



The 8th International Conference for Science Educators and Teachers

ISET 2021

Certificate

This is to certify that

Pattamaporn Kaewkhongkha
Kasetsart University

Has contributed as

Presenter

In the 8th International Conference for Science Educators and Teachers 2021

July 7-9, 2021

Kasetsart University, Kamphaeng Saen Campus, Thailand

Assoc. Prof. Anuchai Pinyopummin, DVM, Ph.D.
Vice President for Kamphaeng Saen Campus

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President of Science Education Association (Thailand).

B04. An Evaluation of 8th Grade Students' Infographics about Human Respiratory System

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Abstract

This study aims to evaluate infographics created by thirty-four 8th Grade students (aged 13-14 years old) from a school in Bangkok previously learned about human respiratory system in the first semester, 2020 academic year. Without being directly taught how to make a good infographic, each of the students was assigned to create an infographic about the human respiratory system covering the meaning, organs, air pathway, inhalation and exhalation, diseases and treatments, and some statistical data related to the respiratory system. They were given a short tutorial on infographic creation and allowed to select an online design platform (Canva, Piktochart, etc.) by themselves. A scoring rubric was developed to evaluate the infographics in 2 categories: information (with 2 subcategories; content covering and accuracy) and design (with 3 subcategories; layout, fonts & colors and figures). Each subcategory scores were ranged from 1 to 3 points, 15 points in total. The result from evaluation of the infographics found that the minimum and maximum scores were 5 and 9, respectively. None of the infographics was rated in a good level (scored higher than 11 points). The majority (29 infographics, 85.3%) was in a moderate level (scored between 6 - 10 points). The other 5 infographics (14.7%) were marked as poor (scored less than 5 points). It was also found that most of the infographics could not provide covered content. Some errors about scientific concepts and data were also found. Details and examples of students' infographics will be shown and discussed.

Keywords: Infographics, Evaluation, Lower secondary education

C03	Effects of TPACK-Problem-Based Learning in Developing Grade 10 Students' Learning Achievement and Problem Solving Skills on Function Matters <i>Maneerat Srichan and Khajornsak Buaraphan</i>	13.30-13.45	34
C04	Promoting Attitude toward STEM of High School Student through STEM Partnership for Design-based Learning in PM 2.5 Crisis Songchai Ugsonkid, Tassaneewon Lertcharoenrit, Sutasinee Kityakarn, Ratiporn Munprom and Pattamaporn Pimthong	13.45-14.00	35

Date: July 7, 2021

Concurrent Session II

Time: 14.15 - 15.15 GMT

No	Topic	Time	Page
Oral session II-A			
Chairperson: Tepkanya Promkatkeaw Strand 1: School science teaching and learning			
A04	Learning Approaches Enhancing Students' Ability in Constructing Scientific Explanation: A Meta-Analysis Study <i>Piriya Wannathai, Chaninan Pruekpramool and Chanyah Dahsah</i>	14.15-14.30	36
A05	Effects of STSE Teaching Model in the Acid-Base Balance Topic for Enhancing Grade 11 Students' Learning Achievement and Problem-Solving Skill <i>Ratanaphun Utmeemang and Khajornsak Buaraphan</i>	14.30-14.45	37
A06	Development of Do It Yourself (DIY) Hands-On Activities on Earth Structure and Dynamics for Enhancing Eighth Grade Students' Design Ability <i>Chotika Srikamthai, Witat Fakcharoenphol, and Tussatrin Wannagatesiri</i>	14.45-15.00	38
Oral session II-B			
Chairperson: Jeerawan Ketsing Strand 4: Assessment of student learning in science			
B04	An Evaluation of 8 th Grade Students' Infographics about Human Respiratory System <i>Pattamaporn Kaewkhongkha, Witat Fakcharoenphol, Tussatrin Wannagatesiri and Nantarat Kruea-In</i>	14.15-14.30	39
B05	Scientific Explanation Assessment for Science Student Teachers <i>Tawan Chaiwon, Kulthida Nukultham, Tussatrin Wannagatesiri</i>	14.30-14.45	40
B06	Exploring Scientific Media Literacy Skills and Self-efficacy of Seventh Grade Students in Samutprakarn Province <i>Korakoch Tangcharoenlap, and Theerapong Sangpradit</i>	14.45-15.00	41

ISET 2021 Program

ISET 2021 PROGRAM OVERVIEW		
Day 1 : 7 July 2021		
08.00-08.30	Registration	
08.30-09.00	Opening ceremony -Welcome speech from 1) The President of Kasetsart University 2) The Vice President of Kasetsart University, Kamphaeng Saen Campus 3) Dean of Faculty of Education and Development Science, Kasetsart University, Kamphaeng Saen Campus 4) The President of Science Education Association (Thailand)	
09.00-10.00	Plenary session: Prof. Charles Henderson	10:00 – 11:00 pm EDT
10.00-11.00	Keynote 1: Prof. Gillian Roehring	10:00 – 11:00 pm CDT
11.00-12.00	Keynote 2: Prof. John Williams	12:00 – 1:00 pm AWST
12.00-13.00	Lunch	
13.00-14.00	Concurrent session I	See detailed program
14.00-14.15	Break	
14.15-15.15	Concurrent session II	See detailed program
15.15-15.30	Break	
15.30-16.30	Poster session	See detailed program
Day 2: 8 July 2021		
09.00-10.00	Keynote 3: Prof. Samia Khan	7:00 – 8:00 pm PDT
10.00-11.00	Keynote 4: Prof. Khajornsak Buaraphan	
11.00-11.15	Break	
11.15-12.15	Concurrent session III	See detailed program
12.15-13.15	Lunch	
13.15-14.15	Concurrent session IV	See detailed program
14.15-14.30	Break	
14.30-15.30	SEAT committee meeting	
Day 3: 9 July 2021		
09.00-10.00	Keynote 5: Prof. Lilia Halim	9:00-10:00 am MYT
10.00-11.00	Keynote 6: Prof. Purim Jarujamus	
11.00-11.15	Break	
11.15-12.15	Concurrent session V	See detailed program
12.15-13.30	Lunch	
13.30 – 14.30	Closing ceremony	

Online Conference Information

The 8th international Conference for Science Educators and Teachers will be held online through CISCO WebEx.

CISCO WebEx can be downloaded on computer or on your mobile device from <https://www.webex.com/downloads.html>

You can join the whole conference through the link below.

The 8th international Conference for Science Educators and Teachers
Hosted by Faculty of Education and Development Sciences Kasetsart University

<https://ku-edu.webex.com/ku-edu/j.php?MTID=mcfcbd74959d1bd66ce6ae4cd2b61872a>

Wednesday, Jul 7, 2021 8:00 am | 12 hours | (UTC+07:00) Bangkok, Hanoi, Jakarta

Meeting number: 184 557 4760

Password: iset2021

*We encourage all presenters to try testing CISCO WebEx by joining the simulated conference on the 5th and 6th of July, 2021 between 8:00am – 16:00pm Indochina Time through the same link above.

**There will be the main online conference room for ceremony, Plenary session, and Keynote sessions with 3 breakout sessions for oral presentation (Room A, Room B, and Room C)

***For **POSTER** presenters, please submit your 10-minute presentation video, and PowerPoint slide or Poster files to iset2021krabi@gmail.com by 5th of July, 2021. The videos and slides will be posted at <https://drive.google.com/drive/folders/1jQE3ouWdyHMfzdKUyA-V9tOEzMLhRKne?usp=sharing>