

一、下表係密西根大學教學與學習研究中心 (The Center for Research on Learning and Instruction at the University of Michigan) 所進行有關教學研究的結果 (Duckin & Barnes, 1986), 請根據此表的結果說明其意涵, 並對國內高等教育之教學提出改善建議。(25%)

Table 1 Summary of Results of the Michigan Meta-Analyses of Research on Instructional Technology in Higher Education

	Student Achievement			N	Student Satisfaction (5-Point Scale)	N	Withdrawal Rate	N	Time Taken (Hrs/Week)	N	Aptitude Achievement Correlation
	N	Exam Scores	Percentile Rank								
Audio-Tutorials	42	68.5%	58	6	3.56	22	19%	—	—	12	.36
Conventional instruction		66.9%	50		3.30		17%				.39
Significance level		$p < .05$	—		N.S.		N.S.				N.S.
Mean effect size		.20	—		.12		0.06				.02
Computer-Based teaching	54	60.6%	60	11	3.77	13	26.9%	8	2.25	7	.41
Conventional instruction		57.6%	50		3.50		27.6%		3.50		.51
Significance level		$p < .01$	—		—		N.S.		$p < .01$		N.S.
Mean effect size		.25	—		.24		-.01		—		.12
Keller Plan instruction	61	73.6%	70	11	4.19	27	13.9%	4	Approx. equal	9	.50
Conventional instruction		65.9%	50		3.40		12.6%				.50
Significance level		$p < .0001$	—		$p < .01$		N.S.		—		N.S.
Mean effect size		.49	—		.46		.10		—		0
Programmed instruction	56	67.1%	60	4	3.41	9	20.3%	9	5	19	.40
Conventional instruction		64.8%	50		3.49		19.7%		6		.48
Significance level		$p < .05$	—		N.S.		N.S.		N.S.		N.S.
Mean effect size		.28	—		-.10		.06		—		.09
Visual-Based instruction	65	68.4%	56	16	3.45	10	13.1%	—	—	16	.50
Conventional instruction		66.9%	50		3.48		13.2%		—		.45
Significance level		$p < .01$	—		—		N.S.		—		N.S.
Mean effect size		.15	—		-.06		-.05		—		.06

Note. A dash indicates that the information was not available. "N.S." means not statistically significant at the .05 level.

資料來源：Dunkin, M. J., & Barnes, J. (1986). Research on teaching in higher education. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3<sup>rd</sup> ed.) (p. 758). New York, NY: American Educational Research Association.

二、試從「教學觀」的角度比較「建構論」(constructivism) 與「接受觀」(received view) 的差異, 以及論述建構論觀點對於教學的啟示為何?(25%)

三、美國學者 Barber (1995) 在其著作「聖戰對麥當勞世界」(Jihad vs. McWorld) 中, 指出當今世界上有二種潮流: 一種是「麥當勞世界」(Mc World), 透過訊、娛樂、商業的國際化, 把整個世界變成具有共同價值觀與生活方式的全球化世界, 甚至把整個世界變成同質性的迪士尼樂園 (Disneyland); 另一種是「聖戰」(Jihad), 在維繫傳統價值信念的支配下, 反對任何形式的國際整合。這兩種力量彼此拉鋸, 構成我們今天看到的世界。試從教育社會學的角度申論上述觀點對未來教育改革的意涵。(25%)

四、請就國內中小學 (含學前) 任何一種專門領域或學科課程與教學之評量與評鑑的實施情形作討論, 並請提供具體建議與改革方案?(25%)



一、圖 1、圖 2 係 Amabile 等人(1996, 1997)研究組織與創造力的一些訊息，請依據這些訊息說明影響組織創新的因素及其在學校創新經營上的價值。(35%)

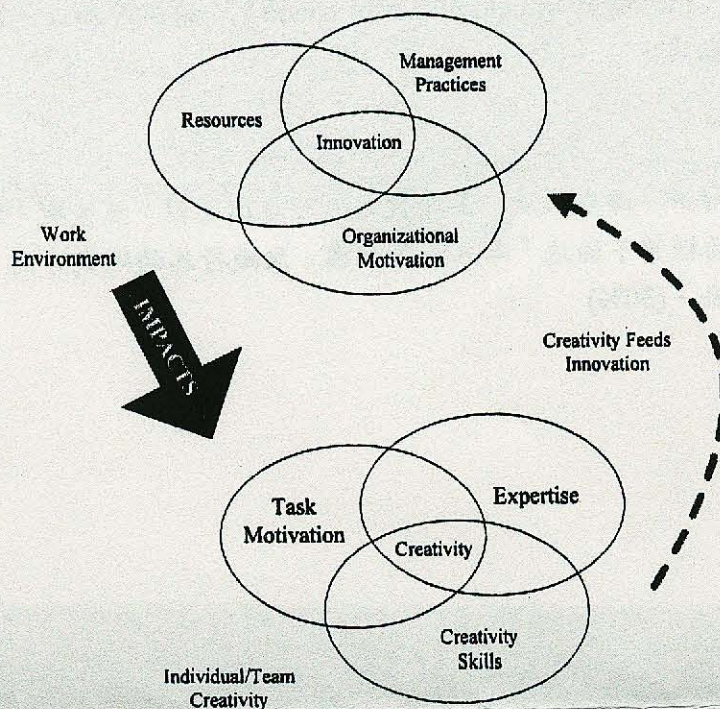


圖 1：Impact of the Organizational Environment on Creativity

資料來源：Amabile, T. M., Conit, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal*, 39(5), p. 1159.

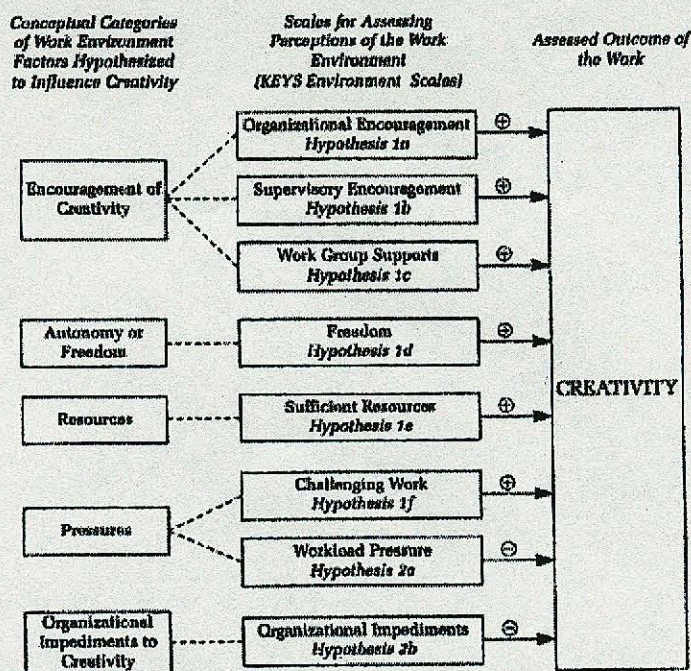


圖 2：Conceptual model Underlying Assessment of Perceptions of the Work Environment for Creativity

資料來源：Amabile, T. M. (1997). Motivating creativity in organizations: on doing what you love and loving what you do. *California Management Review*, 40 (1), p.53.



二、國內正在推動試辦教師專業發展評鑑，而美國各地也正在推動「依教師表現敘薪 (merit-pay or paid by performance)」；請試著加以比較並分析其實施上之盲點或困境。(35%)

三、請先剖析「西方組織行為研究」的理路與邏輯，然後從「跨文化」與「本土化」的框架下論述「華人教育機構」組織行為的研究方向、策略及可能的實際作法。(30%)



# 國立中山大學97學年度博士班招生考試試題

科目：英文教育名著【教育所】

共 2 頁 第 1 頁

作答注意事項：

1. 本卷為甲組（課程與教學）試題。
2. 不必抄題，作答時請注意標示題號。
3. 請用中文作答。

1. Please **summarize and comment** in Chinese on the following paragraph. (25%)

All human activity is mediated by tools. What is significant about tools is not their own abstract properties but rather how they are incorporated into, and fundamentally alter, human activity. In other words, tools do not simply facilitate action that could have occurred without them, but rather, by being included in the process of behavior, alter the flow and structure of mental functions (Vygotsky 1981). The tool of literacy included language itself as well as a wide variety of physical artifacts as papyrus, codex, book, pencil, pen, paper or typewrite. The development of each of these tools has had a profound effect on the practice of literacy. Today, social, economic, and technological transformations are again aligned to bring about major changes in literacy practices. New types of computer-and Internet-based literacy are emerging that has been referred to as electronic literacies (Warschauer, 1999). Electronic literacies are not isolated from the types of literacy practiced with print but rather involve added layers that account for the new possibilities presented in the electronic medium of computers and in the Internet. Electronic literacy is actually an umbrella term that encompasses several other generic literacies of the information era, including computer literacy, information literacy, multimedia literacy, and computer-mediated communication literacy. These new literacies stem in part from the new technological features of the computer but also from the broader social setting in which computers are used.

2. Please **translate** the following paragraph into Chinese. (25%)

The major theme of Vygotsky's theoretical framework is that social interaction plays a fundamental role in the development of cognition. Vygotsky (1978) states: "Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (interpsychological) and then inside the child (intrapyschological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relationships between individuals." (p57).

A second aspect of Vygotsky's theory is the idea that the potential for cognitive development depends upon the "zone of proximal development" (ZPD): a level of development attained when children engage in social behavior. Full development of the ZPD depends upon full social interaction. The range of skill that can be developed with adult guidance or peer collaboration exceeds what can be attained alone.

Vygotsky's theory was an attempt to explain consciousness as the end product of socialization. For example, in the learning of language, our first utterances with peers or adults are for the purpose of communication but once mastered they become internalized and allow "inner speech".

【背面還有試題】



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科目：英文教育名著【教育所】

共 2 頁 第 2 頁

3. Please **translate** (25%) the following text and **state its implications** for conducting data analysis in educational studies (25%).

External validity—like construct validity—is a matter of replication. It is worth noting that one can have multiple replication both *within* a single study—subgroup analyses exemplify this—and also *across* studies—as when one investigator is intrigued by a pattern of findings and tries to replicate them using his or her own procedures or procedures that have been closely modeled on the original investigators’.

Three dimensions of replication are worth noting. First is the simultaneous or consecutive replication dimension, with the latter being preferable since it offers some test, however, restricted, of whether a causal relationship can be corroborated at two different times. (Generalizing across time is necessary more difficult than generalizing across persons or settings.) Second is the independent or nonindependent investigator dimension, with the former being more important, especially if the independent investigators have different expectations about how an experiment will turn out. Third is the dimension of demonstrated or assumed replication. The former is assessed by explicit comparisons among different types of persons and settings where some persons did or did not receive a particular treatment. The latter is inferred from treatment effects that are obtained with heterogeneous samples, but no explicit statistical cognizance is taken of the differences among persons, settings, and times. Demonstrated replication is clearly more informative than assumed, for to obtain an effect with a mixed sample of, say, boys and girls, does not logically entail that the effect could be obtained separately for both boys and girls. It only entails that the effect was obtained despite any differences between boys and girls in how they reacted to the treatment (Cook & Campbell, 1979).



# 國立中山大學97學年度博士班招生考試試題

科目：英文教育名著【教育所】

共 3 頁 第 1 頁

## 作答注意事項：

1. 本卷為乙組（教育經營與管理）試題。
2. 不必抄題，作答時請注意標示題號。
3. 請用中文作答。

1. Please **translate** (25%) the following text and **state its implications** for conducting data analysis in educational studies (25%).

External validity—like construct validity—is a matter of replication. It is worth noting that one can have multiple replication both *within* a single study—subgroup analyses exemplify this—and also *across* studies—as when one investigator is intrigued by a pattern of findings and tries to replicate them using his or her own procedures or procedures that have been closely modeled on the original investigators’.

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【背面還有試題】



2. 美國「全美專業教學規準委員會 (National Board for Professional Teaching Standards; NBPTS)」明訂下列五項專業教師(National Board Certified Teachers; NBCTs)的基本要  
求，請加以評述並說明其與國內優良教師之認定標準有否異同。(50%)

1

**Proposition 1: Teachers are Committed to Students and Learning**

- ✓ NBCTs are dedicated to making knowledge accessible to all students. They believe all students can learn.
- ✓ They treat students equitably. They recognize the individual differences that distinguish their students from one another and they take account for these differences in their practice.
- ✓ NBCTs understand how students develop and learn.
- ✓ They respect the cultural and family differences students bring to their classroom.
- ✓ They are concerned with their students' self-concept, their motivation and the effects of learning on peer relationships.
- ✓ NBCTs are also concerned with the development of character and civic responsibility.

2

**Proposition 2: Teachers Know the Subjects They Teach and How to Teach Those Subjects to Students.**

- ✓ NBCTs have mastery over the subject(s) they teach. They have a deep understanding of the history, structure and real-world applications of the subject.
- ✓ They have skill and experience in teaching it, and they are very familiar with the skills gaps and preconceptions students may bring to the subject.
- ✓ They are able to use diverse instructional strategies to teach for understanding.

3

**Proposition 3: Teachers are Responsible for Managing and Monitoring Student Learning.**

- ✓ NBCTs deliver effective instruction. They move fluently through a range of instructional techniques, keeping students motivated, engaged and focused.
- ✓ They know how to engage students to ensure a disciplined learning environment, and how to organize instruction to meet instructional goals.
- ✓ NBCTs know how to assess the progress of individual students as well as the class as a whole.
- ✓ They use multiple methods for measuring student growth and understanding, and they can clearly explain student performance to parents.



**4 Proposition 4: Teachers Think Systematically about Their Practice and Learn from Experience.**

- ✓ NBCTs model what it means to be an educated person – they read, they question, they create and they are willing to try new things.
- ✓ They are familiar with learning theories and instructional strategies and stay abreast of current issues in American education.
- ✓ They critically examine their practice on a regular basis to deepen knowledge, expand their repertoire of skills, and incorporate new findings into their practice.

**5 Proposition 5: Teachers are Members of Learning Communities.**

NBCTs collaborate with others to improve student learning.

They are leaders and actively know how to seek and build partnerships with community groups and businesses.

They work with other professionals on instructional policy, curriculum development and staff development.

They can evaluate school progress and the allocation of resources in order to meet state and local education objectives.

They know how to work collaboratively with parents to engage them productively in the work of the school.