

國立臺中教育大學九十七學年度研究所碩士班

(含在職進修專班)招生考試

專業英文試題

適用學系:課程與教學研究所

I. Translation (30%)

1. Knowledge about the ways of human beings learn has been accumulating for approximately seventy-five years. Because of the complexity of learning and because of individual differences in learning, a number of theories of learning have been developed and tested through scientific studies and research during this period. Today curriculum planner is guided by several approaches to learning that have been described in different theories. (15%)
2. An essential element in Tyler's competency-led education was the evaluation of educational outcomes, to see exactly how far the objectives were being realized. Thus the curriculum-maker must define behavioral objectives, and then ensure that the students have an opportunity to demonstrate their ability to display that behavior. This might be actually by testing the behavior, or if this is not possible, by inferring the behavior from some analogous and correlated behavior. (15%)

II. Reading comprehension: (40%)

閱讀理解: 請閱讀下面短文並選擇回答文後所列問題

1.

Across Australia, Canada, Finland, Japan and Korea, the five OECD countries that show above-average student performance in science and a below-average impact of socio-economic background on student performance, there is considerable variation in school resources. On average across the five countries, for example, there are 14.1 students per teacher, but this varies from 11.3 in Finland to 16.7 in Canada. Across the five countries, five students share one computer for instruction, which varies from 4 students in Australia to 7 students in Finland (OECD average 7). The extent of school principals' perception of a lack of qualified teachers hindering instruction is below the OECD average in Japan, Korea and Finland, but higher than the OECD average in Australia and Canada. School principals tend to perceive school educational resources

as adequate in Japan and Australia, but this is not the case in Finland and Korea. Across the five countries, the average students' learning time for regular lessons in school per week is 11.5 hours, varying from 9.7 hours in Finland to 12.9 hours in Canada (OECD average 10.6); the average students' learning time for out-of school lessons is 2.3 hours, varying from 1.1 hours in Finland to 4.8 hours in Korea (OECD average 2.4); and the average students' learning time for self-study or homework is 4.3 hours per week, varying from 3.1 hours in Japan to 5.3 hours in Canada (OECD average 4.9). School principals in Korea, Canada and Australia tended to more frequently report that schools provided activities to promote students' learning of science than the OECD average, while this was less frequently the case in Japan and Finland.

- (1) 在本文所討論的五個國家中，哪個國家的學生每週花在自然科學家庭作業的時間最多？
(A) 加拿大 (B) 芬蘭 (C) 日本 (D) 韓國
- (2) 在本文所討論的五個國家中，哪個國家的生師比(學生數/教師數)最低？
(A) 加拿大 (B) 芬蘭 (C) 日本 (D) 韓國
- (3) 文中所討論的五個國家中，哪一國的校長同意「教學因缺乏合格的教師而受到影響」的比例高於 OECD 國家的平均數？
(A) 加拿大 (B) 芬蘭 (C) 日本 (D) 韓國
- (4) 根據本文的敘述，下列何者正確？
(A) 這五個國家的資料顯示，學生的家庭社經背景愈高，其科學成就表現愈高
(B) 這五個國家學生的家庭社經條件優於 OECD 國家的平均數
(C) 這五個國家的學校資源條件十分接近
(D) 這五個國家學生的自然科學成就表現高於 OECD 國家之平均數
- (5) 根據文中的敘述，OECD 國家之學生平均每週花在自然科學家庭作業上的時間有多少？
(A) 2.4 小時 (B) 4.8 小時 (C) 4.9 小時 (D) 5.3 小時
- (6) 就學生人數與教學電腦數之比而言，下列之敘述何者正確？
(A) 就學生人數與教學電腦數之比而言，澳洲等五個國家均高於 OECD 國家之平均
(B) 就學生人數與教學電腦數之比而言，澳洲等五個國家之間並沒有明顯的差異
(C) 在 OECD 國家中，平均每五個學生可使用一台教學電腦
(D) 澳洲是這五個國家中，每個學生平均可使用的教學電腦數最高的國家

2.

The OECD Programme for International Student Assessment (PISA) is a collaborative effort undertaken by all member countries and a number of non-member partner countries to measure how well students, at age 15, are prepared to meet the challenges they may encounter in future life. Age 15 is chosen because at this age, in most OECD countries, students are approaching the end of compulsory schooling, and so, some measure of the knowledge, skills and attitudes accumulated over approximately ten years of education is gained from an assessment at this time. The PISA assessment takes a broad approach to assessing knowledge, skills and attitudes that reflect current changes in curricula, moving beyond the school based approach towards the use of knowledge in everyday tasks and challenges. The skills acquired reflect the ability of students to continue learning throughout their lives by applying what they learn in school to non-school environments, evaluating their choices and making decisions. The assessment, jointly guided by the participating governments, brings together the policy interests of countries by applying scientific expertise at both national and international levels.

PISA combines the assessment of domain-specific cognitive areas such as science, mathematics and reading with information on students' home background, their approaches to learning, their perceptions of their learning environments and their familiarity with computers. A high priority in PISA 2006 is an innovative assessment of student attitudes towards science – questions about this were contextualized within the cognitive part of the test. Bringing the attitude items closer to the cognitive questions allowed questions to be targeted at specific areas, with the focus on interest in science and students' support for scientific enquiry. Student outcomes are then associated with these background factors.

PISA is based on a dynamic model of lifelong learning in which new knowledge and skills necessary for successful adaptation to a changing world are continuously acquired throughout life. PISA focuses on things that 15-year-old students will need in the future and seeks to assess what they can do with what they have learned. The assessment is informed, but not constrained, by the common denominator of national curricula. Thus, while it does assess students' knowledge, PISA also examines their ability to reflect, and to apply their knowledge and experience to real world issues. For example, in order to understand and evaluate scientific advice on food safety an adult would need not only to know some basic facts about the composition of nutrients, but also to be able to apply that information. The term "literacy" is used to encapsulate this broader concept of knowledge and skills.

- (1) 下列有關於PISA的敘述何者正確？
- (A) PISA 以測量學生在學校所學的知識內容為主
 - (B) PISA 的參與國都是 OECD 的會員國
 - (C) PISA 強調各領域知識的精熟程度
 - (D) PISA 重視學生因應未來生活需求的基本素養
- (2) PISA 所測量的對象屬於下列哪一個教育階段？
- (A) 學前階段
 - (B) 國小階段
 - (C) 中學階段
 - (D) 大學階段
- (3) 承上題，下列何者是 PISA 選擇這個階段對象的主要原因？
- (A) 學前兒童的表現代表不同國家對幼兒教育的重視程度
 - (B) 國小學生的表現反應不同同國家的義務教育品質
 - (C) 中學生的表現顯示接受完義務教育者的基本素養
 - (D) 大學生的表現顯示不同國家之國民競爭力
- (4) 下列哪一個領域不屬於PISA評量的範圍？
- (A) 閱讀
 - (B) 數學
 - (C) 自然科學
 - (D) 社會
- (5) 根據文中的敘述，PISA 2006 以哪一個領域為主要重點？
- (A) 閱讀
 - (B) 數學
 - (C) 自然科學
 - (D) 社會
- (6) 下列何者不是PISA評量的重點？
- (A) 因應未來生活需求的能力
 - (B) 不同領域進階知識的學習能力
 - (C) 應用所學於生活問題解決的能力
 - (D) 終身學習的基本能力
- (7) 下列何者為本文內容的主要重點？
- (A) PISA 的主要理念與目標
 - (B) PISA 的參與國與對象
 - (C) PISA 的評量架構
 - (D) PISA 的問題類型

3.

The purpose of this study was to investigate if there are any significant differences in the mathematical attainment of pupils' grade one of primary school in Makkah, Kingdom of Saudi Arabia (K.S.A) between those pupils who had attended kindergarten and their peers who had not, and whether this effect continued into the second and third grades in mathematics attainment. Also the study aimed to investigate the role that teachers' expectation for their students' achievement might play in accounting for any differences. This study was limited to 685 primary fourth grades pupils (special need not include) who had progressed through the first, second and third grades of the primary school in the city of Makkah (K.S.A) in the academic year of 2002-2003 drawn from the 40 primary schools, randomly selected from the four areas in the city of Makkah (North, South, East, and West of Makkah) 20 schools for

boys and 20 schools for girls. 417 of pupils sample had attended kindergarten (294 boys and 123 girls) and 268 of pupils had not (106 boys and 162 girls). Two main methods of data collection were used in this study: a) mathematical scores of final exam the total mathematical scores that the pupils had achieved in the three grades (first grade 1999, second grade 2000, and third grade 2001) were collected from the administration office of each of the schools, and b) teachers' questionnaire consisted of questions to elicit information on the teachers' view about the importance of kindergarten education, as well as their view about the academic and social adjustment differences, if any, between primary school pupils with kindergarten education background and their peers without such an experience. The result of the study indicated that: (1) the pupils who had attended kindergarten significantly out-performed their peers who had not attended kindergarten in the first grade and the effect was continued in the second and third grades; (2) the gender of pupils who had attended kindergarten did not affect mathematical attainment in the three grades of primary school, although the girls who had not attended kindergarten were better than the boys. This trend of the impact of kindergarten education on mathematics achievement at the early primary school level was corroborated by the opinions of the primary school teachers, who concurred with the notion of the positive effect of kindergarten education on its recipients. Finally the results concluded that there is a strong indication that attending kindergarten has been shown to be effective in supporting the mathematical education of primary age children. If this is so, then it appears to us that all children should attend kindergarten before joining primary school, therefore, it is recommended that Saudi Arabian government should work towards universalizing kindergarten education. Integrating kindergarten education into the current basic education could do this.

- () 1. 本研究的樣本來自國小的哪年級
(A) 一年級學生 (B) 二年級學生
(C) 三年級學生 (D) 四年級學生
- () 2. 本研究的自變項是(A) 性別 (B) 學生的幼稚園教育(C) 性別 與學生的幼稚園教育 (D) 數學成就
- () 3. 本研究的依變項是(A)性別 (B)學生的幼稚園教育(C)性別、學生的幼稚園教育、數學成就 (D) 數學成就
- () 4. 研究結果顯示幼稚園教育對於國小四年級學生的數學成就
(A)具有影響力 (B)沒有影響力
(C)只有男生有影響力 (D)只對女生有影響力
- () 5. 本研究的結果依上述段落所提供的建議是

- (A) 加強幼稚園的數學課程
 (B) 加強國小低年級中男生的數學成就
 (C) 普及幼稚園教育
 (D) 加強一到三年級的數學課程以補強學生的數學
- () 6. 性別在本研究中的結果是
 (A) 有無幼稚教育背景的學生都沒有影響
 (B) 沒有幼稚教育背景的女生高於沒有幼稚教育背景的男生
 (C) 有無幼稚教育背景的學生都有影響
 (D) 有幼稚教育背景的女生高於有幼稚教育背景的男生
- () 7. 本研究的結果證實幼稚教育對於學生的數學成就影響是
 (A) 一到三年級 (B) 一到四年級
 (C) 只有一到二年級 (D) 只國小階段都有

III、Cloze: (30%)

Choose the most proper words from the given lists to complete the following passage. Fill in each blank with one selection only and no selection can be used more than once.

1.

Many education systems contain ___(1)___ for dividing students into separate types of education, with different curricula, different qualifications at the end of the program and different expectations for the transition to further education or work, representing different tracks. Commonly, more academic ___(2)___ offer readier access to university-level education, and vocational tracks provide training for particular jobs or ___(3)___ in the labor market (although these may also provide options for continued education).

One ___(4)___ to differentiate among students is the use of different institutions or programs that seek to separate students, in accordance with their performance or other characteristics. Where students are stratified based on their performance, this is often done on the assumption that their ___(5)___ will develop best in a learning environment in which they can stimulate each other equally well, and that an intellectually homogeneous student body will be conducive to the efficiency of teaching.

- accordance
- according
- account
- advice
- characteristics
- device
- divorce
- intelligence
- machines
- mechanisms
- mechanics
- performance
- personality
- scaffolding
- traces
- talents
- tracks
- trades
- training
- traditions
- transformation

2.

Four major philosophies have influenced education in the United States: idealism, realism, pragmatism, and existentialism. The first two philosophies are traditional, and the latter two are contemporary.

__(1)__ holds the doctrines as that people come to know the world through their senses and their reason, whereas __(2)__ emphasizes moral and spiritual reality as the chief explanation of the world. The former suggests that knowledge comes from studying the reality and truth which emanates from both science and art, the latter treats truth and values as absolute, timeless, and universal. And, to know is to rethink the latent ideas that are already present in the mind.

__(3)__ is rooted in realism. Up to the late nineteenth century, the American education was dominated by it. At the elementary school level, it suggested three Rs, as well as moral and religious training in the curriculum. It urged a broad liberal education be the best and only type of education for all students. Such a demand in education appeared in the publication of __(4)__. Later, surfaced in the 1930s as a reaction to progressivism and developed into a major position during the cold War and Sputnik era of the 1950s and early 1960s, __(5)__ was rooted in both idealism and realism.

Today, this philosophy is reflected in the public demand to raise academic standards and to improve the students' work and minds. It is evidenced in such reports as __(6)__ as well as __(7)__. And a national project “ __(8) ” was followed.

Different from Perennialism and Essentialism, pragmatism is based on change, process, and relativity. It construes knowledge as a process in which reality is constantly changing. Knowing is considered a transaction between learner and environment. __(9)__ was developed from it, and became a contemporary reform movement in educational, social, and political affairs. The work of __(10)__ is one of the writings that reveal such views about education.

reconceptualism	excellence in education	progressivism	essentialism
democracy and education	Paideia proposal	a nation at risk	perennialism
idealism	realism	existentialism	reconstructionism
pragmatism	no child left behind	Summerhill	relevant curriculum
humanistic curriculum	liberal arts	experimentalism	multidisciplinary curriculum

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教育學試題

適用學系:課程與教學研究所

申論題：一題二十五分，共四題

- 一、有學者認為班級是一種「社會體系」，具有「選擇」、「社會化」以及「照顧」等等的功能。除此之外，您認為班級社會體系還具有哪些功能？請您選擇其中一項班級社會體系的功能申論之。
- 二、宋朝的書院，一般皆有名師講學於其中，請列舉一位宋代名師，描述其教學風範，並分析其足以作為現代教師楷模之處。
- 三、請舉例說明在實際教學上，您如何運用認知心理學的各種原理來幫助學生進行有效的學習。
- 四、請比較質的研究與量的研究評定研究品質的概念，並說明其提升的方法。

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(在職進修專班)招生考試

課程與教學理論與實務試題

適用學系：課程與教學研究所

申論題：一題二十五分，共四題

- 一、「全球在地化」與「在地全球化」有何差異？在課程上應有的內涵與教學的策略為何？
- 二、在課程改革過程中，大學可以和中小學建立哪些不同類型的夥伴關係？其目的為何？可能會遭遇的難題有哪些？解決之道為何？
- 三、學生在學習過程中會出現個別差異現象，若有部分學生學習落後，教師必須實施補救教學。A. A. Glatthorn(2000)提出兩種補救教學技巧：立即性補救教學、和系統化補救教學。請問：兩種補救教學技巧適用時機為何？應如何實施？當前中小學教師實施補救教學面臨的困難為何？應如何改善？
- 四、課程學者多爾(William E. Doll)在課程願景一書中以「幽靈」(ghost)作為隱喻，批判充斥於課程概念之中的集權式的、單向度式的控制。而他論述到美國最近的課程發展則認為「杜威」幽靈隱藏其中。依此隱喻，您認為台灣的國民教育課程內涵中的「幽靈」為何？針對此「幽靈」，又該如何處理呢？