Where to be a teacher? The demands of the supplementary education industry

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ABSTRACT: The aim of this research was to analyse - according to the requirements of employment conditions - the demand characteristics of the supplementary education industry for educational Human Resources (HR), so as to provide references to education departments and teacher training organisations for course adjustments, talent cultivation and path planning of graduates. To this end, the leaders and supervisors of senior high schools' mathematical physics cram classes, Mandarin cram classes, day care, and certification cram classes were investigated, through in-depth interviews, to further understand the implications of applicants' abilities, as required by employers. It was found that the preference of public institutions regarding applicants was focused on Mandarin, information applications, and work attitude; while human resources with a college degree or above, with education experience, were most welcomed in the supplementary education industry, of which work history, major subject studied and acceptable positions held by the applicants were the main screening factors used by employers.

INTRODUCTION

Since the promulgation of the Teacher Education Law in 1995, teacher education planning and policies have diversified and a teacher reserve system developed. With the exception of normal universities, more than 95 universities and colleges have established education and post-graduate education courses, contributing to a surplus of teachers [1][2].

Between 1997 and 2001, the teachers in primary and secondary schools, and kindergartens, reached 139,124, accounting for 70% of the total number of teachers, 198,431. However, regular teachers only amounted to 76,074; substitute teachers in primary and secondary schools amounted to 11,971; 51,079 were reserve teachers. Coupled with the ageing trend of the population and sharp drop in the birth rate, the number of students declined to 206,324 in 101 semesters, posing a great challenge to the demand of teachers in primary and secondary schools [3][4].

The numbers of arts and science, language and certification cram classes increased five times in the latest decade, including 200% in skill certification cram classes and with an annual growth of 20% in arts and science cram classes [5]. The applicants from *education fields* are the most eager to enter into the supplementary education industry (28.7%) and the publishing industry (6.5%) [6].

If the implications of the demands of those intended for supplementary education could be analysed by the employers, their advantages would be further advanced through long-term career planning [7][8].

What are the employment conditions set by employers in a supplementary education industry for applicants with educational backgrounds? What are the requirements set for employment in different industries?

Through in-depth interviews, the researchers attempt in this article to provide further insight into the requirements set by the supplementary education industry for an applicant's educational background, certificates, experience, service classes, capacity, etc, thus contributing to course adjustments and the fostering of talent by education departments and teacher training organisations.

Based upon the research motivations above, the aims of this research were:

- To investigate the employment conditions set by employers in a supplementary education industry for applicants with educational backgrounds.
- To investigate the requirements set by the supplementary education industry for applicants' educational backgrounds, certificates, experience, service classes and capacity.

METHODS AND IMPLEMENTATION

Participants

Through in-depth interviews, four individuals, including two founders or leaders and two managers were interviewed for 2 to 3 hours. The data of interviewees were first collected over the Internet; then the outline and plan of the interview were determined for the interviews. The interviewees, HR structure of the enterprises, and codes of interviews are summarised in Table 1.

Category	Position of interviewees	HR structure of enterprises	Time and code of interview
Mathematical physics cram class of senior high school	Business manager	Number of students: 550 Number of teaching staff: about 20 (college degree: 3, bachelor degree: 9, postgraduate degree: 8)	13, 07, 2010 (R990713)
Mandarin cram class of senior high school	Personnel manager	Number of students: 680 Number of teaching staff: 30 (college degree: 2, bachelor degree: 17, postgraduate degree: 10)	26, 07, 2010 (\$990726)
Day care	Director	Number of students: 350 Number of teaching staff: 11 (college degree: 8, bachelor degree: 3)	03, 08, 2010 (M990803)
Certification cram class	Personnel manager	Total number of students: about 600 Number of students in branches: about 90 Number of teaching staff: about 30 (college degree: 12, bachelor degree: 7, postgraduate degree: 3)	12, 08, 2010 (C990812)

Table 1: List of interviewees and HR structure of e	enterprises.
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Materials

Through in-depth interviews of the directors or supervisors in the supplementary education industry, an attempt was made in this research to gain a further understanding of the requirements for employees, set by employers, including public institutions. As the operating model and concept of public institutions may affect the appraisal and response of the personnel managers of the employee, a qualitative instrument was required to provide an insight into the background of HR employment and explore an *implicit meaning* that cannot be obtained by a quantitative instrument [9]. Based on literature reviews and content analysis, the interview outline was first proposed; then, the directors of a certain supplementary education industry were interviewed in order to modify the outline, contents, interview sequence and mode of representation. The questionnaire for the employment conditions in the supplementary education industry was as follows:

- What are your requirements for the educational background of the applicants?
- What are your requirements for the major of the applicants?
- What are your requirements for the experience and certification of the applicants?
- What are your requirements for the work ability and attitude of the applicants?

Data Analysis

The data of interviewees were classified by the category and date of interview, and processed in sequence using *modified analysis*. Then, all data were sorted and analysed to record their differences and similarities, using *constant comparative analysis* and, finally, compared and discussed to draw conclusions and suggestions.

RESULTS AND DISCUSSION

Educational Background

The interview data show that educational background was just one of several important indicators of competence of which the work attitude of the applicants was highlighted. According to the research results, the concept of a screening process for diplomas will affect talent selection during the process of internal talent flow [10][11].

The employer's cognition of educational background is divided into cognition of part-time teachers and full-time administrative staff. The former relates to teaching quality, and is focused on the major studied by the applicant and teaching experience, while the latter is focused only on service attitude. The employment market considers the family

background, geographical environment, job characteristics, work experience, gender, employment channel and other factors, while avoiding the influence of education on employment willingness [12].

Verhaest and Omey believed that excessive investment in education could influence the accumulation of working experience [13]. From the perspective of the human capital theory, the holder of a college degree is believed to have greater resources and higher productivity than general and vocational high school graduates in labour force utilisation and work adjustment. However, they have less education and income than those with a Bachelor degree. In this regard, finding administrative staff with a college degree is a main consideration of employers in obtaining a labour force for the supplementary education industry. The interview contents are summarised below:

Though educational background is an influential factor for judging competence, the teachers in national universities and research institutions are qualified. We attach importance to teaching experience, as an experienced teacher is more helpful to the students (R990713).

With the exception of foreign teachers, the Mandarin teachers are mainly sourced from Taiwanese teachers with a foreign masters or bachelors degree. However, many experienced teachers from domestic English departments have a good performance as well (S990726).

Majors

It was found that the competence and teaching abilities of the applicants were emphasised [7]. It was found that majors were required by all day cares, other relevant education services, Mandarin, and mathematical physics cram classes of senior high schools. The reason lies in the common background of all the subjects, as well as the necessity of understanding the psychological and teaching requirements of young students and children [7]. Alternatively, the teachers in elementary and secondary schools should have professional teaching competence, including curriculum planning, lesson planning, presentation of teaching materials, teaching methods, learning assessments, class operation, resources management, curriculum evaluation, teaching evaluation, self-development, professional development and the professional attitude required in the supplementary education industry [14]. The interview is summarised below:

The major and competence of teachers is the key to students in senior high schools, and teaching experience and concepts are also helpful to students of different backgrounds (R990713).

Apart from the teachers, no higher educational degree is required for administrative staff; however, abilities in communication, document processing and service attitude are emphasised (C990812).

Work Experience

It was found that the work history, teaching experience, care and patience of the applicants were highlighted, while administration and communication abilities of the administrative staff were seriously considered. From the standpoint of human capital theory, employers pay greater attention to the experience and attitude of the teachers and the on-site experience of the administrative staff [15].

It was found that experienced applicants were required for day cares for two reasons: 1) complex contents, including schoolwork tutoring, life care, emotional guidance and liaison with parents; and 2) arts curricula requiring good learning and skills [16]. Similar to the research results of Chung, experienced teachers are favourably positioned to guarantee teaching quality and understand the psychological needs of the students to improve learning outcomes and reputation. In addition, educational background and competence are taken as a proof of work capacity, according to the screening theory. In view of human capital theory, job tenure and experience are proportional to salary, showing that work experience is required by the employers in the supplementary education industry due to improved performance [14][16]. The interviews are summarised below:

The teachers' caring and patience, as well as good communication skills, are of greater significance; moreover, experienced teachers have a better understanding of the requirements and the children's emotions. Of course, the educational background is a consideration, while experience is important to tutoring and guidance (M990803).

Most of our students are adults, with intentions of attending civil service examinations or in pursuit of positions at research institutions. Apart from part-time teachers, good command of the propositions can help them pass the examinations, while basic word processing and communication capabilities are required for the administrative staff (C990812).

Work Attitude

It was found that basic skills, attitude and behaviours were highlighted, while competence was seriously considered in the supplementary education industry. Like other relevant researches, most employers pay greater attention to the attitude, communication skills and experience of the applicants, in addition to their educational background and educational performance, with particular attention paid to work attitude [17].

It was found that the employable skills required for the supplementary education industry were mainly represented by work enthusiasm, responsiveness, proactive approach, optimism, and communicative competence, interest in teaching, caring, patience and a good expressive ability. The reason is that focus is placed on dealing with the problems of students, followed by a good capacity for communication with good expression as required for achieving learning results, dealing with performance, teaching requirements, administration and management. In addition, proactive coordination and co-operation, special knowledge, practical skills and practical experience are required. In this article, the competence and characteristics were close to those required in the 104 Job Bank and ICAN [18][19]. Chen and the 104 Job Bank pointed out that interest in teaching, caring, patience and good expression implies the work attitude and cognition required to engage in education and help to effectively resolve communication problems and work pressures [18][20][21]. The interviews are summarised below:

We take much account of the response and communication capability in view of different requirements or issues of the students or their parents. This helps the parents to get acquainted with us (R990713).

Other than the level of foreign language, the most important part for the applicants lies in whether they can understand the psychological and learning conditions of students. If the parents take the examination into account, the teachers have no way but to strengthen their examination capability, in addition to communicating with the parents (S990726).

Work in day cares requires a sense of responsibility and caring; teachers with only a college degree could also do the job well. Thus, teachers with a strong sense of responsibility are required to answer the questions of the students, communicate positively with the parents, irrespective of their educational background (M990803).

CONCLUSIONS

The influences of employment conditions, requirements for employability, education-related departments, and education programmes for fostering human capital in the supplementary education industry, as well as the response strategies, are stated as follows.

The required employment conditions in the supplementary education industry were favourable to those with college degrees or above. Teachers were employed mainly from those majoring in education and having a college degree or above. From the perspective of the human capital theory, the human capital demands of employers requiring higher professional functions focused on those with Bachelors degrees, while lesson tutoring, life care and administrative management focused on those with college degrees. Considering human resource utilisation, work adjustment, lower expenditures in education and salary, and college degrees, were the main factors for obtaining a labour force for employers in the supplementary education industry.

The required employment conditions in the supplementary education industry were favourable for qualified pre-service teachers in primary schools and kindergartens. Despite the favourable employment conditions for pre-service teachers having elementary school and preschool educational backgrounds, the employment demand focused on administrative personnel. Therefore, pre-service teachers intending to engage in the supplementary education industry should analyse market demands and enhance their administrative skills.

Employment conditions for the supplementary education industry focused on work experience, majors, and acceptable demeanour. Employers in the supplementary education industry placed great demands on the experience of teachers engaged in junior and senior high school cram classes. This was possibly due to the number of part-time teachers that were screened based on professional and educational backgrounds. Certificates were not taken as a screening condition, with the exception of English certificates for day cares.

IMPLICATIONS

It is necessary to enhance the employment competence of graduates from teacher education institutions engaged in the supplementary education industry. It was found that pre-service teachers with primary and preschool qualifications should strengthen their administrative knowledge and work attitude. Regarding those in charge of children's care and nursing, some administrative jobs must be assumed, in addition to lesson tutoring. Therefore, they must be optimistic, good at communication, responsive, proactive and enthusiastic. Interpersonal communication skills and other capabilities can be fostered through services offered by societies or organisations.

Teacher education institutions should strengthen curriculum planning for pre-service teachers involving their teaching discipline and work experience. According to research, the educational background, work experience and certificates were the main considerations of employers. Therefore, students with poor work experience should obtain certificates;

for example, through practical curriculum planning; certification organised by teacher education institutions; or through conducting internships, probation and part-time jobs in the supplementary education industry. In addition, English skills are a necessity in the supplementary education industry. Hence, educational qualifications should be verified in order to maintain educational quality by the education organisations, in combination with the skills testing and school teaching organised by governmental or corporate bodies.

Teacher education institutions should strengthen pre-service teachers' employability in relevant educational industries through integral curriculum or educational programmes. It was found that employers in the supplementary education industry emphasised an applicant's work attitude; for example, caring, patience, responsiveness, communication skills and an interest in teaching. *Education-related* courses were suggested, of which educational related industry and logistics were taken as teaching subjects. Talent training facilities and departments associated with the education industry, such as toy design, figure learning, museum operation, non-profit organisation management, etc, could attract the attention of students and resolve difficulties in their teaching careers.

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