**Educational Communications and Technology Yearbook** 

Anna Wing Bo Tso
Alex Chi-keung Chan
Wendy Wing Lam Chan
Peter Edward Sidorko
Will W. K. Ma Editors

# Digital Communication and Learning

**Changes and Challenges** 



#### **Educational Communications and Technology Yearbook**

#### **Series Editor**

Will W. K. Ma, Hong Kong Association for Educational Communications and Technology (HKAECT), Hong Kong, Hong Kong

The Hong Kong Association for Educational Communications and Technology (HKAECT) was established in 1989. Its first conference was organized in 1990, addressing "The Role of Educational Communications and Technology in Year 2000," with speakers coming from the United States, China, and Taiwan to discuss the outlook on educational communication and technology. Throughout these years, the HKAECT has held a number of international conferences, symposiums, workshops, and talks with various themes to provide a platform to enable rich exchanges for academicians, practitioners, and professionals in the fields of communication and education to discourse about the shaping and changing issues on education, communication, and technology. This Yearbook series collect presentations from the annual international conferences held by the HKAECT. Chapters would come from the annual global call for submission, and be selected based on blind review from international review board. Subject areas include but not limited to communication, new media, news media, broadcast journalism, democracy and the media, entertainment and education, learning analytics, AI in education, game-based learning, ubiquitous learning, MOOCs, open education, instructional design, social context and learning environment, social media, risk and ethics in new media, etc.

More information about this series at https://link.springer.com/bookseries/16077

Anna Wing Bo Tso · Alex Chi-keung Chan · Wendy Wing Lam Chan · Peter Edward Sidorko · Will W. K. Ma Editors

# Digital Communication and Learning

Changes and Challenges



Editors
Anna Wing Bo Tso
Hong Kong Association for Educational
Communications and Technology
Hong Kong, China

Wendy Wing Lam Chan Hong Kong Association for Educational Communications and Technology Hong Kong, China

Will W. K. Ma Hong Kong Association for Educational Communications and Technology Hong Kong, China Alex Chi-keung Chan Hong Kong Association for Educational Communications and Technology Hong Kong, China

Peter Edward Sidorko The University of Hong Kong Hong Kong, China

ISSN 2524-4078 ISSN 2524-4086 (electronic) Educational Communications and Technology Yearbook ISBN 978-981-16-8328-2 ISBN 978-981-16-8329-9 (eBook) https://doi.org/10.1007/978-981-16-8329-9

© The Editor(s) (if applicable) and The Author(s), under exclusive license to Springer Nature Singapore Pte Ltd. 2022

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Singapore Pte Ltd. The registered company address is: 152 Beach Road, #21-01/04 Gateway East, Singapore 189721, Singapore

#### **HKAECT**

The Hong Kong Association for Educational Communications and Technology (HKAECT; http://www.hkaect.org/) was established in 1989. Its first conference was organized in 1990, addressing "The Role of Educational Communications and Technology in Year 2000", with speakers coming from the United States, China, and Taiwan to discuss the outlook on educational communications and technology. Throughout these years, the HKAECT has held a number of international conferences, symposiums, workshops, and talks with various themes to provide a platform to enable rich exchanges for academicians, practitioners, and professionals in the communication and educational fields to discourse about the shaping and changing issues on education, communications, and technology.

#### **List of HKAECT Presidents**

1989–2010 Leo P. K. Yam 2010–2016 Allan H. K. Yuen Current President, since 2016 Will W. K. Ma

#### Themes of the HKAECT Conferences since 1990

1990	The Role of Educational Communications and Technology in Year 2000
1992	Instructional Technology: Design, Utilization and Evaluation
1994	Telecommunications in Education
1996	Innovations and Quality in Teaching and Learning
1997	Tertiary Teaching in the Use of Technology: Vision and Practice
1998	New Challenges and Innovations in Teaching and Training into the 21st
	Century

vi HKAECT

2001	Education Reform: Integrating Information Technology, Communication,
	and Curriculum
2004	Media Innovations in Education: Input and Outcome in New Society
2007	Educational Communications and Technology as Learning Experiences
2010	Multiliteracies for the 21st Century: Education, Communication, and Technology
•	nology
2014	New Media, Knowledge Practices, and Multiliteracies
2017	New Ecology for Education: Communication X Learning
2018	New Media for Educational Change: Effect on Learning and Reflection on
	Practice
2019	Shaping the Future of Education, Communication and Technology
2021	Learning Environment: Innovation and Design
2022	Innovation and Transformation: The Post-pandemic Landscape of Education

and Beyond

#### **Organization of the Conference**

#### International Advisory Board

Hsin-Tzu (Tommy) Chen, TAECT/Chinese Culture University Li Chen, Beijing Normal University Xun Ge, AECT/University of Oklahoma Phillip Harris, AECT Shih-Chang Hsin, TAECT Siu Cheung Kong, The Education University of Hong Kong Feng-Qi Lai, Indiana State University Alice Y. L. Lee, Hong Kong Baptist University In-Sook Lee, KSET/Sejong University Kedong Li, South China Normal University Juhong Liu, SICET/James Madison University Mei-feng Liu, Beijing Normal University Peter Sidorko, The University of Hong Kong Youru Xie, South China Normal University Allan H. K. Yuen, Yew Chung College of Early Childhood Education Jinhua Zhao, Southern University of Science and Technology

#### Organizing Committee

Will W. K. Ma, HKAECT/Technological and Higher Education Institute of Hong Kong (THEi)
Alex Chi-Keung Chan, Hong Kong Shue Yan University
Wendy Wing Lam Chan, The Hang Seng University of Hong Kong
Anna Wing Bo Tso, The Hang Seng University of Hong Kong
Shurui Bai, The University of Hong Kong
Miaoting (Cat) Cheng, Shenzhen University

Chenggui Duan, Chu Hai College of Higher Education Rose C. W. Fong, QAHE/Northumbria University London Timothy K. F. Hew, The University of Hong Kong Steven K. K. Ng, Chung Hua University Cora Junru Yang, Renaissance College of Hong Kong

#### International Program Committee

Beth Teagarden Bair, University of Miami

Rik Bair, University of Miami

Yoo Kyung Chang, Columbia University

Jason Chi Wai Chen, The Education University of Hong Kong

Yang-Hsueh Chen, National Chengchi University

Raymond Chi Fai Chui, Hong Kong Shue Yan University

Holly Chung, The Hang Seng University of Hong Kong

Lesa Covington Clarkson, University of Minnesota

Angeline Guo, Macquarie University

Iris Yiru Lai, Zhejiang Normal University

Wilfred W. F. Lau, The Chinese University of Hong Kong

Tracy Kwok Fong Lee, Chu Hai College of Higher Education

Ken Li, Hong Kong Institute of Vocational Education

Juhong Christine Liu, James Madison University

Chung Kwan Lo, The Education University of Hong Kong

Noble Po Kan Lo, Hong Kong Community College, Hong Kong Polytechnic University

Jiutong Luo, The University of Hong Kong

Scott Mcleod, University of Colorado-Denver

Su Mu, South China Normal University

Ann Ooms, Kingston University and St. George's University London

Jae Hyung PARK, The Education University of Hong Kong

Aynur Sarisakaloglu, Ilmenau University of Technology

Wilhelmina Savenye, Arizona State University

Hing Wa (Helena) Sit, The University of Newcastle (Australia)

Nicolson Siu, The Hong Kong University of Science and Technology

Howard Zhaoxun Song, The Hang Seng University of Hong Kong

Yin Yi Tan, Universiti Sains Malaysia

Nigel Sidley Thompson, Hong Kong Shue Yan University

Hamed Khodadadi Tirkolaei, Arizona State University

Jessica To, Nanyang Technological University

Wanli Xing, University of Florida

Xing Xu, Sichuan International Studies University

Yi Zhang, Central China Normal University

#### **Conference Organizers**







The University of Hong Kong Libraries

#### **Preface**

The HKAECT 2021 International Conference on *A New Paradigm for Digital Communication and Learning: Changes and Challenges* was co-organized by the Hong Kong Association for Educational Communications and Technology (HKAECT) and The University of Hong Kong Libraries. It was held on 24–26 June 2021, online and live, at the Ingenium of the Main Library, The University of Hong Kong, Hong Kong SAR, China.

Since the onset of COVID-19, online teaching and learning has played an increasingly vital role in shaping a new education culture in various education settings across different countries. Needless to say, online education, alongside new media, has provided ample benefits to educators and students. Nevertheless, virtual lessons and communication conducted synchronically (real-time) and asynchronically alike do bring problematic issues such as insufficient technical support, inefficient classroom management, reduced interaction between teachers and students, and growing concerns over privacy and security. With a view to shedding light on the global education climate in the midst of the pandemic, HKAECT International Conference 2021 provided an academic platform for discussing the pros and cons, constraints, and potential risks as the new paradigm for digital communication and learning takes place.

Through open calls for paper submissions, the Conference Committee received close to 60 proposals. Upon completion of the rigorous peer review process, 20 high-quality manuscripts are chosen for the post-conference edited volume. The book is broadly categorized into five parts under five main themes—Part I: Assessment and curriculum (chapters "Self and Peer Assessment in the Socially Distanced Classroom: An Action Research for Improving English Oral of Asian Students", "Online Teaching and Assessment Practices During COVID-19 Crisis: Perspectives from University Students", and "Designing Inclusive and Diverse Artificial Intelligence (AI) Curriculum for K-12 Education"), Part II: Creativity and social media (chapters "The Need of Having Journalistic Creativity in Journalism Education: A Review of the Literature on Media Creativity and Look

xii Preface

Beyond", "Social Experiential Learning for Zero Waste Education in a Liberal Arts University", "Enhancing the Awareness of e-Mental Health Messages: The Effects of Narrative, Emoji, and Relevance", and "Exploring a Self-paced Online Course Design, Learning Engagement, and Effectiveness on Anti-cyberbullying Topic for Adolescents in Hong Kong"), Part III: Language learning and teaching (chapters "Teaching in the Time of Corona(Virus): A Cross-Institutional Study of Online English Language Teaching in Hong Kong Higher Education", "ICT Virtual Multimedia Learning Tools/Environments: Role and Impact on ESL Learners' Development of Speech Accuracy—YouTube as an Example", "Chinese Second Language Learners' Perceptions of Gamification in an Informal Learning Environment: Duolingo as a Case Study", and "An Exploration of Developing ICT-Related Pedagogical Strategies in the Professional Development of EFL Teachers in Vietnam"). Part IV: Online learning and blended learning (chapters "An Adventure in Flipping a Secondary School Mathematics Classroom During the COVID-19 Pandemic", "Exploring the Relationships Between Online Learning, Motivation, Social Presence, and Learning Efficacy", "A Review on Blended Learning for English Language Teaching in Indonesian Higher Education", and "Communication Noise in E-learning During the Pandemic and How to Reduce It: Perspectives from University Students and Teachers"), and Part V: Learning environment and design (chapters "An Empirical Study on Peer Discussion About Statistical Evidence in Computing Laboratory", "Effective Learning Through Project-Based Learning: Collaboration, Community, Design, and Technology", "The Role of Online Course Design in Associating Second Language Learners' Motivation and Self-regulated Learning Strategies in Non-formal Online Learning Contexts', "An Empirical Study on the TEAMS Online Teaching Experiences at a University in Taiwan", and "From Big Data to Blockchain: Promises and Challenges of an All-Encompassing Technology in Education").

We are grateful that the Conference has successfully attracted numerous renowned scholars and experienced practitioners to share their latest research, recent observations, and recent teaching experiences with the conference participants from Australia, Asia, Europe, the U.K., and the U.S.A. On behalf of the Conference Organizing Committee, we would like to take this opportunity to express our heartfelt gratitude to our keynote speakers, namely, Prof. Xun Ge, President of AECT and Professor of The University of Oklahoma, Prof. Bart Rienties of The Open University, U.K., Timothy K. F. Hew of The University of Hong Kong, and Mr. Nick Melchior of Springer. We would also like to show our sincere appreciation for the hard work of all chapter contributors and peer reviewers. Without the helping hand and great support of our HKAECT friends, this book volume would not have been possible.

October 2021

Anna Wing Bo Tso Alex Chi-keung Chan Wendy Wing Lam Chan Peter Edward Sidorko Will W. K. Ma

### **Contents**

Assessment and Curriculum	
Self and Peer Assessment in the Socially Distanced Classroom:  An Action Research for Improving English Oral of Asian Students  Anna Wing Bo Tso	3
Online Teaching and Assessment Practices During COVID-19 Crisis: Perspectives from University Students Annie W. Y. Ng	19
Designing Inclusive and Diverse Artificial Intelligence (AI)  Curriculum for K-12 Education	33
Creativity and Social Media	
The Need of Having Journalistic Creativity in Journalism Education: A Review of the Literature on Media Creativity and Look Beyond	49
Social Experiential Learning for Zero Waste Education in a Liberal Arts University Paulina Pui Yun Wong and Gary Wai Chung Wong	67
Enhancing the Awareness of e-Mental Health Messages: The Effects of Narrative, Emoji, and Relevance Chi-Keung Chan and Kelly Ka-Wai Chan	87
Exploring a Self-paced Online Course Design, Learning Engagement, and Effectiveness on Anti-cyberbullying Topic for Adolescents in Hong Kong	107

xiv Contents

Language Learning and Teaching	
Teaching in the Time of Corona(Virus): A Cross-Institutional Study of Online English Language Teaching in Hong Kong Higher Education  Noble Po Kan Lo and Sumie Chan	125
ICT Virtual Multimedia Learning Tools/Environments: Role and Impact on ESL Learners' Development of Speech Accuracy—YouTube as an Example Azzam Alobaid	143
Chinese Second Language Learners' Perceptions of Gamification in an Informal Learning Environment: Duolingo as a Case Study Liuyufeng Li and Breffni O'Rourke	183
An Exploration of Developing ICT-Related Pedagogical Strategies in the Professional Development of EFL Teachers in Vietnam  Tuyen Van Nguyen, Helena Hingwa Sit, and Shen Chen	203
Online Learning and Blended Learning	
An Adventure in Flipping a Secondary School Mathematics Classroom During the COVID-19 Pandemic Man Keung Chun and Chung Kwan Lo	223
Exploring the Relationships Between Online Learning, Motivation, Social Presence, and Learning Efficacy Samuel Cheuk-Yin Law, Raymond Chi-Fai Chui, Nicholson Yat-Fan Siu, and Chung Hau Ching	239
A Review on Blended Learning for English Language Teaching in Indonesian Higher Education  Putri Gayatri, Shen Chen, and Helena Sit	253
Communication Noise in E-learning During the Pandemic and How to Reduce It: Perspectives from University Students and Teachers  Zhao Xun Song, Jing Wu, and Hsin Li Hu	279
Learning Environment and Design	
An Empirical Study on Peer Discussion About Statistical Evidence in Computing Laboratory  Ken W. Li and Merrilyn Goos	299
Effective Learning Through Project-Based Learning: Collaboration, Community, Design, and Technology Will W. K. Ma	317

Contents xv

The Role of Online Course Design in Associating Second Language Learners' Motivation and Self-regulated Learning Strategies in Non-formal Online Learning Contexts Shuqin Zhai and Min Lan	343
An Empirical Study on the TEAMS Online Teaching Experiences at a University in Taiwan Pei-Ying Wu, Kwan-Keung Ng, and Shao-Fu Li	365
From Big Data to Blockchain: Promises and Challenges of an All-Encompassing Technology in Education	383
Author Index	399

## **Assessment and Curriculum**

#### Self and Peer Assessment in the Socially Distanced Classroom: An Action Research for Improving English Oral of Asian Students



Anna Wing Bo Tso

**Abstract** The aim of this action research study is to share the experience of introducing self and peer assessment to an online English presentation course conducted for English as a Foreign Language (EFL) students at a university in Hong Kong in Spring 2020. Disrupted by the COVID-19 outbreak, face-to-face English oral classes were made to go online in the pandemic. While the reduced face-to-face interactions caused inconvenience to the English oral class, online teaching had also created an opportunity for introducing alternative assessment methods in the EFL oral course. With reference to the current theories of self and peer assessment, this paper looks into how the online platform had advantaged self and peer assessment of EFL students' oral performances during the research period. Students' perceptions of self and peer assessment in the EFL oral class will also be discussed.

**Keywords** Action research  $\cdot$  EFL oral practice  $\cdot$  Self and peer assessment  $\cdot$  Teaching during the pandemic

# 1 Introduction: English Oral in the EFL Classroom During COVID-19

Due to the COVID-19 outbreak since January 2020, for four consecutive semesters across two academic years, face-to-face lessons at university in Hong Kong had been replaced by real-time Zoom classes and digital learning so as to practice social distancing. Such changes had brought a great deal of unexpected challenges to the delivery of English language courses, in particular a course that focuses on oral presentation skills and public speaking. Because of the constraints of Zoom classes, public presentation aspects such as the speaker's posture, use of gestures, eye contact with the audience, facial expressions, and body language can no longer be assessed in

A. W. B. Tso (⋈)

The Hang Seng University of Hong Kong, Hong Kong, China

e-mail: annatso@hsu.edu.hk

the same way they used to be assessed in face-to-face classes. In addition, interactions between the speaker and the audience are bound to be different, if not reduced.

Despite all the limitations in the socially distanced classroom conducted online, digital technology has brought new opportunities for English classes. Maximizing the benefits that digital learning platforms can bring to the students has become the current trend. As a matter of fact, years before the COVID-19 pandemic, online peer assessment has already been performed increasingly due to the ease and convenience of doing so (van Popta et al., 2017). For example, while the learning environment via Zoom does not facilitate non-verbal communication training, the EFL teacher can gear the focus toward verbal communication training, which includes such aspects as pronunciation, intonation, speaking pace, fluency, presentation structure, and time management. Because of the recording function of Zoom, all verbal communication features of the students' presentations can now be easily recorded, archived, replayed, and studied closely by the teacher, the audience members, as well as the student presenters themselves. In short, as Zoom classes are conducted during the pandemic, it is high time for EFL teachers to incorporate self and peer assessment to increase students' motivation, enhance self-directed learning, and train up their English oral proficiency.

In this paper, I will share my observations of the advantages, feasibility, as well as limitations of using self and peer assessment in an EFL oral class conducted online during the pandemic. In the following, a brief literature review of self and peer assessment will be provided before moving on to the detailed discussion of the action research on self and peer assessment for improving English oral of Asian students.

#### 2 Literature Review

#### 2.1 Self-assessment as a Formative Assessment Tool

Different from the typical teacher assessment, self-assessment is a kind of alternative assessment that employs a free-assessment approach (Jung, 2016, p. 3). It is a "wide variety of mechanisms and techniques through which students describe (i.e., assess) and possibly assign merit or worth to (i.e., evaluate) the qualities of their own learning processes and products" (Panadero et al., 2016, p. 804). While research indicates that self evaluation and self-generated feedback are associated with academic gains (Zimmerman & Schunk, 2011), self-assessment has a major drawback—it causes a conflict of interest as the student plays the role of a self-assessor. According to Tejeiro et al. (2012), students often tend to overestimate their own performance especially when summative self-assessment is counted toward final grades. After all, students do want to obtain the highest possible marks. On the other hand, some students who lack confidence in their abilities tend to give themselves low grades, which can bring negative impacts on the students and even the institution. To avoid

the conflict of interest, it is best if self-assessment is constantly monitored by teachers and carried out in the formative form. As Andrade (2019) points out, "the purpose of self-assessment is to generate feedback that promotes learning and improvements in performance. This learning-oriented purpose of self-assessment implies that it should be formative: if there is no opportunity for adjustment and correction, self assessment is almost pointless." (p. 2). To a large extent, self-assessment in summative assessment will only succeed if the student assessors are well-trained. In other words, the main aim of self-assessment is to improve students' understanding of the evaluation criteria and enhance their self correction ability.

#### 2.2 Peer Assessment: Advantages and Limitations

Apart from self-assessment, peer assessment is also in the trend in educational settings because of technological advancement. It is defined as "a frequently adopted learning strategy to assist students in rating and offering instant feedback to peers from the perspective of instructors, which has good potential for fostering students' critical thinking." (Fang et al., 2021, p. 1155). Through the reciprocal process, not only can the assessees benefit from receiving comments from peers, the student assessors can also take advantage of the assessor's role and improve their own learning. "This is achieved by students having to critique and review someone else's work and thereby reflect on their own understanding or performance" (Chin, 2007, p. 13). Given sufficient guidance and support from the teacher, students can be trained to distinguish high-quality works from low-quality works, provide constructive feedback, reflect on their own works, avoid the same mistakes, and retain and/or further improve their own works (Seifert & Feliks, 2019). Besides improving students' academic performance, peer assessment is also known to be an effective tool for enhancing such student capabilities as team communication (Grice et al., 2013; Kearney, 2013), teamwork, and collaboration (Cunningham et al., 2016).

Alongside self-assessment, peer assessment is becoming increasingly important as an alternative method (Cheng & Warren, 2005) in higher education because it can be effectively implemented online without much burden in the logistics (Hsu, 2016; Li & Gao, 2016). In the past two decades, numerous research studies have found that both self and peer assessment enhance self-regulated learning and help students become autonomous learners (Boud et al., 2014; McDonald, 2016; Xu & Zhu, 2011). Meanwhile, problems brought by self and peer assessment have also been identified. Regarding the efficacy of self-assessment, it is pointed out that "[o]ne of the main areas of uncertainty with regard to self-assessment is learners' objectivity and capacity to view their own attainments" (Ekbatani, 2011, p. 67). Likewise, it is noticed that students who participated in self-assessment tended to overrate themselves when self-assessment was implemented (Henderson, 2017; Vuma & Sa, 2017). Instant guidance for student assessors and regular marking standard monitoring are required. Lapham and Webster (2003) also noticed that peer assessment could bring some negative effects, such as "[p]rejudice, favouritism, friendships and ethnic division"

(p. 188). Nevertheless, the pros of self and peer assessment appear to have outweighed the cons according to research. This action research study aims to reveal what works in the undergraduate ESL oral class and how the potential benefits mentioned by the researchers can be maximized in the online learning context.

#### 3 Background of the Study

# 3.1 The School Environment and Scheme of Work of the Online English Oral Course

Since students' English language proficiency is positively correlated to their academic achievements (Tso & Chung, 2016), the university in which I conducted the action research had made it compulsory for most year-one students to take a five-credit course called *Presentation Skills*, a foundation English course that I taught in Spring 2020. There were no set books for the course, and students were provided with study materials designed by the lecturer, who was also free to design his/her own notes and teaching materials to suit the needs of the students. This flexibility became essential as there was the COVID-19 outbreak, for the teaching focus and materials had to be adjusted for full online learning. There were 4 contact hours per week (2 h of recorded lecture + 2 h of real-time Zoom tutorial) and a total of 52 contact hours for the course, which consisted of five units, all of which aimed at brushing up the listening and speaking skills of EFL students. To pass the course, students must pass both the continuous assessment (40%) and the final examination (60%).

Because of the sudden COVID-19 disruption in 2020, *Presentation Skills*, which used to be a face-to-face course, became an online course. All oral assessment was turned into recorded oral presentations to be submitted online through Moodle. Since facial expressions, gestures, and body movement, in recorded presentations could not be assessed the same way as in real-time face-to-face presentations, the marking rubrics were adjusted—originally, 22% of the scores were allocated for the category of "delivery skills", which include visual, gestural and spatial semiotics such as eye contact with audience, facial expression, gesture, posture, and body movement (Tso & Lau, 2019). Now, the category of "delivery skills" merged with that of "language skills," with 43% of the scores allocated for linguistic and audio semiotics like the use of vocabulary, fluency, tone and manner, pronunciation and accuracy, pace and intonation (Tso & Lau, 2019) (Fig. 1).

Now that much of the focus had turned from "delivery skills" to "language skills," students were given the freedom to decide whether they would like to submit video clips (MP4) or audio clips (MP3) of their recorded oral presentations. Knowing that their oral presentations would be peer assessed, the majority of students expressed their preference to submit audio clips instead of video clips to keep their privacy and avoid embarrassment.

**Fig. 1** The original marking rubrics for the face-to-face English presentation course

	ORAL PRESENTAT	TON MA	ARKIN	G RUBR	ICS	
	Content, Organia	zation &	Strate	egy (57%)		
Con	tent & Organization (37%)	Excellent	Good	Satisfactory	Average	Poor
		(32-37)	(24-31)	(16-23)	(8-15)	(0-7)
√ (	Gain the audience's interest					
✓ S	tate purpose clearly					
✓ I	dentify the topic and define the					
S	cope of the presentation					
✓ E	xhibit knowledge of content in					
tl	ne presentation					
✓ S	upport the main points with					
d	etails					
✓ [	Occument facts where necessary					
✓ P	rovide transitions					
✓ S	ummarize main points					
√ C	Close smoothly					
Pres	entation Strategies (20%)	Excellent	Good	Satisfactory	Average	Poor
		(17-20)	(13-16)	(9-12)	(5-8)	(0-4)
✓	Presentation well-planned and					
	well-coordinated (planned					
	transitions/coordinate visuals with					
	consistent style)					
<b>√</b>	Time management (within the					
	time limit specified)					
<b>√</b>	Question handling (anticipate					
	questions; provide positive, sound					
	and relevant answers)					
/	Use of visual aids					
	total:					/57
-	Language & 1	Delivery	Skills	(43%)		,,,,
Lan	guage Skills (21%)			Satisfactory	Average	Poor
	56* (=1/4)			-		
			(14-17)	(9-13)	(5-8)	(0-4)
<u> </u>	Use of vocabulary	(16-21)	(14-17)	(9-13)	(5-8)	(0-4)
	Use of vocabulary	(18-21)	(14-17)	(9-13)	(5-8)	(0-4)
<b>~</b>	Fluency	(16-21)	(14-17)	(9-13)	(5-8)	(0-4)
<b>~</b>	Fluency Tone and manner (Use of	(18-21)	(14-17)	(9-13)	(5-8)	(0-4)
✓ ✓	Fluency Tone and manner (Use of you-view, reader benefit, etc.)	(18-21)	(14-17)	(9-13)	(3-8)	(0-4)
√ √	Fluency Tone and manner (Use of you-view, reader benefit, etc.) Pronunciation & Accuracy			, ,		
√ √	Fluency Tone and manner (Use of you-view, reader benefit, etc.)	Excellent	Good	Satisfactory	Average	Poor
✓ ✓ ✓ Deli	Fluency Tone and manner (Use of you-view, reader benefit, etc.) Pronunciation & Accuracy very Skills (22%)	Excellent		Satisfactory		
✓ ✓ Deli	Fluency Tone and manner (Use of you-view, reader benefit, etc.) Pronunciation & Accuracy very Skills (22%)  Eye contact with audience	Excellent	Good	Satisfactory	Average	Poor
✓ ✓ Deli	Fluency Tone and manner (Use of you-view, reader benefit, etc.) Pronunciation & Accuracy very Skills (22%)  Eye contact with audience Voice projection, pace and	Excellent	Good	Satisfactory	Average	Poor
√ ✓ Deli	Fluency Tone and manner (Use of you-view, reader benefit, etc.) Pronunciation & Accuracy very Skills (22%)  Eye contact with audience Voice projection, pace and intonation	Excellent	Good	Satisfactory	Average	Poor
✓ ✓ Deli	Fluency Tone and manner (Use of you-view, reader benefit, etc.) Pronunciation & Accuracy very Skills (22%)  Eye contact with audience Voice projection, pace and intonation Gesture, posture & facial	Excellent	Good	Satisfactory	Average	Poor
✓ ✓ Deli	Fluency Tone and manner (Use of you-view, reader benefit, etc.) Pronunciation & Accuracy very Skills (22%)  Eye contact with audience Voice projection, pace and intonation Gesture, posture & facial expression	Excellent	Good	Satisfactory	Average	Poor (0-4)
✓ ✓ Deli	Fluency Tone and manner (Use of you-view, reader benefit, etc.) Pronunciation & Accuracy very Skills (22%)  Eye contact with audience Voice projection, pace and intonation Gesture, posture & facial expression total	Excellent	Good	Satisfactory	Average	Poor

# 3.2 Students' Abilities and My Approach in Teaching English Oral Online

The 27 year-one students in my online oral class were mostly Hong Kong students who had passed the DSE English language examination, but there were also students from China, India, and Nepal. To find out how I could help my students learn English more confidently and independently, I designed a set of questionnaires for my students. The survey was conducted in week 1 through Google form. From the list of oral activities, including "giving a presentation," "making a speech in public," "having a group discussion," "making telephone conversations," and "communicating in meetings," 87% of the participants graded "making a speech in public" as very difficult, i.e., score 8 on a scale of 1 to 10, with 1 being the least difficult and 10 being the most difficult. Thus, "making a speech in public" was made the main focus in the study. Speaking of "making a speech in public," there can be three kinds of public speeches, namely face-to-face, online real-time, and online asynchronously. Traditionally, "making a speech in public" in an English presentation course refers to delivering a speech at a lectern in front of the audience members who are physically present inside the classroom. However, due to the COVID-19 disruption, the format of the "public speeches" had gone digital. In the English Presentation course, the online asynchronous speech format was used, and it was warmly welcomed by students mainly because of two reasons: firstly, the virtual public speech format allows multiple retakes and revisions; secondly, the digital format is similar to the kind that YouTubers and key opinion leaders (KOL) create and present to their fans and audiences from all around the world. By a fortunate stroke of serendipity, the pandemic urged both the teacher and students to keep abreast of the times and adapt the presentation tasks online asynchronously.

#### 4 Research Questions

With a special focus on technology-assisted self and peer assessment, this action research investigated the following questions:

- i. To what extent did online self and peer assessment improve EFL Asian students' public speaking skills in English?
- ii. How did EFL Asian students at university perceive self and peer assessment through the online platform?

This paper has sought the answer to the first question through the triangulated data generated from students' oral performances, student assessors' evaluation forms, the student survey, and the focus group interviews. The answer to the second question, on the other hand, was sought through the student survey and the focus group interviews.

#### 5 Research Methodology

To find out the effectiveness of online self and peer assessment in enhancing EFL Asian students' English oral proficiency, this study employed a four-stage action research model (Mertler, 2019) that allows the "observing-doing-observing-adjusting" cycling and spiraling pattern to collect data through students' recorded speeches in MP3, filled evaluation forms, questionnaires, and focus group interviews.

#### 5.1 Action Research Cycle 1: The Planning Stage

In week 1 of the action research (last week of January 2020), the concept of self and peer assessment was introduced to the 27 full-time year-one university students. The purpose and action plan of the research were also stated and outlined for the participants. It was explained clearly to all participants that the alternative assessment to be employed was solely for experimental and research purposes. The scores given in the self and peer assessment process would by no means affect the original assessment system and the grade they would get for the oral course. Students were given the marking rubrics on Moodle. The assessment criteria and grade descriptors were listed clearly and neatly in a table format. In the recorded lecture, the lecturer also explained how the marking guide should be used. Students could also use the Moodle discussion forum should they need to address any issues arising from the assessment process.

After the marking criteria had been explained, students were given a 20-min lecture on how to make a good speech. A sample speech outline was also shared on Moodle. In the real-time Zoom tutorial, students were given a script extracted from Winston Churchill's famous speech, "We shall fight them on the beaches." Students were divided into groups to discuss the language techniques used in Churchill's speech.

#### 5.2 Action Research Cycle 2: The Acting Stage

In week 2 of the action research (mid-February 2020), the 27 students listened to three samples of assessed presentation which were five-minute speeches with different qualities (excellent, satisfactory, or unsatisfactory) in the lecturer's recorded lecture archived on Moodle. Students could replay the samples as many times as they wanted at their own pace. When students got more familiar with the assessment system, in the real-time Zoom tutorial, they were asked to listen to two speeches and practice assessing them according to the marking guide introduced in Jan 2021. After the marking, students were allowed time to discuss their judgment with their peers. When they had finished the discussion, they were asked to compare the marks and

comments given by the tutor, their classmates, and themselves. They were encouraged to ask questions when in doubt. Before the tutorial ended, 5 volunteer students were chosen to formed the focus group of the action research. The function and role of the focus group were explained. The five students were also informed of the special arrangements for them in action plan weeks 3 and 4.

#### 5.3 Action Research Cycle 3: The Developing Stage

In week 3 of the action research (early March 2020), students started to prepare and make their own five-minute speech into an audio clip. Given three speech topics, students were free to choose a topic which they liked. With reference to the speech outline given to them previously, they recorded their five-minute speeches in MP3 and shared it on Moodle's discussion forum. Next, students were instructed to assess their own oral clip with the marking guide introduced in week 1. When the self-assessment was completed, the evaluation forms were submitted through Moodle. Upon completion of the marking, the tutor also shared the teacher's evaluation scores and remarks with the students. By comparing the self-assessment and teacher assessment scores and comments, students got to learn more about the criteria for evaluating a public speech in English. In addition, a follow-up interview with the focus group was conducted within week 3 to find out students' feedback toward self-assessment.

#### 5.4 Action Research Cycle 4: The Reflecting Stage

In week 4 of the action research (mid-March 2020), students chose 1 out of 3 speech topics and again made their own five-minute speech into an audio clip. After recording and submitting their speeches in the MP3 format, students were instructed to self-evaluate their own work, and carried out peer assessment for one another. The filled self and peer evaluation forms were collected through Moodle. Last but not least, the tutor returned the marksheets to all students. Students were able to compare the marksheets generated in self-assessment, peer assessment, and teacher assessment.

Same as before, a follow-up interview was conducted with the focus group in week 4. In addition, all students who participated in the self and peer assessment activities were asked to complete a questionnaire that examined their views on the validity, reliability, and usefulness of online self and peer assessment in their English oral learning process.

#### 6 Data Collection

Four different types of data were collected in the action research. First of all, the recorded oral speeches in MP3 were collected in weeks 3 and 4 of the research plan. The quality of the speeches made in week 4 was compared with that of the speeches made in week 3. Improvements and/or changes in style and tone were also noted. Secondly, the filled self and peer evaluation forms were collected. The grade, scores, and comments written on the evaluation forms were examined with reference to the recorded speeches. Thirdly, two follow-up group interviews with the focus group were conducted in weeks 3 and 4. Students' comments and feedback regarding the usefulness, validity, reliability, and any concerns about online self and peer assessment were of critical significance to the study. Last but not least, filled questionnaires about participants' perception of self and peer assessment were collected from the oral class. To a large extent, the survey was expected to reflect the EFL undergraduate students' attitudes and readiness to accept the incorporation of self and peer assessment through the digital platform.

#### 7 Findings and Discussions

#### 7.1 Learning Outcomes

In the survey, student participants indicated that both online self and peer assessment had helped them improve their English oral and speech making skills. With regard to self-assessment, about 70% of the students agreed that through self-assessment, they understood the evaluation criteria for grading and assessing speeches. Also, 60% reflected that they were able to make a better speech after undergoing self-assessment in week 3 (Fig. 2).

To what extent do you agree or disagree with the following statements?	Agree	Neutral	Disagree
#3: Now I know how a speech is assessed and graded.	70.37% (n = 19)	29.63% (n = 8)	0% $(n = 0)$
#7: I can make a better speech after self assessment.	60% (n = 16)	40% (n = 11)	0% (n = 0)

Fig. 2 The survey result of Questions 3 and 7 in the student questionnaire

To what extent do you agree or disagree with the following statements?	Agree	Neutral	Disagree
#8: I have learnt more from listening to my classmate's speech.	72% (n = 19)	26% (n = 7)	2% (n = 1)
#9: I have spotted some errors in my classmate's speech.	52% (n = 14)	37% (n = 10)	11% (n = 1)

Fig. 3 The survey result of Questions 8 and 9 in the student questionnaire

Seventy-two percent of the students also expressed that peer assessment was helpful in enhancing their listening skills. Over half of the students also noted that they were able to spot mechanical mistakes in their peer assessee's speeches (Fig. 3).

However, student assessors were not confident of their own marking. A significant gap between the student assessors and the teacher assessor was observed. Students showed a tendency of over-grading speeches, not to mention writing no or only brief comments compared to the EFL teacher. Some student assessors were only able to give vague comments like "You made some grammatical mistakes" and "The speech can be more fluent" in the evaluation form, which were too general and close to useless. In fact, only 42% of the students thought they were able to correct their own mistakes during self-assessment. They might only discover their own grammatical and pronunciation mistakes only when they read the teacher assessor's comments and replayed their own recorded speech.

Nevertheless, a number of student assessors were still able to indicate pronunciation mistakes made by their fellow classmates. For example, one of the student assessors wrote in the evaluation form, "many regular verbs in the past participle form, such as "sustained," "defined," "carried," etc. were mistakenly pronounced with the voiced ending /dId/." This had been echoed by Lucy, a participant in the focus group interview. In the second interview conducted in cycle 4 of the action research, Lucy mentioned:

My peer assessor has corrected my mispronunciation. Before the peer assessment, I wasn't aware of the mistakes I often made when pronouncing the past tense form of regular verbs. Thanks to the reminder given by my peer assessor, I realized now that verbs like "faced", "attacked", "backed" and "refused" should be pronounced without voicing the 'ed' endings. As for past tense verbs that ended with "ded" and "ted", I need to keep the /dId/ sound, as in "masterminded", "intended", and the /tId/ sound, as in "admitted" and "committed".

While most students could only discover their own mechanical mistakes through teacher assessment and peer assessment, some students did show clear awareness of the faults they made in the speech structure through self-assessment. For instance, Eddie of the focus group revealed in the interview that he did not know how to end his speech. Indeed, he stuttered a lot toward the end of the speech and ended his speech

abruptly by saying, "time's up already." After listening to his own recorded speech repeatedly in the self-assessment, Eddie became conscious of the shortcoming in the speech ending. In the second recorded speech, Eddie concluded by providing several recommendations to the problem addressed in the speech topic. He also managed to wrap his speech up with a concluding sentence, "I hope this nightmare could be ended [sic] in the near future."

Similarly, Jessie, another student in the focus group, had also made some improvement in striking a balance in the structure of her speech. When she first made her speech about her view on breast implants, she argued against the issue without considering the opposing views held by others in society. She made the statement, "putting into yourself something that doesn't belong to you is the biggest nonsense I've ever heard of." This made her speech sound subjective and unsympathetic. After the self-assessment and teacher assessment, Jessie realized the problem in her speech through the recording. Then, in her second speech, Jessie started by giving a definition of the subject matter. Then, she spent an equal amount of time on discussing both views (i.e., Ghosts exist, and ghosts do not exist) before she expressed her personal view at the end. With the implementation of online self and peer assessment, most students became more aware of the style, tone (register), structure, pronunciation, and grammar in their speeches.

Apart from the improvement in the oral performance, students also showed that they had become more enthusiastic and reflective in learning. For example, after cycle 4, the focus group suggested that they should revise the oral recordings after receiving the ratings from self and peer assessment. They would like to submit the revised speeches. From the survey, 56% of the student participants revealed that they welcomed self and peer assessment in future; 36% remained neutral about the statement, and only 8% of the students disagreed with the idea of having self and peer assessment in future.

Furthermore, from the filled evaluation forms collected in cycles 3 and 4 of the action research, I noticed that some participants had gradually become more confident of giving comments on others' oral presentations. Although there was still limited written feedback written in the evaluation, the written feedback in cycle 4 had, to a certain extent, become more precise. For instance, instead of just giving a score for the conclusion of the assessee's speech, one student assessor pointed out to the assessee that the speech had "ended in a rush."

#### 7.2 Feedback on Self-assessment

From the questionnaires, it appears that most participants perceived self-assessment as a positive and constructive learning process. 68% percent of the participants agreed that after the activity, they knew better how a speech is assessed and graded. 60% percent felt that they could make a better speech after the self-assessment. The responses from the group interviews added further evidence to the view. The focus group showed appreciation toward online self-assessment. They liked the speech

Student feedback 1	"I have concerns that as assessors, not all of us are objective."
Student feedback 2	"Frankly, I don't have much confidence in doing self-assessment. I may have the tendency of over-rating myself."
Student feedback 3	"I think I may have under-rated myself? I only realized it only when I compared the grade and scores I achieved from the self-assessment and those from the peer assessment."
Student feedback 4	"We may need more samples for practice before conducting the self-assessment. To maximize the effect, more good speech samples should be provided for standardization."

Table 1 EFL Asian students' views on self-assessment in the English oral course

archive on Moodle and they found it very convenient to upload, replay, and download their speeches from the online platform. However, students had shown concerns about over-rating, under-rating, and not being objective enough when conducting self-assessment (Table 1).

The feedback was in alignment with Ekbatani (2011)'s observation, which raises the concerns about student assessors' objectivity and assessment abilities. It can be foreseen that fairness would be of key concern should self-assessment become part of the formal assessment, be it in the face-to-face or online mode. While self-assessment provides a chance for students for self-reflection, it would be challenging for the teacher if he or she has to ensure students' honesty in self-assessment. The conflict of interest would make it hard for any student to fail himself or herself in the course. One suggestion for this loophole is that the students can work with the tutor to improve self and peer assessment. With the tutor's constant monitoring, the tutor can see more clearly what the students' needs, and self and peer assessment shall be more accurate and reliable. They can then be used as part of the formal assessment process. In the long run, the learning experiences students gained in the self and peer assessment may also help students prepare for their future employment when they will need to assess the quality of their own work and participate in performance management and appraisal processes.

#### 7.3 Feedback on Peer Assessment

Compared to self-assessment, students had more reservation toward peer assessment. As reflected in the second focus group interview, students felt embarrassed and reluctant in giving negative comments and poor grades to their classmates, especially if the classmates were their good friends, and that the comments they made were saved and shown clearly to all online. The other negative feedback about peer assessment was that students were not confident of the ability and competence of student assessors. They were not sure of the validity and accountability of the grades, scores, and comments provided by their peers (Table 2).

Student feedback 1	"It is especially hard to comment on a classmate harshly and give him/her a bad grade. I don't know how to avoid hard feelings when I need to give bad comments and a poor grade to a friend."
Student feedback 2	"My classmate did not know how to help me. Peer assessment is good only when the peer assessor is capable."
Student feedback 3	"I found mistakes in my classmate's speech, and then I realized I also made the same kind of mistakes."
Student feedback 4	"To improve, we can have peer assessmentthat may create more pressurewell, pressure will push students to work harder."

Table 2 EFL Asian students' views on peer assessment in the English oral course

The feedback collected from students supports the assertion made by Seifert and Feliks (2019) who state that for peer assessment to be effective, students must reflect on work and the assessment process under close guidance from the teacher. It also shows that Lapham and Webster (2003)'s concerns about "[p]rejudice, favouritism" and "friendships" are real (p. 188). In spite of the unfavourable feedback, the participants did agree that there were some advantages in using peer assessment. In the questionnaire survey, 72% of the participants agreed that they actually learnt more from listening to their peer's speech in the peer assessment. This finding echoes Fang et al. (2021)'s study that peer assessment does foster students' critical thinking.

#### 8 Conclusion

In the Spring term of 2020, over a short period of four weeks, I incorporated self and peer assessment into an online English presentation course for undergraduates in Hong Kong. Lectures on how self and peer assessment work were delivered via pre-recordings, students' presentations were recorded via real-time Zoom sessions, whereas marking rubrics, examples, and evaluation samples were shared via Moodle. From the students' English oral performances, evaluation forms generated in the self and peer assessment, as well as responses from students' interviews and the follow-up survey, it is indicated that with the introduction and incorporation of self and peer assessment via online platforms, most students became more conscious of their English presentation performances. Their learning motivation, self-awareness, confidence in making judgment, and speech making techniques were vastly improved in a short duration of three months.

While self-assessment was well-perceived as useful and constructive, respondents did express concerns regarding the validity and reliability of the evaluations conducted by their peer assessors. Doubts about objectivity and reliability of the student assessors still exist, particularly in the case of peer assessment. To keep confidentiality and avoid shame and anxiety, teachers may consider conducting peer assessment anonymously. With a double-blind review system, the white lie effect can be lessened too. On another note, the success of self and peer assessment depends

greatly on how experienced and mature the participants are. Rating errors may occur if the student assessors are novices. Teachers need to be cautious that self and peer assessment as part of the formal assessment shall affect students' GPA. Teachers need to ensure that all student assessors are given sufficient training and guidance before self and peer assessment are integrated in formal assessment.

#### References

- Andrade, H. L. (2019). A critical review of research on student self-assessment. *Frontiers of Education*, 27, 1–13. https://doi.org/10.3389/feduc.2019.00087
- Boud, D., Cohen, R., & Sampson, J. (2014). Peer learning and assessment. In D. Boud, R. Cohen, & J. Sampson (Eds.), *Peer learning in higher education: Learning from and with each other*. Kogan Page.
- Cheng, W., & Warren, M. (2005). Peer assessment of language proficiency. *Language Testing*, 22(1), 93–121.
- Chin, P. (2007). Peer assessment. *New Directions in the Teaching of Physical Sciences*, *3*, 13–18. https://doi.org/10.29311/ndtps.v0i3.410
- Cunningham, C., Odonoghue, G., & Jennings, D. (2016). Introduction of wikis to foster collaboration in health professional education. *Focus on Health Professional Education: A Multi-Disciplinary Journal*, 17(1), 30–44.
- Ekbatani, G. V. (2011). Measurement and evaluation in post-secondary ESL. Routledge.
- Fang, J.-W., Chang, S.-C., Hwang, G.-J., & Yang, G. (2021). An online collaborative peer-assessment approach to strengthening pre-service teachers' digital content development competence and higher-order thinking tendency. *Educational Technology Research & Development*, 69(2), 1155–1181. https://doi.org/10.1007/s11423-021-09990-7
- Grice, G. R., Gattas, N. M., Sailors, J., Murphy, J. A., Tiemeier, A. M., Hurd, P. D., & Duncan, W. (2013). Health literacy: Use of the four habits model to improve student pharmacists' communication. *Patient Education and Counseling*, 90(1), 23–28.
- Henderson, I. (2017). *Human resource management for MBA and business masters*. Chartered Institute of Personnel and Development.
- Hsu, T. C. (2016). Effects of a peer assessment system based on a grid-based knowledge classification approach on computer skills training. *Journal of Educational Technology & Society, 19*(4), 100–111.
- Jung, M. (2016). Peer/teacher-assessment using criteria in the EFL classroom for development students' L2 writing. *Journal of Pan-Pacific Association of Applied Linguistics*, 20(1), 1–20.
- Kearney, S. (2013). Improving engagement: The use of 'Authentic self- and peer-assessment for learning to enhance the student learning experience. Assessment and Evaluation in Higher Education, 38(7), 875–891.
- Lapham, A., & Webster, R. (2003). Peer assessment of undergraduate seminar presentations: Motivations, reflection and future directions. In S. Brown & A. Glasner (Eds.), Assessment matters in higher education: Choosing and using diverse approaches (pp. 183–190). Society for Research into Higher Education and Open University Press.
- Li, L., & Gao, F. (2016). The effect of peer assessment on project performance of students at different learning levels. *Assessment & Evaluation in Higher Education*, 41(6), 885–900.
- McDonald, B. (2016). *Peer assessment that works: A guide for teachers*. Rowman & Littlefield Publishers Inc.
- Mertler, C. (2019). Action research: Improving schools and empowering educators (6th ed.). Sage Publications, Inc.