two Column Method 兩欄法

Before solving a problem or applying concepts, a discussion leader can help participants more fully consider a problem or issue or concept by employing a twocolumn method of generating and recording responses to a prompt – eg, "A Positive Classroom Looks and Sounds Like/ Doesn't Look Like This." Head two columns on the board/flip chart with "Looks/Sounds Like" and "Doesn't Look/Sound Like" and ask the participants for ideas, observations, recalling of presentation information that will support one side of the board or another. You might ask half the room to be initially responsible for the two minutes of listing "Favorable to A" and the other half to provide "Favorable to B" listing; then you could take a minute to have participants generally add to this base of information and/or generate a "Creating C from A & B" column. This technique can be quite effective in moving a group discussion from basic ideas toward considerations of how to apply those ideas; the listing can provide a base of ideas from which potential problems as well as benefits/successes/possibilities can be identified so that participants can begin a next stage of discussion.



解決問題或應用觀念前,討論帶領者可以幫助參與者更全面地考慮一個問題或概念,採用一個兩欄的方 法產生和記錄反應去提醒-例如,"一個積極進取的課看起來,聽起來像/看上去並不像這個。"頭兩欄在 黑板上/圖板以"看起來/聽起來像"和"看/聽起來不像"要求與會者對簡報信息的想法及意見、觀察心得、 回顧,這將支持一方的黑板或另一方。你可能會請一半的人,在最初的兩分鐘,負責列出"有利到 A", 另一半提供"有利到 B"的清單,然後你可以以一分鐘令參與者廣泛加入到這個基本資訊和/或生成一個 "從 A&B 創 C"的欄位。這種技術可以非常有效的使分組討論從基本思路走向考慮如何應用這些想法;清 單可以自潛在的問題提供一個基本的想法,以及利益/成功/可能性的判別,使參與者能開始下一階段的 討論。

(8)Scenarios/Case Studies 方案/案例研究

Provide participants with a "local" example of a concept/theory/issue/topic being covered in the discussion. Participants discuss and analyze the scenario/case (provided by facilitator), applying the information covered in a presentation to some situation they may encounter outside of the workshop. Participants can briefly present their findings to other small groups or to the whole group or simply record ideas on an overhead/white board so that workshop leader can draw questions and synthesis from the material. Participants can also develop (individually, in pairs, groups) their own work-based case studies and exchange them with others for discussion and analysis.



參與者提供一個"親身的"的例子一個概念/理論/問題/主題納入在討論中。與會者討論和分析的情況 /case(由調解人),運用在報告資料中的某些情況下,他們可能會再研討會外遇到。參與者可以簡要 介紹他們的發現,給其他小群體或整個集團或簡單地記錄幾點想法在白板上,使研討會的領導者可以利 用的問題和合成出教材。與會者還可以開發(單獨,成對,團體)自己的工作為基本的案例研究與其他 人討論和分析和交流。

(9)Reciprocal Questioning 交互質疑

The facilitator provides question stems, such as the following:

Comprehension Question Stems Connector Question Stems

Describein your own words.	Explain whyand how
What doesmean?	How areandsimilar?
Why isimportant?	How areanddifferent?
How couldbe used to?	How doestie in withthat we learned before?

Participants then develop specific questions from the given stems and provide answers. Students can work individually, with a partner, or in a small group.



主持人的問題提供了主幹,如以下內容: 理解問題的主幹 用你自己的話描述....。 ...是什麼意思? ...為什麼重要? 怎麼可能被用來.....?

主幹連接問題 解釋為什麼...和怎樣...... 如何...和...相似? 如何...和...有什麼不同? 與......如何配合,以我們學過的.....? 然後制定具體的問題,與會者從給定的主幹提供問題。可以獨立,與合作夥伴,或以小團體。

(10)Numbered Heads Together 集思廣益

Here participants work in groups (large or small). To begin, a group member asks a question, then others in the group put heads together and make sure everyone knows the answer. To close, the question asker picks one from the group to answer the question. This can also be done with two or even several teams, where Team One asks Team Two a question. Team Two puts heads together and makes sure team members know the answer. Then Team One selects a Team Two person to answer the question.



在這裡,與會者工作在組(大或小)。首先,一組成員問一個問題,然後其他組員集思廣益,確保每個 人都知道答案。要結束時,這個問題從提問者挑選一組回答的問題。這也可以通過兩個甚至多個團隊, 其中兩個小組團隊之一問另一隊一個問題。另個隊集思廣益,並確保團隊成員都知道答案。然後選擇一 人來回答這個問題。

(11)Roundtable 圓桌會議

A question is posed by a group leader, teacher/facilitator or another participant. Each person writes one answer (or another sort of response, as directed by group leader) on paper (or flipchart or transparency) that's passed around the group. Each group shares/presents their answer to the entire class. ${}_{\circ}$



由一個小組負責人,教師/主持人或其他參與者提出一個問題。每個人寫一個答案(或另外一種類型的 反應,以負責人指示)在紙上(或活動掛板或投影片)這是該組相互傳達。每個組別向整個課分享/介 紹他們的回答。

(12)Corners 角落

The leader of the day places content (or flipchart with question) in each corner of the room. Groups of 3-6 people move from corner to corner and discuss answer(s) to each posed question. The groups develop a consensus and write their answer directly on each flipchart. When the flipchart has an answer already written by a previous group, the next group revises/expands/ illustrates that response with additional information, if possible. Different colored markers can be used for each group to see what each group wrote for each question. \circ



當天的領導者放上內容(或問題的圖)在教室的每個角落,三到六人一組的人從角落到角落移動並且討論 答案,各組發展一個一致的意見並且放到各個圖上,當圖上已經有其他組別回答的問題,下一組修改/ 衍伸/註解更多資訊,可能的話,不同的顏色筆可以讓各組使用以區別

(13)Problem-Based Learning 基於問題的學習

Present a problem to the class/group. The problem needs to be based on an authentic situation that the participants could actually encounter. Partners or small groups must apply the presented information to address the problem. They may address the problem deductively (determine what is causing the problem) or inductively (analyze the issues and identify the problem).



在一組/班上提供問題,問題需要基於一個參予者可能遇到的客觀情況,夥伴或組員必須應用報告過的 資訊去解決問題,他們可以演繹的方式(判斷可能有此問題原因)或是以歸納的方式(分析情況且理解問 題)

(14)Ten-Two Strategy 10-2 策略

Presenter shares information for ten minutes and then stops for two minutes to encourage listeners to pair and share their ideas, fill in any gaps or misunderstandings, and allow each other to clarify information.



報告者分享十分鐘資訊後停下兩分鐘,鼓勵聽者去附和或分享意見,補足缺陷或歧見,並允許其他人去 澄清資訊

(15)Peer Survey 同儕調查

Each participant is given a grid that is to be filled in according to the needs of the group. Students/group members can be instructed to fill in the grids on their own or the can collect statements from peers and then share in small/large groups. Groups can then generate and share conclusions. Grid topics or categories can be tailored/designed as needed/preferred; here's a sample grid:

Example of Idea:

Useful Information:

Unresolved Question:



每個參與者給個待組員填滿的格子,組員可以被指導的完成或是收集同伴資訊並分享在大或小的組內, 各組可以產生或分享結論,格子的主題或分類可以簡便/設計過的無論是需求或偏好,以下是範例

想法的範例

有用資訊

未解的問題

(16)Shared Brainstorming 激盪分享

Presenter disseminates sheets of paper to each small group of 3-5 people. On each sheet is a different question. Team members generate and jot down answers to the given question. The presenter then instructs each group to rotate to another sheet containing a different given question to answer. Depending on the time available, this procedure is repeated, giving each group the opportunity to respond to as many questions as possible. At the end of this activity, each group returns to their original question sheet, reviews the given responses, generates a summarization of ideas, and shares their conclusions etc. with the entire group. \circ



報告者發下紙張到 3-5 人大小組別,每張紙問題不同,組員討論並寫下答案,報告者接著指示各組換張 紙的問題,依據時間控制的重複過程,給各組機會去回應越多問題越好,活動最後每組回到這些問題紙 上,重新檢視回答,產生並歸納意見,並且與其他人分享

(17)3 - 2 - 1 Format 3 - 2- 1 格式

Presenter instructs students to jot down and share with partner or small group:

- 3 ideas/issues etc. presented
- 2 examples or uses of the idea/information covered
- 1 unresolved/remaining question/area of possible confusion



報告者指示學生與夥伴或小組員記下或分享如下資訊:

3 個意見/問題在先前報告中的

2 個例子使用了報告的資訊

1 個未解或尚存的問題有可能造成困惑的點

(18)Note Check 檢查筆記

Students pair with a partner/small group to briefly (2-5 minutes) share notes. They can clarify key points covered, generate and/or resolve questions, generate a problem to solve, solve a problem posed by the instructor, or write a paragraph synthesizing key ideas as set out in partner's notes.



學生無論是成對或是小組,花 2~5 分鐘分享筆記,他們能澄清主要的點,或是歸納問題,解決被指引 的問題或是寫下一整合組員關鍵意見的段落

(19)Background Knowledge Probe 背景知識的探討

BKPs questionnaires ask for basic, simple responses (short answers, circling/showing of hands in response to multiple choice questions) from students who are about to begin a course, a unit, or study of a new concept. Such probes are meant to help teachers determine effective starting points/appropriate levels of instruction for a given subject and/or class. Used to both open and close course activities, a BKP helps students focus attention on what will be important material.



背景知識探討有幾個基本且簡單的問題(簡答,多重選擇的答案)會出現在學生一開始時,或是讀到一個 新觀念時,這樣的探討有助於老師對現有主題或課程決定有效的指導方針,使用開放或封閉的活動,可 幫助學生集中注意於教材中的重點

(20)Generating Questions 產生問題

Have students/participants create five types of questions from a reading assignment, with each question moving to a "higher" level of thinking. Begin with a question asking for an important fact stated directly in a text. Then develop a question that revolves around two relationships, ideas, characters or events addressed in the reading. At the next level ask students to write questions requiring answers built from inference – an analysis drawn from two pieces of information close together in a text or from relationships among many pieces of information spread throughout the assigned reading(s). Students can create higher level guestions based on patterns they perceive in seemingly unrelated pieces of information – a symbol, a theme that recurs. The last of this question-developing thread might ask students to create a guestion based on the reading and everyday life, issues, contexts. This can be a great activity for those days when students have been assigned short but intense readings that they will be expected to discuss in detail in class. Have students write the five questions (noting page numbers when they refer to textual passages or ideas) on a note card, which can be passed around, used as a guide during discussion, and/or turned in at the end of class.



讓學生創造五種問題,從閱讀作業,每個問題越來越轉變到一個"更高"水平的思考。首先的問題會是, 一個重要的在文字中明顯表述的事實。然後制定一個問題,涵蓋兩個關係,思想,人物或文章述及事 件。在下一個層面,要求學生寫問題,要求答案包含推理分析 -來自兩部分資訊併攏在一分或幾個之間 的關係的資訊位於指定的閱讀內。學生們可以在看似不相關的部分信息創造更高層次的基礎問題一個 符號,一個重複的主題。最後這個問題發展的脈絡可能會要求學生根據以下內容創造一個問題:閱讀和 日常生活、問題、情境。對於習慣分配短暫而緊張的閱讀的那些日子學生而言,這可以是一個大的活 動,他們將在課堂上詳細討論。讓學生寫的五個問題(注意他們指的文本段落或想法時的頁碼)在一張 卡片上,可傳來傳去,用來在討論中指導,在課的最後繳交。

(21)Jigsaw Teamwork 拼圖團隊合作

A Jigsaw is an active learning exercise in which (1) a general topic is divided into smaller, interrelated pieces (e.g., the puzzle is divided into pieces); (2) each member of a team is assigned to read and become an expert on a different piece of the puzzle (e.g., one person is given a Team Building Issues puzzle piece/article, another the Team Composition & Roles piece/article, and so on); (3) then, after each person has become an expert on their piece of the puzzle, they teach the other team members about that puzzle piece; and, finally, (4) after each person has finished teaching, the puzzle has been reassembled and everyone in the team knows something important about every piece of the puzzle. Functioning as a successful team requires the integration of many different activities. If any piece of the puzzle is missing, the team is generally a group and not a team.



拼圖合作是一種主動學習的過程,其中(1)一般被劃分為更小的主題,相互關聯的部分(例如,謎題 分為許多片段);(2)每一個小組成員被分配到閱讀並成為於不同的一塊拼圖的專業(例如,一個人被 賦予一個團隊建設問題的拼圖,另一個收到小組的組成與角色拼圖,等等);(3)然後,在每個人都有 成為他們專業的一塊拼圖,他們教其他團隊成員有關的拼圖,以及最後,(4)在每個人完成教學,難 題已被重新組合成團隊中的每個人都知道的東西,幾乎每一塊的拼圖都是重要的。作為一個成功的運作 團隊,需要整合許多不同的活動。如果任何一塊拼圖缺少,團隊將只是一個組,而不是一個團隊。

(22)Rotating Chair Discussions 主席輪流討論

The Rotating Chair group discussion method works well in several situations; groups well versed in the ordinary usefulness of this process of building ideas will comfortably engage rotating chair practices for handling difficult discussions. The ground rules for Rotating Chair are four: (1) When you would like to participate, raise your hand; (2) The person speaking will call on the next speaker (aiming to call on a person who has not/has less frequently contributed); (3) The person called on will first briefly restate/summarize what has been said then develop the idea further; (4) As a speaker, if you wish to raise a new question or redirect the discussion, you will briefly summarize the points made in the prior discussion, and where possible create a transition from that thread to the one you're introducing.

Participants gain the most from Rotating Chair discussions by not only participating as speakers, but by also being attentive listeners, jotting down notes about ideas so that ideas develop in those spaces between speaking, learning from others' ideas rather than listening for a "right idea" or "right answer" to emerge, and trusting that the opinions and experiences that you offer in speaking will increase the knowledge base and problem-solving capacity in the classroom.



主席輪流討論法在幾種情況下運行良好,像是;小組深諳在這個過程基本的運作原理,將使它輕鬆進行,並可以馬上處理困難的討論。主席輪流的主要規則有四:(1)當你想參加,請舉手;(2)說話的人將拜訪下一位發言者(目的是使少甚至沒有發言的人有機會),(3)發言的人將首先簡要總結之前說了些什麼,然後進一步發展自己想法;(4)作為一個發言者,如果你想提出一個新的討論點,你將在提出討論前先簡要總結先前要點,並盡可能從你總結的過程創造一個轉變。

主席輪流的活動使參與者不只獲益最大於參與發言,也受益於細心的聆聽、筆記記下意見及觀念發展 過程,學習別人的想法,而不是聽一個"好主意"或"正確答案"出現;並且相信你的意見和經驗將增加課 堂上鞏固知識基礎和解決問題的能力。