

# Digital Era and Co-convergent Perspectives of International School Teachers in Beijing China

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**Abstract:-** This research aimed to compare the perspectives on being teachers in the digital era for international schools in Beijing China between Chinese and foreign teachers. Data from samples, with a 5-rating-scale questionnaire, were analyzed by descriptive statistics. The finding pointed out that both Chinese and foreign international schoolteachers in the digital era had no statistically significant difference at the 0.05 level about having twelve co-convergent perspectives at the critical level as the baseline: knowledge, integrity, flexibility, expertise, management, professionalism, service mind, core competency, teaching, teamwork, communication, and problem-solving. Moreover, the more they develop knowledge, the more they add integrity for academic and cyber security systems before the other skills.

**Keywords:-** Digital Era, Co-Convergent Perspective, International School, Schoolteachers

## I. INTRODUCTION

Due to technological innovation that has developed a lot. Whether it's 5G, VR, AR, IOTs, various applications, or AI, they affect learning and teaching. Teachers must redesign the teaching-learning in terms of the content design, the learning activities design, and the communication process design. Content design is to create modern content, fulfilling content, calligraphy, pictures, and colors, for students to learn on their own, but keep up with the times and have a variety of options for their asking questions, or expressing opinions. Learning activities design, there are 2 parts to learning activity design: 1) Behaviorist Learning Design which must suit students and be friendly to students of different ages. Students learn by connecting new content to life experiences or situations around each person. Communication Process Design: 1) Written language is a part of communication, Nowadays, there is a tendency to use more visual communication, interaction, and screening. Teachers must use existing tools to design content and communication processes so students can understand and build on their ideas. 2) Having an information collection management system to make the content interesting, to follow, and not boring.

The role of the teacher will be changed to provide quality, flexible education. In the digital era, teachers become digital teachers who must adapt to education in the future. Education will be self-organizing, and technology

will play a major role in the delivery of education and in providing support to students. Learning will move toward individualization and learner-centeredness because of the digital era. Many schools in this world, especially international schools, have invested in teacher professional development to ensure that teachers' competency is more than just knowledge and skills; it involves meeting complex demands by drawing on and mobilizing psychosocial resources (including skills and attitudes) in a particular context. Teachers need a wide range of competencies to face the complex challenges of today's world. Teaching competency is an inherent element of an effective training process.

In China, the selection of international school teachers insists on taking teachers' ethics as the first standard. Besides, international school teachers should have an open culture vision, and understanding of health, environment, population, international organizations, peace, human rights, global consciousness, and sensitivity to other cultures in the critical analysis. The ability to resolve conflicts, cooperate with others, and educate students about international understanding should be democratic, fair, respectful, and tolerant. Accordingly, the quality of international school teachers has an important impact on students' academic achievement, international schools attach great importance to the development of teachers.

Nowadays, there are 148 international schools in China in 6 different cities; 45 schools in Shanghai, 28 schools in Beijing, 26 schools in Guangzhou, 20 schools in Shenzhen, 11 schools in Hangzhou, and 8 schools in Wuhan. The best international schools use a British curriculum, especially in Beijing, Shanghai, and Guangzhou orderly. [1] The teachers in international schools especially those who are Chinese in China are facing an insecure and precarious working environment characterized by short-term contracts and subsequent high rates of annual turnover. They must use more strategies to survive and thrive themselves. One cause is a clash of national and international curricula that causes organizational insecurity and loss of teachers' efficacy, leading to high rates of annual turnover. Another cause concerns predominantly micro-politics and unethical behavior by international school owners. So, teachers in international schools must have more complex competencies.

Moreover, requirements, and regulations for international school teachers and teaching vary greatly. Teachers must have many competencies especially strong self-efficacy which leads to teacher work engagement and supports a more positive learning environment. [2] Teachers with high self-efficacy are more likely to implement innovative teaching practices, possess better classroom management skills, and are more likely to engage in professional development than teachers with low self-efficacy. [3][4] High self-efficacy is linked to job satisfaction and is a critical component in retention.[5] [6] Higher perceived self-efficacy points to more engagement in teachers' work with joy, pride, and love, and less anger, fatigue, and hopelessness toward their students. [7]

So, being an international school teachers in China in the digital era, both Chinese and foreign teachers must be under controlled of the laws and rules of four parts: the nation, the schools, the standardization, and the teachers' self (self efficacy). However, between teachers who are Chinese and foreign, how are about their perspectives for being teachers in the digital era and their perspectives are co-divergent? These are the significant of this research.

#### *A. Research Objective.*

To compare the perspectives about teachers in the digital era of international school teachers in Beijing China between Chinese and foreign teachers.

#### *B. Research Benefits*

- The human resource management/ development in international schools in Beijing China can apply these research results for recruiting or promoting schoolteachers.
- International schools especially in Beijing China can apply these research results for setting the development plan for schools and schoolteachers.
- The education system of China can apply these research results for setting criterias or indicators of being teachers in international schools.

#### *C. Literature Review*

The research integrated 4 parts of theoretical basis for setting the research framework. There were reflective practice concept of Donald Schön, andragogy and pedagogy concepts of Malcolm Knowles and others, cultural competence concept of James Banks, and self-determination theory of Deci and Ryan. Reflective Practice emphasized and encouraged teachers to continually examine and adjust their practices based on teachers' experiences and feedback. The principles of andragogy (adult learning) and pedagogy (child learning) were important for understanding the diverse needs of students in international schools. Teachers must adapt their teaching methods to suit the age and background of their students. Cultural Competence highlighted the importance of teachers' self-awareness of their own cultural biases and an understanding of the cultural backgrounds of their diverse students, population in international schools. Self-Determination Theory, the researchers used for synthesizing and underscoring the

importance of teachers fostering students' autonomy, competence, and relatedness to enhance their motivation and engagement for creating a positive learning environment.

Besides, the researchers reviewed and integrated the professional support concept for setting the item specification of being teachers in the digital era, especially in international schools. There consisted of 7 parts. The Professional Learning Communities (PLCs) part, it was used for understanding how to engage in collaborative learning and share experiences and insights. Mentoring and coaching part, it was used for providing mentorship programs of International schools, and for helping teachers receive personalized guidance and feedback on their professional development. Professional development workshops, it was used for indicating new skills and refining existing ones, especially in the digital era. Self-assessment and goal setting part, it was used for understanding tools and frameworks of teachers for self-evaluation, encouraging themselves, identifying areas where they want to grow. Feedback mechanisms part, it pointed out about establishing effective feedback mechanisms, including peer evaluations, student feedback, gaining insights into their strengths and areas that need improvement. Constructive feedback part, is used for checking essential for professional growth. Access to resources part, international schools can provide teachers with access to resources such as research articles, books, and online courses, for helping teachers stay informed about the latest educational trends and best practices. Leadership support part, it used for understanding the strong leadership and crucial professional development of teachers to engage in their own self-professional development.

All reviewed literature above led to the key point of this research, the co-convergent perspectives, which meant international school teachers' perspectives about being teachers in the digital era with convergent thinking from the facts outside themselves to crystallize the answers. The answers for being teachers in international schools in China in the digital era consisted of 12 perspectives; knowledge, integrity, flexibility, expertise, management, professionalism, service mind, core competency, and skills such as teaching skill, teamwork skill, communication skill, and problem-solving skill.

Besides, the researchers reviewed about international schools in China. It founded that international schools in China, especially in Beijing based on British-based curriculum, the most. Main reasons are the British-based curriculum is well-regarded for its academic excellence and its emphasis on inquiry-based learning and a strong commitment to sustainability and community service. It provides high-quality education and is known for its academic rigor and extensive extracurricular activities. The researchers used all integrated reviews to set 12 co-convergent perspectives for research samples, checking and indicating their perspectives about being teachers in international schools in China in the digital era.

**D. Research Methodology**

This comparative research approach focused on international schools in Beijing China. The research population was different international schools in 4 locations, 9 schools in Beijing China. The samples were 342 Chinese teachers and 62 foreign teachers by simple random sampling at 95% confidence. The research instruments was the 5-rating scale questionnaires that had internal consistency 0.90 reliability and validity 1.00 in content and construct validity. The 5-scoring interpretation were 1.00-1.80 (It doesn't matter at all), 1.81–2.60 (less important), 2.61-3.40 (significant), 3.41-4.20 (critical), and 4.21-5.00 (extremely important). The researchers checked their normal distribution before comparative analyzing. Besides, collected data were entered, cleaned, completed, accuracy, and consistency. To

ensure participants' privacy and confidentiality by not disclosing their identities or personal information and obtaining informed consent from participants, explaining the purpose of this research and how their data will be used.

**E. Research Results**

After the researchers examined the normal distribution of the data, it was found that there was no difference between masculinity and femininity, being Chinese and foreign teachers, and teaching at primary and secondary levels. The researcher tested co-convergent perspectives' reliability and found that all co-convergent perspectives should not be separated. They are suitable perspectives for international schoolteachers as in Table 1.

**Table 1 Reliability of Co-Convergent Perspectives**

| Co-convergent Perspectives | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|----------------------------|----------------------------|--------------------------------|----------------------------------|------------------------------|----------------------------------|
| Knowledge                  | 38.19                      | 63.17                          | 0.78                             | 0.96                         | 0.977                            |
| Integrity                  | 38.84                      | 64.17                          | 0.87                             | 0.94                         | 0.974                            |
| Teamwork                   | 38.87                      | 64.38                          | 0.87                             | 0.94                         | 0.974                            |
| Expertise                  | 38.87                      | 63.64                          | 0.88                             | 0.94                         | 0.974                            |
| Core competency            | 38.89                      | 64.25                          | 0.88                             | 0.96                         | 0.974                            |
| Professionalism            | 38.89                      | 64.33                          | 0.94                             | 0.99                         | 0.973                            |
| Management                 | 38.88                      | 63.95                          | 0.88                             | 0.94                         | 0.974                            |
| Service mind               | 38.90                      | 64.73                          | 0.84                             | 0.93                         | 0.975                            |
| Teaching                   | 38.90                      | 64.59                          | 0.95                             | 0.98                         | 0.973                            |
| Flexibility                | 38.91                      | 64.19                          | 0.86                             | 0.93                         | 0.974                            |
| Problem-solving            | 38.91                      | 63.99                          | 0.84                             | 0.95                         | 0.975                            |
| Communication              | 38.93                      | 64.85                          | 0.85                             | 0.95                         | 0.975                            |
| ANOVA with Cochran's Test  |                            |                                |                                  |                              |                                  |
|                            | Sum of Squares             | df                             | Mean Square                      | Cochran's Q                  | Sig                              |
| Between People             | 2560.06                    | 403                            | 6.35                             |                              |                                  |
| Within People              |                            |                                |                                  |                              |                                  |
| Between Items              | 181.57                     | 11                             | 16.50                            | 952.78                       | .000                             |
| Residual                   | 665.31                     | 4433                           | 0.15                             |                              |                                  |
| Total                      | 846.88                     | 4444                           | 0.19                             |                              |                                  |
| Total                      | 3406.94                    | 4847                           | 0.70                             |                              |                                  |
| Grand Mean = 3.53          |                            |                                |                                  |                              |                                  |

Table 2 pointed that 12 co-convergent perspectives for being international schoolteachers have 97% internal consistency or 0.97 reliability. Grand mean of 12 co-convergent perspectives is 3.53 that means international schoolteachers in Beijing China, both Chinese and foreign, must have these perspectives at the critical level as the baseline. In addition, from the top five, it is found that international schoolteachers in the digital era in Beijing China must integrate knowledge and morality or ethics simultaneously. Skills sections such as communication skills and problem-solving skill can evolve together after. The researchers analyzed the mean and standard deviation of 12 perspectives to confirm the orderly, in Table 2.

**Table 2 Co-Convergent Perspectives of International Schoolteachers in China**

| Co-convergent Perspectives | Total (404) |      | Chinese (342) |      | Foreigner (62) |      | Mean differences testing |      |
|----------------------------|-------------|------|---------------|------|----------------|------|--------------------------|------|
|                            | Mean        | SD   | Mean          | SD   | Mean           | SD   | t-test                   | Sig. |
| Knowledge                  | 4.16        | 0.97 | 4.16          | 0.96 | 4.21           | 1.04 | -0.39                    | 0.69 |
| Integrity                  | 3.51        | 0.81 | 3.50          | 0.81 | 3.60           | 0.82 | -0.84                    | 0.39 |
| Teamwork                   | 3.49        | 0.80 | 3.48          | 0.79 | 3.51           | 0.81 | -0.30                    | 0.76 |
| Expertise                  | 3.49        | 0.84 | 3.47          | 0.84 | 3.59           | 0.81 | -1.00                    | 0.31 |
| Core competency            | 3.47        | 0.79 | 3.46          | 0.78 | 3.54           | 0.84 | -0.76                    | 0.44 |
| Professionalism            | 3.47        | 0.74 | 3.46          | 0.73 | 3.53           | 0.78 | -0.71                    | 0.47 |

|                 |      |      |      |      |      |      |       |      |
|-----------------|------|------|------|------|------|------|-------|------|
| Management      | 3.47 | 0.82 | 3.46 | 0.83 | 3.55 | 0.76 | -0.80 | 0.42 |
| Service mind    | 3.46 | 0.79 | 3.44 | 0.78 | 3.55 | 0.84 | -0.97 | 0.33 |
| Teaching        | 3.45 | 0.72 | 3.44 | 0.72 | 3.52 | 0.75 | -0.79 | 0.43 |
| Flexibility     | 3.45 | 0.82 | 3.42 | 0.81 | 3.60 | 0.86 | -1.65 | 0.09 |
| Problem-solving | 3.45 | 0.85 | 3.45 | 0.84 | 3.45 | 0.87 | 0.01  | 0.98 |
| Communication   | 3.43 | 0.78 | 3.40 | 0.78 | 3.55 | 0.77 | -1.39 | 0.16 |

Table 2 points out that in the digital era, Chinese and foreign teachers in the international schools in Beijing China have 12 co-convergent perspectives at a critical important level. First, both teachers must have qualified and modern academic knowledge and life-knowledge. Teachers should acquire and absorb knowledge all the time. Secondly, they must have integrity which is the foundation of trust and reliability and is the most important measure of academic and cyber systems security. Next, they must work in/with teams, have expertise in their field, have a core competency for being a teacher, have professionalism, manage class and learning process, have a service mind, teaching skills, flexibility, problem-solving skills, and communication skills.

To compare co-convergent perspectives between Chinese and foreign teachers in the digital era about being

international schoolteachers in China, the analyzed results show that Chinese and foreign teachers have all co-convergent perspectives at the same level, a critical level, except the foreign teachers, in perspective about knowledge which is an extremely important level. However, the researchers tested the differences of means by independent sample t-test for equality of mean, and equal variances assumed. The results of all co-convergent perspectives show that Chinese and foreign teachers have different mean in knowledge perspective but they do not differ significantly at 0.05 statistical level.

At the critical important level, in the digital era, Chinese and foreign teachers in the international schools in Beijing China should integrate all 12 co-convergent perspectives.

Table 3 Correlation of Co-Convergent Perspectives of Chinese And Foreign International Schoolteachers in Beijing China

| Pearson Correlation | Management | Professionalism | Teaching | Service mind | Teamwork | Integrity | Expertise | Flexibility | Problem-solving | Knowledge |
|---------------------|------------|-----------------|----------|--------------|----------|-----------|-----------|-------------|-----------------|-----------|
| Core competency     | 0.74**     |                 |          |              |          |           |           |             |                 |           |
| Professionalism     | 0.81**     | 1               |          |              |          |           |           |             |                 |           |
| Teaching            | 0.86**     | 0.87**          | 1        |              |          |           |           |             |                 |           |
| Service mind        | 0.71**     | 0.84**          | 0.83**   | 1            |          |           |           |             |                 |           |
| Teamwork            | 0.75**     | 0.84**          | 0.87**   | 0.74**       | 1        |           |           |             |                 |           |
| Integrity           | 0.76**     | 0.83**          | 0.86**   | 0.74**       | 0.81**   | 1         |           |             |                 |           |
| Expertise           | 0.85**     | 0.86**          | 0.86**   | 0.75**       | 0.77**   | 0.78**    | 1         |             |                 |           |
| Flexibility         | 0.89**     | 0.81**          | 0.85**   | 0.71**       | 0.73**   | 0.72**    | 0.82**    | 1           |                 |           |
| Problem solving     | 0.75**     | 0.86**          | 0.80**   | 0.71**       | 0.80**   | 0.81**    | 0.72**    | 0.70**      | 1               |           |
| Knowledge           | 0.69**     | 0.90**          | 0.72**   | 0.74**       | 0.67**   | 0.66**    | 0.68**    | 0.68**      | 0.67**          | 1         |
| Communication       | 0.83**     | 0.78**          | 0.92**   | 0.73**       | 0.73**   | 0.73**    | 0.79**    | 0.81**      | 0.69**          | 0.65**    |

Sig. (2-tailed) = 0.00 \*\* = 0.01 N = 404

Table 3, the co-convergent perspectives for being international school teachers in the digital era have a high correlation at 0.05 statistically significant level. An interesting point of this table is professionalism which is a powerful quality. Professionalism is not the job teachers do, it's how to do a teacher's job. Teachers must put their knowledge into action. Teachers' teaching builds the foundation and is the starting point for all professionals [8]. Professional teachers must have high and modern: knowledge (r=0.90), teaching skill (r=0.87), expertise (r=0.86), problem-solving skill (r=0.86), service mind, and teamwork skill (r=0.84), integrity (r=0.83), flexibility (r=0.81), and communication skill (r=0.78). Because digital platforms represent new structures for better knowledge

sharing and more sustained innovation. Knowledge and professionalism have the highest correlation at 0.05 statistically significant level (r=0.90). Professional knowledge of teachers is culturally and socially situated and materially grounded. Professional expertise is often highly dependent on conceptual perception and sensory intelligence.

## II. CONCLUSIONS

To compare the perspectives about teachers in the digital era of international school teachers in Beijing China between Chinese and foreign teachers points out that: Chinese and foreign teachers should have 12 co-convergent

perspectives at the critical level for being international schoolteachers in the digital era: knowledge, integrity, flexibility, expertise, management, professionalism, service mind, core competency, teaching, teamwork, communication, and problem-solving. Significantly, knowledge and integrity must be integrated before adding more other skills.

Why do the international schoolteachers in the digital era integrate knowledge and integrity first? There are many reasons such as China's teacher policy, the people-oriented system, and the regulations on implementing the Law of the People's Republic of China. However, China International Schools are based on two key points: 1) the changed characteristics of the curriculum system from the structure based on introducing a Western curriculum to the "integrated" system based on the national curriculum, and 2) the characteristics of students' export that concerns about the teachers' competencies. So, teachers' perspective in international schools especially in the digital era must lean on a 12-co-convergent perspective which is the knowledge-integrity based.

The researcher synthesized research results from Table 1-2-3 and the legal policy of "China International School", the results pointed out that. Curriculums are based on the national curriculum standards and carry out innovations in education and teaching. Teachers' knowledge in digital becomes the priority for international schools, especially in Beijing, which must design and put in schools' policies to set the standard of teachers that must have this competency. The Outline of the National Plan for Medium- and Long-term Education Reform and Development (2010–2020) clearly states that international schoolteachers must cultivate international talents with international awareness, international understanding ability, awareness of international rules, understanding of differences, and facing up to differences for students. Teachers must integrate 12 co-convergent perspectives to enrich the Nation Plan. Teachers' knowledge and integrity become the priority for international schoolteachers in the digital era. Human resource managers in international schools must recruit, train, and evaluate teachers and the ones who would like to be international schoolteachers with 12 co-convergent perspectives. It also aligns with the mission and goals of the international school, continually examining and adjusting their practices based on their own experiences, feedback, international education standards, and local Chinese educational regulations, including the Council of International Schools (CIS) or the Western Association of Schools and Colleges (WASC).

Knowledge and integrity become the first important co-convergent perspectives. An integrity approach relates to concepts or views of ethics, corruption, and good governance. Integrity encourages students' initiative and creativity. In the digital era, integrity becomes the academic process creator for students and teachers which is concerned the 21st Century skills, student-centered learning, being global citizens, diverse learning styles, preparation for higher education and careers, adaptation to multiple curricula, frameworks, and approaches, cultural sensitivity to create the learning process, and life-long learning for students.

Confidently, the research proposition points out that. International schoolteachers should focus on their perspectives especially 12-co-convergent perspectives. This must be based on knowledge and integrity in order to be able to maintain moral values in the digital age that monitors the quality of teachers at all times. At the same time, teachers must be moral role models for students to create a lifelong learning process.

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