## Seminar on Education Informatization for Developing Countries

Name	Seminar on Education Informatization for Developing Countries			
Organizer	Zhejiang Normal University			
Time	June 8-28, 2023	Language	English	
Professional Background	Officials and heads of departments of education informatization, admin officers and teachers of educational institutions, experts of education informatization technologies, etc.			
Number of Participants	25			
Requirements	Age Limit	(Seminars) Under 45 for officials at or under director's level; under 50 for officials at director general's level		
	Health Condition	Be in good health and provide a health certificate or medical examination form issued by a local public hospital; free of conditions that are prohibited from entry into China under Chinese laws and regulations; free of severe chronic diseases such as hypertension, cardiovascular and cerebrovascular diseases, diabetes, mental illness, or infectious diseases that may pose a serious risk to public health; not in the recovery period after major surgery or acute illness, not severely physically disabled, and not in pregnancy.		
	Language Proficiency	Fluent in English (speaking, writing, listening, and reading)		
	Other	Participants are not allowed to bring their spouses, family members, or friends with them during the training.		
Host city	Jinhua, Zhejiang Province	Local Temperature	Summer, about 20-30°C	
Cities to visit	Hangzhou (Zhejiang Province), Shanghai	Local Temperature	Summer, about 20-30°C	
Notes	<ol> <li>Please prepare research materials related to education informatization for exchange and discussion.</li> <li>Please wear formal attire, traditional attire, or leadership uniforms to attend formal events. Please also prepare comfortable shoes and sportswear for participating in sports courses or using campus sports facilities.</li> <li>Please bring commonly used medications to prevent and treat malaria, colds, etc.</li> </ol>			

	<ul> <li>4. Computers are not provided in the hotel. If needed, please bring your own.</li> <li>5. In principle, participants are not allowed to change their flights to and from China. If there is a need, please contact the commercial office to follow the procedure for changing tickets. If there are special circumstances that prevent you from departing on time or cause flight delay during transfer, please contact the commercial office or the program team in a timely manner to inform them of the latest flight information so that they can arrange for airport pick-up.</li> <li>6. Please confirm whether you need to re-check your luggage when transferring. After landing and retrieving your luggage, please wait patiently at the international or domestic arrival exist where the program team holding a pick-up sign with "Zhejiang Normal University" writted on it will meet you. If you have been waiting for more than 15 minutes, you can contact the project contact persons by phone.</li> </ul>			
Contact of Organizer	Contact Person(s)	Zhang Dawei, Shen Fangyao, Lu Dan		
	Telephone	+86-579-82298819		
	Mobile	+86-13516970997(Zhang), +86-15868137679(Shen), 13586989320(Lu)		
	Fax	+86-579-82298819		
	E-mail	ywjd@zjnu.cn		
About the Organizer	Zhejiang Normal University (ZJNU), established in 1956, is a key provincial university known for its teacher education. Over the past 67 years, ZJNU has nurtured more than 300,000 talents including 210,000 in the educational field. It is thus acclaimed as the "cradle for basic education teachers in Zhejiang Province". ZJNU upholds the value of educational internationalization and has established partnerships with more than 280 foreign educational institutions situated in over 60 countries and regions spanning 5 continents. It has collaborated on study abroad and exchange programs with more than 70 foreign universities, and it has welcomed over 3,000 international students participating in short-term, long-term, and CSC scholarship programs. Over the past decades, ZJNU plays an active role in international exchanges and cooperation by taking full advantage of its strength. It serves as the "Base for Educational Aid and Development" approved by the Ministry of Education, the "China Aid Training Center for Primary and Secondary Education" approved by the Ministry of Commerce, and the "China- ASEAN Education and Training Center" approved by the Ministry of Foreign Affairs and the Ministry of Education. Up to the present, ZJNU has held 215 foreign aid training programs, including 8 academic degree programs with 166 participants, 206 short-term foreign aid training programs with 5,231 participants, and 1 remote recording and broadcasting program with about 200 participants. Our university has trained participants from 112 countries, regions,			

and international organizations, including outstanding alumni such as Faustin-Archange Touadéra, the sitting president of the Central African Republic. ZJNU strives to maintain good relations with alumni. This seminar consists of lectures, discussion sessions, cultural experience as well as economic and cultural visits. The training program will invite experts and scholars in the field of education informatization to give lectures on various topics, such as China's national conditions, Chinese education overview, development and reflection on education informatization in China, implementing smart campuses in Chinese primary and secondary schools, etc. **1. Lecture Content** (1) Overview of China: introducing China's history, geography, society, economy, culture, China's political system & foreign policy, mainstream Chinese societal values and public morality, etc.; to give participants a general understanding of China and a theoretical framework for further learning and exchange. (2) Common Prosperity: Common prosperity is not only the essential requirement of socialism with Chinese characteristics, but also a distinctive feature of China's modernization, and more importantly, a shared aspiration of the Chinese people. This lecture examines a village relocation initiative in Wuyi County, which serves as a prime Training example of poverty reduction efforts and the human-centric philosophy prevalent in Content China. (3) Development and Reflection of China's Education Informatization: This lecture introduces the centennial history of China's education informatization development, which includes four stages: 1) Education informatization before the founding of People's Republic of China; 2 Early stage of education informatization after the founding of People's Republic of China; ③Comprehensive development stage of education informatization; ④Education informatization in the 21st century: focusing on the development of the 40 years' Reform and Opening-up, especially the major progress and achievements in fighting against COVID-19, as well as the latest development of education informatization 2.0. (4) Artificial Intelligence Education in Primary and Secondary Schools: Since July 2017, in accordance with the national strategic policing requirement, artificial intelligence has been incorporated into the basic education curriculum, which enables China to make great progress and take on a leading role in AI education in the stage of basic education. The lecture aims to introduce the current situation and provide advice on AI development in basic education in China, and offer references for developing countries to develop AI in the process of education informatization.

- (5) Smart School Development and Implementation: the lecture introduces the definition, history, and enabling technologies of Internet of Things with a focus on the extensive applications of IoT. In the context of the smart classroom, this lecture will focus on IoT's application in smart education.
- (6) China's Information Technology Development and Software Talent Training: With the vigorous development of China's emerging IT industries such as artificial intelligence, Internet of things, big data and cloud computing, the requirements for the quality of software products are getting higher, which leads to a large demand for highly skilled software talents. According to the employment and labor market statistics database, China is facing a software talent gap. As a large developing country, China needs to figure out solutions to prepare software talents in response to future challenges. Based on China's national conditions, the current situation of software development, and the software engineering subject of ZJNU, this lecture briefly introduces the approaches ZJNU adopts to prepare software talents.
- (7) HEI Classroom Teaching Reform Driven by Information Technology: With the popularization of information technology, new teaching approaches such as cloud-based classroom, flipped classroom and Massive Open Online Course (MOOC) are promoting the reform of classroom teaching in HEIs. By leveraging information technology, learning platforms with rich information resources are built to highlight personalized learning, and encourage independent and inquiry-based learning, with the aim of preparing competitive and innovative talents for modern society.
- (8) Information Security and Challenges: As new technologies such as cloud computing, blockchain, face recognition, artificial intelligence, big data, Internet of Things and mobile computing are gradually being widely used, the revolutionary impact of information technology on education is getting profound. Cyber security guarantees education informatization. The lecture analyzes the current security situation of education informatization, and puts forward suggestions on how to ensure the security of education informatization.
- (9) Challenges and Changes in Education in the Age of Big Data: This lecture starts by providing an overview of the fundamental features of big data and educational big data, and explains the primary techniques used to manage and analyze such data. The lecture also explores the application and challenges of big data: 1) big data in classrooms, including monitoring and early-warning prediction of student performance; 2) big data in student's daily life, understanding their thoughts, interests, and habits; 3) the challenges that big data presents to the field of education.

- (10)Development of K-12 STEM Education This lecture focuses on the integration of information technology with other disciplines such as Mathematics and Science. The lecture also provides insights into the development of K-12 STEM education in China. In addition to introducing the theory of STEM education, the lecture emphasizes the core competencies of STEM including critical thinking skills, problem-solving abilities for complex issues, and the potential to drive technological progress.
- (11)Cultural experience: Tai Chi is a martial art originating from China that focuses on cultivating both internal and external strength, harmonizing firmness with flexibility. By practicing its movements and techniques, participants can gain an understanding and appreciation of Tai Chi as well as the broader Chinese cultural context.

## 2. Lecturer Profile

- (1) Li Jiahou: Professor in the Department of Educational Technology of the College of Education in Shanghai Normal University, member of MOE National Expert Committee on Teacher Education Informatization, expert of MOE Modern Distance Educational Resource Development Project (Basic Education Team). Research interests: teacher education development in the mobile Internet era, the application of minimalist approach to education in the information technology learning environment, secondary school student's higher-order thinking development in the information technology environment, the application of artificial intelligence in education, teaching strategies of deep learning in the field of education, etc.
- (2) Zheng Zhonglong: PhD, Professor, PhD Supervisor, Dean of the School of Computer Science and Technology of Zhejiang Normal University, Vice Chair of National Association of Computer Education and Research in Normal Universities, and Vice Chair of Zhejiang Provincial Association of Computer Education and Research, visiting scholar in the University of California with the support of China Scholarship Council with collaborating supervisor Prof. MingHsuan Yang, an IEEE Fellow. Research interests: machine learning, pattern recognition, image/video processing, and blockchain. Research achievements: He has presided over 5 National Natural Science Foundation projects and several provincial-ministerial research projects; publications in IEEE/ACM Transactions on Networking and other academic journals and conferences.
- (3) Wang Hui: Ph.D. in Engineering at Shanghai Jiaotong University, Associate Professor, Master's Supervisor, Director of the Computer Science Department of the School of Computer Science and Technology of Zhejiang Normal University. Research interests: industrial Internet of Things, Internet of Things and wireless sensor networks, etc. Prof. Wang has published more than 10 papers in internationally recognized journals and conferences over recent 3 years.

- (4) Peng Hao: Ph.D. in Engineering at Shanghai Jiaotong University, Professor, Vice Dean of the School of Computer Science and Technology at Zhejiang Normal University, executive committee member of China Computer Federation (Hangzhou), Vice Chair of CCF YOCSEF (Hangzhou), Secretary General of Zhejiang Computer Education Committee, Deputy Secretary General of Zhejiang Computer Society, and committee member of Zhejiang Computer Application and Education Society. Research achievements: 80+ research publications, 2 national foundation projects, 9 provincialministerial projects, and other 14 scientific research projects.
- (5) Ding Zhiguo: Ph.D., Associate Professor, visiting scholar at the Massachusetts Institute of Technology. Director of the International Exchange and Cooperation Center of the School of Computer Science and Technology of Zhejiang Normal University. Research interests: software system quality assurance and testing, system anomaly detection and prediction. Has published over 10 papers in recognized journals such as *Reliability Engineering & System Safety*.
- (6) Chen Xin: Ph.D. in Computer Science, Associate Professor, Master's Supervisor. Vice Director of the Computer Science Department of the School of Computer Science and Technology at Zhejiang Normal University. Prof. Chen delivered a quality offline course Intelligent Mobile APP Development. Achievements: winner of the second prize of the 2020 Teaching Innovation Competition of ZJNU, coaching the student team to win the second prize in the nationwide software service outsourcing competition, winning the bronze medal in the Zhejiang "Internet+" Innovation and Entrepreneurship Competition.
- (7) Hu Zhaolong: Associate Professor of the School of Computer Science and Technology of Zhejiang Normal University, Ph.D. and Master's Supervisor of Beijing Normal University. Research interests: complex networks, data mining, and blockchain. In 2021, he guided the Jinhua Branch of the State Grid Corporation of China and won the first prize in the Zhejiang Provincial Data Mining Competition.
- (8) Xu Lihua: Professor, PhD Supervisor, former Director of International Office, Office of Chinese Language Council International & Office of Hong Kong, Macao and Taiwan Affairs, Zhejiang Normal University. Research interests: international Chinese education, second-language acquisition, Chinese language promotion in Africa, and language policy and planning in Africa. Prof. Xu has presided over 8 research projects under the National Social Science Fund of China and other funds. Prof. Xu has published several academic papers in journals such as *Language Teaching and Linguistic Studies*. Prof. Xu is the editor-in-chief of 9 textbooks and monographs, such as *Confucius Institutes in Africa: Retrospect and Prospect*.

(9) Zhang Yanjun: Ph.D. in Education, Postdoc, Associate Professor and Master's

Supervisor at the College of Education, Zhejiang Normal University. Research interests:
STEM education, international and comparative education, etc. Prof. Zhang has presided
over 1 provincial-ministerial research project and is currently working on 1 provincial
research project.

(10)Xuan Bingshan: Ph.D. in Historical Geography, Associate Professor, Master's Supervisor, Vice Director of Department of TCSOL at Zhejiang Normal University. Research achievements: publications in recognized journals, including *Agricultural History of China*. Research interests: folklore studies, Chinese culture, intangible cultural heritage, promotion of Chinese culture, etc.

During this seminar, we will organize visits to Hangzhou and Shanghai, with a focus on exploring the achievements of education informatization in China. Through visits to vibrant cities, the participants will be immersed in the diverse and rich culture of China and gain first-hand experience with China's economic, social, educational, and cultural progress since the Reform and Opening-up. The seminar aims to strengthen cooperation and exchanges between China and other developing countries.