

# Getting More Teaching out of Testing and Grading



## 創造更有意義的教學

Testing and grading can sometimes feel like necessary evils of teaching—far removed from the loftier goals of higher education— and a source of potential conflict with students. It doesn't help that many students see grades as evaluations of their intelligence, abilities, and potential, and not as a context-specific measure of how well they have met the specific learning goals of a course. Students often forget that receiving a positive evaluation is not, in fact, the central goal of a class. Common approaches to assessment—especially those that provide only a number or letter grade—can reinforce these student perceptions.



考試跟評分有時候會讓人覺得像是教學時必要的惡魔---與巍峨的高級教育目標大相逕庭，以及與學生的潛意識互相衝突的源頭。當學生看到他們成績後，對於評估他們的才智、能力以及潛力是沒有幫助的，而且也無法作為一個特定的評量關於他們如何地符合細項的教學目標，學生通常會忘記得到分數並不是這堂課的目標，最常用的評估方式特別是那些已以一個數字或英文字母作為評等的一句可以增強學生的概念

Assessment can actually be one of your greatest teaching tools and a way to connect with your students, but this requires rethinking the role of assessment

in your course. This newsletter presents a model of “educative assessment,” informed by the work of Wiggins (1998) and described by Fink in *Creating Significant Learning Experiences* (2003, p. 82). This model focuses on how you can move beyond assessment for the sole purpose of assigning a grade and use it, coupled with feedback, to encourage meaningful learning.



評等可以是你很好的一項教學工具，以及一個使你跟你學生有聯繫的方法，但這需要重新思考評等在你刻上所扮演的腳色，這篇新聞是一個“教育評等 educative assessment,”的模式，由 Wiggins (1998)所提起並且由 Fink 在 *Creating Significant Learning Experiences* (2003, p. 82)進行闡述，這個模式著重在你如何超越評定只單純未給予成績的目的並且運用它、將它與回饋結合，並且去助長有意義的教學。

## **(1)Base Assessment on Meaningful Learning Goals**

### **有意義學習目標的基本評量方式**

Meaningful learning goals are the foundation for every aspect of your course. Learning goals answer the question, “What am I preparing students to do, in the real world or as scholars in my field?” Once you have identified your learning goals, the next question is, “How can I create opportunities for students to prepare for, practice, and demonstrate this learning?” The answer will guide your choice of assessment strategies, as well as the material and classroom activities that students will need to achieve the learning goals.



有意義的教學目標是你每一個教學面向的基本。教學目標回答了問題像是“我準備要學生在真實世界或是在成為與我同領域的學者後該如何做？”當你一決定你的教學目標後，下一個問會是“我如何創造機會給學生去準備、展示以及練習這堂課的學習？”答案會引導你選擇評定策略的依據，並且會是要學生達到教學目標的教材及課堂活動。

Fink calls this approach “forward-looking assessment,” meaning that your focus is on how students will use course material in meaningful ways, not on how much material you can cover, and how well students remember what was covered in the course. Assignments and exams with a backward-looking focus

answer questions such as, “Did the student attend lecture?” and “Did the student read the textbook?” These questions typically arise by looking over your lecture notes and texts and thinking, “Which parts of this should I test students on?” Backward-looking include those that ask students to recall or recognize information or to solve problems that are nearly identical to those presented in class. In contrast, forward-looking assessment starts from the question,



Fink 把這個方法叫做“發展前景評量 forward-looking assessment”代表你把焦點放在學生如何把教材用在有意義的地方，而不在你能教多少材料；以及學生能記得多清楚課堂上的材料，評量及考試以一個保守的 backward-looking 方式專注在問題像是“學生有參與課堂嗎”、“學生有讀教科書嗎”這些問題通常會在會出現在你看過所有教科書及筆記後開始思考，並且你會想“哪一部分我應該考學生？” 保守的評量方式 backward-looking assessments 包含的問題要學生去回答完全在課程上出現過的內容。相反的，發展前景評量 forward-looking assessment 從這些問題開始：

## **(2)“What do I want students to be able to do with the knowledge acquired in this class? ”**



我希望學生怎樣去運用這堂課得到的知識？”

“What do I want students to be able to do with the knowledge acquired in this class?” Exam questions, paper topics, and projects should require students to demonstrate their ability to use knowledge in the ways in which scholars or professionals do.



“我希望學生怎樣去運用這堂課得到的知識？”考試問題、報告標題、以及專題去展現他們運用知識的方式，用學者及專家的方法。

Compare the following two assessment strategies for a course in art history.

The instructor wants to assess how well students have achieved the learning goal of understanding how politics can influence popular aesthetics. A backward-looking assessment might ask students to identify the political influences on specific artists or architects, as discussed in lecture or the text. A forward-looking assessment might present students with several unfamiliar works of art or artifacts from before and after an important political transition. This assessment asks students to discuss what they observe and relate their observations to examples covered in class. This assessment draws on the same material but assesses whether students are able to apply the material in a novel scholarly way.



以一堂在藝術史的課比較兩種評量策略，指導者希望去確定學生多了解他的教學目標：政治如何去影響大眾美學 popular aesthetics，一個保守式評量方式會請學生去認出政治對特定藝術或建築的影響，如同課堂上或是教科書所提到的，但在一發展前景評量方式會展示學生幾種不熟悉的藝術或建築的先前情形，以及在重要的政治轉變過後之後的改變，這種評量方式要求學生去討論他們觀察到什麼，以及這與他們在課堂上範例觀察到的相關性，這種評量方式使用一樣的教材，但是確定學生在一個新穎的學術方法上去運用教材。

This kind of forward-looking approach assesses whether students can transfer information and experiences from the class to the meaningful learning goals of your course. Exams and assignments with a forward looking focus also make the learning goals of the course clear to students, which can broaden a student's narrow focus on grade achievement.



這種前景式解決方法確定學生能轉換知識及經驗，從課堂上到你那具意義的教學目標。用前景式方式去做考試及評量讓學生比較清楚於教學目標，不會局限於那分數的達成

### **(3) Create Criteria and Standards for Every Assessment**

#### **為每個評量訂立準則及規範**

When you begin to design assessments that go beyond recall and basic problem solving, evaluating students' learning becomes more challenging. How would a student's work demonstrate meaningful learning? According to Fink's

model of educative assessment, the solution is to be clear about the criteria and standards of successful learning for every learning goal. Criteria describe the elements of the

student's work that will be evaluated, and standards describe what successful learning "looks like" for each criterion. For example, consider an assessment that asks students to develop a campaign for health promotion. One criterion of success at this task could be the effectiveness of the main campaign message. The instructor would then identify what makes a campaign message effective and might include standards such as

- (a) the message takes into account the target audience
- (b) the language of the message is carefully chosen and persuasive, and
- (c) the message effectively appeals to either rational or emotional responses.



當你開始去設計先前課程回想及基本問題解決評量方式,評定學生的學習情形變得具挑戰性,一個學生的作業怎樣去展示有意義的學習?根據 Fink 的教學性評量模式,解決方式是弄清楚每個教學目標的準則 Criteria 及規範 standards,準則闡述了會學生作業會評定的部分,規範則是描繪了每一個成功的教學準則"看起來像怎樣",例如,一場關於促進健康的遊說活動,這任務的其中一樣成功準則可以是主要遊說訊息的效果,指導者可以先確立怎樣會是有有效的訊息,可能包含這樣的規範

- (a) 這個訊息有把目標的觀眾算進去
- (b) 訊息的語言是小心地選過並且有說服力的。而且
- (c) 訊息有效地吸引理性或感性的反應

On the basis of these standards the instructor has a way to evaluate a student's demonstrated learning. Criteria and standards do more than provide a metric for assigning grades. These standards also give the instructor a clear outline for what students need to learn in class and give students a clear framework for approaching the project. Criteria and standards can help students direct their efforts to meaningful learning, by highlighting what is most important. For this reason, it is helpful to give students in advance a copy of the standards and criteria you will use to assess their learning. Explain your reasoning for the criteria and share examples of strong work that meets your standards.



這些基礎的規範讓指導者有機會去評定學生的學習狀況，準則及規範提供了多於僅僅是制式的分配成績，這些規範給了指導者一個清楚的輪廓，關於學生需要在課堂上學什麼；也提供了指導者一個清楚的完成專題的框架，準則及規範可以在一個強調出什麼比較重要的方法下，幫助學生將他們的努力指向有意義的學習，在這個原因下，有幫助的是事先給學生一份關於你將如何確認他們學習狀況的規範及準則的資料，解釋你列這些準則的原因以及分享些符合你規範的優秀作業範例。

#### **(4) Include Peer and Self-Assessment**

##### **包含同輩及自己評價**

An important part of educative feedback is helping students understand the process of assessment. Grades should not be mysterious, and students should be able to determine for themselves when they are truly doing their best work. Teaching students to assess their own work helps them better understand the skills that are valued in a particular field and develop the general life skill of being able to look honestly at and improve their own work.



一個重要的教學回饋方式是幫助學生了解評量的程序，成績不該是神祕的，且學生應該在做到了他們最好後能夠決定自己，教導學生去確定他們自己的作業幫助他們更了解在特定領域有價值的技術，並且發展一個綜觀的人生技巧，能夠去誠實並改善自己的作業

Fink recommends having students assess other students' work before assessing their own work. The process of peer-assessment gives students experience interpreting criteria and standards and developing a standard of comparison for their work. Peer review can be an eye-opening experience for students who have never been on the receiving end of a last-minute effort or a truly top-rate performance.



Fink 建議讓學生先評定其他學生的作業之後再來評定自己的，這個同輩評量 peer-assessment 的過程給學生一個闡述準則及規範的經驗並且發展出一個比較他們作業的規範，同輩的檢閱可以是一個開眼界的經驗，讓學生去了解怎樣的結果會是緊要關頭的努力或是真正的高水準表現

To include peer and self-assessment in your course:

- Teach peer review as an important process in your field and have students peer—review each other’s work according to the standards of your field.
- In class, have students develop solutions to a problem and share their solutions in a small group or with the whole class. Discuss the solutions using pre-established criteria and standards, or use the discussion to develop criteria and standards.
- Allow students to come up with the set of criteria and standards for an assignment by having them review and assess one another's work, or examples from previous classes. Then invite them to use those criteria and standards to revise their own work.



在你的課程中包含同輩及自己評價

- 教導同輩檢閱是個在你領域重要的過程，並且讓學生在你對這領域的規範下檢閱其他人的作業
- 在課堂中，讓學生發展出問題的解決方法並且讓他們以小組方式或是全班方式分享他們的解答，用事先建立好的準則及規範討論各種解決方式，或是用討論去發展準則及規範
- 允許學生在看過其他人的作業或是先前的作業範例之後發展出一套準則及規範方法，接著請他們用這套準則及規範去校閱自己的作業

**Peer review can be an eye-opening experience for students who have never been on the receiving end of a last-minute effort or a truly top-rate performance.**

- If you give students a list of criteria and standards for an assignment, ask them to evaluate their work using that list and to turn in their self-assessments with the assignment.



同輩的檢閱可以是一個開眼界的經驗，讓學生去了解怎樣的結果會是緊要關頭的努力或是真正的高水準表現

如果你給學生一個關於評量準則及規範的清單，請他們用那分清單去評定他們自己的作業並且轉入他們的自我評量內

## **(5) Provide Educative Feedback**

### 提供教育意義的回饋

Grades are essentially a ranking system, and most students experience receiving a grade as reward or punishment for their performance. Educative feedback serves a different goal entirely: It is provided for the sake of learning and encouragement, not for the sake of rating a student's performance. Students who receive feedback on non-graded as well as graded performances come to see the process, not as a justification for a grade, but as an attempt to help them learn. Such feedback should lead students to improve their performance and balance constructive criticism with positive comments.

To meet these goals, feedback should be

- frequent, to reinforce recent learning and to give students a chance to change study habits or seek help;
- delivered as close in time to the learning experience and performance as possible, not handed back weeks later without discussion;
- discriminating, by being clear about how well the student has met criteria and standards and how they might improve; and
- given with respect and encouragement, including opportunities for students to respond to feedback.

To provide educative feedback in your course:

- Give students a problem to solve or question to answer in class. Provide immediate feedback through class discussion.
- Give students practice exams, with answers and explanations available.
- Require students to submit outlines for papers, or proposals for projects, and provide them with guidance and direction.
- Provide detailed and constructive feedback on papers and require students to revise them based on your feedback.
- Schedule meetings with students to discuss their learning goals for the course and to review their performance on tests or assignments.
- Ask students to assess their own work and respond to your comments during feedback discussions.

—Kelly McGonigal, Ph.D.



成績最終只是一個排定系統，多數學生把成績視為他們表現的獎賞或處罰，教育意義的回饋提供了整個不同的目標：它是為了學習及鼓勵才提供的，不是為了評定學生的表現。學生是為了得到不管是不評定分數或是評定分數的回饋才來看整個程序，並不是去為分數辯護，而是為了嘗試去讓他們學習。這樣的回饋可以領導學生改善他們的表現，以及在建設性的評斷及正面性的建議上取得平衡

為了達到這些目標，回饋應該要：

- 頻繁，為了增強最近的學習以及給予學生機會去改變學習習慣或是尋求幫助
- 在短時間內給予，與學習經驗及表現後的間隔要短，不能在沒討論情況下一周後才給
- 有區別力，清楚的表明學生符合哪些規範及準則以及他們如何改善
- 給予尊重及鼓勵，包含給學生機會去對回饋作回應

在你的課程提供具教育意義的回饋：

- 給予學生一個課題或提問，請他們馬上在課堂上回答解決，在課堂討論上馬上給予回饋
- 給予學生一個練習測驗，要包含答案及解釋
- 要求學生交出報告(paper)的大綱，或是專題的提案，並且給他們指引或方向
- 對於學生的報告(paper)提供詳細及建設性的回饋並要求他們根據你的回饋做修改
- 與學生約定 meeting 時間去討論他們在課堂上的學習目標並且檢閱他們在考試或評量作業的表現
- 請學生去確認他們自己的作業並且在回饋討論時回應你的結論

## Stanford Classroom Strategies



Rod Searcey

The William H. Bonsall Professor in History, Nancy Kollmann, integrates a range of writing assignments into all of her courses as a way to help students “think historically,” as she recently explained in “Teaching through Writing in Humanities Courses,” a presentation in CTL’s “Award-Winning Teachers on Teaching” series.

“Students learn best when they are engaged and nothing jump-starts that process of engagement better than having to write about something. But writing well—meaning mastering a topic, clarifying the argument, and defending your position—doesn’t often come on the first try. It takes many stages of writing and many types of engagement—outlines, drafts, conversations—and hard, hard thinking.”

In addition to midterms, finals, and regular reading logs, Professor Kollmann also has students write a of an historical monograph. Not only is a book review a project that works well in the quarter system because of its well-defined scope, she noted, but it also “seems to encapsulate what historians do in their discipline. That is, as historians, they assess each others’ arguments and comment on them. That’s the habit of mind that I want undergraduate students, let alone graduate students, to develop.”

VHS and DVD copies of Professor Kollmann’s presentation are available at the CTL library and online at <http://ctl.stanford.edu/AWT>. For more information, please contact [TeachingCenter@stanford.edu](mailto:TeachingCenter@stanford.edu), or call 723-1326.

“Teaching through Writing in Humanities Courses,” “以文學哲史的方式寫作”  
“Award-Winning Teachers on Teaching” 教學上得獎的老師

## “think historically,” 以歷史方式思考 jump-starts 啟發



William H. Bonsall 單位歷史系的教授 Nancy Kollmann 在最近一個 CTL 的“Award-Winning Teachers on Teaching(教學上得獎的老師)”報告會系列說到在教學生“以文學哲史的方式寫作”上， Kollmann 整合她課程裡一個範圍的書面作業，幫助她的學生“以歷史方式思考”：

“當學生被約束住並且沒有任何啟發時的學習，會比較他們去寫一些東西還要好，但是寫的好---代表專精於一個主題、澄清一個論證、並且要站住自己的立場，並不是在第一次嘗試就會出現，要花許多階段的寫作並且許多不同的限制才行，這包括---大綱、草稿、對話，以及很辛苦很辛

除了期中考、期末考以及規律的閱讀教材，Kollmann 教授也要求學生寫一個關於歷史專論 historical monograph 的書評 book review，不只這書評是個在學期制系統裡面因為範圍規範得宜是很好的專題，並且書評可以“濃縮歷史學家做的事”她說，換句話說，身為一個歷史學家，他們確立其他人的論證並且下結論，這是我希望大學生所發展的，研究生更不在話下。

Professor Kollmann 報告的 VHS 及 DVD 檔可以在 CTL 圖書館以及以下網址  
<http://ctl.stanford.edu/AWT>. For more information, please contact  
TeachingCenter@stanford.edu, or call 723-1326.

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