UEF
UNIVERSITY OF ECONOMICS & FINANCE

QS STARS RATING SYSTEM

HUTECH
Đại học Công nghệ Tp.HCM

CỤC CÔNG TÁC PHÍA NAM

THE SECOND INTERNATIONAL CONFERENCE ON SCIENTIFIC, ECONOMIC AND SOCIAL ISSUES

DIGITAL TRANSFORMATION, COOPERATION AND GLOBAL INTEGRATION IN THE NEW NORMAL

SPONSORS

Sacombank
Đồng hành cùng phát triển

THÉP MIỀN NAM
Nền tảng cho tương lai vững bền

FINANCIAL PUBLISHING HOUSE

TABLE OF CONTENT

APPLICATION OF TECHNOLOGY AND BIG DATA IN THE FIELDS OF FINANCE, ACCOUNTING AND AUDITING IN THE CONTEXT OF GLOBALIZATION

BANK RUN AND SILICON VALLEY BANK 1

Lam Dang Xuan Hoa, Ho Minh Khoa, Huynh Vo Nhat Linh 1

BIG DATA AND INTELLECTUAL PROPERTY RIGHTS 14

Le Thi Minh, Vo Trung Hau 14

THE EFFICIENCY OF THE INTERNAL CONTROL SYSTEM IN RISK MANAGEMENT AT THE NAM A COMMERCIAL JOINT STOCK BANK 23

Truong Thanh Loc, Tran Ngoc Thanh 23

VIETNAM - AUSTRALIA ECONOMIC AND TRADE COOPERATION IN THE NEW NORMAL: OPPORTUNITIES AND CHALLENGES FOR VIETNAMESE INVESTORS 30

Nhu Nguyen Phuc Quynh*, Anh Nguyen Thi Nguyet, Duy Nguyen Anh 30

IMPACTS OF CREDIT GROWTH AND CREDIT RISK ON THE PROFIT OF VIETNAM JOINT STOCK COMMERCIAL BANKS 43

Dao Le Kieu Oanh*, Tran Thi Huong Ngan 43

FACTORS AFFECTING CUSTOMERS' DECISIONS TO USE E-BANKING AT JOINT STOCK COMMERCIAL BANKS IN HO CHI MINH CITY 57

Nguyen Duy Khanh[1], Pham Quoc Tham[2] 57

HOW CHINA_USA POLITICAL TENSIONS AFFECT STOCK MARKET RETURN OF CHINA AND THE USA? A QUANTILE VAR CONNECTEDNESS APPROACH 70

Hao Wen Chang[1], Tsangyao Chang[2]and Mei-Chih Wang[3] 70

BANKING HUMAN RESOURCES BEFORE THE DEVELOPMENT OF ARTIFICIAL INTELLIGENCE AI 92

Nguyen Huynh Chi 92

IMPROVE THE QUALITY OF TRAINING THROUGH IMPROVEMENT OF STUDENT TESTING AND ASSESSMENT – CASE IN ACCOUNTING BRANCH, UNIVERSITY OF ECONOMICS AND FINANCE 102

Thuy Thi Ha 102

ACTIVITIES OF DIGITAL TRANSFORMATION IN VIETNAMESE COMMERCIAL BANKS: AN OVERVIEW DURING THE COVID-19 RECOVERY PERIOD 109

Nguyễn Thị Quỳnh Châu, Đào Lê Kiều Oanh 109

OPPORTUNITIES AND CHALLENGES FOR VIETNAM IN ATTRACTIVE FDI IN GLOBAL MINIMUM CORPORATE TAX IMPLEMENTATION 117

Ngo Hoang Thong 117

DIGITAL ECONOMY IN VIETNAM, TRENDS AND POTENTIABILITY

DEVELOPING SMART HOME MODEL FOR APARTMENTS IN HO CHI MINH CITY BASED ON INTERNET OF THINGS (IoT) TECHNOLOGY 182

Dang Thanh Thuy[1], Nguyen Thanh Dien[2] 182

TRANSPARENCY OF ACCOUNTING INFORMATION OF CONSTRUCTION ENTERPRISES IN HO CHI MINH CITY – CASE STUDY OF APPLICATION OF ACCRUAL ACCOUNTING....193

Truong Thanh Loc[1]*, Pham Thi Yen Nhi[2]....193

FACTORS AFFECTING THE QUALITY OF FINANCIAL STATEMENTS OF MANUFACTURING ENTERPRISES IN HO CHI MINH CITY 207

Truong Thanh Loc*, Dang Nguyen Tuong Han, Nguyen Ngoc Mai Phuong, Nguyen Thi Quynh Huong....207

THE CRITICAL FACTORS OF COLLEGE STUDENTS' INTENTION TO USE METAVERSE TECHNOLOGY FOR SUBJECTS RELATED TO IMPORT-EXPORT LEARNING....221

Van Thuy Nguyen Ho, Chau The Huu, Luan Thanh Nguyen*....221

CONSUMER PERCEPTION ABOUT THE SUSTAINABILITY COMMITMENT OF LUXURY BRANDS IN VIETNAM AND CHINA MARKETS....233

Tran Minh Tu[1]....233

INFLUENCE OF WOM AND EWOM IN MAKING DECISION BUYING GOODS 247

Doan Anh Tu[1], Kim Phi Rum[2], Nguyen Pham Hai Ha[3]....247

DIGITAL ECONOMY AND DEVELOPMENT POTENTIAL IN VIETNAM....257

Hoang Thi Chinh, Nguyen Hoang Phan 257

BLOCKCHAIN APPLICATION IN MODERN LOGISTICS: INTERNATIONAL EXPERIENCE AND SOME RECOMMENDATIONS FOR VIETNAM 266

Nguyen Nu Tuong Vi....266

FACTORS AFFECTING THE DEVELOPMENT OF THE DIGITAL ECONOMY IN VIETNAM 272

Vo Tien Si 272

LEGAL FRAME FOR THE OPERATION OF THE REAL ESTATE BUSINESS UTILIZING THE BLOCKCHAIN PLATFORM IN VIETNAM....284

Le Thi Khanh Linh....284

DIGITAL TRANSFORMATION – COOPERATION – GLOBAL INTEGRATION IN BUSINESS

FACTORS INFLUENCING BUSINESS ACCEPTANCE OF INDUSTRY 4.0 TECHNOLOGY APPLICATIONS IN DONG NAI PROVINCE 291

Thanh-Thu Vo*, Minh-Huong Tang 291

DIGITAL ORIENTATION, INNOVATION CAPABILITY AND FIRM PERFORMANCE: A PROPOSAL RESEARCH MODEL 298

Nguyen Van Hau 298

PREDICTION OF STUDENT'S BEHAVIORAL INTENTION TO USE SMART LEARNING ENVIRONMENT: A COMBINED MODEL OF SELF-DETERMINATION THEORY AND TECHNOLOGY ACCEPTANCE 309

Nguyen Thi Hai Binh[1], Dao Y Nhi[2], Nguyen Thanh Luan[3], Dang Quan Tri[4] 309

THE PEDAGOGICAL IMPACT OF GRAMMARLY ON EFL WRITING COMPETENCY: AN EMPIRICAL INVESTIGATION IN HIGHER EDUCATION CONTEXT. 323

Nguyen Thi Hong Lien[1], Nguyen Truong Gia Minh[2], Nguyen Ngoc Vu[3]* 323

FACTORS AFFECTING PURCHASING DECISION OF THE YOUTH ON TIKTOK 336

Ngoc Pham[1], Thanh Cong Tran* 336

FACTORS AFFECTING OCCUPATIONAL SAFETY BEHAVIORS OF WORKERS DIRECT PRODUCTION AT CU CHI POWER COMPANY 345

Minh Luan Le, Thi Trang Tran 345

CORPORATE SOCIAL RESPONSIBILITY AND EMPLOYEES' ORGANIZATIONAL CITIZENSHOP BEHAVIOUR 355

Nguyen Xuan Hung[1], Ha Le Thu Hoai[1], Nguyen Huu My Truc[2&3], Pham Tan Nhat[2&3] 355

THE INNOVATION CAPACITY - THE ROLE OF LEADERS OF SMALL AND MEDIUM ENTERPRISES IN HO CHI MINH CITY, VIETNAM 365

Huynh Nhut Nghia 365

PEOPLE'S THOUGHTS ON THE IMPACT OF ARTIFICIAL INTELLIGENCE ON BUSINESS 376

Ton Nguyen Trong Hien, Bui Tuyet Anh 376

FACTORS AFFECTING BRAND SWITCHING INTENTION IN THE CONTEXT OF HIGHER EDUCATION IN VIETNAM 382

Ly Dan Thanh, Nguyen Phu Quoi, Tran Hoang Nam, Vo Hong Son, Nguyen Ngoc Thuy Tien 382

ENHANCE THE DIGITAL COMPETITIVENESS 398

Tran Quang Canh, Hoang Thi Chinh 398

ASSESSING PATIENT SATISFACTION (BRAND) AFTER THE COVID-19 PANDEMIC AT THU DUC CITY HOSPITAL.....408

Nguyen Hoang Dung [1*], Nguyen Huynh Bao An [2], Van Phuong Trang [2] 408

INDUSTRIAL AND HUMAN RESOURCES FORM THE FOUNDATION FOR BINH DUONG'S SUSTAINABLE ECONOMIC DEVELOPMENT.....408

Hoang-An Nguyen 417

IMPACT OF ORGANIZATIONAL FAIRNESS ON THE EMPLOYEES' KNOWLEDGE SHARING IN TRAVEL AND TOURISM ENTERPRISES IN HO CHI MINH CITY 426

Le Thi Nhu Quynh[1,2], Le Thi Giang[2], Truong Quang Dung[1] 426

THE EFFECT OF PERSONAL MOTIVATION ON THE TACIT KNOWLEDGE SHARING BEHAVIOR OF 5-STAR HOTELS' EMPLOYEES IN HO CHI MINH CITY.....440

Le Thi Giang, Nguyen Bach Hoang Phung.....440

DIGITAL COMPETITIVENESS AND OPERATIONAL EFFICIENCY OF ENTERPRISES IN THE DIGITAL ERA: THE CASE OF VIETNAMESE ENTERPRISES 453

Diep Nguyen Thi Ngoc[1*], Canh Quang Tran[2], Anh Bach Hoang Ngoc[1].....453

FACTORS INFLUENCING PARENTS' SELECTION OF PRIVATE PRESCHOOLS IN THU DUC CITY 466

Thi-Trang Tran[1], Thi-My-Dung Pham[2], Thi-Bich-Diep Le[1*] 466

RECOVERY COMMUNICATIONS IN THE TOURISM AND HOSPITALITY INDUSTRY AFTER THE COVID-19 PANDEMIC

DEVELOPING A SPIRITUAL TOURISM DESTINATION IMAGE MEASUREMENT SCALE OF AN GIANG 474

Nguyen Vuong Hoai Thao[1], Nguyen Quyet Thang[2] 474

PROSPECTS OF VIRTUAL REALITY TOURISM APPLICATION IN VIETNAM TOURISM PROMOTION 487

Nguyen Thi Hong Ha, Pham Thi Huong Giang 487

PERSONALIZATION TRAVEL TRENDING IN HO CHI MINH CITY IN THE CONTEXT OF POST COVID-19 497

Duong Bao Trung 497

IMPACTS OF MEDIA ON CUSTOMERS' DECISION TO CHOOSE FOOD AND BEVERAGE SERVICES POST THE COVID-19 PANDEMIC 511

Nguyen Thi Bich Van 511

DIGITAL TRANSFORMATION APPLICATION TO PROMOTE THE RECOVERY AND DEVELOPMENT OF INBOUND TOURISM IN HO CHI MINH CITY 521

Tran Trong Thanh 521

VIETNAM TOURISM AFTER COVID-19 PANDEMIC 527

Nguyen Hoang Phan[1], Hoang Thi Chinh[2] 527

NAVIGATING THE EVOLVING LANDSCAPE OF SOCIAL MEDIA DATA MINING AND PRIVACY 537

Pham Thai Hien 537

THE CORRELATION BETWEEN STUDENT SELF-REPORTED GENERAL WELL-BEING AND PERCEIVED SUPPORT FROM FRIENDS, TEACHERS, AND UNIVERSITY 545

Virginia Kelsey[1], Đặng Thị Mai Ly[2*], Nguyễn Anh Khoa[2], Nguyễn Văn Tường[2] 545

DIGITAL VERSUS NON- DIGITAL

PROVIDING CONVENIENCE TO CUSTOMERS IN THE DIGITAL MARKETING ERA: OBSERVATIONS FROM COMMERCIAL BANKS IN HO CHI MINH CITY 556

Nguyen Quang Trung 556

VIRTUAL REALITY: AN INNOVATIVE TOOL IN TOURISM EXPERIENTIAL MARKETING 564

Thanh Nguyen Ngoc Le[1], Khuong Thanh Nguyen[2] 564

THEORETICAL CONCEPTS OF STRATEGIC POSITIONING FOR PLACE BRANDING: A CASE STUDY OF DONG THAP PROVINCE 580

Phan Bao Giang.....580

LITERATURE REVIEW ON THE IMPACT OF DIGITAL MARKETING ON VIETNAM'S SMALL AND THE MEDIUM BUSINESS ENTERPRISES (SMEs) 587

Lê Kim Nguyên[*] 587

CHALLENGES FACED BY TEACHERS IN NON-TRADITIONAL EDUCATION

PROPOSE AN ONLINE TEACHING COMPETENCE SCALE FOR UNIVERSITY LECTURERS 596

Duong Thi Kim Oanh*, Dang Thi Dieu Hien 596

EXAMINE USAGE OF LEARNING MANAGEMENT SYSTEMS (LMSS) BY FACULTY STAFF AT UNIVERSITY OF ECONOMICS (UEF) AND FINANCE WITH EXPANDED TECHNOLOGY ACCEPTANCE MODEL (TAM).....608

Ha Truong Minh Hieu, Ngo Minh Hai*, Mach Tran Huy.....608

DIGITAL TRANSFORMATION
AN INDISPENSABLE EVOLUTION FOR SUSTAINABLE CORPORATES

FACTORS AFFECTING THE APPLICATION OF STRATEGIC MANAGEMENT ACCOUNTING AT MANUFACTURING ENTERPRISES IN BINH DUONG PROVINCE 618

Truong Thanh Loc[1]*, Nguyen Thi Thanh Truc[2] 618

HRM DIGITAL TRANSFORMATION: TAKING A ROAD OF SUCCESSION PLANNING ..629

Trương Phan Hoàng Anh, Giang Ngọc Anh.....629

THE IMPLICATION OF CONTACLESS SERVICE AS A TOOL TO IMPROVE CUSTOMER REVISIT INTENTION 640

Linh, Nguyen Duy Yen*.....640

TOURISM BRAND LOVE IN THE DIGITAL AGE: THE ROLE OF ONLINE TOURIST EXPERIENCES, TOURIST-BRAND RELATIONSHIP QUALITY AND SUSTAINABILITY 651

Thanh Nguyen Ngoc Le 651

CONDUCTING FOCUS GROUPS IN CROSS-CULTURAL SCHOLARSHIP OF TEACHING AND LEARNING (SoTL): A COMPARATIVE CASE STUDY 662

Punithan Moganathas[1], Jenny Hill[2], Andy V.-M. Kok[2], Matt Barr[2], Ruffin Relja[2]*, Philippa Ward[2], Duong Tran Quang Hoang[3], Quynh Phuong Tran[3] 662

LEVERAGING DIGITAL TRANSFORMATION FOR SUSTAINABLE CORPORATE EVOLUTION IN VIETNAM 677

Nguyen,Tan Dat[1], Le,Dinh Thang[2].....677

INFORMATION TECHNOLOGY AND APPLICATIONS

FB-PROPHET MODEL FOR TIME SERIES FORECASTING IN SALES 691
Thanh Cong Tran 691
USING AI CODE IN C# PROGRAMMING 698
Nguyen Ha Giang 698
DETERMINANTS OF CONTINUANCE USAGE INTENTION OF MOBILE FOOD ORDERING APPLICATIONS (MFOAS) AMONG VIETNAMESE USERS: THE MEDIATING ROLE OF E-SATISFACTION 705
Lam Hoang Phuong[1*], Nguyen Thi Kim Lien[2], Tien Hung Nguyen[3], Vinh Long Nguyen[4] 705
DECODING MARKETING INSIGHT: INSIGHT FROM OUTSIDE 718
Hoàng Thị Hằng, Trần Thành Công[*] 718
DIGITAL DISRUPTION AND DATA SECURITY: HOW FINTECH IS RESHAPING BANKING ... 724
Hoàng Văn Hiếu, Trần Ngọc Thiên Ngân 724

TRENDS AND ISSUES IN ENGLISH LANGUAGE EDUCATION AND RESEARCH

EFL LEARNERS' ATTITUDES AND LEARNING ENGAGEMENT IN COMMUNICATIVE GAME-BASED GRAMMAR TEACHING 736

Nguyen Thi Thanh Huyen[1], Tran Quoc Thao[2] 736

APPROACHES TO TEACHING L2 LISTENING: 749

CLOSING THE GAP BETWEEN REAL-LIFE AND CLASSROOM-BASED LISTENING 749

Luu Thi Mai Vy 749

DEFINING ROLES OF STUDENT ENGAGEMENT IN THE 21ST CENTURY LANGUAGE CLASSROOM 755

Ho Xuan Tien, Duong My Tham 755

EFL STUDENTS' ATTITUDES AND LEARNING INVESTMENT IN PORTFOLIO - BASED ENGLISH WRITING LEARNING: A LITERATURE REVIEW 763

Ly Gia Huy[1], Tran Quoc Thao[2] 763

EXPLORING EFL LEARNER IDENTITIES IN PROJECT-BASED LANGUAGE LEARNING AT A HIGH SCHOOL IN AN GIANG PROVINCE 774

Nguyen Hong Thien[1], Tran Quoc Thao[2] 774

THE VALUES OF SYNTACTIC COMPLEXITY IN ACADEMIC WRITING: A LITERATURE REVIEW 791

THE ISSUE OF AMBIGUITY IN THE ENGLISH LANGUAGE 801

Nguyen Dinh Tuan 801

RESEARCH PERSPECTIVES ON JUNIOR HIGH SCHOOL EFL STUDENTS' MOTIVATION IN ENGLISH LANGUAGE LEARNING 812

Huynh Thanh Nhon[1], Tran Quoc Thao[2] 812

EXPLORING THE INFLUENCE OF WRITING ANXIETY ON VIETNAMESE ESL UNDERGRADUATES' WRITING PERFORMANCE: A QUANTITATIVE STUDY 821

Nguyen Ngoc Nguyen, Nguyen Hoang Phan 821

THE APPLICATION OF THE "FLIPPED CLASSROOM" MODEL IN TEACHING ENGLISH IN THE VIETNAMESE UNIVIVERSITY EDUCATION ENVIRONMENT 838

THE USE OF RESOURCE MANAGEMENT STRATEGIES IN EFLFLIPPED CLASSROOMS 847

Nguyen Quynh Thao Vy[1,*], Duong My Tham[2] 847

INSIGHTS INTO ENGLISH MAJOR STUDENTS' USE OF PHRASAL VERBS IN ACADEMIC WRITING 860

Do Thi Thanh Thuy, Tran Quoc Thao 860

LAW IN THE CONTEXT OF INTERNATIONAL INTEGRATION

LEGALISING INTELLECTUAL PROPERTY INFRINGEMENTS IN RUSSIA – A WAR TACTIC IN THE CONTEXT OF RUSSIA'S INVASION OF UKRAINE 869

Bui Thi Hong Ninh* 869

MODEL OF ASSET REGISTRATION WORLDWIDE AND LESSONS FOR VIETNAM IN IMPROVING ASSET REGISTRATION LAWS 880

Vu Anh Sao[1,2], Nguyen Thi Xuan Mai[2] 880

LEGAL ISSUES ARISING FROM THE DEVELOPMENT, IMPLEMENTATION, AND USE OF ARTIFICIAL INTELLIGENCE (AI) - INTERNATIONAL EXPERIENCES AND LESSONS FOR VIETNAM 887

Le Hoang Minh Huy*, Nguyen Thi Thu Ha, Dao Trong Duc, Ky Dieu Linh, Bui Thi Thuy Linh, Nguyen Nam Trung 887

SOUTH KOREA'S EXPERIENCES ON PROPERTY REGISTRATION LAW - LESSONS FOR VIETNAM 896

Vu Anh Sao, Pham Huynh Bao Oanh 896

THE RISE OF REMOTE WORK: LEGAL CHALLENGES AND IMPLICATIONS FOR EMPLOYMENT LAW IN VIETNAM 903

Nguyen Thi Xuan Mai[1], Nguyen Thi Ngoc Loan[2] 903

CHALLENGES AND RECOMMENDATIONS FOR THE LEGAL FRAMEWORK IN THE EMERGING AGE OF ARTIFICIAL INTELLIGENCE 910

Nguyen Thi Thu Trang 910

THE IMPACTS OF GLOBAL MINIMUM TAX ON FOREIGN DIRECT INVESTMENT (FDI) CORPORATIONS IN VIETNAM 921

Trần Ngọc Thanh[1] 921

CROSS-BORDER E-COMMERCE ACTIVITIES AND TAX MANAGEMENT ISSUES 933

Le Huynh Phuong Chinh, Ngo Thi Khanh Linh, Pham Ngoc Lan Anh 933

EXPERIENCE IN KOREA AND CHINA ON TAX MANAGEMENT FOR CROSS-BORDER E-COMMERCE ACTIVITIES 941

Duong Anh Son[1], Tran Vang Phu[2] 941

LEGAL PERSPECTIVE ON REGULATIONS RALATED TO PERSONAL INCOME TAX WHEN EARNING INCOME THROUGH E-COMMERCE PLATFORMS IN VIETNAM, TAKING THE CASE OF INDIVIDUALS DOING BUSINESS THROUGH TIKTOK APPLICATION 946

Nguyen Duc Tri [1], Hoang Minh Châu[2] 946

THE COMPATIBILITY ON THE SCOPE OF MUTUAL LEGAL ASSISTANCE (MLA) IN CRIMINAL MATTERS AND THE CONDITIONS OF REFUSAL MLA IN CRIMINAL MATTERS BETWEEN VIETNAMESE LAW AND INTERNATIONAL TREATIES WHICH VIETNAM HAS SIGNED. 956

Pham Huynh Bao Oanh 956

TAX POLICY FOR E-COMMERCE OF COUNTRIES IN THE WORLD AND RECOMMENDATIONS TO VIETNAM 967

Nguyen Thanh Minh Chanh, Ha Thi Van Anh, Pham Lam Tam Nhu 967

LEGAL REGULATIONS FOR ENTERPRISE OBLIGATIONS TO PROVIDE INFORMATION ON E-COMMERCE PLATFORM 974

Truong Kim Phung*, Nguyen Hoang Chuong 974

"ROBOT TAX" – RECOMMENDATIONS FOR VIETNAM 981

Gian Thi Le Na, Pham Phuong Doanh 981

WTO APPELLATE BODY REFORM IN THE CONTEXT OF ESCALATING GEOPOLITICAL TENSIONS 988

Nguyen Nam Trung 988

IMPACTS OF STATE OWNERSHIP AND BUSINESS CHARACTERISTICS ON TAX AVOIDANCE: EVIDENCE IN VIETNAM....128
Huyen Ngoc Nguyen, Thanh Dan Bui 128
RUSSIA'S IMPACTS AND SCENES ON BEING BANNED FROM SWIFT....143
Lam Dang Xuan Hoa [1] , Phan Ngoc Anh [2] 143
THE ROLE OF ACCESS TO FINANCE AND THE ENTREPRENEURIAL INTENTION OF YOUNGERS IN THE SOUTHWESTERN PROVINCE, VIETNAM....151
Vu Truc Phuc*, Nguyen Dang Hat, Nguyen An Phu, Dao Le Kieu Oanh 151

PROPOSE AN ONLINE TEACHING COMPETENCE SCALE FOR UNIVERSITY LECTURERS

Duong Thi Kim Oanh*, Dang Thi Dieu Hien

Ho Chi Minh City University of Technology and Education

oanhdtk@hcmute.edu.vn

Abstract

The adoption of online teaching modes in higher education in Vietnam is encouraged by the rapid development of information and communication technology as well as the significant effects of the COVID-19 pandemic. Lecturers' online teaching competence is crucial for effectively deploying online teaching styles. As a result, having a scientific scale to assess the status of university lecturers' online teaching competency is critical. The aim of this study is to propose an online teaching competence scale for university lecturers (OTCSUL) in Vietnam. Based on a systematic evaluation of the literature on online teaching and lecturers' online teaching competence, the OTCSUL-1 with six component competencies and 34 items was proposed. The OTCSUL-2 is revised from the data of 66 lecturers at six public universities regarding the relevance and sufficiency of six component competencies and 34 items of the OTCSUL-1. The OTCSUL-2 consists of "Technology" (6 items), "Understanding student learning" (5 items), "Online instructional design" (5 items), "Digital content development" (4 items), "Learning facilitation" (7 items), "Online learning outcomes assessment" (6 items) and "Online session administration" (4 items). With seven component competencies and 37 items, the OTCSUL could be used to investigate university lecturers' online teaching competence, develop an online teaching competence training program for university lecturers and teacher education, and guide online teaching practice in Vietnamese universities.

Keywords: *Online teaching, Online teaching competence, Online teaching competence scale for university lecturers*

1. Introduction

Digital transformation in higher education is an inevitable trend of The rapid development of information and communication technology in the first decades of the 21st century. In Vietnam, the Covid-19 pandemic, which began at the end of January 2020, is seen as a major impetus for implementing a comprehensive digital transformation in higher education.

Since March 2020, higher education institutions have transitioned to online teaching to sustain teaching and learning activities in order to securely and flexibly adapt as well as effectively control the Covid-19 pandemic (Le et al., 2002). Online teaching modes as Blended Teaching, Online Teaching, Hybrid Teaching have been pushed in higher education institutions in connection with this trend (Vu et al., 2021). More than 50,000 disciplines had moved to online teaching rather than face-to-face teaching as of April 2020, with 4.4 million credit hours of online teaching (Le et al., 2021). This transition in training modes necessitates in-service training for university lecturers in online teaching competence.

Compared with face-to-face teaching competence, online teaching competence is a new spectrum of pedagogical competence. Online teaching competence of university lectures plays a very crucial role in the effective implementation of online teaching modes at universities. So, it is essential to have a scientific online teaching competence scale for university lecturers (OTCSUL) to explore the status of university lecturers' online teaching competence. Findings on lecturers' online teaching competence will provide a scientific basis for the development of an in-service online teaching competence training program for university lecturers. In light of the foregoing, the aim of this study is to propose an OTCSUL in Vietnam through seeking answers to the following questions:

(1) What are the component competencies and their corresponding items of an online teaching competence of university lecturers?

(2) How does this study propose an online teaching competence scale for lecturers?

2. Literature review on online teaching and online teaching competence to propose an online teaching competence scale for university lecturers

Along with in-person teaching, online teaching becomes a pivotal teaching mode in the context of the digital transformation. Online teaching is a form of distance education because it focuses on anytime and anywhere learning, and students are physically separated from teachers. Online teaching is an outstanding form of the transition from teacher-centered teaching to student-centered teaching. To achieve learning outcomes in an online course, students will be more responsible for and autonomous with their learning by selecting "what they learn, where they learn, and who they learn with" (Joksimovic et al., 2015).

Online teaching is a form of distance education in which learning and teaching activities are implemented partially or entirely at anytime and anyplace through the Internet, "either on the Web or by the way of mobile apps" (Ko & Rossen, 2017; Baran et al., 2011; Bolliger & Wasilik, 2009). The interaction of three major components of technology-assisted teaching, including content, pedagogy, and technology, is required for online teaching. Online teaching allows students to actively learn with other students (Sadiku et al., 2018) in the limitless online learning environment.

For the successful implementation of online learning modes at universities, lecturers need to be in-service trained in online teaching competence. Online teaching competence is a type of pedagogical digital competence that refers to the ability to design instructions, organize interactive learning activities, assess online learning outcomes, and administer online sessions using the interplay of three main components of technology-assisted teaching. Online teaching competence is not just a single competence, but also a blended competence comprised of component competencies and corresponding items. Although "technology" is one of the major components of teaching online, lecturers do not have to be experts or advanced computer users (Ko & Rossen, 2017). The authors believed that the best online lecturers are "people-oriented" people who have the aptitude and motivation to become the very best online lecturers.

Spector and De La Teja (2001) focused on the ability to monitor and facilitate online discussions and chat sessions of lectures when referring to multiple abilities of online teaching competency. Lecturers can organize, keep discussions alive, and provide feedback to students (in online asynchronous discussions); establish ground rules for discussion; and actively interact with students (in online synchronous discussions).

According to Abdous (2010), online teaching competence consists of multiple competencies organized around three non-linear teaching phases: before (preparation, planning, and design), during (facilitation, interaction, and feedback provision), and after (reflection and lesson consideration). Before beginning online teaching, lecturers must be able to completely comprehend the foundations and pedagogy

of online teaching, identify the course structure and required resources and/or learning activities, and set up a well-organized course site with clear directions, guidelines, and assessment criteria. Lecturers are able to draw students' attention and motivate them to learn, as well as actively connect and engage with them and offer them with timely and meaningful responses. After completing online teaching, lecturers are also able to synthesize and generalize lessons.

Bigatel et al. (2012) recommended seven competencies for successful online teaching: active learning, administration leadership, active teaching responsiveness, multimedia technology, classroom etiquette, technological competence, and policy enforcement. Bigatel et al. (2012) also addressed the necessity of recognizing and training the seven competencies above for lecturers to be successful in teaching online.

Alma et al. (2017) proposed teaching competencies adjusted to virtual learning environments based on three stages of research: generalizing traits of virtual instructions, defining virtual teaching skills, and validating a virtual teaching profile. Six virtual teaching competencies were pointed out: pedagogy, educational interaction, digital, instructional design, professional, ethical and legal responsibility, and research. The importance and levels of six competencies were also analyzed, of which pedagogical competence was the best evaluated in both aspects.

Roddy et al. (2017) synthesized the competencies required for effective online teaching while investigating best practice principles for online lecturers. Communication, technology, informative feedback provision, administration, responsiveness, learning monitoring, and student assistance provision were identified as the most critical online teaching competencies. According to Roddy et al. (2017), if lecturers lack technological competence, they will be unable to cope with technology-related problems in online classes. As a result, students may have difficulty gaining access to learning materials.

Based on the concept that online teaching competences are knowledge and skills to teach on online platforms, Izmirli and Kirmaci (2017) proposed the component competencies of online learning competencies. Developing the presence of social, teaching, and cognitive aspects; preparing the syllabus and instructional guidelines; selecting appropriate methods for active interaction; pedagogical competencies; and discovering individual differences are all components of online teaching competencies.

Following a literature review on effective teaching competencies in online learning environments, Albrahim (2020) identified the six component competencies of online learning competencies and their corresponding items, including pedagogy, content, design, technology, management and administration, and communication and society. The component competencies and their items are the basis for the development of an online teaching competence scale and training program for lecturers.

Simsek et al. (2021) developed a valid and reliable online teaching competence scale for university lecturers based on data from 392 lecturers at Istanbul Cerrahpasa University (Turkey). The scale includes four component competencies and 15 items: pedagogy (5 Items), support (3 Items), technology (3 Items), and course management (4 Items). Pedagogical competence is determined by the following items: clearly stating learning outcomes, preparing lesson plans, being enthusiastic when teaching, and using active teaching methods. Facilitation competence refers to the ability assist students construct and maintain learning communities, develop good attitudes about online learning, and establish relationships with lecturers and classmates. Technological competence is defined as the ability to use hard and soft tools in online teaching effectively, solve problems arising when using online teaching tools. Course management competence refers to the ability to organize courses in a modular framework using Learning Management Systems (LMSs), to effectively employ LMS functions, and to conduct interactive LMS activities (Simsek et al., 2021).

While conducting research on the online teaching competence of Agriculture lecturers at universities in Northeast India, Borah and Devaran (2022) created six component competencies and 23 corresponding items. Technology, instructional support, teaching ethics, course administration, and content support were the specified five component competences. Successful online teaching is largely dependent on the component competencies of online teaching competence (Borah & Devarani, 2022).

In sum, the systematic literature review on online teaching and online teaching competence of lecturers reveals that online teaching competence of university lecturers is ability to apply a set of knowledge, skills and attitude of technology, (specialized) content and pedagogy to design instructions and learning materials, implement partially or entirely active and interactive learning activities, assess learning outcomes and administer online sessions through the Internet. Online teaching competence includes component competencies and its corresponding items. Common component competencies are addressed including technology, pedagogy, content, assessment, administration and so on. This study sketches an online teaching competence scale for university lecturers (Version 1) (OTCSUL-1) based on the concept and component competencies of online teaching competence for university lecturers. The OTCSUL-1 was sketched with six component competencies and 34 items: 1) Technology (7 items); 2) Understanding of students (5 items); 3) Lesson design (6 items); 4) Learning facilitation (8 items); 5) Assessment (4 items); 6) Session administration (4 items). The six component competencies and 34 items of OTCSUL-1 are organized in order in Table 1.

Table 1: Online teaching competence scale for university lecturers (OTCSUL - 1)

Component competence	No	Items
Technology	1	Have basic knowledge and skills of MS Office, search engines, email, and online teaching platforms.
	2	Effectively use the hardware tools (desktop, personal computers, tablets, cameras...) and software as required by online teaching.
	3	Use multimedia (images, graphics, video, audio, text) to enhance your own teaching and match student learning activities.
	4	Use a combination of social media applications and sites (e.g., Facebook, YouTube, Zalo, etc.) in online teaching.
	5	Solve problems that arise when using online teaching platforms or unexpected situations (e.g., disconnection from the network).
	6	Solve problems that arise when using online teaching platforms or unexpected situations (e.g., disconnection from the network).
	7	Use technology to interact with students and promote their academic progress.
Understanding of Students	1	Identify psychological characteristics of students.
	2	Identify current cognitive levels of students.
	3	Identify the knowledge and skills that students often struggle with.
	4	Respect differences in the learning preferences of students.
	5	Apply teaching strategies that match the cognitive levels of students.
Lesson Design	1	Design the learning outcomes of the lesson using SMART principles (specific, measurable, achievable, realistic, and timely).
	2	Develop academic content that is consistent with learning outcomes.
	3	Select teaching strategies that are consistent with learning outcomes and academic content.
	4	Design assessment tasks and criteria that are consistent with learning outcomes and academic content.
	5	Select online teaching tools that are consistent with academic content, teaching strategies, and online learning conditions.
	6	Develop digital learning materials to motivate students to study further.
Learning Facilitation	1	State clearly the learning outcomes.
	2	Apply active teaching methods to enhance students to interact in each online session.

	3	Encourage students to interact with each other and with lecturers through the implementation of academic tasks and learning projects in the form of groups.
	4	Provide students with opportunities to study through practicing and doing simple experiments at home.
	5	Encourage students to discuss and propose solutions to deal with practical issues.
	6	Encourage students to discuss though open forum on learning management system or online teaching platforms (Zoom, Google Meet, Microsoft Team).
	7	Provide promptly feedback on students' performances during the learning process.
	8	Interact and communicate with students both inside and outside of the online course with respect, passion, and dedication.
Assessment	1	Design assessment tasks that match learning outcomes and academic content.
	2	Use effectively online assessment tools.
	3	Monitor and guide students to improve their performance and learning outcomes.
	4	Analyze students' learning outcomes to adjust teaching strategies in a timely and appropriate manner.
Session	1	Use effectively components of learning management systems.
Administration	2	Organize lessons according to module structure on learning management systems.
	3	Use and manage components of online teaching platforms effectively.
	4	Organize effectively learning activities (open forum, quiz, questionnaire, assignment.) on learning management systems.

3. Research method

3.1. Sample

66 lecturers were the respondents in this study. They come from six public universities in Vietnam: Ho Chi Minh City University of Technology and Education, Hung Yen University of Technology and Education, Nam Dinh University of Technology and Education, Hanoi University of Science and Technology, University of Social Sciences and Humanities, Vietnam National University Ho Chi Minh City, and Industrial University of Ho Chi Minh City. They participated in survey via https://forms.gle/m3nEVx9U2zx6sNFd6 in the school year 2022 - 2023.

3.2. Data collection

A questionnaire with three open-ended and three closed-ended questions was created in order to collect information on the sufficiency and relevance of the six component competencies and 34 items of the OTCSUL-1.

Specific criteria are used to determine the relevance and sufficiency of the six component competencies and their items. The six component competencies will be relevant and sufficient if they: (1) describe the three key elements of technology-assisted teaching over the Internet, namely technology, pedagogy, and content; and (2) express teaching actions that lecturers perform in the online environment. Items of each component competence are considered as relevant and sufficient if they: (1) conform to the component competence's name; and (2) convey the content of each component competence engaged with the aspects of online teaching activities.

4. Findings and discussion

In terms of the relevance of the six OTCSUL-1 component comptencies, there was a large majority of agreement (93.9%), with only 6.1% disagreeing (see Fig. 1). According to an anonymous lecturer, "the online teaching competence scale for lecturers should be divided into three main component competencies

in terms of knowledge, skills, and attitudes relating to technology, pedagogy, and content". The OTCSUL-1, which consists of six component competencies and 34 items, refers to activities that are closely related to the features of online teaching and learning in addition to the three main elements of online teaching competence: technology, pedagogy, and content.

According to another lecturer, "Artificial intelligence (AI) technology, specifically ChatGPT, is a significant challenge for education. Lecturers must refresh and upgrade their qualifications as well as have technological competence to limit student cheating. As a result, the ability to use AI and ChatGPT should be included in the online teaching competence scale for university lecturers".

Another lecturer suggested that, "*Artificial intelligence (AI) technology, specifically ChatGPT, is a significant challenge for education. Lecturers must refresh and upgrade their qualifications, as well as have technologies in place to limit cheating. As a result, combining AI and ChatGPT, an online teaching competence scale for university lecturers should be added*". Although there are certain disadvantages to using ChatGPT, such as erroneous or fraudulent knowledge generation and plagiarism (Lo, 2023; Khan et al., 2023; King & ChatGPT, 2023), numerous recent studies have emphasized the advantages of ChatGPT or other open AI for education. Students' creative and critical thinking skills, as well as their ability to solve problems in the real world, are all improved by using AI tools or engaging in learning activities connected to AI (Zhai, 2022). According to Zawakki-Richter et al. (2019), AI is used in four other aspects of higher education, including adaptive and personalized systems, assessment and evaluation, profiling and prediction, and intelligent tutoring systems. OpenAI invented ChatGPT, an artificial intelligence chatbot (Lo, 2023; Taecharungroj, 2023). ChatGPT can serve not only as a lecturer assistant by developing course materials, giving suggestions, and providing feedback (Lo, 2023; Anders, 2023), but also as a virtual tutor for students by answering questions or facilitating collaboration (Lo, 2023). Chat GPT can help lecturers (01) develop teaching materials by creating quizzes to assess learning outcomes, (2) improve academic success by giving lecturers and students a foundational understanding of various topics; and (3) offer a comprehensive understanding of various topics in an understandable

language (Tlili et al., 2023).

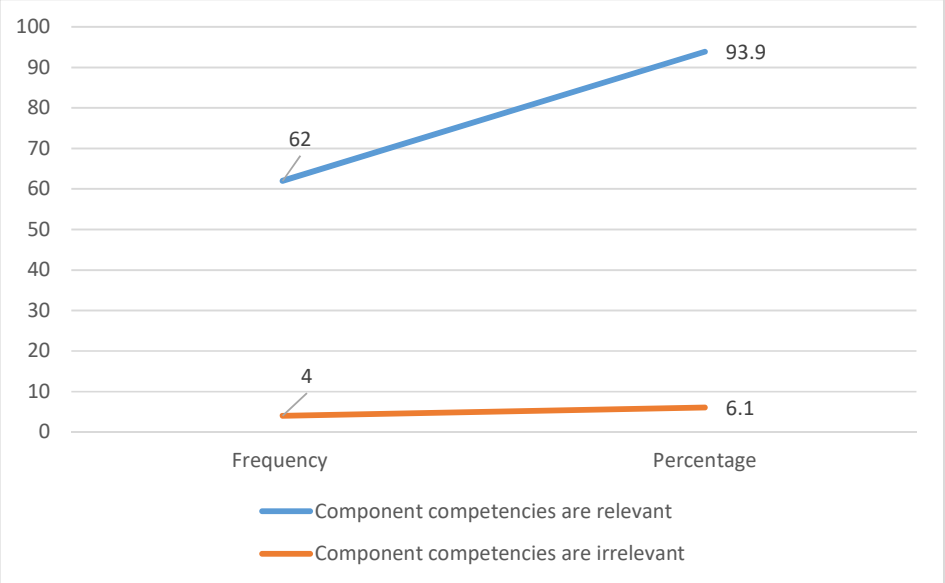

Fig 1. Relevance and irrelevance of 6 component competencies of the OTCSUL-1

As shown in Fig. 2, the majority of questioned lecturers (84.8%) believed the OTCSUL-1 component competences were adequate; only 15.2% disagreed.

In response to the insufficiency of the six component competences, a lecturer noted, *"In online teaching, lecturers should have knowledge and skills in terms of technology, content, and pedagogy. Therefore, instructional design and digital content development should be separated from lesson design. While instructional design belongs to pedagogy, digital content development falls under content"*.

Another lecturer suggested expanding the OTCSUL-1 to include the following two component competencies: "ability to interact in an online teaching environment" and "ability to advise, guide, and support students". The necessity of digital content or interaction between the lecturer, students, and the learning environment, in developing an online course was also discussed in Phan's work (Phan, 2021). Therefore, suggestions that include "digital content development" and "interaction" as component competencies of lecturers' online teaching competence are noteworthy for the OTCSUL

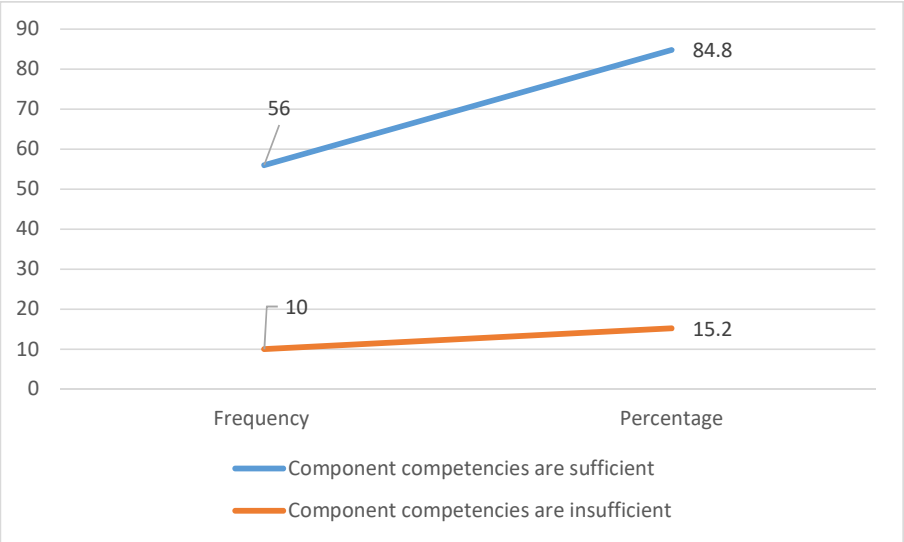

Fig 2. Sufficiency and insufficiency of 6 component competencies of the OTCSUL-1.

As regards the sufficiency and relevance of 34 items, 78.8 % of lecturers agreed, compared with 21.2% of them disagreeing (see Fig. 3). A common point of agreement in the answers to the open-ended question on the insufficiency and irrelevance of items in the OTCFUL-1 was that items need to be engaged with the characteristics of the teaching and learning activities in an online environment. Below are some noteworthy comments on the insufficiency of items given by lecturers:

In terms of the sufficiency and relevance of 34 items, 78.8% of lecturers agreed, while 21.2% disagreed (see Fig. 3). A prominent point of agreement in response to the open-ended question about the insufficiency and irrelevance of 34 items was that items needed to be engaged with the characteristics of online teaching and learning activities. The following are some important comments on the insufficiency and irrelevance of 34 items provided by lecturers:

A lecturer explained the insufficiency and irrelevance of items: *"Items of Understanding of students of lecturers' online teaching competence are not different from items of Understanding of students in face-to-face class. So, understanding of students in an online class should include the ability to use technology to identify students"*.

Another lecturer suggested adding an item about using e-portfolios to give feedback on students' learning outcomes in online teaching.

The addition of an item on using e-portfolios to provide feedback on students' learning outcomes in online teaching was recommended by another lecturers.

In terms of "Learning Facilitation", a lecturer proposed adding two items including "Lecturers have knowledge of pedagogical principles in online teaching" and "Lecturers have an ability to design, comply with and flexibly handle online teaching scenarios".

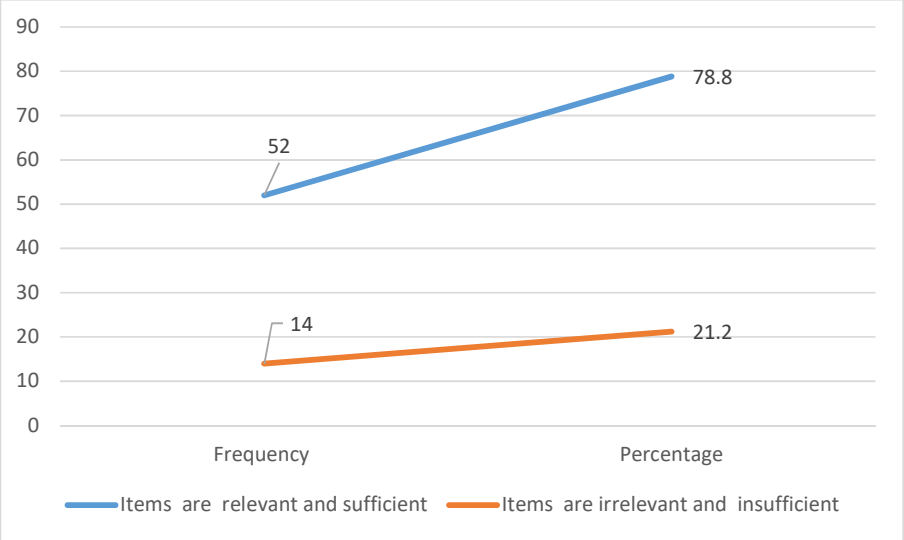

Fig 3. Sufficiency and insufficiency of 34 items of the OTCSUL-1.

In sum, 66 lecturers' qualitative and quantitative data on the relevance and sufficiency of six component competencies and 34 items of the OTCSUL-1 revealed that (1) names of the six component competencies should be expressed more clearly and precisely; (2) "lesson design" should be divided into two component competencies: instructional design and digital content development; and (3) items of the six component competencies should be engaged with characteristics of teaching and learning activities in an online environment.

The data and discussion presented above were utilized to rename the component competencies and add characteristics of online teaching and learning activities to the items. The OTCSUL-1 was replaced by the OTCSUL-2, which includes 37 items organized into seven component competencies: 1) Technology (6 items); 2) Understanding student learning (5 items); 3) Online instructional design (5 items); 4) Digital content development (4 items); 5) Learning facilitation (7 items); 6) Online learning outcomes assessment (6 items); and 7) Online session administration (4 items). Table 2 presents the OTCSUL-2 with seven component competencies and 37 corresponding items. The OTCSUL - 2 is the finding of proposing the Online Teaching Competence Scale for University Lecturers (OTCSUL) in Vietnam through the systematic literature review and the survey in this study.

Table 2: Online teaching competence scale for university lecturers (OTCSUL - 2)

Component competence	No	Items
Technology	1	Have basic knowledge and skills of MS Office, search engines, email, and online teaching platforms (Google Meet, Zoom, Microsoft Team, etc.).
	2	Utilize effectively the software and hardware tools (such as desktop computers, laptops, tablets, cameras, etc.) in online teaching.
	3	Use multimedia (pictures, graphics, video, audio, and text) effectively in online instructional design, digital content development, and learning facilitation.
	4	Use digital teaching platforms (Google Meet, YouTube, MS Team, Zoom) in combination with webtools (Quizlet, Padlet, EdPuzzle, etc.) and ChatGPT (Chat Generate Pre-training Transformer) effectively.

	5	Use online teaching tools to effectively interact with and engage students in online learning activities.
	6	Solve problems that arise when using online teaching platforms or unexpected situations (e.g., disconnection from the network).
Understanding Student Learning	1	Identify psychological changes in students when learning online through their facial expressions, behaviors, gestures, and language.
	2	Determine the cognitive levels of students based on their written or oral answers and interactive learning activities with lecturers and classmates.
	3	Identify the knowledge and skills that students can find difficult when learning online.
	4	Identify the preferred learning styles of students (visual, aural, read/write, and kinesthetic) when learning online.
	5	Use teaching methods and forms that are compatible with students' preferred learning styles and online learning conditions.
Online Instructional Design	1	Design the learning outcomes of the subject and lessons using SMART principles (specific, measurable, achievable, realistic, and timely).
	2	Design academic content ensures scientific, modern, pedagogical logic, and consistency in students' cognitive levels as well as online learning conditions.
	3	Select teaching forms and methods that match learning outcomes and academic content.
	4	Design learning activities, tasks and assessment criteria.
	5	Select online teaching tools that match academic content, teaching methods, and students' online learning conditions.
Digital content development	1	Design multimedia presentation lectures (audio, images, video, graphics, etc.) that run on a computer or network environment and can be widely shared.
	2	Create audio files (lessons or documents) or text (textbooks, textbooks, reference materials, tests, etc.) that can be run on a computer or network environment and can be shared widely.
	3	Design images, videos, or provide online reference links to assist students in understanding academic content more fully.
	4	Design learning tasks and learning sheets for online discussion activities.
Learning facilitation	1	State clear learning outcomes and content in each online lesson.
	2	Encourage students to learn together through discussions, simulations, case studies, solving real-life situations, etc.
	3	Encourage students to learn through practice, do simple experiments at home, and apply their learned knowledge to solve real-life situations.
	4	Encourage students to study, discuss, explore, present, prove, and propose solutions for solving real-life situations in small groups.
	5	Encourage students to participate in online learning forums and share their knowledge and skills with their classmates.
	6	Provide students with clear and positive feedback on their learning task performance so that they can make timely adjustments to their learning.
	7	Interact and communicate with students both inside and outside of the online course with respect, passion, and dedication.
Online Learning Outcomes Assessment	1	Design assessment tasks that are consistent with learning outcomes and academic content.
	2	Use online assessment tools (Azota, Eduso, Quizizz, Mentimeter, Poll Everywhere, Edmodo, etc.) that are diverse and suitable for assessment tasks.
	3	Design assessment tools (checklists, rubrics, scales, etc.) that are valuable and reliable.
	4	Provide positive feedback on student performance and learning outcomes based on assessment criteria that are consistent with the tasks.
	5	Monitor and guide students to adjust learning activities based on feedback on performance and learning outcomes throughout the learning process.
	6	Analyze students' learning outcomes to adjust teaching strategies in a timely and appropriate manner.
Online Session Administration	1	Organize online lessons and sessions in a modular structure on learning management systems (Moodle, Blackboard, Canvas, Edmodo, etc.) and

proficiently use online teaching platforms (Google Meet, Zoom, Microsoft Teams, etc.).

2 Effectively use components of learning management systems (assignment, forum, survey, questionnaire, feedback, etc.) and online teaching platforms (breakout room, screen, record meetings, polls, whiteboard, etc.) in the organization of learning activities and learning outcomes assessment.

3 Identify time for learning activities appropriately and manage time to organize learning activities on learning management systems and online teaching platforms effectively.

4 Track or monitor student participation and interaction in synchronous and asynchronous online learning activities.

5. Conclusion, limitations and practical recommendations

The online teaching competence of university lecturers is critical for properly implementing online teaching modes in higher education institutions. University lecturers' online teaching competence has been demonstrated to be a mixed competence comprised of several component competences and their respective items. Component competencies and corresponding items are identified as solid fundamentals for proposing the online teaching competence scale for university lecturers in Vietnam with six components and 34 items based on a systematic literature review on online teaching and the online teaching competence of lecturers. This study, on the other hand, received responses from 66 lecturers on the relevance and sufficiency of six component competencies and 34 items. The data was meticulously evaluated and used to refine the proposed online teaching competency scale for university lecturers into the official online teaching competence scale for university lecturers. This study creates the Online Teaching Competence Scale for University Lecturers, which includes seven component competencies and 37 items, as previously indicated.

This study has certain drawbacks, which include:

Component competencies and corresponding items of the online teaching competence of lecturers were only systematically reviewed in general and are not linked to lecturers' online teaching competence in specific majors.

The survey only gathered the responses of 66 lecturers on the relevance and sufficiency of component competencies and corresponding items of the proposed online teaching competence scale for lecturers at six public universities. The research sample is still small, and the survey was conducted at one type of university. As a result, these data do not include instructors from all types of universities in the Vietnamese higher education institution system, including public, private, and international institutions.

Despite the well-designed questionnaire and careful data processing, the seven component competencies and 34 items of the online teaching competence scale for university lecturers identified were not validated with a large sample representative of all types of universities using Exploratory Factor Analysis and Cronbach's Alpha coefficient to investigate the scale's validity and reliability.

The following recommendations are considers:

Develop an online teaching competence scale for specialized lecturers.

Develop an online teaching competence training program course or curriculum for lecturers in general and specialized lecturers.

Investigate the status of the online teaching competence of university lecturers in Vietnam.

Comparative research on the online competence of university lecturers in Vietnam compared with other nations in the world.

Acknowledgement

This research was funded by Ministry of Education and Training (MOET) and organized by Ho Chi Minh City University of Technology and Education (HCMUTE): Code number CT 2022.06. SPK, the 8th small branch project: "Research on developing online teaching competence for lecturers at higher education institutions in engineering and technology". The authors would like to thank MOET and HCMUTE for financial and procedural support, as well as the 66 lecturers who participated in the survey of the online teaching competence scale for university lecturers.

References

Albrahim, F. A. (2020). Online Teaching Skills and Competencies. *The Turkish Online Journal of Educational Technology,* 19(1), 9–20. https://doi.org/10.5430/wjel.v12n3p187

Alma, L. P., Minerva, I. C., Laura, C. P., Patricia, A. A & Domingo, S. (2017). Teaching Competences in Higher Education Virtual Learning Environments. *International Review of Management and Busisness Research*, Vol.6, Issue. 7, pp. 1317-1329.

Baran, E., Correia, A., & Thompson, A. (2011) Transforming online teaching practice: critical analysis of the literature on the roles and competencies of online teachers. *Distance Education*, 32:3, 421-439, DOI: 10.1080/01587919.2011.610293

Bigatel, P. M., Ragan, L. C., Kennan, S., May, J., & Redmond, B. F. (2012). The Identification of Competencies for Online Teaching Success. *Journal of Asynchronous Learning Networks*, Volume 16: Issue 1, pp. 59 - 78. https://files.eric.ed.gov/fulltext/EJ971040.pdf

Bolliger, D. U., & Wasilik, O. (2009). Factors Influencing Faculty Satisfaction with Online Teaching and Learning in Higher Education. *Distance Education*, 30, 103-116.

https://doi.org/10.1080/01587910902845949

Borah, P., & Devarani, L. (2022). Competency of Faculty Members in Online Teaching of Agricultural Undergraduatesduring COVID-19 Pandemic: A study in North-East India. *Indian Journal of Extension Education*, 58(1), 21–25. https://doi.org/10.48165/ijee.2022.58105

Brent, A. A. (2023). Why ChatGPT is such a big deal for education. C2C Digital Magazine: Vol. 1: Iss. 18, Article 4. https://scholarspace.jccc.edu/c2c_online/vol1/iss18/4

İzmirli, S., & Kirmaci, Ö. (2017). Developing Online Teaching Competencies of Educators in Turkey. *Mediterranean Journal of Educational Research*, 22, 38–52.

Joksimovic, S., Kovanovic, V., Gasevic, D., Dawson, S., Siemens, G. (2015). The history and state of online learning. *In book: Preparing for the digital university: a review of the history and current state of distance, blended, and online learning* (pp.93-132), Chapter: 4. Publisher: Athabasca University.

King, M.R., chatGPT. (2023). A Conversation on Artificial Intelligence, Chatbots, and Plagiarism in Higher Education. *Cel. Mol. Bioeng*. **16**, 1–2. https://doi.org/10.1007/s12195-022-00754-8

Ko, S & Rossen, S. (2017). Teaching online - A practical guide (Fourth edition). *Routledge.*

Khan, R. A., Jawaid, M., Khan , A. R., & Sajjad, M. (2023). ChatGPT - Reshaping medical education and clinical management. *Pakistan Journal of Medical Sciences*, 39(2). https://doi.org/10.12669/pjms.39.2.7653

Le, D.P., Nguyen., T.H, Dao., T.H, Nguyen, T. V., Vu, T. Q. N. (2021). Online teaching in university in Vietnam during the COVID-19 pandemic and some measures to adapt to the "new normal" sate. Vietnam *Journal of Educational Sciences, Special Issue*, pp. 54 - 60. http://vjes.vnies.edu.vn/sites/default/files/noidung_sdb_01_2021-54-60.pdf

Lo, C.K. (2023). What Is the Impact of ChatGPT on Education? A Rapid Review of the Literature. *Educ. Sci.* 13, 410. https://doi.org/10.3390/educsci13040410

Phan, T. B. L. (2021). Proposing the online learning design process. Vietnam Journal of Educational Sciences, Issue 47, pp. 7-12. http://vjes.vnies.edu.vn/sites/default/files/baiso_02_so42.pdf

Roddy. C., Amiet, D. L., Chung, J., Holt, C., Shaw, L., McKenzie, S., Garivaldis, F., Lodge, J. M., & Mundy, M. E. (2017). Applying Best Practice Online Learning, Teaching, and Support to Intensive Online Environments: An Integrative Review. *Front. Educ*. 2:59. doi: 10.3389/feduc.2017.00059

http://chuongtrinhkhgd.moet.gov.vn/content/dauthaudautucong/Lists/DuAn/Attachments/104/043.%20Bao%20cao%20tom%20tat.pdf

Sadiku. M. N. O., Adebo. P. O & Musa, S. M. 2018. Online Teaching and Learning. *International Journals of Advanced Research in Computer Science and Software Engineering*, Volume-8, Issue-2, pp. 73-75, 2018

Simsek, I., Kucuk, S., Biber, S. K., & Can, T. (2021). Development of an Online Teaching Competency *Scale for University Instructors. Open Praxis*, 13(2), pp. 201–212. DOI: https://openpraxis.org/articles/10.5944/openpraxis.13.2.137/

Spector, J. M., & De La Teja, I. (2001). Competencies for online teaching. *ERIC Digest.* https://eric.ed.gov/?id=ED456841

Abdous, M. 2011. A-process-oriented-framework-for-acquiring-online-teaching-competencies. *Journal of Computing in Higher Education*, 23(1), p60-77.

Taecharungroj, V. (2023). What Can ChatGPT Do?" Analyzing Early Reactions to the Innovative AI Chatbot on Twitter. Big Data Cogn. Comput. 7, 35. https:// doi.org/10.3390/bdcc7010035

Tlili, A., Shehata, B., Adarkwah, M.A. et al. (2023). What if the devil is my guardian angel: ChatGPT as a case study of using chatbots in education. Smart Learn. Environ. **10**, 15. https://doi.org/10.1186/s40561-023-00237-x

Vu, H. D et al. (2019-2020). Study on technology - based learning, training modes *(E-learning) in higher education and Massive Online Open Courses: Experiences in the world and the application in Vietnam. National project.* Mode: KHGD/16-20.ĐT.043.

Zhai, Xiaoming. (2022). ChatGPT User Experience: Implications for Education. https://ssrn.com/abstract=4312418 or http://dx.doi.org/10.2139/ssrn.4312418

Zawacki-Richter, O., Marín, V.I., Bond, M., Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education – where are the educators?. Int J Educ Technol High Educ 16, 39. https://doi.org/10.1186/s41239-019-0171-0

NOT FOR SALE

ISBN: 978-604-79-3782-0

HO CHI MINH CITY UNIVERSITY OF ECONOMICS AND FINANCE

141 - 145 Dien Bien Phu, Ward 15, Binh Thanh District, HCM City

Website: uef.edu.vn - Hotline: (028) 5422 6666 * (028) 5422 5555