

# **I. Secrets of Successful TAs**

## **I. Capacity Determined by Attitude: TA Role Recognition**

As the name suggests, the main task of TAs is to assist teachers with teaching activities. However, a deeper understanding of the positioning and significance of TA roles can help to cultivate a more comprehensive and positive work attitude.

Different types of TAs in National Taiwan University have different responsibilities, and their course tasks also vary. Nevertheless, regardless of the types of TA, the common goal is to improve teaching quality in the course. On one hand, TAs help teachers facilitate the course and assist students with more in-depth learning. On the other hand, they give timely feedback to teachers regarding difficulties encountered by the students in the classroom, and discuss solutions with the teachers. Therefore, their function as a bridge between teachers and students can be regarded as their most important role.

In addition to the income from assisting with course teaching, TAs also gain professional knowledge and career development. First, TAs must be familiar with course content, and transform hard knowledge into forms that are easier for students to absorb, thereby intangibly enhancing their understanding of the course content. Second, the experience of working closely with instructors helps TAs broaden their horizons and familiarize them with the teaching plans of professors. Third, to clearly convey knowledge, TAs must be trained in presentation and expression skills, and the ability to express and judge words. Fourth, in the process of teaching, TAs will become acquainted with students from various departments, which can increase their network. Moreover, interacting with students from other domains can also help TAs understand the differences in thinking as a result of different training.

Naturally, there will be times when TAs encounter discouraging or frustrating situations. At such times, TAs should try to put aside their negative thoughts and seek solutions to the myriad of problems encountered during teaching. If TAs can regard the frustrations encountered in their work as brief lapses in their journey, they will have the opportunity to experience more new things. Subsequently, they may become more serious and responsible in their TA work.

Daisaku Ikeda, United Nations Peace Prize winner once said, "The enthusiasm of youths determines the condition of the world!"

We hope that the TAs can 'serve passionately', 'prepare seriously', 'complete responsibly', 'counsel humbly', 'learn actively' and 'seek counsel' to successfully fulfill their multi-faceted roles of 'bridging teaching', 'steering discussions' and 'catalyze learning quality'.

Figure 2.1.1

## 人才是邁向頂尖的唯一關鍵

*Human resource is critical to achieve the university excellence*



## 以教育彩繪臺灣的未來

*Education brings Taiwan a colorful future*

### II. Secrets to Improving Teaching Effectiveness

#### 1. The Overall Blueprint for TA Work

For TAs, understanding regular course content progress, exams, reports and assignments are non-negotiable preparations. We should have such relevant information ready at the beginning of the semester to plan our work blueprint for the entire semester.

##### (1) Preparation Stage - Two Weeks before School Begins:

Full communication between TAs and teachers is top priority before school begins.

In the communication, TAs should understand the course objectives, the methods in which the courses will be conducted, course assessment criteria, and the amount of freedom given to the them. Some teachers or course designs do not give much flexibility to TAs while others allow TA some freedom. TAs should discuss with teachers to understand the scope of their own authority and responsibilities so that they can abide by a basic guideline in their subsequent TA activities.

At the same time, we can also begin to familiarize ourselves with the course content, prepare handouts and supplementary materials for group teaching, or build a

teaching website for the course. These tasks should be distributed equally to all TAs for the same course. First time TAs can also contact senior TAs in the course about relevant reminders. There are many trivial tasks involved in course preparation. However, by laying a solid foundation, subsequent course teaching will go smoothly.

## **(2) Early Stage - The First 4 Weeks of School:**

A good start is half the success. The first four weeks of school can be regarded as the key period for developing student attitude. The classroom routine and learning attitude established during this time may last throughout the semester.

In the first several weeks of school, teachers, students and TA are still working to fit., and we can observe teachers adjusting their pace. During this time, we should introduce themselves to students, explain the rules of the course, establish an initial mutual understanding, and help students settle into a learning state.

To achieve the above objectives, we can try writing a welcome letter to students. In the e-mail, we can introduce ourselves and inform students of classroom reminders and rules, such as when group class begins, assignment deadlines and grading criteria for absences, late work, tests and class participation. Relevant regulations and classroom materials should be uploaded to the CEIBA website for students to read. It is preferable to clearly define rules at the beginning of semester than leave students feeling confused by being lax and then becoming strict.

Even if we have sent a letter, it is best to publicly express our expectation of excellent student performance during group class and motivate student learning through encouragement. By cultivating student habit of speaking openly, submitting assignments on time and regularly checking course information on the CEIBA website at this time, subsequent TA classroom leadership will be more effective. If there are group activities in the course, groups should be established as soon as possible during this time to allow group members to develop team understanding.

**Figure 2.1.2**

# 給學生的第一封信

給各位來修\_\_\_\_\_的同學：

我是\_\_老師的研究生\_\_\_\_\_,  
這次很高興能擔任課程 TA，  
和大家一同參與這門課。  
今天是第一次上課，有幾件事情和想大家分享，

自我介紹

我們的課程網頁在 [http://\\_\\_\\_\\_\\_](http://_____)  
布告欄中會公告課程的最新動態，  
上課進度和講義都在課程大綱中，  
課程中會有兩次考試、交兩次心得報告，  
在網頁中也都找得到歷屆問題集和報告觀摩，  
歡迎大家多多利用喔！

課程網頁介紹

大家對於課程內容、報告寫法、或考試等等有任何問題都歡迎來信詢問，  
我的 e-mail 是\_\_\_\_\_,  
另外還有 office hour 大家可以多利用，  
時間是每週三和週三上午 9:00 ~ 12:00，  
請大家事先用 e-mail 通知我時間和大概的問題。  
來信時請記得署名，雖然用學號也查得到姓名，  
但總是覺得能在信中看到大家的名字比較親切 ☺  
還請大家多多配合喔！

TA 聯絡方式、  
office hour、  
其他規定

祝大家有個充實愉快的學期 TA \_\_\_\_\_

(Source: Chia Ru-chen, Institute of Biomedical Science).

## (3) Middle Stage - One Month after School Begins to Mid-Term:

As the semester progresses, students will become more involved in department or club activities, which may affect their classroom attitude. During this time, TAs can give appropriately remind students to stay on track with course progress.

Sending regular letters to students is a very effective form of reminder. TAs can summarize the class content before and after each course unit, give a preview of the course for the following week, and remind students of report deadlines. The midterm exam is an important event at this stage. Students may have many questions when preparing for the exam, and we should do our best to help them. Naturally we must set boundaries on our responsibilities and refuse excessive or unreasonable demands from students.

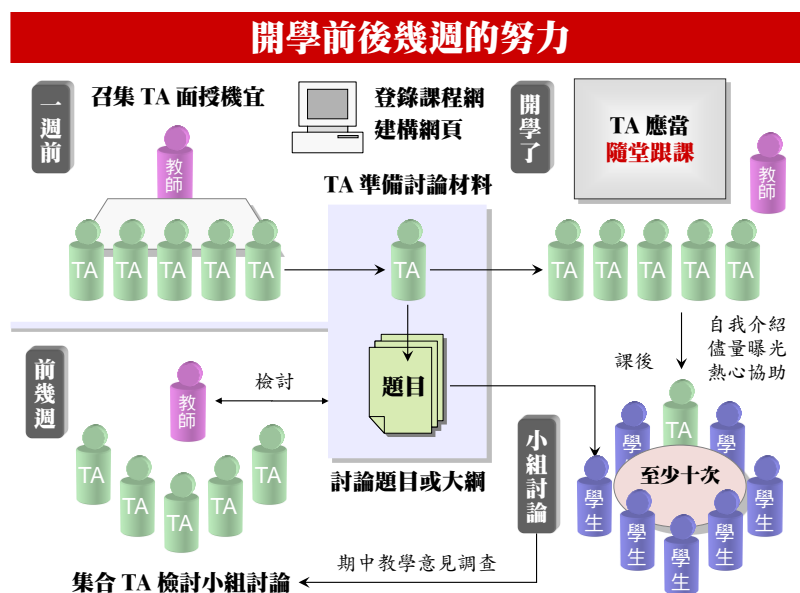
## (4) Final Stage - Last Month to Final Exam:

In the final stage of the semester, students are under pressure from reports and exams while TAs are also at a busy work phase.

During this time, we must ensure that students have submitted their assignments and reports, ensure no missing work or plagiarism, and provide students with appropriate assistance for completing their final report if necessary. At the end of the

semester, TAs may be required to help teachers with grading exams, scoring assignments and calculating grades. Although the workload is quite heavy, TAs can hopefully manage their time well and diligently complete their final tasks.

Figure 2.1.3



## 2. Attitude Adjustment and Time Management

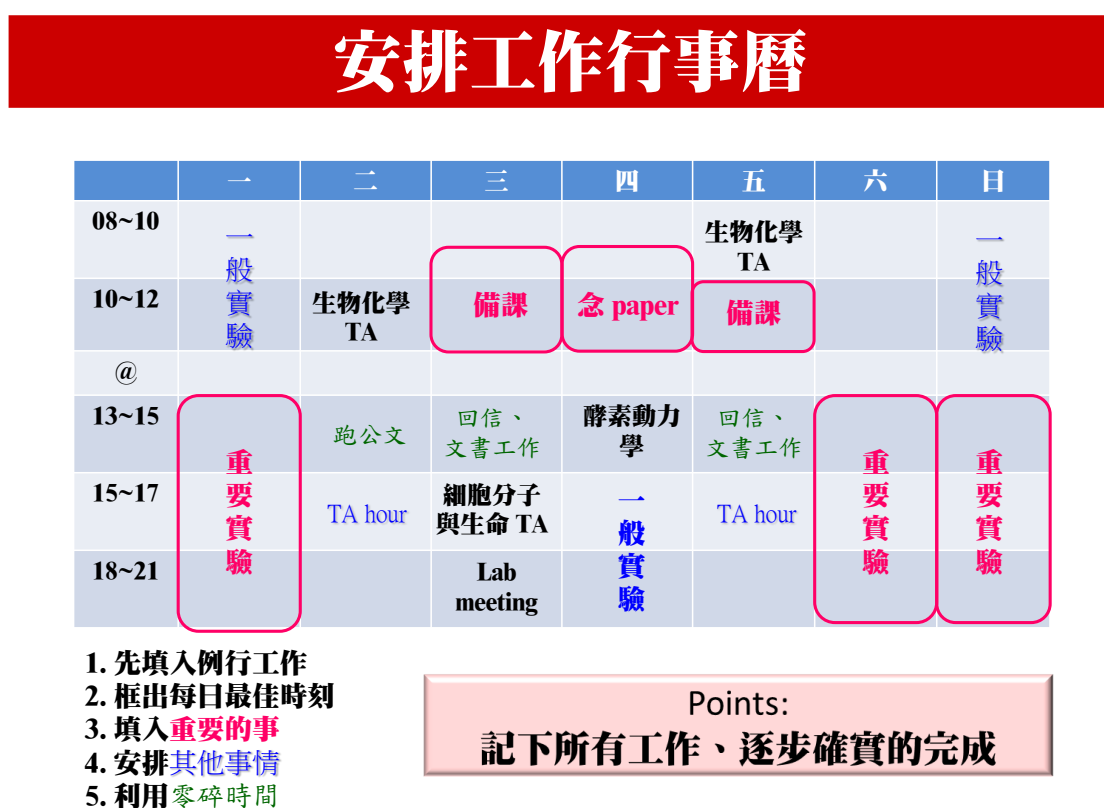
After accepting the TA job, enthusiasm for teaching may prompt us to try to achieve our best, and provide our students with good course learning. This is naturally the model spirit of TA work. However, too much involvement may result in us neglecting our other responsibilities. In fact, as graduate students, we have our own coursework and research, and these are our primary duties. Therefore, setting clear boundaries for our TA work and properly allocating personal time can help us balance teaching and personal life.

The following methods may help us manage our time. First, set a timetable for the entire semester to determine the expected amount of TA work such as lesson or lab preparation, and mark the days when students submit reports, assignments and exams. Then schedule corresponding work hours so that our tasks do not conflict with our coursework or personal life. Second, set a reasonable work goal that can be completed within a certain period of time. Then based on this estimation, determine the manageable amount of work to reduce work stress. Third, leave the best time for important tasks. A wise TA should be able to prioritize things by do the most urgent and important tasks first and dealing with trivial matters when mental energy is low. Fourth, do not cater to students by giving in to every request. Let them know that they need to prepare for their lessons and assume personal responsibility for learning.

Having fixed office hours can help us balance our personal time management

and student learning needs. Students may use TAs as a cure-all by expecting TAs to answer their questions at all times, give them extra make-up classes, compile materials and review key points for them. Such a problem is most serious for Type B lab and practice TAs, particularly during mid-terms and finals. Therefore, regardless of the type of TAs, always remember to keep to principles and not meet every student request. It is preferable that we interact with students via e-mails to prevent our academic life from being disrupted by cell phone calls or instant messaging from students.

Figure 2.2-2



(Source: Chia Ru-chen, Institute of Biomedical Science).

Having fixed working hours allow for more efficient time use. For example, during the early stage, set TA hours to help students with their learning problems. Set aside a specific time for communicating with students via email, and take advantage of the announcement and mail function of the CEIBA website to reduce letter processing time. To avoid forgetting tasks, create a list and cross out completed items so that tasks are not omitted because of busyness.

Figure 2.2-3

## 工作記錄表

周次	日期	授課內容	播放影片	講義
1		簡介+土地住民政經變遷	--	--
2		荷治時期	歷史的台灣：荷蘭篇	<ul style="list-style-type: none"> <li>■ 荷治講義</li> <li>■ 葡萄牙人與福爾摩沙</li> </ul>
3		鄭氏治台時期	--	鄭經與鄭克塽
4		清領前期(康雍乾)	打拚:台灣人民的歷史(第三集)	清治時期
5		劉銘傳	劉銘傳影片	清治+交通建設
6		台灣民主國	--	台灣民主國
7		清明節放假	--	---
8		日治前期	台灣崛起(一)甲午戰爭	<ul style="list-style-type: none"> <li>■ 非武裝抗日時其民族運動的形式與方向</li> <li>■ 學生之政治運動</li> <li>■ 始終一貫的差別待遇</li> </ul>
9		日治後期	台灣崛起(一)非武裝	
10		(期中考週)		
11		國府遷台、戒嚴	藍色海平線	<ul style="list-style-type: none"> <li>■ 早期台灣獨立運動</li> <li>■ 中國國民黨與威權體制</li> </ul>
12		白色恐怖	還原二二八(上)	
13		白色恐怖		
14		國民黨+反對黨運動		
15		修憲+制憲		半總統制的形成與演化
16		政黨輪替與民主化	貼滿郵票的鄉愁	
17		分裂國家與兩岸政治變遷	打拚:台灣人民的歷史(#7~#8)	
18		期末考!!!	--	--

**製作空白表格，確實掌握課堂進度。了解講義以及播放影片時程，也可讓TA本身進行預習備課的計畫。**

(Source: Yang Shu-Wei, Graduate Institute of National Development).

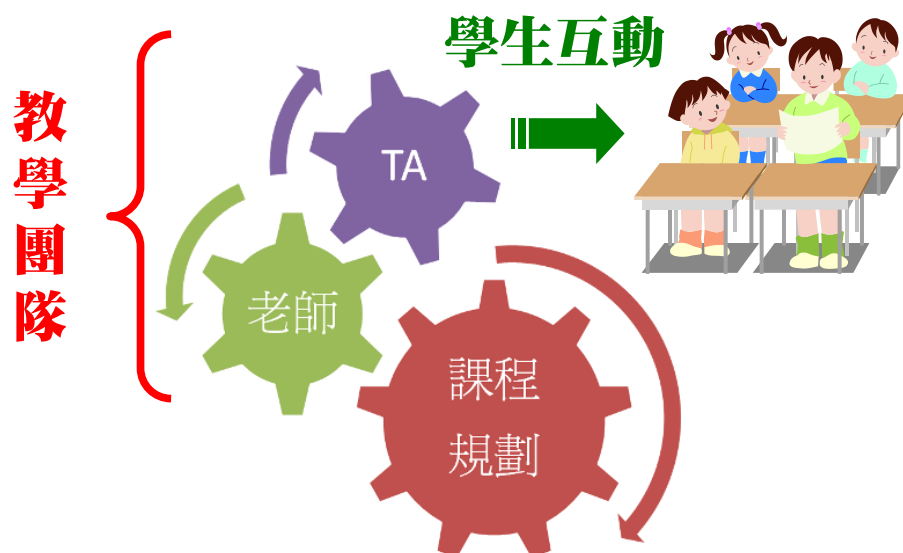
In summary, adjusting our work attitude, scheduling, setting boundaries on responsibilities and efficient time management can help us successfully navigate our work.

### 3. TA Teaching Team Management

A teaching team comprises the course instructor and one to several TAs. The members are like all sizes of gears in a machine. The gears must run smoothly for the machine to work properly. Therefore, a well-run teaching team has a significant impact on the success or failure of the teaching.

Figure 2.3

# TA的定位



(Source: by Guan Shu-Huei, Institute of Ecology and Evolutionary Biology).

For courses with several TAs, the teachers may designate senior TAs as Head TA. The teachers assign work to Head TAs, who then distribute tasks to other TAs in their team. Since the content of weekly tasks may vary slightly, it is recommended that all the TAs meet regularly to determine work progress and share their teaching experience. During the work meeting, TA teams should reasonably distribute responsibilities through communication and coordination. Head TAs can take this opportunity to share their own journey from work skills to crisis management. Through such experience mentoring, the TA teams can avoid mistakes.

First time TAs may find it easy to panic because of the lack of work experience. However, we should remain calm and positive in the face of difficulties. First of all, be fully prepared for the courses and keep up with the courses. TAs who are new to the job are less familiar with the teacher's classroom content. Hence by attending the entire class, reading the course materials, and practicing the content of our group lessons, we can be more confident when facing the students. In case of difficulties during lesson preparation or teaching, seek the counsel of senior TAs. After numerous attempts, if new TAs still find their job very difficult, they should bring it up during the team meeting to seek the support of other TAs or alternative solutions.

A good work team is united, and team members have common goals and vision.

Leaders of teaching teams (teachers or Head TAs) should ensure that their team members agree on the teaching objectives, and their classroom guidelines and teaching activities should be based on the teaching objectives set by the teachers. Team members should also work together and not criticize the team in order to gain personal success. When students comment negatively on the teacher or other TAs, we should try our best to understand the situation, empathize with the students, and then convey their opinion to the teacher or other TA to address the problem. It is important to refrain from conveying negative emotions to avoid exacerbating the problem.

The TA team is one body and should remain united to those outside. Differences in opinion among the team members should be calmly communicated and coordinated. If disagreements cannot be resolved, the teacher should make the final decision, which the TA team should respect. The team should present a unified statement to the outside to avoid loss of credibility in any team member. If the TA teaching team can keep teaching goals on the forefront of their thinking, and respect team cooperation and honor, conducting a successful course will certainly not be a difficult task.

#### **4. Classroom Management**

Generally, students who interact well with TAs feel positively about the course and the TAs themselves. Students who feel positively about the course are usually more motivated to learn, and are more active in the classroom. At the same time, active student participation and attitude will also enhance the teaching confidence of TAs.

This positive cycle of "teaching" and "learning" can further enhance the teaching quality of the course, which is why classroom management is important. The following techniques can be applied not only to group teaching, but also to student interactions or emails.

##### **(1) Self Introduction**

Regardless of TA type, we should introduce ourselves to students in class, meet them face to face or communicate via email during the early stage of the course so that students can get to know us.

Most TAs are similar in age to the students they lead. Therefore, an open and friendly attitude will help them integrate with students and help students converse more easily with them. TAs can also share with students their knowledge background and research interests to let students understand their academic background and build student trust in their academic expertise. At the same time, TAs can also use their first meeting to share their course understanding and expectation with the students,

enabling students to feel confident about their guidance and ability to help them learn. Depending on the circumstance, talking about their hobbies with students is also a feasible way for TAs to quickly close their distance from students.

In short, through the first meeting, TAs should try their best to cultivate trust and identification to facilitate future teaching and communication with students.

## (2) Understand Student Background and Learning Needs

Understanding student background and needs, and adjusting classroom routine accordingly can increase teaching efficiency. In addition, when students feel validated by the TAs, they become more involved in the course and are less likely to skip class or assignments.

To more quickly get to know students and help them get to know each other, we can ask students to introduce themselves on the first day of class. Name cards, seating charts, photos and even taking notes on the students' department or interest can help us recall student names during the first few group classes. TAs without group class can ask students to introduce themselves on the CEIBA website, and thereby develop their habit of regularly checking the CEIBA website.

Figure 2.4.2

看穿學生的真面目！？

姓名：沈○星	綽號：丁丁	生日：秘♥密♥
系級：植科所	學號：D95Bxxxxx	電話：秘♥密♥
E-mail：b_xxxxxxxxxx@yahoo.com.tw		
以1~2句話形容自己是怎樣的人：眼鏡是本體		怪人
曾修過何種與生命科學相關的課程：		
曾參與過何種生物保育自然體驗環保的社團或活動：生研社		有點基礎
曾在台大修過以討論課為主的課程：		
除了本科系專業外，還有哪些興趣、專長或技能：LOL, D3, 桌遊		宅

有點基礎的怪宅人才：還算肯表達自己的意見，可以當暗樁

(Source: Shen Yu-Hsing, Institute of Plant Biology).

After an initial understanding of student background, we can assign classroom duties and groups. For example, students with some basic knowledge of the class content can serve as our helpers. To facilitate group discussions, each group can be assigned 1-2 such helpers. In addition to understanding student background, self-introduction is a good opportunity for understanding student motivation. Students whose only goal is course credits are usually passive in their learning and therefore less interested in the course. Hence, we can try to inspire their learning motivation. On the other hand, for students who are passionate about the course content, we can offer additional knowledge for further learning.

Based on the different learning motivations and the teaching goals set by teachers, TAs can adjust their course content and difficulty level to enhance student learning efficiency. For example, the knowledge background and motivation for taking the course are more complex among general education students. Therefore, it is best to avoid using terms that are too technical or monotonous explanations. On the other hand, using course related films and current events as supplementary materials can arouse student interest and trigger motivation for further exploration. In professional courses, teachers may be more concerned about whether students are keeping up with the reading list. In this case, class discussions must focus on the text, and we can design a series of questions to lead students from superficial to in-depth discussion.

### **(3) Public Speaking Skills**

Speaking on stage is a full body exercise involving the head, eyes, nose, ears, mouth, hands, feet, chest and abdomen. Oral instruction is not enough to create a deep impression on the students. Therefore, when preparing lessons, we should think about how to strengthen impression through physical and multimedia stimulation.

Before going on stage, we should plan in advance the time, key points and presentation methods for the course, arrange in detail accompanying activities and props, and present accordingly. When on stage, TAs should not keep looking at their lecture notes and materials. They should divide their focus on the audience into three blocks--left, center, right, sweeping their eyes back and forth to ensure that students are looking at them and sensing their watch. When making an important point, TAs can slow down or pause in their speech to attract student attention.

In addition to body language, appropriate forms, pictures, music, video and other multimedia-assisted teaching tools can be used to summarize information, attract student attention and stimulate their learning interest. When using instructional multimedia, we should clearly explain to students the teaching focus and what the

students should be observing so that multimedia teaching and teaching objectives can be more closely integrated. Furthermore, unless the main content of the course is music and video appreciation, music and videos should not be overly long to avoid affecting main teaching activities.

#### **(4) The Art of Communication**

When communicating with students, TAs should pay attention to the speed, tone and words of their speech. TA can use pauses and inflections to capture student attention within one minute. At the same time, words should be positive and encouraging, such as "very good, great". Negative words such as "but, however, still" should be avoided.

When communicating, we must convey goodwill. Appropriate amount of eye contact with students, smiles and the ability to call students by name indicate the sincerity of TAs to communicate with students. When conversing, remember the principle of 'listening' and 'withholding judgment'. Listen carefully to student needs to respond appropriately. Even if the question raised by a student may seem very simple to the TA, it should not be ignored because other students may also have problems with that simple question. Last, if an interaction with students turned out unpleasant, we must avoid rash, emotional responses. It is better to pause and understand the difference in opinion before proceeding with the conversation.

Last, TAs should abide by TA ethics when communicating with students. When talking in public, avoid sensitive issues such as gender or ethnicity. In addition, TAs should not use class time to talk about their political positions. When interacting with students, TAs must respect the boundaries of their role, and they are strictly forbidden from developing emotional relationship with students.

#### **(5) Sincere Concern and Compliment for Students**

From their perspective, students feel the diligence of TAs when they offer needed assistance during the course. For example, TAs can initiate reviewing the types of questions in which errors are common, or use their own learning experience to provide mnemonics, associations and graphics to enhance student learning efficiency. For topics that students are less familiar with or course content that they are especially interested in, TAs can increase discussion time. They can also offer students additional information about lectures, exhibitions or news that are relevant to the course topic to give them the opportunity to expand their learning content. When students perform brilliantly in class, in their Internet comments or quiz, we can publicly compliment them during group classes or by e-mail, and list their excellent achievements. By initiating concern for their classroom needs and performance, and

giving them positive feedback, TAs can help students become more motivated in the course.

TAs can chat with students after class to give them timely help and feedback so that they can reflect on their understanding of the course, thereby allowing teachers to adjust their teaching progress. If class time is inadequate, TA Hours is also a good channel for resolving student confusion or providing feedback. However, to prevent students from intruding on personal time with questions that are irrelevant to coursework, it is recommended that outside of class time or office hours, TAs should communicate with students via online bulletin board or email.

In short, TAs should be well prepared and cheerfully help teachers. When teaching, we should cherish opportunities for communication and exchanges, uphold professionalism and strictly observe classroom regulations. At the same time, we should also take into account learner needs and be ready to adjust our teaching method to make learning enjoyable and effective for the students.

## **5. Group Management and Leadership**

In addition to general TAs, TAs for discussion classes, labs and foreign language classes usually work directly with small groups of students. However, general TAs can also divide large classes of students into small groups. Through rotation visits, TA Hours and discussion bulletins, TAs can keep in close contact with students and track their learning. Although different types of TAs have different teaching tasks and forms of activities, there are some common tips that can be applied across different types of groups to help us lead our groups.

### **(1) Group Composition:**

Group composition is an important issue for TAs in group teaching or group work supervision. Common grouping methods include member selection by students themselves or randomly system assignment. However, with basic understanding of the student background, teachers and TAs can group students according to the information and course purpose. For example, groups can be based on an even distribution of students from different departments, a balance of males and females, or expertise.

In fact, member distribution and composition have a great impact on future group dynamics. Members from the same department may lack stimulation in their learning because of familiarity. Groups with too many couples may affect the mood of others with their romantic overtones. Groups with an uneven mix of males and females may result in an one-sided attitude on certain issues. The above are examples of challenges we may encounter. Therefore, assigning group members is a basic task

that cannot be underestimated. It should be noted that if there are mid-term group presentations or finals group reports, groups should be formed as soon as possible for members to develop cooperation and mutual understanding.

Figure 2.5.1

## 小組主題報告和短劇表演—TA秘笈

- 開學3週內確立分組，建立分組通訊錄。

大一英文分組名單暨通訊錄  
(此聯請撕下交給助教Annie，另一聯由組長留存)

組別:

閱讀文章篇名:

科系	學號	姓名	手機	確定能收到訊息的E-mail(請勾選或填寫)
				<input type="radio"/> NTU信箱 or <input type="radio"/> 其他:
				<input type="radio"/> NTU信箱 or <input type="radio"/> 其他:
				<input type="radio"/> NTU信箱 or <input type="radio"/> 其他:
				<input type="radio"/> NTU信箱 or <input type="radio"/> 其他:

(Source: Chiang Min-Hsuan, Department of Foreign Languages and Literature).

### (2) Developing Group Cohesion:

Group management skills can be used to enhance group unity. For example, to help group members interact more enthusiastically, we can encourage students to get to know each other to reduce the gap and anxiety among them by having them make name tags and introduce themselves. In class, we can assign group work to enhance their group identity through division of labor and cooperation. During the semester, the following methods can be used to vitalize the effectiveness of group learning:

- Role change by having students be the discussion leader.
- Use outstanding group work as models and be generous with encouragement.
- Remind students of learning progress, and provide external motivation such as scores to reinforce learning willingness.
- Work closely with students and use the opportunity to close the distance from them.

Through these activities, TAs can help students understand the importance of listening and respecting the opinions of others. By creating an open and trusting group atmosphere, students will ultimately develop tacit cooperation and become aware that positive interactions can create great energy.

### **(3) Completing Group Report:**

More and more courses are using group report as a method of assessment. Group members must collect, compile and analyze data through discussions, coordination, division of labor and cooperation, then use multiple presentation methods to complete their mid-term and final group report. Therefore, guiding students in their information search and helping them formulate feasible topics are important tasks for TAs.

TAs should also regularly monitor the progress of group discussions. At the beginning of the semester, we can ask groups to schedule their progress and division of labor so that the report can proceed accordingly as much as possible. At the same time, have students record the progress of each discussion and report back to the TA regularly. In this way, the groups can avoid hastily put together report just before the deadline, and uneven distribution of work among group members can be avoided. When calculating group grades at the end of the semester, we should allow group members to have some say in the grades. Mutual assessment among the group members can prevent those who did not contribute to group activities from enjoying credit for the success.

**Figure 2.5.3**

# 小組自評互評

範例 (可以E-mail交給助教)

期末整體回顧

評分 5~1	主動參與 積極討論	分配工作 執行能力	相互尊重 團隊氣氛
最佳 5分	主動參與小組活動 積極提出討論意見	分配工作準時完成 成果令人相當滿意	尊重組內不同意見 維繫小組和諧氣氛
最差 1分	閃躲推託小組工作 消極裝傻排斥討論	分配工作未能完成 成果鬆散交差了事	無視組內不同想法 引發小組衝突紛爭
派大星			
海綿寶寶			
章魚哥			
蟹老闆			
自己			

依據表現的等級表現，給予1~5分。

(Source: Hwang Ya-Lun, Institute of Ecology and Evolutionary Biology).

In conclusion, when leading groups, we should aim to 'cultivate group cohesion', 'inspire active learning in students', 'maintain student interest in learning' and 'achieve completion of high-quality group work'. To this end, TAs must properly plan and manage the groups.

## 6. Session 1 of TA Group Class

The first TA group class is very important for TAs because students are meeting them for the first time, and will form their first impression of the group class accordingly. A dull first group class will not inspire members to speak in subsequent classes, while a TA seems ignorant in the first group class will not inspire students' confidence in the TA. Therefore, experienced TAs will put special effort into designing their first group class.

During the first group class, TAs have several key tasks. The first is familiarizing students with the course, including the course purpose, course content and teacher requirements, and self-introduction. The second is housekeeping, including introducing the course website, providing teacher and TA contact information, handling purchases for assigned books, and grouping. The third is getting to know the students, such as having the students introduce themselves during the group class or

on the Internet, and using name cards or photos to identify the students.

Establishing an atmosphere of discussion is also an important task during the first group class. This may be the first time that students are participating in a group course led by a TA, and are not used to speaking. Without the stress of course progress at this time, we can try some little activities to break the silence and unfamiliarity of students. These types of activities are called icebreakers, and the following are examples of effective icebreakers:

- Self-Introduction: Besides non-structured introductions, students can also be given self-introduction cards. Students fill in their basic personal information and interesting information such as their learning interest, nickname or expertise. The order of introduction can be based on seating or student number, or by passing a ball for added fun.
- Dream Group Class: The groups discuss the most anticipated or boring type of group class. Using study handouts and the blackboard, explain the advantages and disadvantages of the various types of group class. After compiling and summarizing data, have the groups debate the different ideals and expectations.
- True or False: Design yes/no questions to help students get to know each other. Stand all the group members in a circle where they can see each other. Use standing, stepping forward or drawing circles or crosses with the hands to answer the questions. The questions should not invade student privacy, and should be simple yes/no questions about daily life, classes or academics. The purpose is to lower student defense and create a fun atmosphere. Appropriate self-disclosure by the TAs may also be unexpectedly effective.
- Picture Storytelling: Have students draw from a set of prepared picture cards and think about their traits, outlook on life or family background according to the card content and text. Then have the students take turns sharing their reflections. After the sharing, organize the dimensions mentioned by the students on a poster or blackboard to help them get acquainted, as well as letting us have an initial understanding of the students.

These are not the only ice-breakers. TAs can also think of other activities for promoting an atmosphere of discussion, and copy and learn from each other to enhance their leadership.

## **7. Prepare a Procedure for Leading a Class**

To effectively achieve the teaching objectives of each group class, we can

prepare a procedure for leading each class, including the method for conducting the course, the teaching materials, and even backup plans (such as if the classroom equipment malfunctions). Pre-planning the classroom procedure can help TAs avoid becoming overwhelmed in class because of the lack of preparation. It also allows new TAs to become familiar with leading a class. The following BOPPPS module is a commonly used teaching process. It helps teachers disassemble and analyze the teaching process and discover blind spots in their teaching, thereby improving and enhancing their teaching effectiveness.

The BOPPPS module basically dissects teaching content into small units of about 15 minutes duration. Since humans can concentrate for only about 15 minutes, TAs should not talk continuously for more than this amount of time. Each mini teaching

unit comprises a 'transition' that ties all the units into a single course unit, which fits into the transitions. Hence based on these transitions, the BOPPPS divides the course into six parts.

Part One is Bridge-in, which aims to attract student attention and help them focus on what is about to be introduced. At the beginning of the discussion class, TAs can explain the reasons, importance or commonality of the course, tell stories or personal experience related to the course topic, ask questions related to the course topic, or share a famous quotation related to the course content to guide students into the course.

Part Two is Objective/Outcome. Simply put, TAs should clearly communicate the teaching objectives, such as key course concepts, learning value and the skills to be learned so that students can clearly understand their learning direction. Course objectives must be specifically and clearly described, and include components such as who the targets are, what they will learn, under what conditions and how well they will learn.

Part Three is Pre-assessment. Tests, assignment or informal questions such as open-ended questions and brainstorming can be used to determine the prior knowledge and readiness of students for the class discussion topic. For TAs, pre-assessment can help them understand student interests and abilities, allowing them to adjust content depth and progress. For students, pre-assessment can help them focus on specific course purpose, enabling them to express to the TAs their need for review or clarification.

Part Four is Participatory Learning, which is divided into two types: The common type is TA and student interaction, and the other is discussion among students. In this stage, TAs should use teaching strategies to warm up class participation. Frequently used methods include dividing students into small groups for

problem discussion and pausing the lecture to allow student reflection. In addition, students can also be encouraged to ask questions, or scenarios can be presented to draw them into an interactive context.

Part Five is Post-assessment which allows TAs to determine student learning outcome and whether teaching goals are achieved. There are different assessment methods for different course content. For knowledge-based courses, multiple choice or short-answer questions can be used. For analysis-based courses, students can be asked to practice analyzing specific scenarios. For skill-based courses, a checklist can be used or students can simply demonstrate what they have learned. For attitude-based courses, students can be asked to fill in an attitude scale, write a short reflection or journal.

Last is the Summary. This stage has a transitional function. In this stage, TAs should help students summarize the content of the class, integrate key learning and preview the content for the next class. In addition, appropriate recognition of student efforts and learning outcome is also a common method for concluding the course.

The above model is not appropriate for every course. It can be adjusted according to course content to design the most suitable process.

## **8. Principles for Questions and Answers**

TAs can organize classroom processes using different types of question activities. Through questions, TAs can help students gradually digest the course content, connect course content to their life experience, and enhance their course understanding. Good questions can lead students to integrate their thinking and logic, and process the course content into systematic knowledge. Discussion questions can be designed by TAs themselves or in consultation with the teachers.

Questions should be progressive: Introductions are intended to attract student attention, so at this time, questions should be relatively superficial. TAs can ask students about their daily life or classes; or they can tell a story related to the course and ask students for their thoughts. Pre-assessment questions should be coordinated with the course content. For example, in a novel discussion class, TAs can have students summarize the novel to understand their mastery of the content being discussed. In participatory learning, questions are more in-depth and directly explore the topic of discussion. Using the same novel discussion class as example, students can be asked to analyze the expression techniques used in the novel and explore its positioning in the history of literature. By digging through each layer of core issues, students are helped to focus on the topic of discussion. Post-assessments are tests of student learning outcome. For example, TAs can have students write a short essay using the techniques they have just analyzed to test the effectiveness of the discussion.

TAs should aim to clarify student arguments and provoke further thinking in their response to students. When students ask questions or respond, they may not always be able to effectively organize their arguments. At this time, we can ensure our understanding of student opinions through a variety of questions and repeat verifications, and at the same time guide students in organizing their arguments. After a student has spoken, summarize his or her arguments. In addition to avoiding misunderstanding, this will also allow other students to understand the opinion of the speaker. Once the arguments have been verified, we can extend the discussion to a deeper issue, integrate the topic into other chapters of the course or integrate classroom knowledge with real life to encourage students to think and care about real life.

Different types of questions and feedback can be used for different types of students. Students who are enthusiastic and active are less likely to have stage fright. Hence when the class falls silent, they can be asked to speak to enliven the classroom atmosphere. At the same time, TAs should also respond strongly with positive feedback and compliment them for their enthusiasm. However, TAs must remember to shift speaking rights to other students in a timely manner to avoid a small number of students dominating the discussion.

Some students are used to listening to others before deciding whether to speak. They may need time to organize their arguments. Therefore, in addition to giving them enough time to think, we can help them focus on key points through questions and answers. Some students are capable of weighing the opinions of all parties. When a discussion turns into dispute, we can ask such students to reconcile the views of both parties to avoid direct involvement of TA authority.

Some students like to openly refute the TA. When this happens, we can listen to their arguments. If their opinions are mere mischief, we can use humor to resolve the confrontation without directly responding. If their refutation is based on carefully thought out arguments, we should earn our credibility with them through professional merit. We must keep in mind that student rebuttals are opportunities for in-depth discussions, and therefore should not disregard any feedback.

In addition to discussing course content, students may also approach TAs about course problems. In general, response to student questions can be divided into three categories:

The first category is a discovery approach to questions and answers. For more complicated problems, instead of providing students with direct answers, it is preferable to help students think by answering their question with questions. By helping student with problem analysis and inferences, students can learn to think likewise and become more flexible in their thinking, thereby facilitating positive

learning attitude.

The second category is a spontaneous approach. For simpler basic questions, we can encourage students to find information online or from the library. The more serious the students are about their question, the more likely they are to follow through.

The third category is an open discussion approach. Many students have questions about some past exam questions or questions that will be tested. To avoid having to repeat the answers and to remind students of key content before exams, use group class time or group mail to publicly respond to all students. Such a question-answer method is suitable for many of the more passive students.

With questions, discussions and answers from TAs, students can integrate their previous knowledge into the course content to gain in-depth understanding of the course. The above principles are not static, but depend on our full and flexible use to achieve the best teaching outcome.

## **9. Teaching Models for Participatory Learning**

The purpose of participatory learning is to encourage students to take initiative in learning and guide them from being passive classroom audience to active learners. By active discussion and participation, students will be able to discuss topics more deeply. In addition, the TA and student interaction can also help students focus their attention. The following are several methods for participatory learning:

- Response Slips or Cards: Some students are shy or fearful of conflict with others, and thus unwilling to express their opinion in front of everyone. We can use anonymous opinion slips or cards as a way for these students to express their opinion.

**Figure 2.7.2-1**

# 萬用小卡片

寫下心得、經驗、表決、建議…

- 促進思考
- 前測後測
- 發言手稿
- 分組依據
- 變相點名

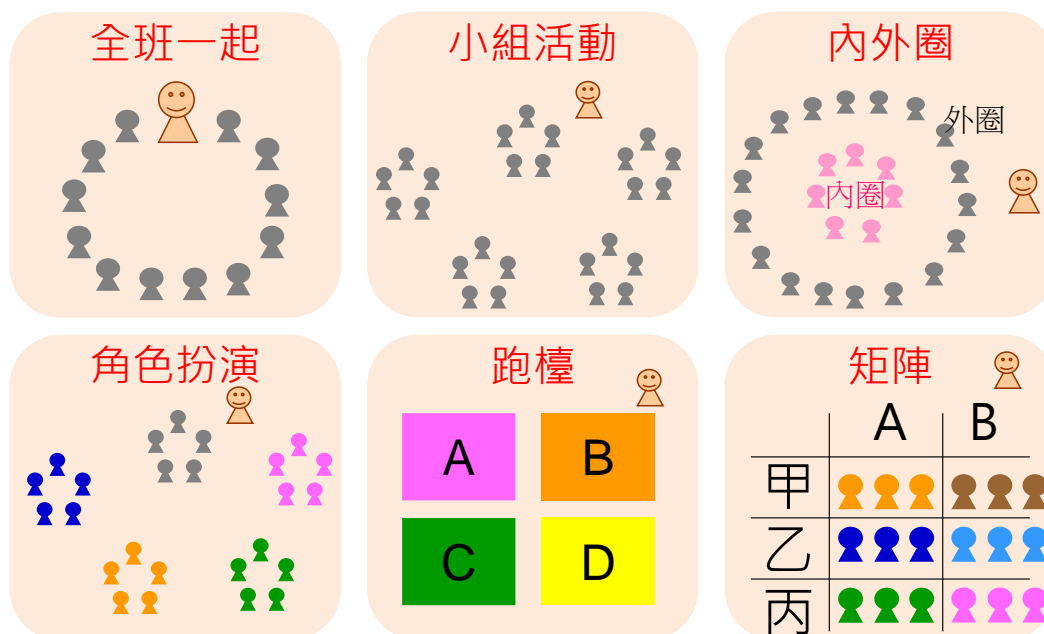


(Source: Li Cheng-En, Institute of Ecology and Evolutionary Biology).

- Survey: Surveys are a very convenient way of classroom participation. We can use questionnaires, show of hands, placards and even electronic voting devices to quickly learn about the view of each student on a topic, then guide them into further discussion.
- Learning Partners: We can pair students into learning partners to discuss short written materials, question each other about assigned readings, comment on or correct each other's work, discuss problems encountered during the learning, share their thoughts about various classroom activities, jointly respond to questions posed by the teacher or TA, or share and summarize the key lessons of the class.
- Talks: This refers to having several students with relevant knowledge background, expertise or experience lead scenario discussions in a cohesive and focused manner. Remember to allow each student the chance to lead a talk to increase their course participation.

Figure 2.7.2-2

# 討論的進行方式與活動



(Source: Li Cheng-En, Institute of Ecology and Evolutionary Biology).

- **Group Discussion:** If there are too many students in the discussion class, the class can be divided into groups of 4 to 5 students. The groups can discuss the same or different topics, then share the outcome of their discussion. During the activity, the groups should maintain appropriate distance to avoid mutual interference. TAs can circulate among the groups to monitor their progress, and guide groups that are less enthusiastic in their discussion. We can ask group members to serve as chair, record keeper, spokesperson to respectively moderate the discussion, summarize the main points of the discussion, and share the results of the group discussion from the podium.
- **Large Group Discussion:** Moderated by the TA, discussions are conducted by the group as a whole. This approach is suitable for discussion classes with fewer members. The best arrangement is to form one large circle so that members can see each other. At the beginning, the large group discussion may become deadlocked. Hence, we can assign more active students to open the discussion or use props such as speech balls to prompt speaking. If we are moderating the discussion and are unable to record the discussion outcome, we can ask students to take turns with recording.

- Discussion Circle: TAs can also try the discussion circle with the “inner discussion circle and outer audience circle”. Being the focus of attention, students in the inner circle are more motivated to perform while students in the outer circle will listen carefully to prepare for their turn in the inner circle. Taking turns in the inner and outer circle will allow each student to experience two different ways of learning.
- Fun Activities: Few people can resist the appeal of fun activities. Fun activities such as competitive Q&A, Blow Wind Blow, jigsaw puzzles or role-playing can immediately energize students and draw us closer to them.

In addition to the abovementioned methods of interaction, topical reports, outdoor activities, film discussions, drama performances, reading clubs, group competitions or debate competitions are also very useful. We can also be creative and develop other teaching activities that can enhance interaction.

## **10. Skills for Leading Discussion Class (Type A)**

Leading discussion is a key task for discussion class TAs.

Except for during mid-terms and finals, discussion class TAs must lead one hour of discussion each week. Discussion classes usually have about 20 students. With the small number of students, TAs have a lot of room to perform. Discussion content may be an extended discussion of the lecture content, assigned readings, group report preparation, or answering student questions. However, discussion procedure should be adjusted according to teaching objectives and learning targets. If the goal of the class is to discuss assigned readings, then students should be required to finish the text before the discussion class. TAs should design questions based on the text to lead student thinking, and assess their understanding of the text. If the purpose of the discussion class is to complete the final group report, then students should first be grouped and a considerable amount of time reserved for the groups to discuss their final report.

Discussion topics and methods of conducting the discussion may be determined by the teacher or decided by the TA. However, the leadership of the TA is key to the success or failure of the discussions. If TAs are knowledgeable about the aforementioned classroom processes, principles for questions and answers and participatory teaching activities, they will be more effective when leading their discussion class. Successful discussion classes require TA diligence, creativity and skills. When TAs are diligent, students can feel their genuine concern and the effectiveness of their help. When TAs are creative, they can generate a conducive classroom atmosphere and help students resolve a myriad of problems. When TAs are skillful, they can more efficiently fulfill their teaching. When TAs are dedicated to the

above goals, they can lead a successful discussion class.

### **11. Skills for Leading Labs and Practice Classes (Type B)**

Discussion classes emphasize interaction, so Type A TAs must encourage creativity, diversity and expression of personal ideas. On the other hand, labs and practices tend toward lectures, so Type B TAs must emphasize simulations. Safety is very important in labs, and students must operate according to the lab procedures demonstrated and explained by the TAs. In practice classes, practice exercises are important, and students must practice according to the algorithms demonstrated and explained by the TAs.

Preparation is very important for Type B TAs. Lab TAs must ensure that all lab equipment is ready and practice the experimental process. It is particularly important to prepare safety equipment and have crisis telephone numbers at hand for contingency response. Practice class TAs must pre-practice algorithms to avoid errors during the calculation process. For middling or low grade students who need the most help, TAs must be able to carefully explain in simple terms that students can understand.

Designing the classroom process is also very important for Type B TAs. Lab work and in-class quizzes will consume a lot of class time, so Class B TAs should pay attention to time arrangement. They should design the classroom process for a particular group class based on whether there is a quiz. During class, we must avoid overly long lectures, but must leave students with enough time for actual practice. After the explanation, students should be required to conduct actual practice and TAs can circulate around the classroom to help solve student difficulties. Last, conduct a course review and test. Having students share their difficulties in the lab or practice on stage are some useful methods. TAs should design and modify the above process as needed.

When solving problems, it is best to use the blackboard. We can list important formulas and problem-solving concepts on the blackboard before class, and remind students of them from time to time. Blackboard writing should be neat and orderly, and should not be scattered throughout the blackboard. Formula deduction should be complete so that students who are distracted can still follow along through the complete calculation. Errors in problem solving step or formula should be immediately corrected and clearly noted. At the same time, TAs should move around the podium constantly to avoid blocking some students from seeing the blackboard content. By working through problems on the blackboard, we convey our thinking to the students.

TAs with insufficient teaching experience may not be able to plan a systematic

blackboard, and therefore should practice diligently. We can first copy the practice problems and calculations onto a piece of A4 paper, and lay out corresponding formulas. Then during class, we can copy the prepared content onto the blackboard. In addition to avoiding mistakes, this can help reduce anxiety for new TAs. However, even with a prepared cheat sheet, we should still look at the students when problem solving instead of focusing on the cheat sheet and blackboard and ignoring them.

Lecture is the main teaching mode for Type B TAs. Explanations should be kept at the moderate to easy level of difficulty, and should take students with middling to low grades into consideration. Different techniques such as mnemonics and associations can be used to help students remember formulas, or graphics can be used to explain lab procedures. Integrate experiments or practice problems with current events to help students understand the relationship between the course and life. When conducting experiments or solving problems, we should repeatedly remind students of previous experimental or problem-solving concepts, and guide them into thinking about why they should follow this particular step in the experiment or formula derivation. For example, practice class TAs should not be stuck in the correctness of a calculation, but should instead focus on communicating problem-solving concepts. We can even ask students for other ways of solving a problem to help them understand that calculation is a process instead of simply memorizing formulas.

After TA demonstration, students may still not fully understand the experiment process or calculation technique. Therefore, during our explanation, we should constantly verify whether they understand the process. Some students may pretend to understand out of shame for not understanding. Therefore, if no student raises questions at the end of our explanation, we can assign students to solve our prepared application questions or extended discussion on the spot to test their understanding.

After leading a class for a period of time, TAs should be able to gradually understand the blind spots in student learning. To explain an experiment or practice problem, TAs can design their teaching content according to the blind spots. With consistent observation, implementation and adjustment, TAs will gradually perfect their teaching

## **12. Leadership Skills for General TA (Type C)**

There are several characteristics in general TA work. First, the TAs have many students in their class, perhaps 2 to 3 times more than for other types of TAs. Second, there is no fixed group time, so students may be unaware of the existence of TAs. Other types of TAs can design their own group lessons and interact with students in group classes to help them learn and grow. However, general TAs do not have this opportunity. Their main job involves massive amounts of housekeeping, assignments

and exam papers. Therefore, in terms of working hours allocation and fairness in grading, general TAs may encounter more problems than other types of TAs.

In summary, the challenges faced by general TAs include: (a) Effective interaction with students; (b) Effective use of time; and (c) Fair grading. Effective use of time has been described above. The following sections will introduce fair and effective grading skills, and describe ways in which Type C TAs can interact effectively with students.

To facilitate student awareness of their existence, Type C TAs must actively create opportunities to reach students. For example, they can email students regularly, and use CEIBA website bulletin and discussion boards to interact with students. When interacting online with students, we can convey goodwill by asking about how they are doing. Establishing a fixed work routine can also enable students to become more aware of the existence of Type C TAs. For example, TAs can send letters to students at regular times to explain class progress or assignment rules, or consistently check in with them on the CEIBA website for any questions or new discussion topics. However, since we cannot see the expression or tone of the other party online, we must be attentive to our word choices to avoid creating negative associations as a result of unintentional words.

In addition, we can also initiate opportunities to talk to students. For example, we can ask professors to set aside a few minutes of their class time for us to explain assignment grading standards to the students, point out common errors in tests, and even publicly compliment students who have performed well. When speaking, we can demonstrate our personality through slangs, gestures or pet phrases to help students recognize us more easily. End of class and fixed TA Hours are the best times for TAs to meet students. We can ask students about the class to determine how well they have absorbed the course content or understand which areas of the content they are not familiar with.

Last, although general TAs must manage the largest number of students, they can create name cards or class IDs to familiarize themselves with student faces, background and interests, and provide teachers with a channel for further knowing their students. In short, although their basic duties do not require regular student contact, with diligent planning, general TAs can still provide students with assistance apart from correcting assignments and exams.

### **13. Leadership Skills for Language TA (Type D)**

The main task of language TAs is to help students become familiar with a foreign language. Language ability training should include four dimensions: listening, speaking, reading and writing. Except for reading ability which students can practice

on their own using materials, practicing other skills require the guidance and feedback of another person. In this regard, language TAs can provide students with considerable help.

The types of group classes for language TAs can be generally divided into group activities, oral group practice and small TA moderated teaching activities. TA tasks in group activities include grouping, making a directory of group member, and providing clear instructional guidelines, learning resources and TA grading guidelines. The teaching guidelines may be in a foreign language, but it is recommended that both Chinese and foreign language be used to avoid students failing to understand the intention of the TA due to unfamiliarity with the foreign language. With oral group practice, TAs can help pair students with practice partners as quickly as possible, and explain practice and assessment methods. During group practice, TAs can circulate among the groups to point out key practice items or common errors. They can also correct student pronunciation, rhetoric or intonation if necessary.

During group activities, we can have the groups record the content of their discussion and task distribution. In addition to allowing us to monitor group progress, this will also help prevent uneven division of labor among group members. During group presentations, we should provide feedback after listening to their report, and comment on the content and method of presentation. Some students may read off their script due to unfamiliarity with the foreign language. In such cases, we need not be too anxious. Rather, we can let them start with reading off their script and then gradually guide them into presenting with ease.

Figure 2.10-1

## 小組主題報告和短劇表演—TA秘笈

### ●掌握小組討論情形，撰寫討論記錄。

小組討論情況調查表				
日期	組別	姓名		
1. 在和TA討論之前，你是否有收到TA寄給你的注意事項並且閱讀理解相關內容？○是○否（請勾選）若有，請問你對於注意事項的內容有沒有什麼疑問或是建議？（請盡量填寫，您的意見將有助於TA的改進◎）				
2. 在和TA討論之前，你們這組事先討論的次數和時間？				
3. 在這次小組報告中，你們的組員分工如何分配？又，你個人所負責準備的部分有哪些？				
4. 整體而言，你對於自己小組的討論情形有沒有什麼看法？				

(Source: Chiang Min-Hsuan, Department of Foreign Languages and Literature).

In small teaching activities, the TAs coordinate with teachers by further explaining course content or provide supplementary teaching. We can use this time to review assignments or previous test, explain materials that students are unfamiliar with, and remind students of common errors. When students indicate that they understand the content, we can ask further questions to test if they truly understand their mistakes. Besides textual expressions, common errors also include verbal expressions. In such cases, we can demonstrate correct pronunciation or intonation, and have students practice publicly. Moreover, we can integrate current events into the course, and gather other materials such as TV programs, movie clips and pop music to introduce foreign customs to stimulate learning interest in students. Using additional teaching activities such as online learning resources or learning demonstration software can also benefit student learning.

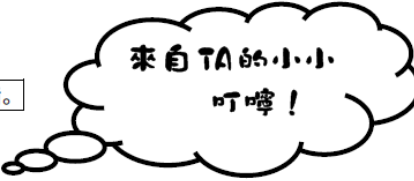
Figure 2.10-2

## TA的貼心輔導

誦純丁A的期中重點小複習♥ 要乖乖念書喔~☺ **1**

★假名重點留意，需小心寫法別弄錯。

- ①平假名的「て」(te)和「へ」(he)
- ②平假名的「わ」(wa)和「れ」(re)
- ③片假名的「シ」(si)「ツ」(tsu)「ミ」(mi)
- ④拗音「ゃ」「ゅ」「ょ」以及促音的「っ」寫的過大，導致辨識度不高  
例：しゃ(×)→しゃ(○)。  
どくしょ(×)→どくしょ(読書)(○)。  
ざっし(×)→ざっし(雜誌)(○)。
- ⑤平假名濁音「が」有三撇喔，片假名的「ガ」才是兩撇。
- ⑥わたし「わ」(wa)(×)→わたし「は」(wa)(○)  
要留意「は」(ha)當助詞使用時念(wa)。
- ⑦標點符號的問題・日語的逗號是「、」(一撇)・



(Source: Chao Yung-Chun, Department of Japanese Language and Literature).

In addition to classroom learning, assignment correction and personal enquiries through e-mails are also channels for language TAs to help students. However,

language TAs often find themselves with problems that they cannot solve because a language carries various aspects of its culture, and its content is infinite. Therefore, when we encounter an unfamiliar cultural dimension in our problem solving, we do not have to feel incompetent. A useful approach is to maintain a positive attitude, and immerse ourselves in the huge flow of knowledge with the students to jointly seek answers and develop.

#### **14. Leadership Skills for Physical Education TA (Type E)**

The main duty of sports TA is to coordinate with the needs of physical education curriculum and assist students with using sports technology or demonstrate movements under the directives of the teachers. Specific tasks include helping teachers prepare teaching materials, roll taking, leading warm up exercises, managing the class, helping students practice exercise movements, supervising safety, assisting with assignments and grading, designing and maintaining course web pages, and learning relevant teaching aids such as coaching or counseling skills.

As with other types of TAs, the role of sports TAs is to smooth communication between teachers and students. However, the difference is that the role of sports TAs involves three major elements: movement, safety and technique. The dynamic nature of physical education classes makes it more difficult to control student status during the course. Therefore, assisting teachers with situation control is very important. Furthermore, due to the dynamic nature of the class, safety is also another important element. Before conducting any sports activity, TAs must familiarize themselves with the area and know where to find the nearest ice machine, first aid kit and AED so that accidents can be quickly managed to reduce the severity of injuries. In terms of technique, TAs must adjust their assistance according to student intent for selecting the course and their experience with the sport. For example, for students who have already mastered the basic movements, TAs can help teach advanced moves.

The tasks of sports TAs can be divided into three parts: before, during and after class. Before the first class begins, TAs should first communicate with teachers to understand the teaching objectives of the physical education course for the entire semester, help them prepare class rosters and other documents, and memorize the exam and grading rules. Before each class, TAs must help prepare teaching aids or reserve the venue. If a class involves outdoor sports, then the venue is subject to the weather, and TAs must have a backup plan in case of rain. TAs can use communication software (such as Line, Facebook), or select several students as key contact persons to notify the class of any changes as soon as possible.

During class, helping teachers with roll-calling and warm-up exercises can reduce teacher burden and increase TA familiarity with students. When necessary, TAs

should communicate with students to understand the purpose of their course selection and needs to better guide them in their learning. Furthermore, since physical education involves physical activity, we must be particularly careful in helping students reduce the occurrence of sports injuries. To this end, TAs should help students with appropriate posture adjustments to achieve the effect of the exercise while maximizing the body's potential.

When adjusting movements, TAs should be especially careful about the boundaries of physical contact. Before adjusting their posture, TAs must first inform the students and observe their response to determine the correction or adjustment approach. Physical contact should abide by the principles of front facing (in appropriate position), brief (minimize contact time) and contained (minimize contact surface). In addition, TAs can also ask students with better performance to assist students of the same gender with posture adjustment.

Time constraint may not allow for cool down exercises after classes. However, TAs should still cultivate the concept of cool down exercises, and ask students to do appropriate stretches after class to reduce muscle fatigue. If sports equipment is rented, TAs must ask students to return them.

In addition to the abovementioned reminders and basic requirements, sports TAs should be enthusiastic, empathetic and patient to more effectively help students assimilate to the class situation. Sports TAs must also offer additional value outside of sports, such as encouraging students to exercise their minds and challenge their limits. Such a role is the most important value of sports TAs.

## **15. Off-Campus Teaching**

Some courses include field instruction to expose students to the world outside the classroom and develop their horizons, such as visits to museums or professional institutions. Field instructions are special tasks for TAs because first of all, they offer content that are usually difficult to directly access on campus, and TAs must spend more time gathering and processing less familiar information. Second, the student activity venue is outside the familiarity of campus, and planning the safe and organized arrival of students to the field location can be a challenge. Last, field instructions involve more variables. Without sufficient preparation, TAs may be overwhelmed by unexpected problems. Therefore, compared with routine class preparation, TAs may have to spend more time when preparing for field instructions.

The first step in preparing for field instructions is arranging the itinerary and plans. When arranging the itinerary, it is best to make an itinerary table that indicates event content, transportation mode and breaks so that the students can be aware of how the day of the field instruction will proceed. If a student is late, he or she can

catch up with the remaining field instruction. If possible, check out the site in advance and take photos of the field location or draw a map for students to prevent them from getting lost. Furthermore, the field instruction teaching plan and itinerary can be formulated into a plan. In addition to reducing the uncertainty of field instruction, the plan can also be used to apply for subsidies from relevant units.

Field instruction preparation also includes arranging transportation, planning the number of participating students, arranging for museum guide or speaker, and collecting relevant information since each of these elements may affect teaching quality. For transportation, using a tour bus allows for more time flexibility, and the TA can also more easily announce reminders and supplementary information to the students. However, renting a tour bus requires more money. Therefore, consider mass transit such as buses, MRT or trains even if they offer less time flexibility and limit TA instruction. In terms of the number of participants, a small group of 5-10 students allows the speaker to be a part of the group and easily talk to students. However, for a medium-sized group of 20- 40 students, a fixed-point teaching method should be used to ensure that every member can hear the speaker. In addition, activities should not be too expensive. For example, the average college student may not be able to afford tickets to weekly concerts.

On the day of the field instruction, TAs should strive to monitor the movements of all the students. Priority should be given to safety over teaching outcome. TAs have more teaching autonomy in self-guided tours. For guided tours, TAs should discuss teaching goals with the guide beforehand. If we think that the guide content is inconsistent with the teaching objectives of the course, we should respond through communication or questions, or supplement the content later so that students can benefit from a field instruction that is consistent with teaching goals. Another important task is to protect the image of the school during field instructions. The students represent the image of their class, teachers and school. Therefore, we should remind students to be careful about avoiding inappropriate behavior. At the end of the field instruction, it is beneficial for students to reflect on the activities, such as through written assignments or posting their reflections on the CEIBA website for teachers, TAs and other students to read.

## **16. Fair Grading**

Grading students is a serious responsibility. Since we have the power to evaluate, we must be accountable when grading students. The foremost task in grading is letting students understand the assessment criteria, know the total score for each assignment, and how answers are evaluated. These standards are not random, but should be incorporated into the course master plan and become game rules that students can

follow. In this way, students will be more trusting of our grading.

Courses in different subject areas have different assignments and examination methods. However, regardless of the nature of the course, as long as grades are involved, fairness is demanded. The following are types of grading:

### (1) In-Class Performance:

With teacher authorization, we may need to grade the in-class performance of students. Grades are based on the quality and frequency of group speeches, presentations, in-class assignments and attendance. The basis of grading is evidence, and therefore weekly records should be kept to avoid forgetting anything.

### (2) Assignments and Reports:

When correcting assignments or reports, TAs should first understand the learning objectives of the assignment or report, design grading criteria accordingly, and then fine-tune the initial scores to get the final grade. The process may seem cumbersome, but by implementing it, grading can be more efficient and fairer.

We can divide reports into several items as basis for grading standard. Grading standard should include the merits of each item and their corresponding scores. Last, based on the performance score of each graded item, the final grade for the entire report is obtained.

Figure 2.12-1

作業與報告評分				
掌握各週進度				
評量項目	優秀 9-10分	尚可 7-8分	普通 6-4分	得分
1. 預習報告	寫出實驗原理和步驟，並整理出流程圖	寫出實驗原理和步驟	僅寫出簡略的實驗步驟	8
2. 實驗數據	做出預期結果；少部分未做出預期結果但清楚說明失敗原因	僅做出部分結果，沒有清楚說明失敗原因	實驗數據完全錯誤或遺失	9
3. 結果整理	圖表說明清楚明瞭，格式正確	圖表呈現較不完整，格式正確	圖表不完整，且格式錯誤	7
4. 實驗討論	引用參考資料討論實驗結果，並寫完討論習題	寫出八成討論實驗結果，但未寫完討論習題	寫出簡單討論結果，且未寫討論習題	7
5. 作業繳交	準時或提前繳交	遲交24小時之內	遲交48小時之內	9

(Source: Hwang Ya-Lun, Institute of Ecology and Evolutionary Biology).

### (3) Group Evaluation:

Teachers and TAs can give some grading rights to groups for mid-term and finals group presentations by allowing groups to evaluate other groups. This will encourage groups to observe each other, learn the strengths of other groups, and also train students in the ability to grade. In the mutual assessment form, the scoring criteria and scope must be clearly explained. Students can also be appropriately encouraged to critique the presentation of other groups to help them sharpen each other and grow.

Figure 2.12-2

## 小組互評表

### 「多元文化與媒體再現」小組期末作品 同學互評表

被評組別： 日期： 評分者：

總分數：請在下列三個分數中勾選一個你想要給的分數

95  
☐

90  
☐

85  
☐

評分指標：(1)報告內容豐富 (2)作品具有批判與顛覆性 (3)呈現方式創新 (4)討論活動恰當 (5)能引起聽眾興趣 (6)團隊合作良好

文字意見：請寫下個人整體印象，也可根據單項指標給予回饋

你們的小組呈現，我最喜歡的部分是：

你們的小組呈現，我覺得可以改進的部分是：

### (4) Test Papers:

Before correcting a test, the grading standard should be established. When correcting tests, TAs can look through several test papers to formulate an appropriate scoring standard. For example, if a question is worth 20 points and consists of 5 items, then each item is worth 4 points and its performance scored accordingly. Last, the scores from each item are added, giving the question its final score. This method is not only applicable to calculation problems and short answer questions, but can also be applied to essay questions. For example, in a 20-point essay question requiring four discussion dimensions, 5 points can be allocated to each dimension. The final

score of the essay is totaled from the score of each dimension. Student penmanship is irrelevant to their learning and understanding, and should not influence their test grade.

Figure  
2.12-3

## 建立評分標準 (紙筆測驗範例)

### 題目：

(例) 細胞內的 Ras 和 P53 兩種基因表現，各會造成何種生理作用? 若這兩種基因分別喪失功能，可能造成什麼問題? (10分)

98(2) 細胞、分子與人類期末考題

#### 給分標準：

##### 區分主要答案 (重點) 和次要答案 (細節)

Ras: 產生信號蛋白釋放E2F (1分)，啟動細胞分裂的基因 (2分)。

P53: 產生援軍蛋白抑制 Ras 的作用 (2分)，也會修復 DNA (1分)，若無法修復受損細胞時會啟動細胞自殺 (1分)。

Ras 失控會使得細胞不正常的分裂，P53 喪失功能則會使得不正常的細胞分裂和細胞損傷無法受到控制，兩種結果都可能引發癌症 (3分)。

(Source: Chia Ru-Chen, Institute of Ecology and Evolutionary Biology).

The above are principles for various types of grading; however, there are some common principles that should be followed when grading:

- After grading, post standard or sample answers to let students know the specific basis for the scores. In addition, TAs can also ask outstanding students to share their assignment or answers to encourage healthy competition among the students.
- Do not hold answers against the person because our task is to grade the "questions" and not the students. Covering student name or blocking personal information when grading can help TAs avoid being affected by

their perception of the student.

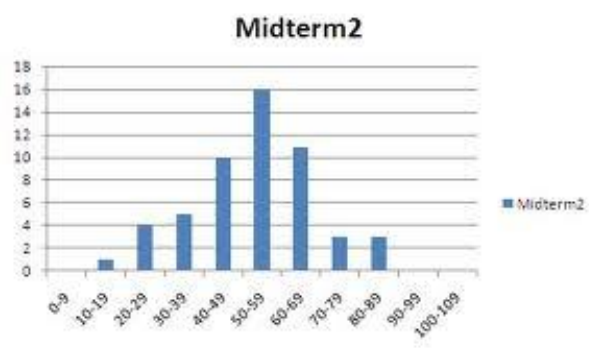
- To prevent changes in personal physical or mental condition from influencing grading standard, it is best for TAs to complete grading all reports and test papers in one sitting or within a short period of time. Likewise, the same question for all test papers should be graded in one sitting to avoid grading standard being influenced by personal TA factors.
- After the grading is completed, the results should be announced to let students know where their learning weaknesses are. Priority help should be given to students with weaker performance. In addition, TAs can also organize the grades of the entire class to observe if grade distribution is skewed, and thereby assess the difficulty of the test questions and strictness in grading standard.

■ Figure 2.12-4

## 範例：公佈成績分佈

### ● 善用圖表呈現單次考試結果或比較趨勢。

分數	人數
90~100	8
80~90	9
70~80	7
60~70	4
60-	4



(Source: Chiang Min-Hsuan, Department of Foreign Languages and Literature).

If the class is large and has several TAs, how should grading be conducted?

In such cases, the TA team can meet with the teacher to discuss common grading criteria and tips.

- Reports or assignments: When grading, avoid grading students in your group, and mix up students.

- Tests: TAs can be assigned question numbers and scope to grade so that a certain part of the test paper is graded by the same TA. In this way, inconsistency in standard can be avoided.

As graders, TAs must avoid personal bias, or be influenced by their personal emotions and values when grading. Nevertheless, there will be times when students are dissatisfied with their grades and question us. If students remain dissatisfied after we have explained the basis for their grades, we may refer their assignment to the teacher to prevent the situation from becoming tense. In summary, as long as we remain consistent to the principles of fairness, justness and openness, determine the grading criteria in advance and be focused when grading, then we have tried our best for our teachers, students and ourselves.

## **17. Using Instructional Multimedia**

Most classrooms in the school are equipped with instructional hardware, such as computers, DVD players and projectors. On one hand, these resources improve teaching facilities and on the other hand, they allow teachers and TAs to break away from traditional lectures and present with different teaching designs. In addition, with the maturity of the Internet and instructional multimedia environment, properly integrating software and hardware resources into our courses can effectively improve our teaching.

### **(1) CEIBA Course Management System:**

A good and interactive course website can be a finishing touch to teaching and learning. Currently, National Taiwan University has a CEIBA course management platform for teachers and TAs to post course information, handouts and announcements. It also allows students to upload assignments or conduct online conversations with teachers and TAs through discussion boards.

The CEIBA plans to include "Course Information", "Course Outline", "Bulletin Board" and "Resource Sharing". Add-drop rules, course slides or handouts can be posted on CEIBA, and course-related videos and essays can also be uploaded for interested students to extend their knowledge. The "Operating Area" of the CEIBA not only accurately monitors student assignment submission, but can also publish quiz results and post outstanding work to facilitate peer learning.

In addition, through the CEIBA discussion boards, online discussion groups can be formed so that regardless of time and place, discussions can be conducted. At the beginning of the semester, we can have students introduce themselves on the CEIBA website, then encourage them to take advantage of the discussion boards by:

- Clearly explaining the purpose, topics, structure, content and way of

conducting online discussions. Basic requirements such as speaking at least a few times during the semester, and details such as adopting joint discussions or topical debates when speaking must be explained in advance to the students.

- Incorporate discussion participation into performance grading.
- Actively provide students with relevant materials and references, or have students search and compile materials to increase their participation.
- If students are not actively participating in the online discussions, TAs can assign online assignments and ask for students' reflections. For example, have students ask questions online and assign them to answer questions posted by others.
- Based on course progress, ask students to think about the course content after class, and post and discuss their reflections with their peers online.
- If the course requires group report, require students to post their discussion materials and progress on the CEIBA to facilitate inter-group exchange and learning.

In addition to the CEIBA course management platform, TAs can also use other free Internet resources to assist with teaching. For example, blogs are convenient for displaying photos and videos; Facebook is a social networking site frequently used by college students and it is quite convenient for discussing group reports. With a little effort, TAs can find many free teaching resources on the Internet.

A course website jointly operated by teachers, TAs and students is not only a place for students to get announcements, download lecture notes or submit their assignments. It is also a place for students to express themselves and review their learning. However, the CEIBA is not limited to these functions. We can go to the Center for Teaching and Learning Development website for more support applications and use them in our courses.

## **(2) Instructional Multimedia Resources:**

Making good use of instructional multimedia resources such as pictures, music and video can create different teaching effects. Using instructional films in class can add liveliness to the presentation and allow classroom knowledge to be presented in a fascinating way. Therefore, the use of appropriate instructional videos can allow us to quickly focus on key teaching content and deepen student impression of the course. For lab TAs, instructional videos are worth the time investment. Demonstrations can help students understand the importance of the experimental procedure, but the cost of each experimental demonstration is very high, teaching quality varies among TAs, and

the size of equipment and space may also affect student view. Therefore, producing a video is a good way to save demonstration cost, standardize teaching and increase learning fun. The video can also be circulated and used for review.

In addition to videos, PowerPoint is a convenient, low-cost, easy to modify and easy to share and interact presentation software. It can present pictures, music and images within the same presentation, and can even be used to create simple films. When designing a PowerPoint presentation, we should consider the overall framework. Selecting appropriate topics and production method according to course objectives and student composition can focus student attention and arouse their learning motivation. Moderate use of images or videos in the PowerPoint can help students visualize abstract course content. However, remember that "conciseness" is the basic principle of PowerPoint design. Instead of stuffing each slide with too many words, images or messages, it is better to leave out unnecessary and extraneous information, and keep to the most important and noteworthy messages.

In addition to the abovementioned teaching aids, there are other online resources and multimedia applications waiting for us to explore. Details can be found in the "Digital Teaching Workshop" of the Center for Teaching and Learning Development. Workshops for using teaching resources can be viewed on the NTU Speech.

Figure 2.13.2-1



## **18. Dealing with Common Problems**

In the challenging and fun teaching process, TAs will inevitably encounter some common problems. However, by mastering several principles, they will be able to cope successfully.

### **(1) Common Problems:**

- TAs and teachers differ in their requirement for course content, attendance, grading criteria and method of leading groups. These issues are related to teachers' overall course plan. Therefore, TAs should communicate in detail with the teachers and explain their ideas to the teachers. However, if the teachers are insistent, then priority must be given to their ideas and helping them with teaching.
- Teachers may not know the job limitation of TAs and assign excessive work that overwhelms the TAs. In this case, TAs can first construct a timesheet of their work and record their work content and hours. Then communicate rationally with the teachers, explain the overly long working hours based on the timesheet. If the communication with teachers fails, seek help from the department or the Center for Teaching and Learning Development.
- Posting course slides on the website can help with teaching, but may also result in a small number of students skipping class. Therefore, TAs can encrypt the website slide file and announce the password during class so that those who skip class would not be able to see the slides. Including roll call and class sign-in will also encourage student attendance.
- With consent from the students, post excellent class notes or assignments as reference and learning for other students.
- Some students may be absent from class or fail to turn in assignments for no reason. To reduce these occurrences, TAs should clearly explain classroom rules and penalty for violations at the beginning of the semester. In other words, they should speak frankly. When students fail to conform to the rules, TAs should communicate and listen in good faith to understand their reasons for not following the rules. Then together, they can work to reduce the obstacles to obeying the rules. Through communication, TAs can help students understand their sincerity in trying to help them resolve problems. If students continue to disregard rules despite repeated communication, TAs should approach the teachers about their personally talking to the students about following the rules.
- Awkward silences in discussion classes may be due to several reasons. TAs should first identify the cause of silence, then address it in an appropriate

manner. The following are common reasons for silence and their solutions:

<b>Reasons for Silence</b>	<b>Solutions</b>
Could not understand the text.	Ask students to point out areas that they do not understand and have everyone brainstorm for ideas.
Did not understand the question.	Adjust the question.
Not interested in the topic.	Design small activities to add fun and use interesting topics as lead-in.
Students are shy.	Directly call up students. Start with students with good performances to break the ice and draw in others; or call on students who do not speak often and guide them into speaking.
Failure to keep up with the reading materials.	Ask for thoughts about the class, designate a spokesperson for the discussion text for the following week.

- Plagiarism or cheating in exams are also problems that have to be addressed. Before giving assignments and exams, TAs must explain the rules to let them know the boundaries between things they can do and things they can not do. During exams, arrange for several TAs to proctor to deter students from being tempted to cheat. If students are found to have plagiarized, specific evidence must be provided and a copy of the student work kept. Likewise, clear evidence must be in place to prove cheating on exams. For example, photos can be taken to record the cheating. After compiling all the necessary evidence, immediately report the incident to the teacher for final handling.
- TAs are not course instructors, and sometimes they may not be able to answer student questions. In such cases, TAs can clearly explain to the students that they are unable to provide an immediate answer, but will look up information and answer them at a later time. Another approach is to refer students to online resources or books for them to look for the answers, thereby cultivating their ability to find answers. Then if the students are still unable to find the answers, the TAs can help them with finding answers.
- Sometimes students may challenge the authority of the TAs, usually in the form of assignment grades or questions that are disruptive to the class. The best approach is for TAs to respond calmly and turn confrontational

questions into easy discussions. If the situation intensifies and cannot be resolved during class, try talking to the students after class to understand their concerns and needs. In addition, TAs can also ask teachers to publicly inform students during class that TA assessment of students will also affect their semester grades (it is best not to indicate the proportion of TA scores in the semester grades). In this way, students will know that TAs have partial authority over their grades and therefore more respectful of the TAs.

- It is harder for TAs to observe their own favoritism and unfairness. The only solution is to set classroom standards with students for various courses and remind themselves to treat all students equally. To avoid being suspected of favoritism by students, TAs should publicly explain to the whole class at the beginning of the school that they will treat all student problems equally and encourage students to ask them for help with their course work.

The above problems are commonly encountered by TAs in the course of their duties. They may seem mundane, but if not handled properly, will become very painful for TAs. The best solution is for TAs to communicate adequately with teachers before courses begin, strictly adhere to the scope of their responsibilities, constantly review their positioning and attitude, and establish course rules with students in advance.

## **(2) Ten Reminders for TAs:**

Last, let us encourage each other with the "Ten Reminders for TAs". When faced with problems, follow these principles and address them openly:

### **■ Figure 2.14.2-1**

## 教學助理備忘十則

- 一、第一堂課之前，與任課教師先研商好上課方針。
- 二、討論活動是講堂、課本、作業所有內容的總匯。
- 三、預擬每堂帶領課的內容大綱與流程，精確執行。
- 四、盡早讓學生獲知所有規定，公平對待每一學生。
- 五、規劃你的生活，不要把所有的時間花在助教上。
- 六、協助學生自己唸書，不要變成他們的個人家教。
- 七、教學助理本身也在學習，遇有不懂處不必勉強。
- 八、教學助理也是教學者，須注意不當言行的影響。
- 九、保存重要教學資料，嚴禁配合無關課堂之活動。
- 十、嚴禁與所帶領課程的學生，發展個人親密關係。

(This chapter is written with reference to the Ministry of Education's abridged translation of Yale University's *Becoming Teachers* teaching manual, teacher lecture materials provided by the National Taiwan University Center for Teaching and Learning Development, and the teaching skills and experience of outstanding TAs. We hereby express our greatest appreciation.)