Seven Principles for Good Practice in Undergraduate Education

優質的大學教育七大原則

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Seven Principles for Good Practice in Undergraduate Education
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Apathetic students, illiterate graduates, incompetent teaching, impersonal campuses -- so rolls the drumfire of criticism of higher education. More than two years of reports have spelled out the problems. States have been quick to respond by holding out carrots and beating with sticks.

Translation
學習態度冷淡的大學生、學無專精的研究生、不適任教師、冷漠的校園環境等，皆是影響高等教育辦學品質的因素。這些因素被報導出來後，政府軟硬兼施希望能快速改善高等教育的素質。

There are neither enough carrots nor enough sticks to improve undergraduate education without the commitment and action of students and faculty members. They are the precious resources on whom the improvement of undergraduate education depends.

Translation

改善大學教育最好的辦法是全校師生一同附諸行動，畢竟教師和研究生是大學教育最直接的教學資源。

But how can students and faculty members improve undergraduate education? Many campuses around the country are asking this question. To provide a focus for their work, we offer seven principles based on research on good teaching and learning in colleges and universities.

Translation

教師和學生如何改善大學教育？以下有七個原則能幫助改善大學教育辦學品質：

Good practice in undergraduate education:

1. Encourages contacts between students and faculty.
2. Develops reciprocity and cooperation among students.
3. Uses active learning techniques.
4. Gives prompt feedback.
5. Emphasizes time on task.
6. Communicates high expectations.
7. Respects diverse talents and ways of learning.

Translation 七項原則為：

1. 鼓勵學生和教師之間多多交流

2. 提倡學生之間的團隊合作

3. 鼓勵學生積極學習

4. 即時回饋

5. 強調按時完成任務

6. 表達出對學生的高度期望

7. 尊重各種才能和學習方法

We can do it ourselves -- with a little bit of help . . . .

Seven Principles of Good Practice

(1) Encourages Contact Between Students and Faculty

Frequent student-faculty contact in and out of classes is the most important factor in student motivation and involvement. Faculty concern helps students get through rough times and keep on working. Knowing a few faculty members well enhances students' intellectual commitment and encourages them to think about their own values and future plans.

Translation

1. 鼓勵學生和教師之間多多交流

師生於課堂上或課後頻繁交流，能有效提升學生的學習動機和學習效果，教師能陪伴學生度過難關，無論是學業、了解自我、未來計畫等方面都有幫助。

Some examples: Freshman seminars on important topics, taught by senior faculty members, establish an early connection between students and faculty in many colleges and universities.

In the Saint Joseph's College core curriculum, faculty members who lead discussion groups in courses outside their fields of specialization model for students what it means to be a learner. In the Undergraduate Research Opportunities Program at the Massachusetts Institute of Technology, three out of four undergraduates have jointed three-quarters of the faculty in recent years a junior research colleagues. At Sinclair Community College, students in the College Without Walls program have pursued studies through learning contracts. Each student has created a "resource group," which includes a faculty member, a student peer, and two "community resource" faculty members. This group then provides support and assures quality.

Translation

例子：若大學新鮮人能由資深老師指導，則能更快進入狀況，熟悉校園及新生活。例如在聖約瑟夫學院的主要課程中，教師能引導學生成為一個好的學習者；在麻省理工學院中四分之三的大學生接受四分之三的教師指導，比例相當；辛克萊社區學院的「學院無疆界」計畫讓學生規劃學習契約，每位學生都有一個輔助和維持學習品質的資源小組，小組成員包括一位教師、一位同儕、兩位社區教職員工。

(2) Develops Reciprocity and Cooperation Among Students

Learning is enhanced when it is more like a team effort that a solo race. Good learning, like good work, is collaborative and social, not competitive and isolated. Working with others often increases involvement in learning. Sharing one's own ideas and responding to others' reactions sharpens thinking and deepens understanding.

Translation

2. 提倡學生之間的團隊合作

有工作團隊的支持，比起獨自學習效率更高。好的學習效率就像表現傑出的工作一樣，需要合作、和他人互動，而非競爭、閉門造車。透過與他人合作的學習方式越來越常見，提出自己的意見並回應他人想法能加強思考力及理解力。

Some Examples: Even in large lecture classes, students can learn from one another. Learning groups are a common practice. Students are assigned to a group of five to seven other students, who meet regularly during class throughout the term to solve problems set by the instructor. Many colleges use peer tutors for students who need special help.

Translation

例子：即使是在學生數多的班級，學生亦能互相學習。分組是一種常見的學習方式，通常一組為五到七人，在課堂上共同解決教師提出的問題。很多學校也採小老師制，讓同儕間互相幫助。

Learning communities are another popular way of getting students to work together. Students involved in SUNY at Stony Brook's Federated Learning Communities can take several courses together. The courses, on topics related to a common theme like science, technology, and human values, are from different disciplines. Faculty teaching the courses coordinate their activities while another faculty member, called a "master learner," takes the courses with the students. Under the direction of the master learner,

Translation

學習社群是另一種常見的合作學習方式。紐約州立大學的學習社群，讓學生能橫跨不同領域的主題如科學、科技、人文等，教師們亦能互相合作來進行教學。

(3) Encourages Active Learning

Learning is not a spectator sport. Students do not learn much just by sitting in classes listening to teachers, memorizing pre-packaged assignments, and spitting out answers. They must talk about what they are learning, write about it, relate it to past experiences and apply it to their daily lives. They must make what they learn part of themselves.

![Translation]

3. 鼓勵學生積極學習

學習不光只是坐在教室聽講、寫作業或背答案，學生應能說出、寫出學過的知識，並連結過去經驗，應用於生活之中，使所學成為生活的一部分。

Some examples: Active learning is encouraged in classes that use structured exercises, challenging discussions, team projects, and peer critiques. Active learning can also occur outside the classroom. There are thousands of internships, independent study, and cooperative job programs across the country in all kinds of colleges and universities, in all kinds of fields, for all kinds of students. Students also can help design and teach courses or parts of courses. At Brown University, faculty members and students have designed new courses on contemporary issues and universal themes; the students then help the professors as teaching assistants. At the State University of New York at Cortland, beginning students in a general chemistry lab have worked in small groups to design lab procedures rather than repeat prestructured exercises. At the University of Michigan's Residential College, teams of students periodically work with faculty members on a long-term original research project in the social sciences.

![Translation]

例子：學習可應用課內或課外，藉由練習、討論、小組作業、同儕互評等方式進行，各大學的各種學門領域中已有很多與合作學習相關研究和計畫，來配合不同學生的學習方式，且學生能參與課程設計。例如在布朗大學，師生能根據時事或普遍議題共同設計新課程，並由學生擔任助教；紐約州立大學科特蘭分校的基礎化學實驗課中，學生打破舊有模式，分小組來設計新的實驗步驟；美國密歇根州立大學中，修習社會科學的學生會參與教師的長期研究計畫。

(4) Gives Prompt Feedback

Knowing what you know and don't know focuses learning. Students need appropriate feedback on performance to benefit from courses. When getting started, students need help in assessing existing knowledge and competence. In classes, students need frequent opportunities to perform and receive suggestions for improvement. At various points during college, and at the end, students need chances to reflect on what they have learned, what they still need to know, and how to assess themselves.

Translation

4. 即時回饋

了解自己懂和不懂的地方能提升學習專注力,因此學生需適時知道自己的學習表現如何,已評估學習成效。在課堂上常給學生機會表現並提出建議,有助於學生進步。學生需要機會來展現自身所學,知道自己需改進之處,以及如何評估自己的學習效果。

Some examples: No feedback can occur without assessment. But assessment without timely feedback contributes little to learning.

例子:雖然透過測驗結果能給學生建議,但若沒有及時回饋,測驗對學習的幫助不大。

Colleges assess entering students as they enter to guide them in planning their studies. In addition to the feedback they receive from course instructors, students in many colleges and universities receive counseling periodically on their progress and future plans. At Bronx Community College, students with poor academic preparation have been carefully tested and given special tutorials to prepare them to take introductory courses. They are then advised about the introductory courses to take, given the level of their academic skills.

Translation

大學應教導學生如何規畫學習,老師可定期輔導學生,在其學業表現和未來計畫給予建議。例如布隆克斯社區學院中,學業表現較差的學生會接受特別輔導,以利課程進行。

Adults can receive assessment of their work and other life experiences at many colleges and universities through portfolios of their work or through standardized tests; these provide the basis for sessions with advisors.

Translation

Alverno College requires that students develop high levels of performance in eight general abilities such as analytic and communication skills. Performance is assessed and then discussed with students at each level for each ability in a variety of ways and by a variety of assessors.

In writing courses across the country, students are learning, through detailed feedback from instructors and fellow students, to revise and rewrite drafts. They learn, in the process, that feedback is central to learning and improving performance.

Translation

阿爾福諾學院培養學生分析、溝通等八項能力的表現，學生會接受評估並與不同施測者討論自己在各種能力不同階段的表現。另外在寫作課中，教師和同儕的詳細建議能幫助學生修改自己的文章，因此及時回饋對學生學習、追求進步來講非常重要。

(5) Emphasizes Time on Task
Time plus energy equals learning. There is no substitute for time on task. Learning to use one's time well is critical for students and professionals alike. Students need help in learning effective time management. Allocating realistic amounts of time means effective learning for students and effective teaching for faculty. How an institution defines time expectations for students, faculty, administrators, and other professional staff can establish the basis of high performance for all.

Translation

5. 強調按時完成任務

學習成效端看付出的時間與精力。對於教師和學生來說學習分配時間都很重要，好的時間分配有助於教與學，更有利於學校決定學生需要多少時間，而教師又需要多少時間來幫助學生學習。

Some examples: Mastery learning, contract learning, and computer-assisted instruction require that students spend adequate amounts of time on learning. Extended periods of preparation for college also give students more time on task. Matteo Ricci College is known for its efforts to guide high school students from the ninth grade to a B.A. through a curriculum taught jointly by faculty at

Seattle Preparatory school and Seattle University. Providing students with opportunities to integrate their studies into the rest of their lives helps them use time well.

Translation

例子：精熟學習、學習契約、電腦輔助教學等學習方式都需要妥善的時間分配。利瑪竇學院與西雅圖預備學校、西雅圖大學合作，開設課程幫助高中生升大學，學生有機會將所學和時間分配能力應用於生活之中。

Workshops, intensive residential programs, combinations of televised instruction, correspondence study, and learning centers are all being used in a variety of institutions, especially those with many part-time students. Weekend colleges and summer residential programs, courses offered at work sites and community centers, clusters of courses on related topics taught in the same time block, and double-credit courses make more time for learning. At Empire State College, for example, students design degree programs organized in manageable time blocks; students may take courses at nearby institutions, pursue independent study, or work with faculty and other students at Empire State learning centers.

Translation

工作坊、密集宿舍計畫、視訊指導、函授教育、學習中心等讓學生能善用時間學習，假日班、暑期班、工作室、社區中心等也開設許多課程，像是在帝國州立學院中學生能規劃自己時間，在附近的學習機構上課或在學校的學習中心工作。

(6) Communicates High Expectations

Expect more and you will get more. High expectations are important for everyone -- for the poorly prepared, for those unwilling to exert themselves, and for the bright and well motivated. Expecting students to perform well becomes a self-fulfilling prophecy when teachers and institutions hold high expectations for themselves and make extra efforts.

Translation

6. 表達出對學生的高度期望

期待自己多學，則會學到更多。高度期望很重要，無論是自我要求不高的學生或高度學習動機的學生，若老師或學校能期待學生表現更佳，則學生更願意付出更多。

Some examples: In many colleges and universities, students with poor past records or test scores do extraordinary work. Sometimes they outperform students with good preparation. The University of Wisconsin-Parkside has communicated high expectations for underprepared high school students by bringing them to the university for workshops in academic subjects, study skills, test taking, and time management. In order to reinforce high expectations, the program involves parents and high school counselors.

![Translation]Translation

例子：大學中都有成績不好或特別優異的學生，像威斯康星大學帕克賽德分校，學校會和成績不好的學生溝通，讓他們參加學科、讀書和考試技巧、時間管理相關的工作坊，而家長和高中老師也加入計畫以提高成效。

The University of California, Berkeley introduced an honors program in the sciences for under-prepared minority students; a growing number of community colleges are establishing general honors programs for minorities. Special programs like these help. But most important are the day-to-day, week-in and week-out expectations students and faculty hold for themselves and for each other in all their classes.

![Translation]Translation

而加州大學柏克萊分校則引進一個科學榮譽學程，幫助需要特別輔導的學生，各大學也陸續開設榮譽學程，皆頗具成效。但教師每日每周的敦促學生才是最有效果的。

(7) Respects Diverse Talents and Ways of Learning
There are many roads to learning. People bring different talents and styles of learning to college. Brilliant students in the seminar room may be all thumbs in the lab or art studio. Students rich in hands-on experience may not do so well with theory. Students need the opportunity to show their talents and learn in ways that work for them. Then they can be pushed to learn in new ways that do not come so easily.

![Translation]Translation

7. 尊重各種才能和學習方法

學習方法有很多種。學生個個有不同才能和學習方式，有些學生能在讀書會、實驗室或藝術工作室有優異表現，但有些學生對於動手做的學科卻不在行。學生需要不同機會來展現長才，並選用適合自己的方式學習。

Some examples: Individualized degree programs recognize different interests. Personalized systems of instruction and mastery learning let students work at their own pace. Contract learning helps students define their own objectives, determine their learning activities, and define the criteria and methods of evaluation. At the College of Public and Community Service, a college for older working adults at the University of Massachusetts-Boston, incoming students have taken an orientation course that encourages them to reflect on their learning styles Rockland Community College has offered a life-career-educational planning course. At the University of California, Irvine, introductory physics students may choose between a lecture-and-textbook course, a computer-based version of the lecture-and-textbook course, or a computer-based course based on notes developed by the faculty that allow students to program the computer. In both computer-based courses, students work on their own and must pass mastery exams.

Translation

例子：個人化的指導和精熟學習讓學生能一展長才；契約學習幫助學生釐清自己的目標，決定自己的學習活動、評估標準等；公共學院及社區服務提供終身職業教育計畫；加州大學爾灣分校修習基礎物理的學生可以選擇在教室內或用電腦上課，選用電腦上課的學生須能獨立學習、通過考試。

Whose Responsibility Is It? / 誰的責任

Teachers and students hold the main responsibility for improving undergraduate education. But they need a lot of help. College and university leaders, state and federal officials, and accrediting associations have the power to shape an environment that is favorable to good practice in higher education.

Translation

師生有責改善大學教育品質，但還有賴大學領導者、各州各國首長、相關機構等幫助。

What qualities must this environment have?

Translation

好的大學教育環境標準應包含？

- A strong sense of shared purposes.
- Concrete support from administrators and faculty leaders for those purposes.
- Adequate funding appropriate for the purposes.
- Policies and procedures consistent with the purposes.
- Continuing examination of how well the purposes are being achieved.

![Translation]

- 明確目標
- 行政單位和教職員能協助以完成目標
- 足夠的資金來完成目標
- 與目標一致的政策和程序
- 持續檢驗目標是否達成.
-

There is good evidence that such an environment can be created. When this happens, faculty members and administrators think of themselves as educators. Adequate resources are put into creating opportunities for faculty members, administrators, and students to celebrate and reflect on their shared purposes. Faculty members receive support and release time for appropriate professional development activities. Criteria for hiring and promoting faculty members, administrators, and staff support the institution's purposes. Advising is considered important. Departments, programs, and classes are small enough to allow faculty members and students to have a sense of community, to experience the value of their contributions, and to confront the consequences of their failures.

![Translation]

這些都是檢驗教育環境是否改善的標準，若達到了這些標準，無論教職員、行政人員、學生都能擁有足夠的資源，教職員有支援和時間來進修，系所、計畫、課程等都能維持小而美的品質，讓班級互動更好、學生能共同面臨學習上的挑戰。

States, the federal government and accrediting associations affect the kind of environment that can develop on campuses in a variety of ways. The most important is through the allocation of financial support. States also influence good practice by encouraging sound planning, setting priorities, mandating standards, and reviewing and approving programs. Regional and professional accrediting associations require self-study and peer review in making judgments about programs and institutions.

![Translation]

政府和相關機構對學校也有諸多影響，尤其是資金方面。政府能左右政策、設立標準、檢核計畫，而地區專業的相關機構亦能參與評估學校計畫。

These sources of support and influence can encourage environments for good practice in undergraduate education by:

- Setting policies that are consistent with good practice in undergraduate education.
- Holding high expectations for institutional performance.
- Keeping bureaucratic regulations to a minimum that is compatible with public accountability.
- Allocating adequate funds for new undergraduate programs and the professional development of faculty members, administrators, and staff.
- Encouraging employment of under-represented groups among administrators, faculty members, and student services professionals.
- Providing the support for programs, facilities, and financial aid necessary for good practice in undergraduate education.

Translation

影響大學教育環境的項目：

- 訂立和大學教育目標一致的政策
- 對學校表現賦予高標準的期望
- 不墨守陳規，符合公眾問責原則
- 妥善分配資金，供大學部新計畫或教職員、行政人員等專業發展之用
- 鼓勵雇用低度再現的教職員、行政人員或學生助教。
- 提供計畫、教學設備及資金