

Primary Exploration of Government-Sponsored Oversea Education Italian Examination Item Bank Building

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Abstract

Government-sponsored oversea education Italian examination as the national selective authoritative exam, the test paper quality directly determines the credibility and validity of the evaluation results. This paper tries to discuss the principle, standard, process and quality control of government-sponsored oversea education Italian examination item bank building based on educational technology and educational measurement theory by integrating linguistics with second language acquisition theory, and then proposes suggestions for examination item bank building.

Key words: Government-sponsored oversea education; Italian; Examination item bank building

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INTRODUCTION

College of Continuing Education Italian teaching and research office, BLCU, established in 1983, is the exclusive Italian training unit for government-sponsored overseas students studying in Italy, as well as the only unit for topic assignment and test center for governmentsponsored oversea education Italian examination. Italian examination includes preliminary test and intermediate test. As the national exclusive unit for governmentsponsored overseas education Italian examination evaluation, the test paper quality directly determines the credibility and validity of evaluation results, and directly influences the assessment on students' learning outcomes and teachers' teaching effect.

Since 1983, Italian teaching and research office has undertaken the work of selecting and training Italian language talents for CSC, ministries and commissions, enterprises and public institutions, and compiled speed-up Italian teaching material, government-sponsored overseas education Italian pre-intermediate examination outline, organized a series of work including topic assignment, examination and evaluation.

Traditional topic assignment mode is speciallyassigned person responsibility system by screening test items from a large amount of practice which should cover all grammar key knowledge points and balance the difficulty level for avoiding repetitive rate, which requires for extremely large workload. Also, topic assigner's subjectivity and knowledge reserve limitation will directly influence the scientificness, comprehensiveness and objectivity of proposition. Item bank oriented exam has become a trend of exam method reform since 1940s. With the development of educational technology and educational measurement theory, item bank integrating linguistics and second language acquisition theory, together with computer technology has become the breakthrough to solve the above difficulty. Thus this paper carries out the exploration of building governmentsponsored Italian examination item bank under such background.

1. THEORETICAL BASIS OF ITALIAN EXAMINATION ITEM BANK BUILDING

According to Marxist philosophy principle, practice determines theory. Practice is the source of theory, fundamental motivation of theoretical development, and ultimate purpose of theory, and the exclusive standard of testing truth. Theory has active counteraction on practice. The ultimate purpose of theory generation is for guiding practice in better ways. Truth and scientific theories have huge driving effect on practice. The theoretical basis of Italian item bank building is as follows.

Connectivism attention learning theory: With the popularity and upgrading of internet, widely application of computer-centered information technology, learning has increasingly broken through the unipolarity of traditional category, hierarchy organization structure. Information bidirectional flow has realized and various links related with learning have change with each passing day. Connectivism learning theory proposed by Canadian scholar George Siemens based on integrating chaos theory, net theory, complexity theory and self-organization theory is attracting more attention. The examination as the indispensable link of learning procedures is also under the guidance of this theory.

Educational measurement theory: According to Bloom's theory of educational objective, learning is divided into three fields, cognition, emotion and skill. Cognition field learning is divided into six levels, knowledge, comprehension, application, analysis, comprehensiveness, and evaluation. Emotional field learning is divided into five levels, receiving or attending, reaction, value evaluation, value organization, and character formation. From the level of educational measurement theory, exam is the process of measuring students' learning level through test. Educational measurement theory plays a critical guiding role for government-sponsored Italian exam, the difficulty, distinction degree of test paper, and exam credibility and effectiveness measurement can provide scientific basis for objective, fair and accurate evaluation.

Linguistic and second language acquisition theory: Language test influenced by the audiolingual method and structural linguistics has abandoned previous non-scientific method, introduced psychometrics, and established structural linguistic testing method. Lado thinks language is a system constituted by form, meaning, and different layers of structure. Language can be decomposed into several items, and selecting representative samples can accurately evaluate examinees' language capacity. Italian grade exam quality analysis should combine linguistic and second language acquisition theory together with own subject characteristics to deeply understand the difficulty and distinction degree of exam items to evaluate the credibility and validity of items scientifically and accurately so as to purposefully compile Italian exam items.

2. PRINCIPLE AND NORMS OF ITALIAN EXAMINATION ITEM BANK BUILDING

Government-sponsored oversea education Italian examination aims at examinees with governmentsponsored qualification, non-Italian specialty through Italian short-term intensive training lasting specified period (no less than 300 period learning for primary level, no less than 600 period learning for intermediate level). Most of them have no Italian basis and have completed undergraduate or postgraduate degree, engaged in teaching or scientific research work in institutions of higher education, for further education or study for doctoral degree in Italy. Different with regular Italian academic education, speed-up Italian study lasts short time in strong intensity with high practicability, and consider both grammar teaching and ability cultivation. Thus, how to test students' Italian comprehensive ability through effective topic assignment is the general objective of topic assignment.

Through comprehensive investigation, based on the properties and characteristics of the item bank, to guarantee Italian item bank building can achieve expected effect, following basic principles must be followed.

2.1 Scientific Principle

Item bank building should follow the rule of item bank building based on scientific educational measurement theory, focus on research demonstration, and avoid subjectivity and randomness. Language test is the important means to test students' language level, which should be scientific, objective, uniform and standard. Item bank without math model is surely item stack. Exam item compilation should consider credibility, validity, difficulty and distinction degree covering comprehensive exam points, referential and description expression with certainty, definition, clarity, indirectness and independence. Item parameters should contain following contents:

Table 1 General Item Parameters

Attributes	Category of the data	Description		
Item code	Number	The ony sign of the item		
Classification	Boolean	Objective item and non-objective items		
Item type	Char	Type of the items, e.g. fill in the blank, calculate, select, etc.; coding type		
Knowledge point	Char	Corresponding to the syllabus, i.e. the outline of the subjects in a certain course		
Difficulty	Number	Estimation of the difficulty		

To be continued

Attributes	Category of the data	Description
Discrimination	Number	Estimation of the discrimination
Cognitive classification	Char	Classification of the subject according to its teaching objectives
Exam requirements	Char	Requirements of the item
Item detail	MEMO	Main body of the item
Reference answer	MEMO	Reference answer to the item
Grading	Char	Rules of scoring
Recommended exam duration	Number	Time to finish the whole exam (in seconds)

Continued

2.2 Operability Principle

Item bank building should set reasonable data parameter, structural and systematic working procedure based on practical condition and usable resources guaranteeing scientificness, correctness and comprehensiveness, downsize unnecessary procedures and indexes, make sure item bank can produce exam paper smoothly according to exam requirements and improve paper composition successful rate. Item bank can be set with difficulty value according to the practical condition. If the exam paper with a certain difficulty value is produced too frequently or intensively with too many "dormant" items, it is possible to find out the insufficient exam items when producing a whole paper again. Too high or too low difficulty value may also result in this problem.

2.3 Sustainable Development Principle

Item Parameters for Safety Reason

Table 2

Item bank building is an interdisciplinary and highly continuous system project which cannot be achieved in an action. Based on confidentiality principle and development requirement, according to the latest exam trend and learning dynamic, it should be timely updated (Chen et al., 2016). It is necessary to keep deleting, revising, supplementing and updating exam items. Different teachers should learn input rules before inputting items, follow scientific, standard topic assignment requirement, and complete topic assignment, exam organization, evaluation and data analysis, reflect the process based on scientific analysis, and timely summarize experience and lessons to correct next-step work so as to realize virtuous cycle of item bank building.

2.4 Systematic Principle

Italian examination item bank should be set with reasonable item layout according to subject characteristics based on exam outline in large quantity with parameter marks in accordance with object events. Language evaluation includes vocabulary, phrase, sentence, paragraph and passage. Item type reserve should be diversified including multi-choice, fill-in blank, correcting, Q&A, translation, paraphrasing, composition, oral language, and matching. Provide effective storing, obtaining, management and maintenance methods for different kinds of items, s achieve the broadness of exam paper content, reasonability of topic assignment, and convenience of utilization so as to satisfy different ability test requirements. The whole system is divided into six modules: item analysis, item input, data conversion, item bank inquiry and statistics, item bank revision and exam paper generation.

2.5 Confidentiality Principle

As national exclusive authoritative topic assignment unit, item confidentiality and security are important principles of item bank building. Strictly abide by relevant confidentiality regulations during item bank design, development, and construction, management and maintenance procedures, avoid "item leakage" and "item omission", and provide a fair and just exam environment for examinees. So item parameters must be added with following information:

Parameters required while running the item bank (generated auto. in the system)				
Frequency	Number	Number of formal referring times		
Recent exposure	Date	The exact date when referred to most recently, in format "yr./m./d." (e.g. 2018/01/28)		
Difficulty in actual testing	Number	Estimation of the difficulty through sampling test and actual operation of the item bank		
Discrimination in actual testing	Number	Discrimination through sampling test and actual operation of the item bank		

3. SUGGESTIONS FOR ITEM BANK BUILDING

Firstly, establish item bank building team, clarify the objective of item bank building, set item bank parameters, collect and organize items, edit topic and audit for storage. After paper composition and test, evaluate items based on exam marks and paper analysis. Item bank team should deeply study problems in experiment for timely improvement, modify items in the item bank, summarize experience and collect item resources, timely supplement items, delete old item and update regularly.

Italian examination item bank standardized building is an interdisciplinary cross-specialty long-term project requiring for teamwork. Currently, it is still in earlystage exploration period without enough theoretical and practical experience, so it is necessary to perfect item bank and team building. Considering data analysis centralized in objective items, fast and convenient, objective and fair. But most objective items test examinees' language receptivity, recognition ability and induction ability, focus on memorable contents, and sacrifices validity to obtain credibility to a certain degree. So it is necessary to supplement subjective item (such as composition correction) test. It is expected that Italian exam can comprehensively reflect examinees' listening, speaking, reading and writing comprehensive language ability and communication skills with technological advancement and AI development in the education field. Thus, Italian exam item bank standardized building cannot be separated with the research team constituted by measurement experts, computer experts, and linguistics experts.

Carry out cooperation and communication with overseas Italian grade exam organizations. There are four Italian grade exam organization units: CELI, Certificato di conoscenza della lingua Italiana; IT, Italian Test; PLIDA, Progetto lingua Italiana Dante Alighieri. Although four test names and organization units are different, exam and authentication are subject to "A Common European Framework of Reference for Language Learning, Teaching and Assessment" (hereinafter referred to as CEFR). CEFR is a common reference basis in the whole Europe and the guideline for each country to compile foreign language teaching program and exam program. Standardized building process requires to implement sustainable development strategy, unify standard of item bank building so that its basic property and structure conform to overseas standard for item bank sharing and mutual operation. It requires for localization building during internalization. For example, some contents in CEFR are with no validation, cross-cultural ability and intermediary agent scale. Different countries and areas are studying methods of localization during the process of imitation. CEFR-J in Japan has expanded the grade of CEFR from 6 to 12. Thus, we cannot blindly put into storage but should screen and select items while introducing, use fine adjustment method, breakdown method and addictive method to draw advantages and discard the dregs.

General Secretary Xi Jinping has expressed his expectation for teachers to "contribute to modern education with Chinese characteristics with world standard" in the consolation Letter to the 29th Teacher's Day. This is the development direction of Chinese education, as well as the target and vision of Italian examination item bank building.

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