4th Consortium of Asia-Pacific Education Universities (CAPEU 2017)

IOP Conference Series: Materials Science and Engineering Volume 296

Surabaya, Indonesia 22 - 23 May 2017

Editors:

Abadi Ali Mustofa Setya Chendra Wibawa

ISBN: 978-1-5108-5835-0 ISSN: 1757-8981 Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2017) by the Institute of Physics All rights reserved. The material featured in this book is subject to IOP copyright protection, unless otherwise indicated.

Printed by Curran Associates, Inc. (2018)

For permission requests, please contact the Institute of Physics at the address below.

Institute of Physics Dirac House, Temple Back Bristol BS1 6BE UK

Phone: 44 1 17 929 7481 Fax: 44 1 17 920 0979

techtracking@iop.org

Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA Phone: 845-758-0400 Fax: 845-758-2633 Email: curran@proceedings.com Web: www.proceedings.com

Table of contents

Volume 296

The Consortium of Asia-Pacific Education Universities (CAPEU)

22-23 May 2017, Universitas Negeri Surabaya, Indonesia

Accepted papers received: 8 January 2018 Published online: 21 February 2018

Preface

The Consortium of Asia-Pacific Education Universities (CAPEU)

Peer review statement

Papers

Development of short Indonesian lesson plan to improve teacher performance

B Yulianto, Kamidjan, A Ahmadi and P V Asteria....1

The development of guided inquiry-based learning devices on photosynthesis and respiration matter to train science literacy skills

Choirunnisak, M Ibrahim and Yuliani.....7

Initial draft of CSE-UCLA evaluation model based on weighted product in order to optimize digital library services in computer college in Bali

D G H Divayana, A Adiarta and I B G S Abadi.....12

Development of the living thing transportation systems worksheet on learning cycle model to increase student understanding

E Rachmawati, S Nurohman and A Widowati.....18

Engaging pre-service teachers to teach science contextually with scientific approach instructional video

E Susantini, I Kurniasari, A N M Fauziah, T Prastowo, A Kholiq and L Rosdiana.....24

Developing workshop module of realistic mathematics education: Follow-up workshop

E L W Palupi and S Khabibah.....31

Media and Information Literacy (MIL) in journalistic learning: *strategies for accurately engaging with information and reporting news*

F Inayatillah.....37

Differentiated strategy, business performance, and intellectual capital: *Evidence small medium enterprise from Indonesia*

Hariyati, L Venusita and Z F Dyani.....40

Worm Disease Profile of Primary School Children

Hartati, Destriani and A R Victoria.....46

Error analysis of mathematical problems on TIMSS: A case of Indonesian secondary <u>students</u>

H A Priyani and R Ekawati.....50

Analysis of student attitudes towards e-learning using Fishbein Multiattribute approach

Jasuli.....56

The implementation of interest-based entrepreneurship curriculum in the Theory of Economics course

J Surjanti, D Nugrohoseno, Budiono and H Musfidah.....63

Identifying students' learning performance as a way to determine the admission process in physical education field

J B Prihanto, D C Kartiko and A Wijaya.....69

Hydration status in adolescent runners: pre and post training

K Ashadi, D N Mirza and G Siantoro.....74

The use of mobile learning application to the fundament of digital electronics course

L Rakhmawati and A Firdha.....78

The implementation of role play in education of pre-service vocational teacher

L Hidayati and P Pardjono.....84

The impact of fashion competence and achievement motivation toward college student's working readiness on "*Cipta Karya*" subject

Marniati and S C Wibawa.....89

Small-sided games in football as a method to improve high school students' instep passing skills

M Ridwan, G Darmawan and Z Fuadi.....93

The characteristics of bioethanol fuel made of vegetable raw materials

Muhaji and D H Sutjahjo.....96

Integrating STEM education through Project-Based Inquiry Learning (PIL) in topic space among year one pupils

Chee Hoe Ng and M Adnan.....102

High-capability students' difficulties in problem solving on the concept of ratio

N F Kusuma, S Subanti and B Usodo.....108

Mathematics Pedagogical Standards: A Suggested Model of Instruction in Enhancing the Mathematics Teacher's Quality of Instruction

N S Saad, M Jemali, Z Hj Zakaria and Q Yusof.....115

An early start to STEM education among year 1 primary students through project-based inquiry learning in the context of a magnet

N Safiee, Z M Jusoh, A M H M Noor, O E Tek and S M Salleh.....125

The development of learning material using learning goal orientation approach in digital electronics

P Puspitaningayu, L Anifah and N Kholis.....130

The use of Facebook and WhatsApp application in learning process of physics to train students' critical thinking skills

R Kustijono and F Zuhri.....136

How can teachers assess reading skills of generation z learners in German language class?

R N Dirga and P H Wijayati.....143

Indonesian teacher engagement index: a rasch model analysis

Sasmoko, B S Abbas, Y Indrianti and S A Widhoyoko.....150

The role of students' self-confidence in relation with swimming routines, frequency, and tutor in swimming class

S Hartoto, F D Khory and B B Prakoso.....157

Structuring students' analogical reasoning in solving algebra problem

S Lailiyah, T Nusantara, C Sa'dijah, E B Irawan, Kusaeri and A H Asyhar.....162

Process skills approach to develop primary students' scientific literacy: A case study with low achieving students on water cycle

Suryanti, M Ibrahim and N S Lede.....168

Gender, academic achievement, and ownership of ATM as predictors of accounting students' financial literacy

Susanti and H T Hardini.....174

Geography literacy can develop Geography skills for high school students: is it true?

W S Utami, I M Zain and Sumarmi.....181

The implementation of flipped classroom model in CIE in the environment of non-target language

Renfei Xiao, Ali Mustofa, Fang Zhang and Xiaoxue Su.....187

Designing learning management system interoperability in semantic web

Y Anistyasari, R Sarno and N Rochmawati.....192

Implementation of science process skills using ICT-based approach to facilitate student life skills

Y S Rahayu, Yuliani and B R Wijaya.....198

21st centuries skill implication on educational system

T Wrahatnolo and Munoto.....207

Pre-service mathematics teachers' statistical reasoning about mean

Y D Kristanto.....214

An analysis of Indonesia's information security index: a case study in a public university

W Yustanti, A Qoiriah, R Bisma and A Prihanto.....220

The effect of thematic learning model, learning style, and reading ability on the students' learning outcomes

L Nurlaela, M Samani, I G P Asto and S C Wibawa.....227

The implementation of assessment model based on character building to improve students' discipline and achievement

Rusijono and K Khotimah.....235

Online test application development using framework CodeIgniter

S C Wibawa, Y Wahyuningsih, R Sulistyowati, R Abidin, Y Lestari, Noviyanti and D A Maulana....240

<u>Using historical perspective in designing discovery learning on Integral for undergraduate</u> <u>students</u>

Abadi and S Fiangga.....247

The impact of research-based learning on student's academic performance and motivation

M S Sumbawati and Y Anistyasari.....255

Development of biology student worksheets to facilitate science process skills of student

Y S Rahayu, R Pratiwi and S Indana.....261

Literacy Infrastructure, Access to Books, and the Implementation of the School Literacy Movement in Primary Schools in Indonesia

K Laksono and P Retnaningdyah.....272

Line integral on engineering mathematics

L H Wiryanto.....281

Cultivating characters (moral value) through internalization strategy in science classroom

M Ibrahim and Abadi.....285

Learning from the coffee shop: increasing junior high school students' self-confidence through contextual learning based on local culture of Aceh

Sarmini, A Supriono and Ridwan.....292

Design of Intelligent Robot as A Tool for Teaching Media Based on *Computer* Interactive Learning and Computer Assisted Learning to Improve the Skill of University Student

M S Zuhrie, I Basuki, I G P Asto B and L Anifah.....298

A Model of Pantun Learning to Develop Elementary Student's Entrepreneurship Awareness

P V Asteria and B Yulianto.....303

Parental involvement in elementary school-aged child's creativity

Suparmi, S P Suardiman and A Kumara.....309

Learning outcomes through the cooperative learning team assisted individualization on research methodology' course

N F D B Pakpahan.....315

Engaging Pre-Service Teachers to Teach Science Contextually with Scientific Approach Instructional Video

E Susantini, I Kurniasari, A N M Fauziah, T Prastowo, A Kholiq and L Rosdiana.....319

Training of Trainers (ToT) Program in Team Teaching

Werry Febrianti and Leo Hari Wiryanto.....332

Talent identification model for sprinter using discriminant factor

N W Kusnanik, A Hariyanto, Y Herdyanto and A Satia.....335

Abuse notation of improper integrals

E Arfi and L H Wiryanto.....340