



**ICED** 2021  
**-QA IV**



**ATLANTIS  
PRESS**

Conference Programme and Abstracts Book

# ICED-QA IV

**4<sup>th</sup> International Conference  
on Educational Development  
and Quality Assurance 2021**

**Merdeka Belajar: Enriching Students Learning Experiences**

**November 9<sup>th</sup>-10<sup>th</sup>, 2021**

**Online from Padang, West Sumatera - Indonesia**

# TABLE OF CONTENTS

Welcome Speech: Rector of Universitas Andalas	1
Welcome Speech: Chair of Lembaga Pengembangan Pendidikan Dan Penjaminan Mutu (LP3M) Unand	2
Welcome Speech: Conference Chair	3
Conference Schedule	4
Parallel Session Schedule	6
List of Abstracts (Paper ID)	18

# WELCOME SPEECH

## RECTOR OF UNIVERSITAS ANDALAS

Assalamu'alaikum wr. wb.

Dear all distinguished guests, especially to our honourable keynote speakers, invited speakers, and the committee of the **International Conference on Educational Development and Quality Assurance (ICED-QA 4)**. A warm welcome from me, from Universitas Andalas, Padang, Indonesia.

As the Rector of Universitas Andalas, I really appreciate the people behind this great activity, the collaboration and cooperation between scholars, researchers, academics, students, policymakers who focus on the issues of educational development and quality assurance. We all know that when we are talking about quality assurance and educational development, we face various challenges. Still, at the same time, by holding this conference, we are also confident that we are going to step forward, together agree to create solutions to minimize problems.

This conference is going to discuss a lot of things related to education and quality assurance. There are 6 keynote speakers from some countries, such as Indonesia, USA, Singapore, and Brunei Darussalam. I know this conference will become a fruitful discussion. Again, I would like to thank all the keynote speakers and presenters for sharing your experience and expertise at the ICED-QA 4, 2021. Finally, I would like to deliver my gratitude to the Finally, I would like to express my gratitude to the keynote speakers and the seminar participants. My high appreciation is addressed to the Chairperson of the Seminar and the entire committee. I hope you all have a very successful conference.

Thank you.

Wassalamu'alaikum Warahmatullahi wabarakatuh.

Padang, 9<sup>th</sup> November, 2021

**Rector**

**Prof. Dr. H. Yuliandri, S.H., M.H.**

# WELCOME SPEECH

## CHAIR OF LEMBAGA PENGEMBANGAN PENDIDIKAN DAN PENJAMINAN MUTU (LP3M) UNAND

Dear Honorable Speakers and Distinguish Guests

It is my pleasure to welcome you to the 4th International Conference on Educational Development and Quality Assurance (ICED-QA IV). With the dedication of an outstanding committee chaired by Dr. Budi Rahmadya, we have collected interesting topics about the development of learning methods and the implementation of higher education internal quality assurance. The topic of this year conference is “Merdeka Belajar: Enriching Students Learning Experiences”, in line with the program of the Ministry of Education, Culture, Research and Technology of the Republic of Indonesia “Merdeka Belajar Kampus Merdeka (MBKM)”.

LP3M Andalas University has hosted the ICED-QA since 2018, an event to present the results of class action research for academic staff and to report the monitoring and evaluation process of internal quality assurance at the study programs, faculties, or universities level. To support the achievement of key performance indicators of state universities (IKU PTN), LP3M has organized training, workshops and provided grants for the development of case-based and project-based learning methods. In addition, it also supports the development of blended learning at the study program level and empowers quality assurance units at the faculty and study program levels. The paper presented by Andalas university lecturers at this event is one of the outputs of the 2021 grant activity, which will be published in the Web of Science (WoS) indexed proceedings.

We appreciate Prof. drh. Aris Junaidi, Ph.D (Director of Learning and Student Affairs, Directorate of Higher Education, The Ministry of Education, Culture, Research and Technology of the Republic of Indonesia), Dr. S. Jimmy Gandhi (California State University, USA), Dr. Balazs Huszka (University Brunei Darussalam, Brunei Darussalam), Ir. Adhi Siswaya Lukman (CEO of PT. Niramas Utama, Indonesia), Assoc. Prof. Dr. Tan Kay Chuan (AUN-QA), and Prof. Dr. Ir. Aulia Siti Aisjah, MT (Head of QA of Institut Teknologi Sepuluh November, Indonesia) as our keynote speakers. Thank you very much for your cooperation so that the participants can gain a good understanding of various aspects of the MBKM program.

I wish you an intellectually enriching and transformative conference and a practically memorable and forward-looking experience.

Best Regards,

**Prof.Dr. apt. Henny Lucida**

**Head of Quality Assurance Unit (LP3M)  
Universitas Andalas**

# WELCOME SPEECH

## CONFERENCE CHAIR

We are delighted to welcome you virtually to the Fourth International Conference on Educational Development and Quality Assurance (ICED - QA) 2021. The conference is held by Lembaga Pengembangan Pendidikan dan Penjaminan Mutu (LP3M)/The Institute for Educational Development and Quality Assurance Universitas Andalas, West Sumatera - Indonesia.

This book is a compilation of the abstract of papers presented in the ICED – QA, with the theme **“Merdeka Belajar: Enriching Students Learning Experiences”** on November 9<sup>th</sup> and 10<sup>th</sup>, 2021 via Zoom Meeting.

This book consists of 91 abstracts divided into five sub-themes; Curriculum design, Quality Assurance for higher education in national, regional, and international institutions, Information and Communication Technology in Learning, Learning Methods and Assessment and Other related topics. We hope that all the participants can capitalize on this event and gain the benefit out of it.

In closing, I would like to thank the Rector of Universitas Andalas and also all members of Lembaga Pengembangan Pendidikan dan Penjaminan Mutu (LP3M)/The Institute for Educational Development and Quality Assurance for their hard work and patience.

Regards,

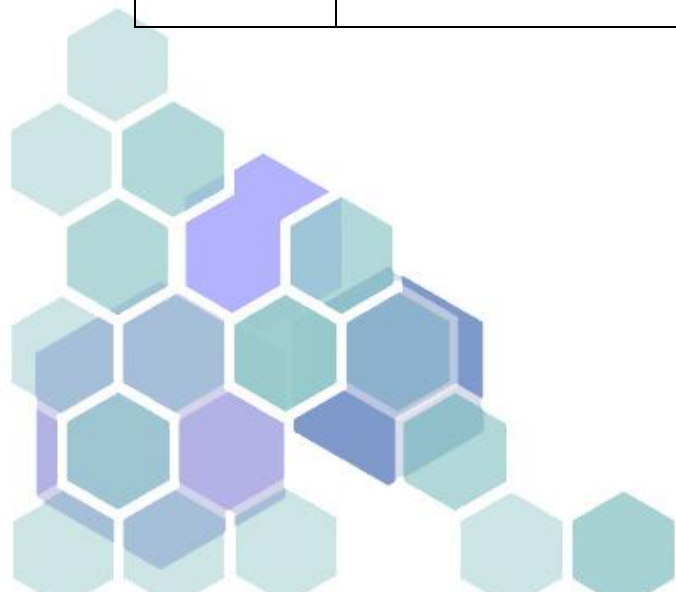
**Dr. Eng. Budi Rahmadya**



# CONFERENCE SCHEDULE

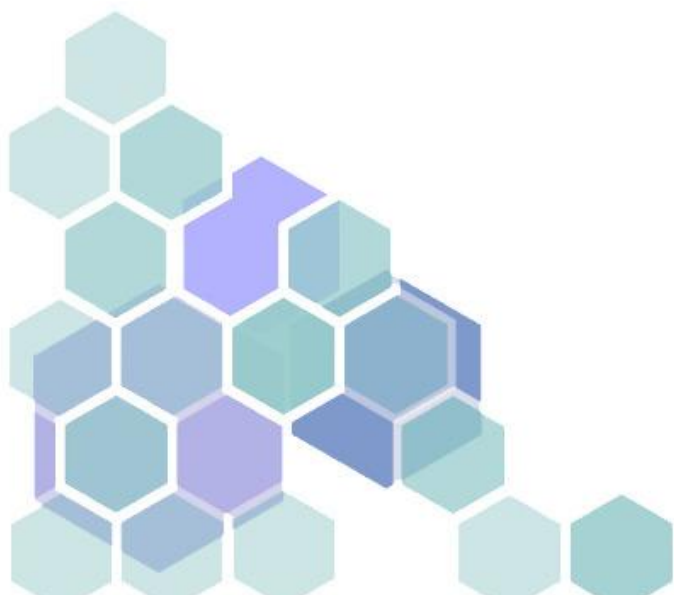
**Day 1: Tuesday, November 9<sup>th</sup>, 2021**

Schedule		PIC
09.00 – 09.05	MC – introduction	MC-Muslimah
09.05 – 09.10	National Anthem	Host – Purnawan/Prama Wahyudi
09.10 – 09.15	Foreword from the conference committee	Dr. Eng. Budi Rahmadya
09.15 – 09.30	Opening speech from the Rector of Unand - Prof. Dr. Yuliandri, SH, MH	Dr. Ike Revita
09.30 – 09.40	Unand Profile	Host – Purnawan/Prama Wahyudi
09.40 – 09.45	Moderator	Diah Tjahaya Iman, M. Litt., PhD
09.45 – 09.50	Opening plenary session 1 – moderator	
09.50 – 10.20	Keynote speaker: Prof. drh. Aris Junaidi, PhD	
10.20 – 10.50	Keynote speaker: Dr. S. Jimmy Gandhi	
10.50 – 11.20	Keynote speaker: Ir. Adhi Siswaya Lukman	
11.20 – 12.00	Questions and Answers	
12.00 – 13.00	Break	
13.00 – 15.30	Parallel session	
	<b>Room 1</b>	Moderator : Riwayadi Host : Hasfy
	<b>Room 2</b>	Moderator : Nur Afrainin Syah Host : Hari
	<b>Room 3</b>	Moderator : Ike Revita Host : Purnawan
	<b>Room 4</b>	Moderator : Dedison Gasni Host : Hasnam



**Day 2: Wednesday, November 10<sup>th</sup>, 2021**

Schedule		PIC
09.00 – 09.10	MC – introduction	MC-Muslimah
09.10 – 09.15	Opening plenary session 2 – moderator	Dr. Fajri Adrianto, SE. M.Bus Host - Ares
09.15 – 09.45	Keynote speaker: Dr. Balazs Huszka	
09.45 – 10.15	Keynote speaker: Prof. Dr. Aulia Siti Aisjah, M.T.	
10.15 – 10.45	Keynote speaker: Assoc. Prof. Dr. Tan Kay Chuan	
10.45 – 11.25	Questions and Answers	
11.30 – 13.00	Break	
13.00 – 15.30	Parallel Sessions :	
	<b>Room 1</b>	Moderator : Riwayadi Host : Hasfy
	<b>Room 2</b>	Moderator : Nur Afrainin Syah Host : Hari
	<b>Room 3</b>	Moderator : Ike Revita Host : Purnawan
	<b>Room 4</b>	Moderator : Dedison Gasni Host : Hasnam
15.40 – 15.55	Closing Remark – Ketua LP3M	Prof. Dr. apt. Henny Lucida Host - Hasfy



# PARALLEL SESSION SCHEDULE

*Link for lecture series:*

**Please click the link below to join the webinar:**

<https://us02web.zoom.us/j/81945469467?pwd=dVozVWcrMXpkWnRjNEJCUVJOY3pEQOT09>

**Passcode:** ICEDQA2021

*Link for parallel session:*

**Join Zoom Meeting**

<https://us02web.zoom.us/j/83398301705?pwd=RXd5SEwzSFd4R1loZ1kwQjJ1TUkrQT09>

**Meeting ID:** 833 9830 1705

**Passcode:** 462606

**Day 1: Tuesday, November 9<sup>th</sup>, 2021**

## Room 1

Time : 13.00 – 15.30 WIB

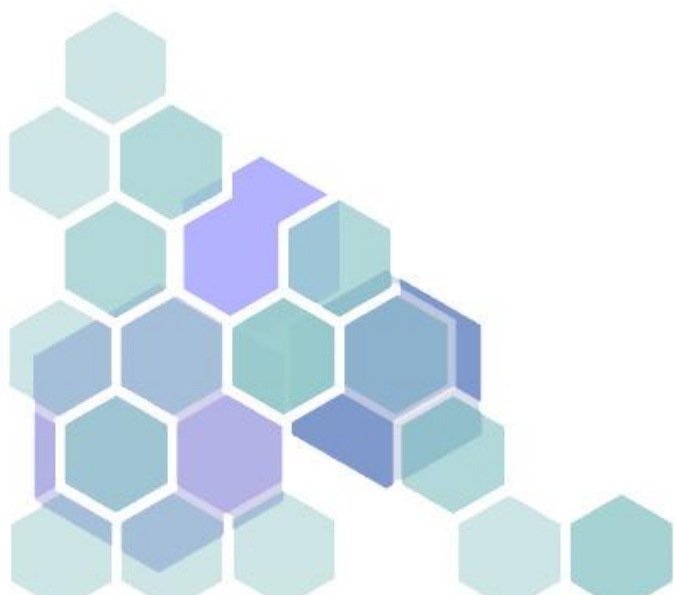
Moderator : Riwayadi

Host : Hasfy

No	Title	Authors	Article tract	Paper ID
1.	The Effect of Case Based Method, Project Based Learning and Experiential Method on Student Analysis Ability in Global Marketing Management Course	Winny Alna Marlina and Susiana Susiana	Learning Methods and Assessment	5
2.	The Modified Case Based Methods in Combination with Team-Based Approach for Teaching General Microbiology at Agricultural Product Technology Department of Andalas University	Purnama Dini Hari and Hasbullah Hasbullah	Learning Methods and Assessment	6
3.	Implementation of Case Based Method (CBM) Learning on Students in Improving Problem Analysis Ability and Problem Solving	Desna Aromatica, Hendri Koeswara and Muhammad Kabullah	Learning Methods and Assessment	7
4.	Project Based Learning: Enriching Students' 21st Century Skills	Inda Mustika Permata, Bima Jon Nanda and Silvi Cory	Learning Methods and Assessment	8
5.	Case Based Method in Pathophysiology of Non-Communicable Diseases Topic	Putri Aulia Arza and Azrimaidaliza	Learning Methods and Assessment	10



	Improves Student Performance of Undergraduate Nutrition Students at Public Health Faculty, Andalas University	Azrimaidaliza		
6.	Application of Project-Based Learning Methods in Land and Water Resource Management Courses	Delvi Yanti and Nika Rahma Yanti	Learning Methods and Assessment	<b>11</b>
7.	Development of Case Based Methods in Learning Courses in Health Ethics and Law in the Era of the Industrial Revolution 4.0	Sri Siswati, Adila Kasni Astiena and Ikhsan Yusda Prima Putra	Learning Methods and Assessment	<b>12</b>
8.	Case-based learning in financial management subject: Is it effective and relevant?	Fajri Adrianto and Masyhuri Hamidi	Learning Methods and Assessment	<b>13</b>
9.	Implementation of The Case-Based Learning Model Through Online Flipped Classroom Learning Approach in Computer and Society Course	Afriyanti Dwi Kartika and Jefril Rahmadoni	Learning Methods and Assessment	<b>14</b>
10.	Application of Case Based Method in Improving Students' Critical Thinking Skills in Case Auditing Course for Accounting Department Students	Husna Roza and Elvira Luthan	Learning Methods and Assessment	<b>16</b>
11.	Application of Case Base Method (CBM) in Online Learning in Higher Education (Study of Sociolinguistic Lectures for Undergraduate Students)	Aslinda Aslinda and Sonezza Ladyanna	Learning Methods and Assessment	<b>20</b>
12.	Effect of Project Based Learning Model on Student's Performance at Accounting Information System Course	Asniati Bahari, Winda Azmi and Alya Ledias Anshar	Learning Methods and Assessment	<b>21</b>



**Room 2**

Time : 13.00 – 15.30 WIB

Moderator : Hendriati

Host : Hari

No	Title	Authors	Article tract	Paper ID
13.	Implementation of Case Based Method (CBM) and Outcome Based Assesment (OBA) Learning Methods in Political Sociology Courses	Dewi Anggraini and Mhd Fajri	Learning Methods and Assessment	22
14.	Tips on Improving Students' Understanding in the Keitairon Course with Problem-Based Learning Method in Japanese Literature	Adrianis Adrianis and Rahtu Nila Sepni Rahtu	Learning Methods and Assessment	23
15.	Case Study Application Methode in Pre-Profession Pregnancy Courses	Laila Rahmi and Lusiana El Sinta Bustami	Learning Methods and Assessment	24
16.	Sampling And Botanical Identification of Forages for Gaot as Project-Based Learning Model in The Feed Quality Control Subject	Khalil Khalil	Learning Methods and Assessment	26
17.	Horticulture Course based on Project Based Learning in Faculty of Agriculture, Andalas University	Nilla Kristina, Warnita Warnita and Elara Resigia	Learning Methods and Assessment	27
18.	Project Based Learning: An Integrated Approach to Enhance Student's	Rayna Kartika and Annisaa Rahman	Learning Methods and Assessment	28
19.	Video Case-Based Learning and Motivation among Third Year Midwifery Students	Ulfa Farrah Lisa and Feri Anita Wijayanti	Learning Methods and Assessment	30
20.	Project Based Learning (Pjbl) Learning Method: Improving Critical Thinking and Problem Solving Skills for Nursing Students	Yulastri Arif and Zifriyanthi Minanda Putri	Learning Methods and Assessment	31
21.	Application of Case Based Method in Pre-Professional Courses Family Plan to Improve Critical Thinking Students of Midwife Study Program Andalas University	Uliy Iffah and Hindun Mila Hudzaifah	Learning Methods and Assessment	33
22.	Project Based Learning on Introduction to Accounting 1 Subject	Rita Rahayu	Learning Methods and Assessment	34
23.	Case-Based Method Implementation in Taxation: Acceptance, Satisfaction, and Its Impact on Learning Outcome	Fauzan Misra and Dian Yuni Anggraeni	Learning Methods and Assessment	35
24.	The Implementation of Case-Based Method and Simulation In The Computer's Organization and Architecure II Class at Universitas Andalas	Rian Ferdian and Tati Erlina	Learning Methods and Assessment	36

**Room 3**

Time : 13.00 – 15.30 WIB

Moderator : Ike Revita

Host : Purnawan

No	Title	Authors	Article tract	Paper ID
25	Case Based Method in Sharia Accounting: The Effect on Students' Understanding of Sharia Financial Accounting Standard	Dian Yuni Anggraeni and Vima Tista Putriana	Learning Methods and Assessment	37
26	The Use of Rubrics for Peer-Assessment with the PBL Method in Folklore Courses	Rima Devi and Rachmidian Rahayu	Learning Methods and Assessment	38
27	Implementation of Case Base Method (CBM) and Outcome Based Assessment (Oba) in Development Communications Course	Sri Wahyuni and Yenni Oktavia	Learning Methods and Assessment	39
28	Development of Cost Accounting Learning with Case-Based Method (CBM)	Susiana Susiana and Yindrizar Yindrizar	Learning Methods and Assessment	41
29.	Problem Identification and Solution Design: Project Based Learning Approach in Improving Student Active Participation and Confidence in English Class	Putiviola Elian Nasir and Rifki Dermawan	Learning Methods and Assessment	42
30.	Implementation of Project Based Learning on the Sanitation of Public Places Subject	Trisfa Augia and Azyyati Alfian	Learning Methods and Assessment	45
31	Improving the Quality of Student Learning Through Learning Methods Project Based Learning (PjBL) in Communication Sociology Course	Sarmiati Mia and Elva Ronaning Roem	Learning Methods and Assessment	47
32	Implementation of Project-Based Learning Using Online Lab Media in Interface and Peripheral Course	Ratna Aisuwarya	Learning Methods and Assessment	48
33	Project Based Learning Method to Achieve Learning Outcomes in The Entrepreneurship Subject	Rahmi Eka Putri	Learning Methods and Assessment	49
34	Project-Based Learning Application Methods (PBL) to Improve Learning Achievement and Business Activities in Creative Public Relations (PR) and Publication Course	Revi Marta and Ilham Havifi	Learning Methods and Assessment	50
35	Implementation of Project Based Learning (PjBL) Method for Business Simulation Courses in Master of Management Study Program Faculty of Economics Universitas Andalas	Hendra Lukito	Learning Methods and Assessment	51
36	Overview of Students' Perspectives on the Project Based Learning Method on Bridge Design Course	Masrilayanti Masrilayanti and Ridho Aidil Fitrah	Learning Methods and Assessment	52



**Room 4**

Time : 13.00 – 15.30 WIB

Moderator : Dedison Gasni

Host : Hasnam

No	Title	Authors	Article tract	Paper ID
37	Case Based Method in Practical of Computer Accounting: The Effect on Students' Capability in Preparing Financial Statements	Sylvi Astari, Dian Yuni Anggraeni and Rayna Kartika	Learning Methods and Assessment	53
38	Case based Learning Method in Intelligent System Course	Nefy Puteri Novani and Desta Yolanda	Learning Methods and Assessment	54
39	Enhance Accounting Student's Academic Skill by Implementing Project Based Learning on Information Technology and Computer Programming Subject	Verni Juita	Learning Methods and Assessment	55
40.	Cased Based Method and Improvement Student's Performance on Life Cycle Nutrition Course Among Nutrition Science Students	Azrimaidaliza Azrimaidaliza, Deni Elnovriza and Syahrial Syahrial	Learning Methods and Assessment	56
41	Development and Implementation of Case Based Methods in Block 3A. Midwife Care on Pregnancy at the S1 Midwife Program Faculty Of Medicine Andalas University in 2021	Miranie Safaringga and Fitrayeni Fitrayeni	Learning Methods and Assessment	57
42	Case Base Method: A Collaborative Learning to Improve Student's Soft Skills in Business Analytics	Ares Albirru Amsal and Rayna Kartika	Learning Methods and Assessment	59
43	The Effectiveness of Case-Based Methods Increasing Knowledge of Nursing Students in Community Courses	Rika Sabri, Mohd. Jamil and Siti Yuliharni	Learning Methods and Assessment	60
44	Portfolios as an outcome assessment in community health nursing project based learning	Mahathir Mahathir, Rika Sabri, Agus Sri Banowo and Mohd Jamil	Learning Methods and Assessment	62
45	The Implementation of Creative Problem Solving (CPS) in Mobile Ad Hoc Network Course: Simulation and Case Study	Budi Rahmadya, Rifki Suwandi and Tri Kurniawati	Learning Methods and Assessment	64
46	Implementation of Problem-Based Learning in Video And Image-Based Tutorial Discussion with Increasing Student Learning Outcomes for Block 1.A Courses (Introduction to Midwifery Education)	Aldina Ayunda Insani and Feni Andriani	Learning Methods and Assessment	67
47	Implementation of Project Based Learning (PjBL) Method to Improve Higher Order Ability Thinking Skills (HOTs)	Hafizah Hanim and Ricky Akbar	Learning Methods and Assessment	68
48	Improving Student Learning Using Case Based Method in Hybrid Learning of	Purnawan Pontana Putra, Friardi Ismed	Learning Methods and Assessment	69

Basic Pharmaceutical Chemistry Practicum	and Regina Andayani		
--	---------------------	--	--

## Day 2: Wednesday, November 10<sup>th</sup>, 2021

### Room 1

Time : 13.00 – 15.30 WIB

Moderator : Rudy Fernandez

Host : Hasfy

No	Title	Authors	Article tract	Paper ID
49.	The Implementation of Case Based Method in Advanced Financial Accounting I Subject	Indah Permata Suryani, Husna Roza and Jonhar Rusli	Learning Methods and Assessment	70
50	Project-Based Learning to Understand Students about the Application of Code 1726:2019 in Earthquake Engineering Courses	Jati Sunaryati, Masrilayanti Masrilayanti and Ruddy Kurniawan	Learning Methods and Assessment	71
51	Project-Based Learning Models in the Development of International Cooperation Framework Course	Anita Afriani Sinulingga and Haiyyu Darman Moenir	Learning Methods and Assessment	72
52	The Effectiveness of Implementation Case-Based Method: Students' perspective	Valeny Suryaningsih and Alfitman	Learning Methods and Assessment	74
53	Implementation of Project Based Learning (PjBL) Learning Model to Improve Student's Soft skill	Verinita Verinita and Yanti Yanti	Learning Methods and Assessment	80
54	Improving Learning Achievements Through Case-Based Method	Mery Ramadani and Hamidatul Yuni	Learning Methods and Assessment	81
55	Reproductive Health Psychology Course Action Research: Increased Student Engagement through the Application of Case Based Method (CBM) and Outcome Based Assessment (OBA)	Yessy Markolinda and Suci Maisyarah Nasution	Learning Methods and Assessment	82
56	Implementation of Storytelling Podcast in Case-Based Method	Berri Brilliant Albar and Indah Maya Sari	Learning Methods and Assessment	83
57.	Implementation of the Case based Learning Method in Introduction to Circuit Analysis Course	Desta Yolanda and Rifki Suwandi	Learning Methods and Assessment	84
58.	The Effectivity and Efficiency of Project Based Learning in Achieving Student's Expected Learning Outcome (A Case Study of Vocational School Students)	Rayna Kartika, Annisaa Rahman and Iswardi Iswardi	Learning Methods and Assessment	85
59	Improving Student Learning Activities in Islamic Macroeconomics Courses through a Project-Based Learning (PjBL)	Neng Kamarni	Learning Methods and Assessment	88
60	The Implementation of Case-Based Method on Cost Accounting Course	Riwayadi Riwayadi and Ika Sari Wahyuni Td	Learning Methods and Assessment	44



**Room 2**

Time : 13.00 – 15.30 WIB

Moderator : Nur Afrainin Syah

Host : Hari

No	Title	Authors	Article tract	Paper ID
61	Case-Based Method (CBM) as the way to motivate the students in Learning English Pragmatics	Ike Revita, RovikaTriociarise, and Farah Anindya Zalfikhe	Learning Methods and Assessment	94
62	Implementation Of Project Based Learning For Improving A Student's Ability In Analysis, Critical Thinking And Systematic In Calculus	Riri Lestari and Des Welyyanti	Learning Methods and Assessment	89
63	Case-Based Method (CBM) implementation in financial management 1 to reach the outcome learning	Silvy Astari	Learning Methods and Assessment	90
64	The Role of Using Problem-Based Learning in Engineering Economics Course	Yervi Hesna and Benny Hidayat	Learning Methods and Assessment	91
65	The Implementation of a Case-based Learning Method on Physical Pharmacy Course	Henny Lucida	Learning Methods and Assessment	92
66	Project-Based Learning in an Element Machine II Course : A Review	Gasni Dedison, Chandra Devi and Dedison Gasni	Learning Methods and Assessment	32
67	Application of Case Based Method in Praprofesi Courses to Improve Student Learning Outcomes	Erda Mutiara Halida and Rafika Oktova	Learning Methods and Assessment	93
68	Effectiveness of Distance Learning Entrepreneurship Course with Credit Earning system at Andalas University	Danny Hidayat and Donard Games	Blended and Distance Learning	17
69	Development of Student-Centered Learning with Problem-Based Learning Through Blended Learning in 3B Block (Normal Delivery Care)	Yulizawati Yulizawati and Henni Fitria	Blended and Distance Learning	29
70	Emphasizing Student Engagement in Blended Learning: The case of students in Business Digital Course	Valeny Suryaningsih and Alfitman	Blended and Distance Learning	40
71	Analysis of Students' Perception Toward Distance Learning with Project-based Learning Model	Asniati Bahari, Fauzan Misra and Alya Lediya Anshar	Blended and Distance Learning	43
72	Development and Implementation of Blended Learning in The Practical of Bank Financial Statement Analysis Course	Dian Yuni Anggraeni and Sanda Patrisia Komalasari	Blended and Distance Learning	46



**Room 3**

Time : 13.00 – 15.30 WIB

Moderator : Edria Sandika

Host : Purnawan

No	Title	Authors	Article tract	Paper ID
73	The Implementation of Blended Learning in Intermediate Accounting	Silvy Astari and Rayna Kartika	Blended and Distance Learning	58
74	Trengthening the Teaching and Learning Process Through Blended Learning in Sociology Study Program	Maihasni Maihasni, Indraddin Indraddin and Wahyu Pramono	Blended and Distance Learning	61
75	Development and Implementation of Distance Education (PJJ) With Credit Earning System At the Andalas University Agribusiness Study Program	Zednita Azriani, Rika Hariance, Rini Hakimi and Nuraini Budi Astuti	Blended and Distance Learning	79
76	Correlation Learning Outcome of Special Sensory Disorder Block with Physiology System Block of Undergraduates Medical Students of Universitas Andalas	Hendriati, Dian Pertiwi, Zurayya Fadila and Aisyah Elliyanti	Curriculum design of higher education	86
77	The Impact of Field Research on Student's Learning in a Prose Class at English Department, Faculty of Humanities, Andalas University Padang	Ferdinal Ferdinal, Seswita Seswita and Isramirawati	Curriculum design of higher education	87
78	Problems in Online Education Administration in Improving the Quality of Education in Higher Education	Rizky Amelya, Sukmawati Noni and Ladyanna Sonezza	Quality assurance for higher education	19
79	Higher Education Employee Engagement Index: Case Study of Strategic Quality Objective Measurement for Education Personnel	I Nyoman Sutapa, Isanti Anna Ismu Edi and Soeharijadi	Quality assurance for higher education	1
80	The Effectiveness of E-Learning by Using Online Media During the Covid-19 in English for Engineering Class	Ahmad Nusi, Sammy Saptanno, Stevanus J Gomie and Rina Latuconsina	Information and Communication Technology in Learning	4
81	The Effectiveness of Online Teaching Method Between Video Demonstration and Written Module Material to Enhance Clinical Skills of Refractive Error Management Among Medical Students	Muhammad Syauqie and Hendriati Hendriati	Information and Communication Technology in Learning	15
82.	Effectiveness of Online Learning During the Covid-19 Period in the Agribusiness Study Program in Andalas University	Devi Analia and Rika Hariance	Information and Communication Technology in Learning	18

**Room 4**

Time : 13.00 – 15.30 WIB

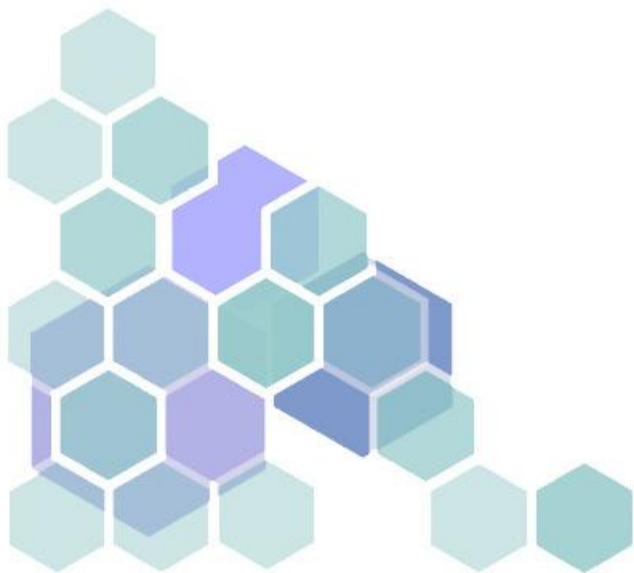
Moderator : Lusi Susanti

Host : Hasnam

No	Title	Authors	Article tract	Paper ID
83	Application of Online-Based Mind Mapping Model as a Development Economy Learning Media for Economics Students Campus Payakumbuh	Nur Ari Sufiawan, Bintang Rizky Abdullah Majo Saibah and Weri Antoni	Information and Communication Technology in Learning	25
84	Evaluation of online learning of logistics distribution practicum courses based on future orientation and study cases	Ares Albirru Amsal and Laela Surdiani	Information and Communication Technology in Learning	65
85.	Design and Implementation of Autonomous Fish Behaviour in Virtual Interactive Aquarium Application	Allin Junikhah	Information and Communication Technology in Learning	73
86	Employee Engagement Index: A Case Study of Academic Support Employee of Higher Education	Nyoman Sutapa, Isanti Anna Ismu Edi and Soeharijadi	Other Related Topics	9
87	Why 6 Cs ? The Urgency of Learning at Elementary School	Poppy Anggraeni, Dadang Sunendar, Bunyamin Maftuh, Wahyu Sopandi and Ryan Dwi Puspita	Other Related Topics	63
88	Effectiveness of Entrepreneur Education for Entrepreneurial Intention through Creativity and Entrepreneurial Self Efficacy	Tri Rahayuningsih	Other Related Topics	66
89	Education Development in Utilizing Indonesian Demographic Dividend to Become a Developed Country	Taofik Andi Rachman, Euis Latipah, Supiana Supiana and Qiqi Yuliati Zaqiah	Other Related Topics	75
90	Evaluation of Learning Process in the Agricultural Extension Study Program Andalas University During the Covid 19 Pandemic	Nuraini Budi Astuti, Sri Wahyuni and Yenny Oktavia	Other Related Topics	76
91	Development of Student Satisfaction Questionnaire for Midwifery Professional Education Study Program in the Learning Process	Ulfa Farrah Lisa, Laila Rahmi and Hindun Mila Hudzaifah	Other Related Topics	77
92	Agricultural Economics Student Perceptions About Online Lectures During the Covid-19 Pandemic	Dian Hafizah, Rusda Khairati and Widya Fitriana	Other Related Topics	78
93	Application of Project-Based Learning Method for Acquisition of Student Expertise in Solving the Industrial World Problems	Susila Bahri and Radhiatul Husna	Project-based Learning	95



## LIST OF ABSTRACT



ID 01

# Higher Education Employee Engagement Index: Case Study of Strategic Quality Objective Measurement for Education Personnel

I Nyoman Sutapa<sup>1\*</sup>, Isanti Anna Ismu Edi<sup>1</sup>, Soeharijadi<sup>1</sup>

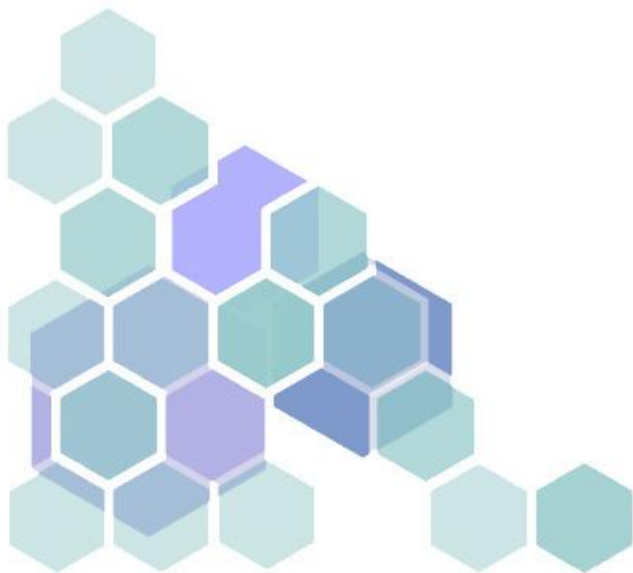
<sup>1</sup>Petra Christian University, Indonesia

\*Corresponding author. Email: mantapa@petra.ac.id

## ABSTRACT

The article discusses the development of a model of the employee engagement index, a performance measurement for education personnel in higher education. Measurement of Employee Engagement uses the Maslach scale with the dimensions of Vigor, Dedication, and Absorption. The model validation uses a sample of 168 education staff from a private university in Surabaya who have been certified to the ISO 9001:2015 Quality Management System. The resulting model can be used as a strategic reference for quality objectives to improve higher education performance.

**Keywords:** quality objective, employee engagement index, education personnel, higher education



ICED <sup>20</sup>/<sub>21</sub>  
-QAIV

ID 04

# The Effectiveness of E-Learning by Using online Media During The Covid-19 in English for Engineering Class

Ahmad Nusi<sup>1\*</sup>, Sammy Saptanno<sup>1</sup>, Stevanus J Gomies<sup>1</sup>, Rina Latuconsina<sup>1</sup>

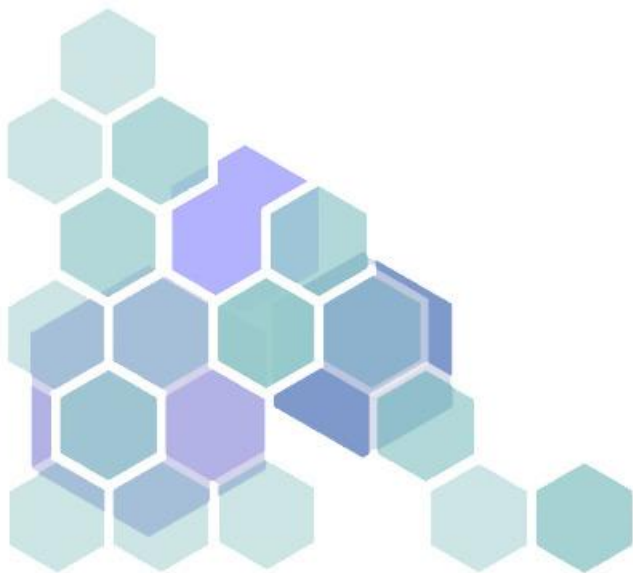
<sup>1</sup>Politeknik Negeri Ambon, Indonesia

\*Corresponding author. Email: ahmad11minang@gmail.com

## ABSTRACT

In this study, the researchers obviously intend to describe the effectiveness of learning by using online media during the Covid-19 in English for Engineering class. This study was descriptive quantitative on evaluation the learning process during the Covid-19 Pandemic. Students in English for Engineering Subject in Ambon State Polytechnic was the population with 30 students randomly selected with homogeneity consideration. The data was collected by questionnaires and observation. The result showed that there were 20.3% of students thought that learning English for Engineering with online learning was very effective. 52.7% of students agreed that was effective. Furthermore, 15.8% of them stated it was adequate and there was only 10.2% of students assumed it was ineffective and there was only 1% considered that online learning was very ineffective. Finally, it was found from the observation and students' recommendations in questionnaires, they were; First, the lecturers should share the material a day before the zoom meeting. Second, zoom meeting can be done for the explanation only and continued it in Google Classroom for questions and discussion. Third, it is suggested that lecturers reduced the task. Fourth, Task should be designed variation to avoid plagiarism. Last, the lecturer should give feedback related to the task and send it back regularly to the students.

**Keywords:** *the effectiveness of learning, online media, covid 19*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

**ID 05**

# **The Effect of Case Based Method, Project Based Learning and Experiential Method on Student Analysis Ability in Global Marketing Management Course**

Winy Alna Marlina<sup>1\*</sup>, Susiana Susiana<sup>1</sup>

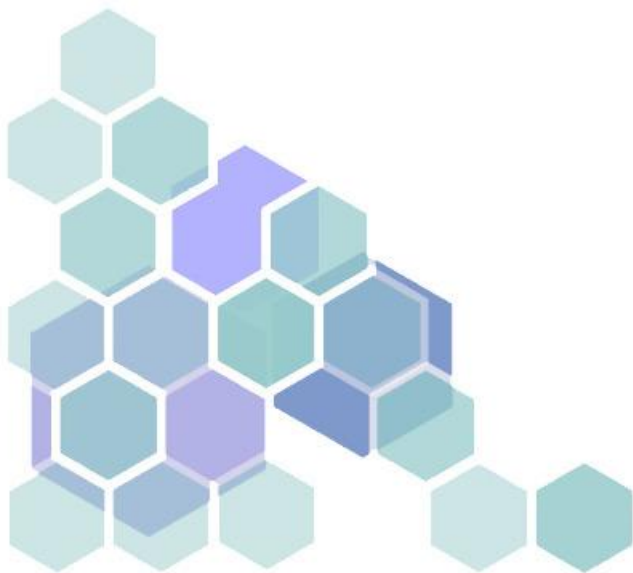
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: winnyalnamarlina@eb.unand.ac.id

## **ABSTRACT**

This research was conducted on students who took the Global Marketing Management Course. The contribution after taking the Global Marketing Management course is that students are expected to know about export and import procedures. The purpose of the study was to determine whether case based method, project based learning and experiential method could improve student analysis. The learning method applied is Student Center Learning (SCL) by using Small Group Discussion. By using old method, the students grade was lower standard grade. The sample of research was 37 students. In this study, the data collection technique used a questionnaire. The overall test results of the measurement instruments used in this study can generally be declared reliable and valid. There were four hypotheses tested in the study and the method used was regression. The results showed that the learning method with Case Based Method, Project Based Learning and Experiential Method improved student analysis in the Global Marketing Management course.

**Keywords:** *learning, experiential, scl*



**ICED** 2021  
**-QAIV**

ID 06

# The Modified Case Based Methods in Combination With Team-Based Approach for Teaching General Microbiology at Agricultural Product Technology Department of Andalas University

Purnama Dini Hari<sup>1\*</sup>, Hasbullah Hasbullah<sup>1</sup>

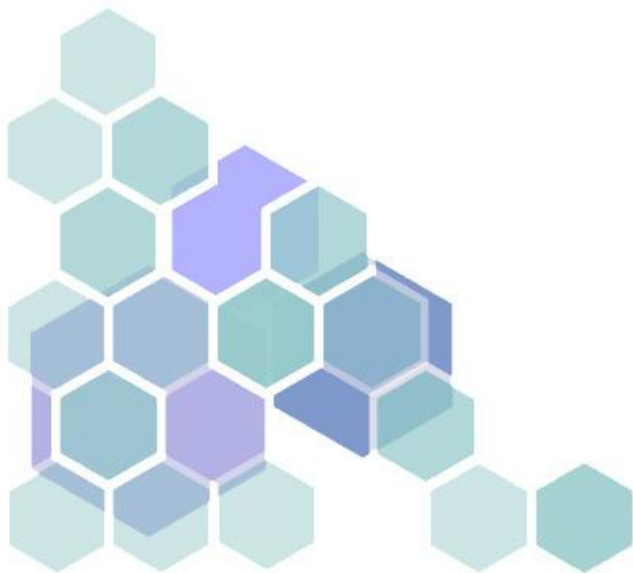
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: purnamadini@gmail.com

## ABSTRACT

The objective of this paper is to investigate the effect of modified case based method in combination with team based approach in accomplishing subject learning objectives, student perceptive of cognitive learning objective and increasing student group participation. The Teaching was held online by using “Ilearn”, a Moodle platform. Students were given reading materials that they had to study prior pre-test, and had to solve cases. The observation showed an insignificant effect to student test score, but had an increase in student perceptive of cognitive learning objective and student participation in group work.

**Keywords:** case based method, team based approach, active learning, online lecture



ICED <sup>20</sup>/<sub>21</sub>  
-QA IV



**ID 07**

# **Implementation of Case Based Method (CBM) Learning on Students in Improving Problem Analysis Ability and Problem Solving**

Desna Aromatica<sup>1\*</sup>, Hendri Koeswara<sup>1</sup>, Muhammad Kabullah<sup>1</sup>

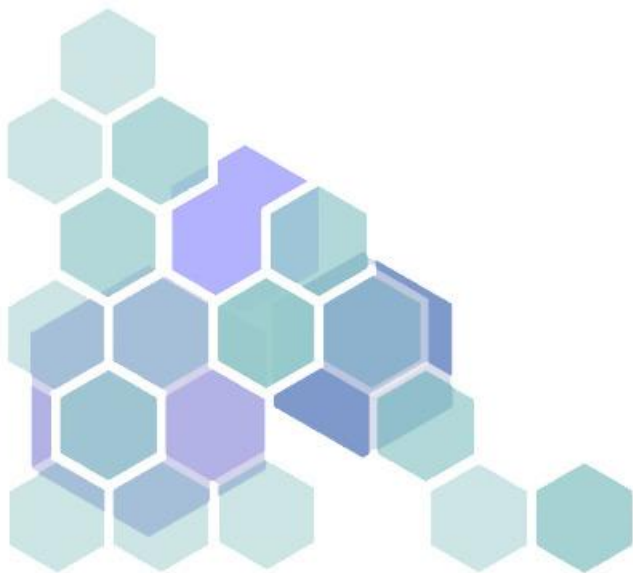
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: [desnaaromatica@gmail.com](mailto:desnaaromatica@gmail.com)

## **ABSTRACT**

Problem analysis and problem solving are two important things in learning public organizations, especially public organization theory courses. Students who take this course are forged to be able to master theory as well as be able to analyze problems in public organizations and solve them. The use of appropriate learning methods that are effective and dynamic involving students is very important to note. For this reason, the teacher center learning method is no longer an effective and dynamic method because it is unable to touch aspects of students' analytical and problem solving abilities. Application of method Case based method (CBM) is a solution that can be applied. Through this learning method, students are honed with various public organizational problems and are required to be able to find solutions. Through the classroom action research method, the implementation of research on the implementation of the CBM learning method on students in improving analytical and problem solving skills will be a test tool that the variation of student-based learning models is the right choice.

**Keywords:** *case based method, problem analysis, problem solving*



**ICED** 2021  
**-QAIV**

ID 08

# Project Based Learning: Enriching Students' 21st Century Skills

Inda Mustika Permata<sup>1\*</sup>, Bima Jon Nanda<sup>1</sup>, Silvi Cory<sup>1</sup>

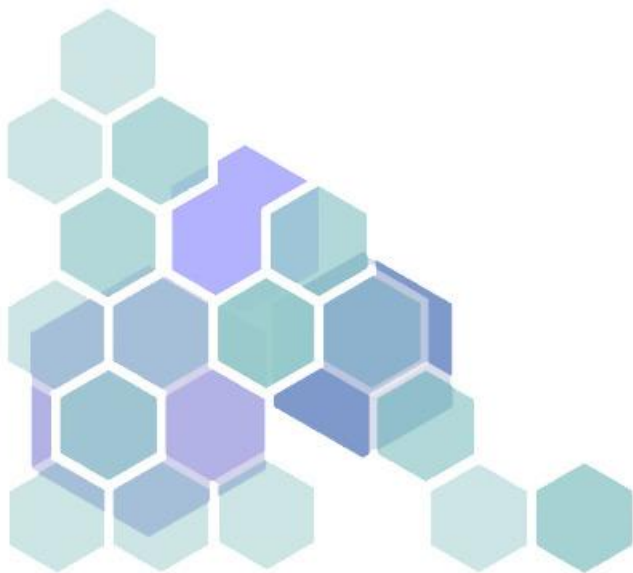
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: indamustikapermata@soc.unand.ac.id

## ABSTRACT

With the advancement of technology, today's industry seeks to maximize its efficiency and effectiveness. Meanwhile, in education, technological advances make it easier for students to get more comprehensive knowledge information. However, technological sophistication also poses challenges for the future of students. If students do not develop their skills, students can be left behind because of technological advances. Therefore, this paper attempts to describe the implementation of project-based learning in enriching the students' 21st Century skills. This paper uses primary data to see student learning experiences after carrying out class projects. The populations in this paper are all students taking part in the Human Rights and Global Justice class, Department of International Relations, Universitas Andalas. This paper shows that, in practice, this method does not eliminate the role of lecturers in learning. In addition, project-based learning can maximize student learning experiences. Class projects provide opportunities for students to enrich their non-technical skills, such as flexibility, media literacy, leadership, and collaboration. The student can hone their skills if they can experience firsthand the dynamics outside the classroom. This method is effective because students can apply the knowledge learned in finding solutions to the problems found. Students also have the freedom to think creatively in producing outcomes from class projects that have been practiced.

**Keywords:** *project, skills, students, method*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 09

# Employee Engagement Index: A Case Study of Academic Support Employee of Higher Education

I Nyoman Sutapa<sup>1\*</sup>, Isanti Anna Ismu Edi<sup>1</sup>, Soeharijadi<sup>1</sup>

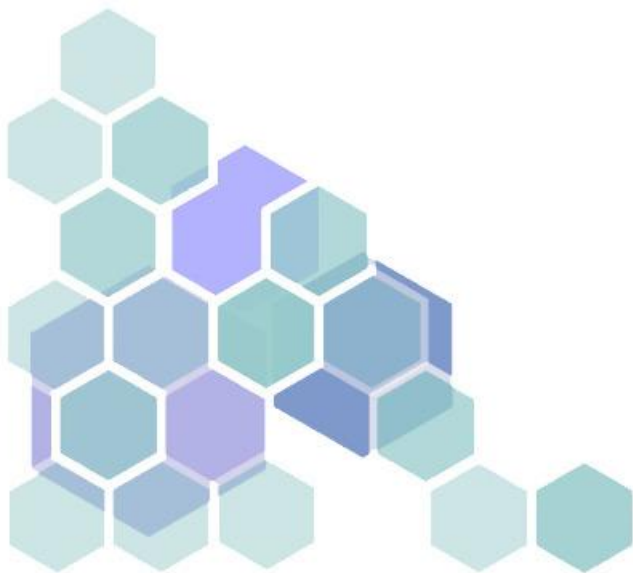
<sup>1</sup>Petra Christian University, Indonesia

\*Corresponding author. Email: mantapa@petra.ac.id

## ABSTRACT

The article discusses the development of an employee engagement index for academic support employees. Employee engagement index is a strategic driver to improve the performance of a higher education. The measurement of the Employee Engagement index uses 31 indicators developed from three dimensions of engagement, namely vigour, dedication, and absorption. The employee engagement index was tested and applied to education support employees at a higher education institution in Surabaya who have been certified to the Quality Management System ISO 9001:2015. The resulting measurement index can be used as a monitoring and evaluation tool for higher education to maintain and develop the competitiveness of institutions.

**Keywords:** *employee engagement index, academic support employee, higher education*



ICED <sup>20</sup>/<sub>21</sub>  
-QA IV

ID 10

# Case Based Method in Pathophysiology of Non-Communicable Diseases topic Improves Student Performance of Undergraduate Nutrition Students at Public Health Faculty, Andalas University

Putri Aulia Arza<sup>1\*</sup>, Azrimaidaliza<sup>1</sup>

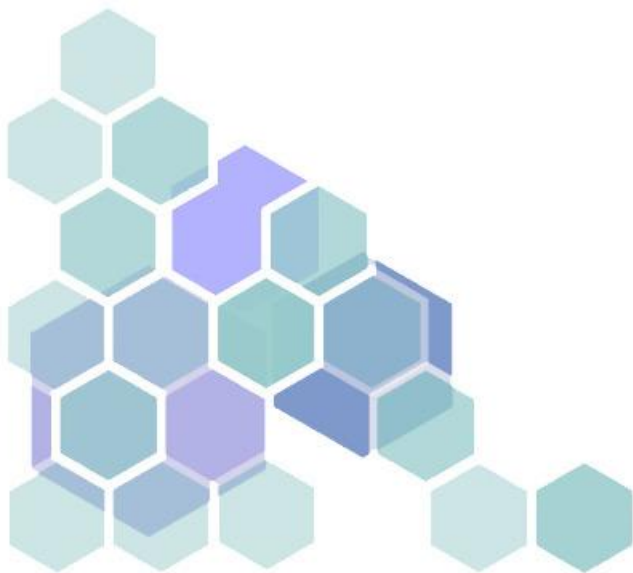
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: [tilla.arza@gmail.com](mailto:tilla.arza@gmail.com)

## ABSTRACT

Pathophysiology of non-communicable diseases is one of topic in the third semester undergraduate nutrition students at Faculty of Public Health University of Andalas. The case based method is becoming an increasingly common teaching strategy in science education especially in medical education. This study aim to analyze knowledge and behaviour of student after using case based method. The assessment of student performance carried out in this case based method includes behaviour score is seen from the assessment rubric which includes communication skills, material understanding, accuracy of case analysis, and ability to answer questions. While, knowledge seen from the quiz scores between before and after (pretest and posttest). Sample selected using the total sampling method with inclusion The criteria for taking the pathophysiology course of non-communicable diseases and informed consent with total sample 50 people. The result of the study shows The average value of the Ability to answer questions still in average category. In other hands, the indicator of communication skill, material understanding, and accuracy of case analysis have a close value with a small difference but still in the same category (Good). the pretest and posttest of student knowledge scores showed significant differences in the all of the case.

**Keywords:** case based method, knowledge, behaviour



ICED <sup>20</sup><sub>21</sub>  
-QAIV

## Application of Project-Based Learning Methods in Land and Water Resource Management Courses

Delvi Yanti<sup>1\*</sup>, Nika Rahma Yanti<sup>1</sup>

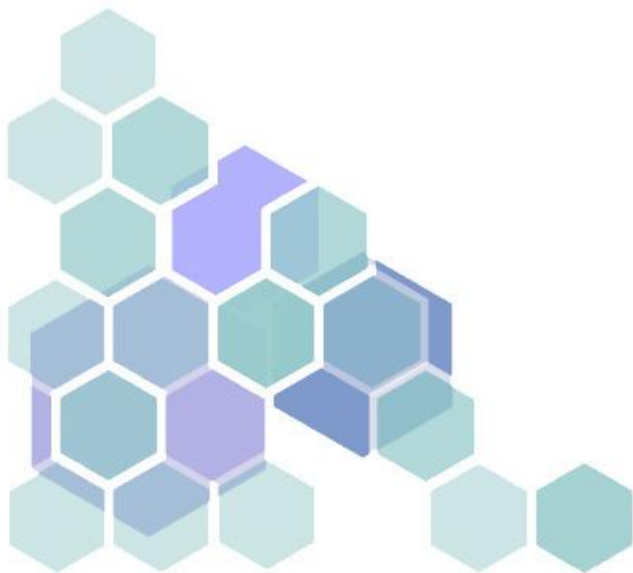
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: delviyanti23@gmail.com

### ABSTRACT

Project-Based Learning Method is a real/complex world problem raised into a learning scenario (students can find their own or projects from industry), student-centered, solved by students in groups. The material studied in the Land and Water Resources Management course is a real-world problem, so the Project-Based Learning method is suitable to apply to this course. This study aims to analyze the material understanding and thinking skills of students using project-based learning methods in the Land and Water Resources Management Course. This type of research is an experiment with a posttest only control group design. The type of data collected is quantitative, namely an assessment of student work. The research was conducted on fifth semester students at the Department of Agricultural and Biosystems Engineering, Faculty of Agricultural Technology, Andalas University. The results of the learning outcomes of lecture participants with the TCL and PBL methods there are differences in several parameters that are assessed. The difference occurs in the aspects of planning (problem formulation), implementation (data completeness), implementation (data processing and analysis), and reporting of results (conclusions), with A symp value. Sig (2-tailed) <0.05. The Project-Based Learning (PBL) method can improve students' understanding of material and thinking skills, this can be seen from the aspects in formulating problems and drawing conclusions, in PBL the final achievement is more accurate while TCL is still in the less precise category.

**Keywords:** learning method, project-based learning, 21st century skills, learning achievement



# Development of Case Based Methods in Learning Courses in Health Ethics and Law in The Era of The Industrial Revolution 4.0

Sri Siswati<sup>1\*</sup>, Adila Kasni Astiena<sup>1</sup>, Ikhsan Yusda Prima Putra<sup>2</sup>

<sup>1</sup>Universitas Andalas, Indonesia

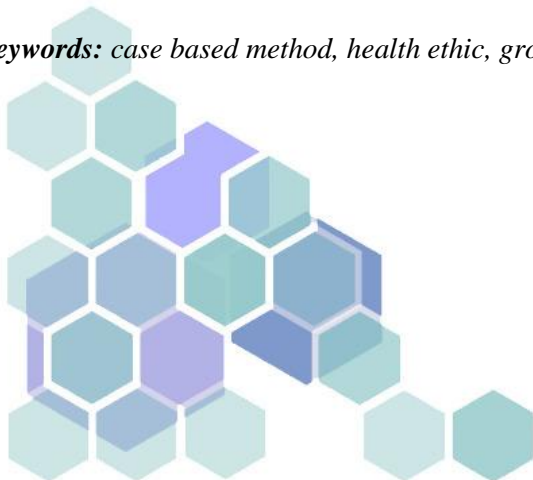
<sup>2</sup>Politeknik Negeri Padang, Indonesia

\*Corresponding author. Email: srisiswati@yahoo.co.id

## ABSTRACT

The Health Ethics and Law course is a mandatory public course for FKM Unand students following the curriculum standards of the Public Health Undergraduate Study Program throughout Indonesia which has been agreed by the Association of Indonesian Public Health Higher Education Institutions. So far the common learning method carried out by lecturers is Lecture Center Learning where lecturers who provide learning materials while students only listen. The formulation of the problem of this research is how the development of Case-Based Methode in the course of Ethics and Health Law. The purpose of this study is to find out the extent of the effectiveness of the application of Cased Based Methode which has been developed in the courses of Ethics and Health Law based on the mindset of students. The method used in the development of this learning model is the ADDIE Research and Development Model (Analysis, Design, Development and Evaluation). The subject of this learning model is students who take courses in Health Ethics and Law. Identification data collection techniques using brain domination and pre-test and postest mindsets of students . From 7 meetings, at the first meeting students were directed to the discussion of cases from the topics listed in the Semester Learning Plan with several supportive theories such as brain domain and mind set. Furthermore, students learn independently, in groups, communicate and collaborate. Lecturers concurrently become tutors in guiding students to develop. The position as a lecturer will be reactive in a problem discussed. The case-based method is very useful in learning so that students can think openly and critically so they can make the students with a growth mindset, not a fixed mindset

**Keywords:** case based method, health ethic, growth mindset, fix mindset, brain



ID 13

# Case-Based Learning in Financial Management

## Subject: Is It Effective and Relevant?

Fajri Adrianto<sup>1\*</sup>, Masyhuri Hamidi<sup>1</sup>

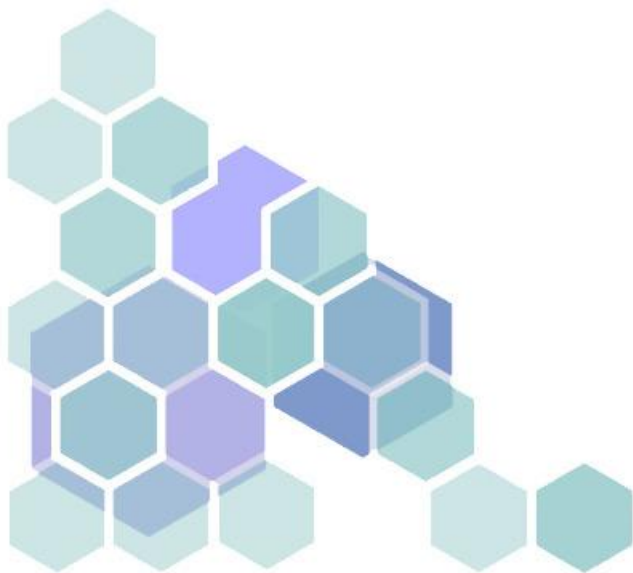
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: fajriadrianto@eb.unand.ac.id

### ABSTRACT

We implement the case-based learning (CBL) method in our subject for achieving our learning objectives. We use real financial cases for Financial Management I subject, especially the cases in public companies. Students make solution simulations for each case. We give three main real financial cases where students should provide the solutions for those cases by using the theory delivered in class. We find that students easily understand the theory and are more enthusiastic and active in the class. They also find it easier to understand the lecture materials. Most students get very good and excellent results for all those case assignments.

**Keywords:** *cased-based learning, student interactive, outcome-based education, teaching method*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

# Implementation of The Case-Based Learning Model Through online Flipped Classroom Learning Approach in Computer and Society Course

Afriyanti Dwi Kartika<sup>1\*</sup>, Jefril Rahmadoni<sup>1</sup>

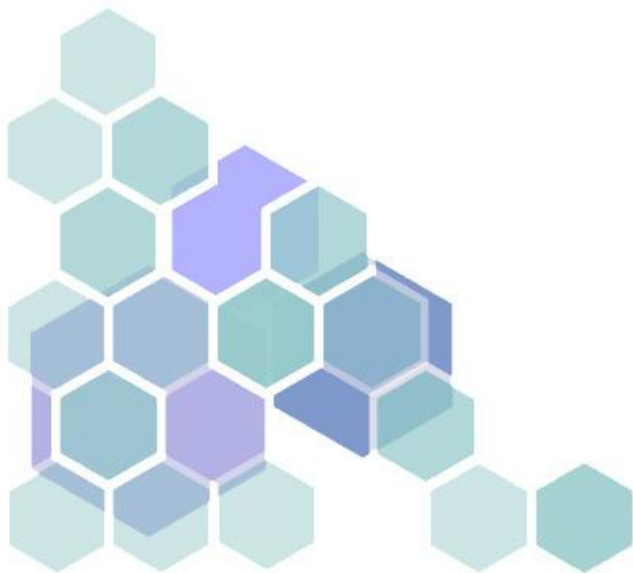
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: afriyantidwikartika@gmail.com

## ABSTRACT

The Computer and Society course at the Information Systems Department, Universitas Andalas, studies ethical, legal, and policy issues faced by society caused by technological developments. Learning activities for this course are usually carried out using the traditional lecture method, which is then followed by a question and answer session with students. Another method used is where students will be formed into several groups, which will then be given topic material to be discussed and presented in turn. The two methods above are also used when the lecture process must be carried out online during the Covid-19 pandemic in Indonesia. This learning method focuses on explaining the syllabus and concepts, where the lecturer explains the theory while the students passively listen and write. This makes students lose motivation and cannot learn independently. Application of Case-Based Learning Model through Flipped Classroom Online Learning Approach in Computer and Community Courses gives results where students have achieved the desired target of learning activities. This target can be seen from how students are present on time to carry out group discussion activities, explain the material, listen to group members' explanations, participate in discussions, are critical, and are responsible for discussion activities. However, because this activity is carried out online, there are still various obstacles in the implementation process, such as internet network disturbances, internet data limitations, and device specifications that do not support learning activities.

**Keywords:** case-based learning, flipped classroom, online learning





# The Effectiveness of online Teaching Method Between Video Demonstration and Written Module Material to Enhance Clinical Skills of Refractive Error Management Among Medical Students

Muhammad Syauqie<sup>1\*</sup>, Hendriati Hendriati<sup>1</sup>

<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: m.syauqie@med.unand.ac.id

## ABSTRACT

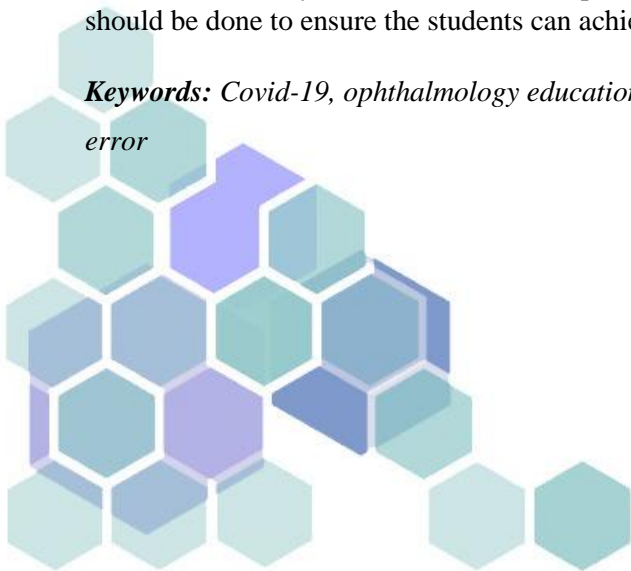
**Introduction:** The COVID-19 pandemic has forced many institutions to diminish face-to-face teaching classes. We conducted an online teaching method through an e-learning platform during the pandemic to ensure that the students attained the essential competencies. This study aimed to give an insight about the effectiveness of online learning between video demonstration and written module material among medical students.

**Methods:** This was an interventional study placed in a university teaching hospital, and 46 medical students participated. The students were divided into two groups, and each of the groups was instructed to watch the clinical skill video or read a written module material about refractive error management, respectively. The student's skills in refractive error management were assessed by an objective structured clinical examination (OSCE) test using simulated patients the following day.

**Results:** The mean score of the OSCE test between the video demonstration group and written module material was  $84.38 \pm 14.21$  and  $82.60 \pm 17.97$ , respectively ( $p=0.710$ ). In video group, students who are in initial clerkship rotation had higher score test ( $88.37 \pm 10.96$ ) than students in final rotation ( $76.91 \pm 17.22$ ,  $p=0.064$ ). While in the module group, both initial and final clerkship students had similar score tests ( $82.40 \pm 21.25$  and  $82.90 \pm 12.43$ , respectively,  $p=0.951$ ).

**Conclusions:** This study results emphasized that the online teaching method by video demonstration and written module material can be useful as an adjunct for improving basic ophthalmology skills of medical students when they enter clinical clerkship. Quality assurance of the video resource and module content should be done to ensure the students can achieve essential competencies in ophthalmology.

**Keywords:** Covid-19, ophthalmology education, online teaching method, online learning, refractive error



ID 16

# Application of Case Based Method in Improving Students' Critical Thinking Skills in Case Auditing Course for Accounting Department Students

Husna Roza<sup>1\*</sup>, Elvira Luthan<sup>1</sup>

<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: husnaroza64@gmail.com

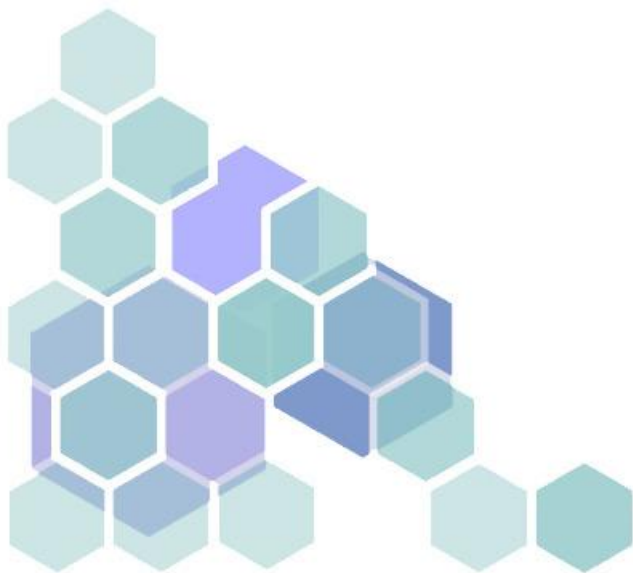
## ABSTRACT

**Background:** Conventional learning methods (Teacher Learning Center/TCL) are unable students to exercise analytical skills, to practice problems solving, and to evaluate problems, especially in Auditing courses which require high analysis and critical thinking. Due to the many shortcomings of the TCL the government recommends using the Student Center Learning (SCL) approach for the learning process in University. Finally, the Case Based Method (CBM), which is a SCL, is designed to increase students' critical thinking ability in solving a case. By using this method, students are expected to be able to exercise critical thinking to solve problems holistically in the Auditing course.

**Research Methods:** This study uses an action research approach for Classroom Action Research (CAR) in applying the Case Based Method in improving students' critical thinking skills. The data used are primary data obtained from observations in dept interviews and questionnaires, in order to explore all the facts in the field. Respondents in this study are fifth semester students majoring in accounting and two auditing lecturers. The analysis used is qualitative data analysis.

**Results:** The results of this CAR show that CBM can improve students' critical thinking ability. These results can be used as input for institutions in making academic policies. For lecturers, it can be a reference for improving the learning process in class and materials for making lesson plans. For students, it can increase the ability of analysis and critical thinking. It will help them to face situations and conditions after graduation.

**Keywords:** case based learning method, critical thinking, activeness.



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 17

# Effectiveness of Distance Learning Entrepreneurship Course With Credit Earning System at Andalas University

Danny Hidayat<sup>1\*</sup>, Donard Games<sup>1</sup>

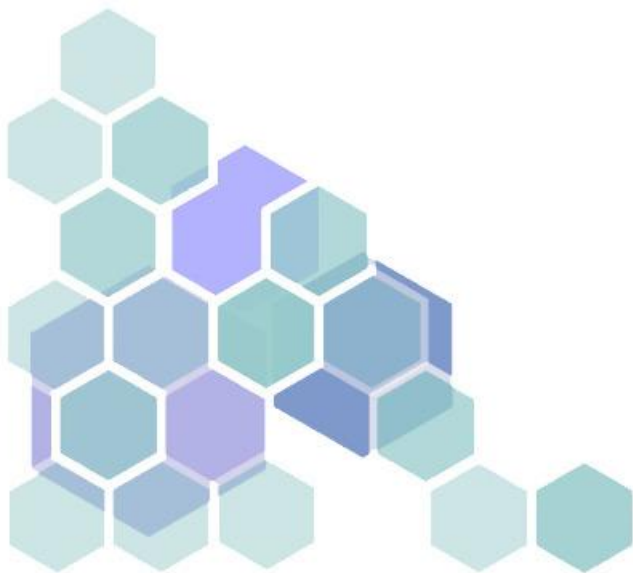
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: [dannyhidayat@eb.unand.ac.id](mailto:dannyhidayat@eb.unand.ac.id)

## ABSTRACT

Distance Learning is an educational system that has a broad reach that is not limited by space and time. At the beginning of 2020 or more precisely in March 2020 all education units in Indonesia implemented the Learning at Home program, or Distance Learning, more precisely since the Covid-19 Virus was declared to have entered Indonesia. At that time, the Chancellor of Andalas University issued a decision to conduct distance learning by utilizing Andalas University I-Learn as the main learning medium. The was implemented in order to prevent the spread of the Covid-19 virus so that it would not spread throughout the community in Unand and Padang City. The purpose of this study was to determine the effectiveness of Distance Learning Entrepreneurship Course with a Credit Earning system for students from partner campuses of Dharma Andalas University and Taman Siswa University at Andalas University. This research uses qualitative research with descriptive qualitative design (case study). Data collection techniques using online questionnaires via google form. The results of this study indicate that distance learning with several methods is quite effective to do, this can be seen from the results of the questionnaire distributed to 40 respondents from 5 questions asked, almost all of the respondents on average support and assess that distance learning is effective against student.

**Keywords:** *distance learning, student learning effectiveness, entrepreneurship course*



ICED <sup>20</sup>/<sub>21</sub>  
-QAIV

ID 18

# Effectiveness of online Learning During The Covid-19 Period in The Agribusiness Study Program in Andalas University

Devi Analia<sup>1\*</sup>, Rika Hariance<sup>1</sup>

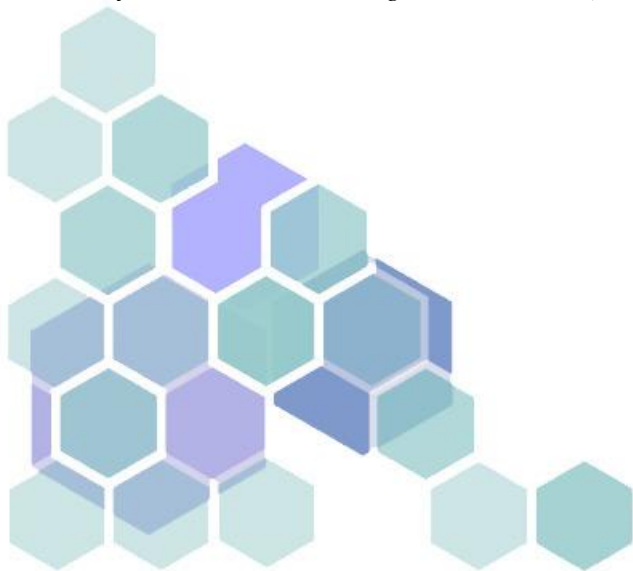
<sup>1</sup>*Agribusiness Study Program Universitas Andalas, Indonesia*

\**Corresponding author. Email: analiadevi150184@gmail.com*

## ABSTRACT

This study aims to describe students opinions about the effectiveness of the online learning process and what obstacles occur during lectures during the Covid-19 pandemic period. The online learning process in question is learning using I-learning in the form of an LMS (learning management system) provided by Andalas University. Using a quantitative descriptive method, this study took a sample of 178 Agribusiness Study Program students who attended lectures in the odd semester of the 2021/2022 academic year. The data is then processed using a google form which is then tabulated. Based on the results of data processing and analysis, it is known that the online learning process carried out using the Andalas University I-Learning media is effective and efficient. Lecturers use additional learning media such as zoom meetings, google meetings, MS Team, and whatsapp media as part of a long-distance face-to-face communication system with students. Lecturers also provide varied learning methods to help students understand the material, form independent learning, and increase students' active participation in learning activities. This study also obtained constructive suggestions from students regarding the improvement of the online learning process that must be carried out by lecturers. The obstacle felt by students related to online learning using the LMS is the limited accessibility of students in accessing the LMS. If the network is constrained in the student's domicile area, a small part of which is in areas that have limited cellular networks, as well as some features in the LMS that are less practical, thus hampering the learning process in the LMS. Thus, it is still necessary to develop more practical online learning media by the university, so that the digital and online learning process can be carried out more effectively and efficiently.

**Keywords:** *online learning, Covid-19, lms (learning management system)*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 19

# Problems in online Education Administration in Improving The Quality of Education in Higher Education

Rizky Amelya<sup>1\*</sup>, Sukmawati Noni<sup>1</sup>, Ladyanna Sonezza<sup>1</sup>

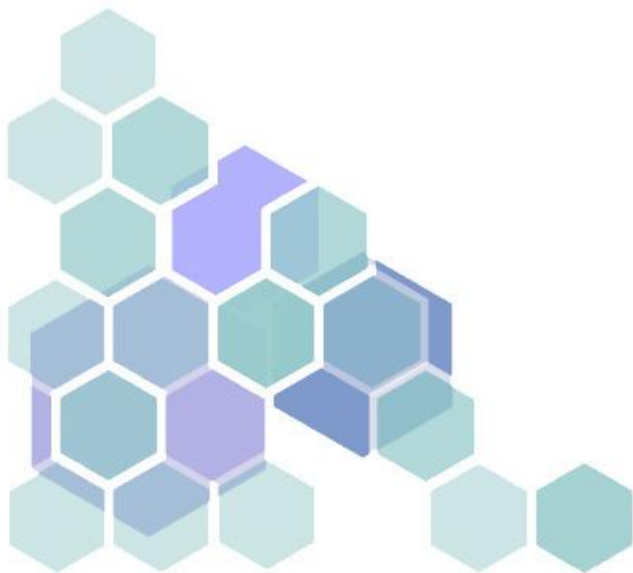
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: rizkyamelya5@gmail.com

## ABSTRACT

Documents and SOPs are an important part in controlling the quality of an institution. Documents and SOPs in the online academic process will be different from the offline academic process. Therefore, this discussion discusses the design and manufacture of digital-based documents and SOPs with a pandemic-friendly concept to maintain and improve the quality of education in the academic realm. Sources of data in making these documents and SOPs are documents and SOPs used by the Indonesian Literature Study Program, Faculty of Cultural Sciences, Andalas University in offline academic activities before the pandemic. Making of these documents and SOPs is done by utilizing the media available on the internet and also being distributed through message sharing applications or social media. The result of this planning is the availability of documents and SOPs for the implementation of the academic process which is carried out online so that students have easier access in the implementation of lectures. However, in the process of distributing these documents, an evaluation process has been carried out so that the documents distributed are suitable for distribution. The problem in distributing documents is only related to the students' inaccuracy in reading the information that has been given. Meanwhile, the challenge for the Quality Control Group (GKM) is related to not all students filling out the questionnaires that have been distributed so that they are hampered in carrying out the evaluation process. The solution is to keep disseminating information from various existing media..

**Keywords:** *gkm, platform, document, sop*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 20

# Application of Case Base Method (CBM) in online Learning in Higher Education (Study of Sociolinguistic Lectures for Undergraduate Students)

Aslinda Aslinda<sup>1\*</sup>, Sonezza Ladyanna<sup>1</sup>

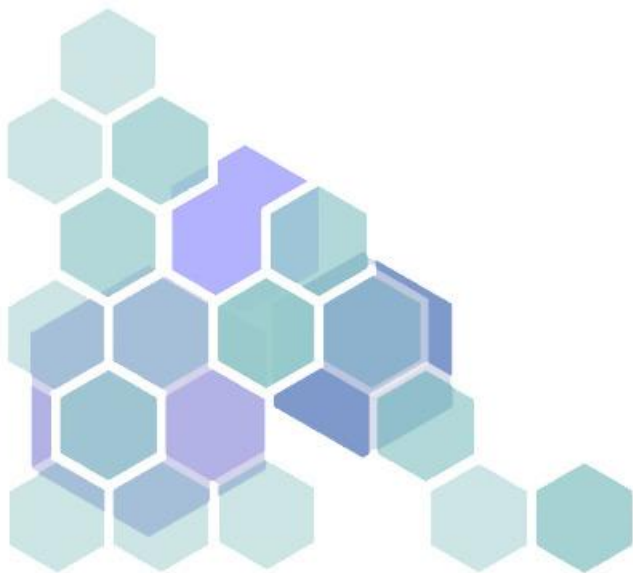
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: [aslinda64@gmail.com](mailto:aslinda64@gmail.com)

## ABSTRACT

Case Base Method is one of the learning methods in optimizing outcomes. Online lectures are an effective modern way of studying, especially in situations where physical contact is not possible. Therefore, this study discusses the application of the Case Base Method in online learning in universities with the aim of explaining how to apply the Case Base Method in online learning in universities, what are the problems faced by students and the challenges of teachers, and what solutions can be done in face these problems and challenges. The data sources in this study were students and lecturers in Sociolinguistics lectures at the Undergraduate Program, Department of Indonesian Language and Literature, Faculty of Humanities, Andalas University in the odd semester of 2021. This research was conducted quantitatively and qualitatively. The method used is descriptive method. The results obtained are the application of the Case Base Method in online learning in universities can be carried out through several stages, namely giving cases, discussions, presentations, and evaluations. Problems in the application of the Case Base Method in online learning are technical problems and attitudes of some students. Meanwhile, the challenge for teachers is to prepare materials and encourage students' enthusiasm both in terms of knowledge and skills to work together in groups. The solution is to increase the competence of teachers in preparing teaching materials and skills in accordance with the Case Base Method. The other main thing is that the government and stakeholders must continue to improve educational facilities and infrastructure.

**Keywords:** case base metode, online learning, student problems, lecturer and government challenges



ICED 2021  
-QAIV

ID 21

# Effect of Project Based Learning Model on Student's Performance at Accounting information System Course

Asniati Bahari<sup>1\*</sup>, Winda Azmi<sup>1</sup>, Alya Ledias Anshar<sup>1</sup>

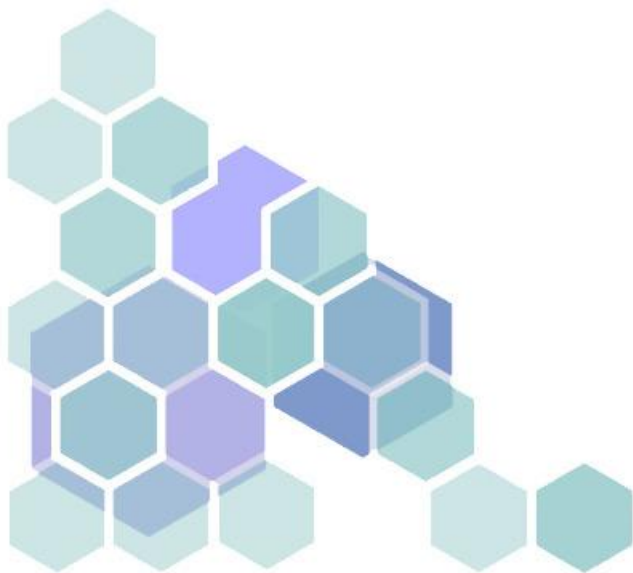
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: [asniati@eb.unand.ac.id](mailto:asniati@eb.unand.ac.id)

## ABSTRACT

Project-based learning (PjBL) is a learning model that uses projects as a learning process to achieve attitude, knowledge, and skill competencies. The purpose of the study is to obtain information about how students can improve their learning outcomes in the Accounting Information System course by using the Project-Based Learning Model. The object of the study was the 5th-semester students of the Universitas Andalas, Accounting Study Program that took the Accounting Information Systems Course. This type of research is classroom action research (Classroom Action Research) with the research subject being the 5th-semester students, totaling 36 people. The research data were collected using observations, field notes, learning outcomes test sheets, and documentation in cycles I and II. The data obtained were analyzed using percentage analysis. The results of the research related to learning outcomes indicate that the Project-Based Learning Model can improve student performance. In addition, according to the students, Project-based learning, can increase their attitude and characters as well as their knowledge better than traditional teaching and learnings methods. The results of the study can be used to design a course model in other courses where students are encouraged to find a real-life problem and ask them to solve the problem. Learning by doing can encourage their motivation to learn more and more. The findings can enrich theory related to learning methods and assessment

**Keywords:** *learning methods and assessment, attitude and characters, accounting information systems, project-based learning, student's performance*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 22

# Implementation of Case Based Method (CBM) and Outcome Based Assesment (OBA) Learning Methods in Political Sociology Courses

Dewi Anggraini<sup>1\*</sup>, Mhd Fajri<sup>1</sup>

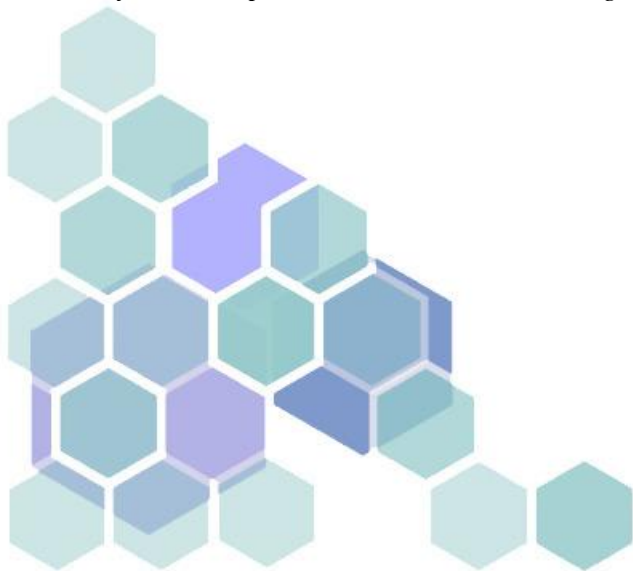
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: dewianggraini\_81@yahoo.com

## ABSTRACT

The Political Sociology course is a subject that is included in the 2018 KKNI-based curriculum and it is a compulsory subject for majors given to third semester students. In this course, several important topics is discussed the concept of political sociology, as well as the relationship between sociology and political science as two social science disciplines. It discusses the meaning of political sociology from the perspective of political science and sociology, political socialization, political culture, political participation, political recruitment, political communication, integration and political conflict. It is hoped that after studying this course students can understand and explain various concepts and theories of political socialization, political culture, political participation, political recruitment, political communication, and political integration and conflict. Learning activities in this course are divided into three ; virtual synchronous learning, self-directed asynchronous learning and collaborative asynchronous learning. This course was attended by 4<sup>1</sup> students. For this semester, the distribution of student scores ranged from 75-85 (A- to A) and none of the students got failed in this courses. In the development of the CBM method and OBA assessment, there are several obstacles faced by students such as the lack of soft skills possessed by students, the lack of students' ability to communicate and provide views at every course learning meeting, students do not know or do not understand the latest studies on political developments in Indonesia. Another obstacle is the lack of ability for lecturers to control student activities/activities at each meeting by using zoom and learning management system / LMS, because many students turn off the camera in every meeting for reasons of limited internet

**Keywords:** *implementation, method, learning*



ICED <sup>20</sup><sub>21</sub>  
-QAIV



# Tips on Improving Students' Understanding in The Keitairon Course With Problem-Based Learning Method in Japanese Literature

Adrianis AdrianiS1\*, Rahtu Nila Sepni Rahtu<sup>1</sup>

<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: idas\_adrianis@yahoo.com

## ABSTRACT

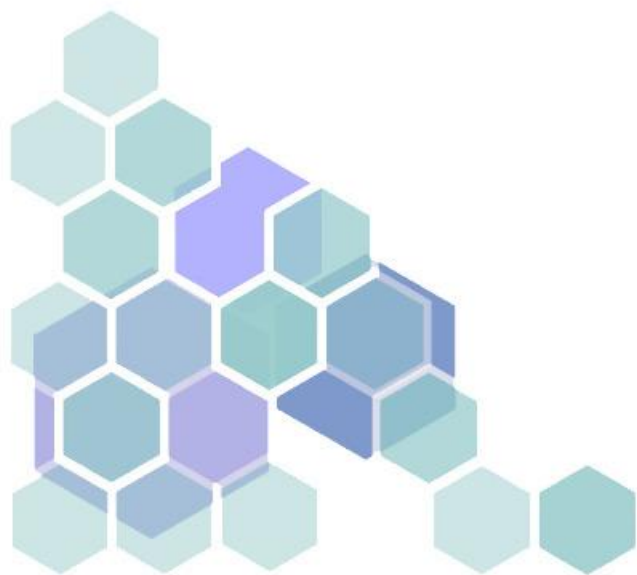
### Abstract

This article is an empirical experience of the researcher in the keitairon (morphology) course which was carried out face-to-face and online. The research used a descriptive qualitative method. The purpose of this research is to find out the students' creativity, how the students solve a problem, how the students express their ideas, and how to ask questions and respect other people's opinions.

The data for this research were taken from the keitairon course sessions both face-to-face online and offline. The online session is seen from the current semester's session, while the offline meeting was from the previous semester's session. The results of the analysis are presented descriptively. This research found that lectures conducted by Student Center Learning (SCL) with the Problem-Based Learning (PBL) method for keitairon which was carried out face-to-face were better than online lectures.

The research results on tips in improving students' understanding of the keitairon course with the problem-based learning method on Japanese literature have a lot of impact on students. For example, students become active in lectures, share with each other, become creative in preparing material, are able to express their opinions, brilliant ideas, and understand the material in detail, etc.

**Keywords:** keitairon, problem-based learning pbl, face-to-face, online



# Case Study Application Methode in Pre-Profession Pregnancy Courses

Laila Rahmi<sup>1\*</sup>, Lusiana El Sinta Bustami<sup>1</sup>

<sup>1</sup>Bachelor of Midwifery, Medical of Faculty, Universitas Andalas, Indonesia

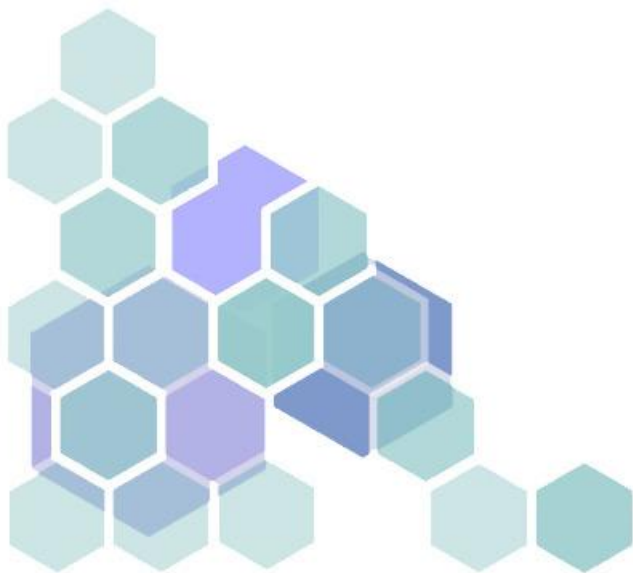
<sup>1</sup>Midwife Professional Eucation, Medical of Faculty, Universitas Andalas, Indonesia

\*Corresponding author. Email: lailarahmi@med.unand.ac.id

## ABSTRACT

National development in the field of education is an effort to educate the nation's life and improve the quality of Indonesian people. Through education, students can develop self-potential, self-control, personality, intelligence, noble character and skills. The development of the method carried out in this study by applying the case study method to seventh semester students in the Pre-Professional Pregnancy course, so that students are expected to master learning outcomes more optimally. The study was conducted on seventh semester students of the Midwifery Study Program, Faculty of Medicine, Andalas University. Research activities are carried out by observing (observing) students' critical thinking skills and enthusiasm after students find examples of cases in print and electronic mass media as phenomena that occur in society that are relevant to the learning material, then discuss with the group, and then explain to other groups for discussion. further learning the subject through 3 (three) cycles of activities. Data were obtained directly from the subject under study (primary data), collected through a data collection format that contained assessment items on students' abilities and observed during the learning process. The data were analyzed descriptively to get an overview of the research subject. The research was conducted by adjusting the schedule of activities carried out in academics. Researchers conduct learning according to the schedule set by the academic and then apply the case study method at several learning meetings for further observations. From the observations made on the application of the case study learning method, it was found that there was an increase in student critical thinking and enthusiasm seen from the observation aspect during the learning process in the pre-professional pregnancy course.

**Keywords:** case study, student centre learning, classroom action research



# Application of online-Based Mind Mapping Model As A Development Economy Learning Media for Economics Students Campus Payakumbuh

Nur Ari Sufiawan<sup>1\*</sup>, Bintang Rizky Abdullah Majo Saibah<sup>1</sup>, Weri Antoni<sup>1</sup>

<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: nurari.sufiawan@gmail.com

## ABSTRACT

Background: Teaching and learning activities are replaced with online learning. there is monotony in online lectures which causes students to have difficulty understanding the material presented and students are less creative so that online learning activities are very far from what is expected which has an impact on student learning outcomes in the cognitive realm in the form of pretest and posttest formative evaluations are still categorized far from the expected criteria The purpose of this study is to analyze the application of an online-based mind mapping model as a development economics learning medium for students of the Payakumbuh campus economics study program.

Methods: The type of research used is Classroom Action Research. There are four steps in carrying out classroom action research: Planning, Implementation, Observation, Reflection. The subjects in this study were students of the E<sup>1</sup> class of special Economics Study Program with a total of 34 people. Data analysis techniques performed: 1). Student activity observation data, 2). Analysis of test data. In this study, it is planned that there will be 2 cycles by examining the improvement of the ability of 3rd semester students in the Development Economics course by applying the mind mapping method.

Results: 1). The results of the observation of student learning activities in the first cycle obtained an average percentage of 65% while the second cycle obtained 78%. This shows an increase in student learning activities in the learning process for the Development Economics Course using a mind mapping model; 2). The results of the data obtained from data collection with the pretest learning evaluation test technique for students in the first cycle of 59% were categorized as complete, while the posttest students in the first cycle of 53% were categorized as having minimum score completeness criteria. While the pretest in the second cycle of 53% is categorized as complete, for the posttest of students in the second cycle, 67% can be categorized as complete, this shows an increase in student learning outcomes in the Development Economics Course by using the mind mapping model.

Conclusions: 1). The application of the mind mapping model in an effort to improve student learning outcomes for class E<sup>1</sup> in the Development Economics Course at the Economics Study Program, Faculty of Economics, Andalas University, Payakumbuh campus has improved student learning outcomes. The results of the observation of student learning activities in the first cycle obtained a percentage of 65% and experienced a significant increase in the second cycle to 78%; 2). The results of the student learning evaluation seen from the posttest score with the percentage of the first cycle score of 53% which can be categorized as having the minimum completeness criteria value and experiencing a significant increase in the second cycle, namely 67% with the minimum completeness category.

**Keywords:** mind mapping model, creativity, learning outcomes

ID 26

# Sampling and Botanical Identification of forages for Gaot As Project-Based Learning Model in The Feed Quality Control Subject

Khalil<sup>1\*</sup>

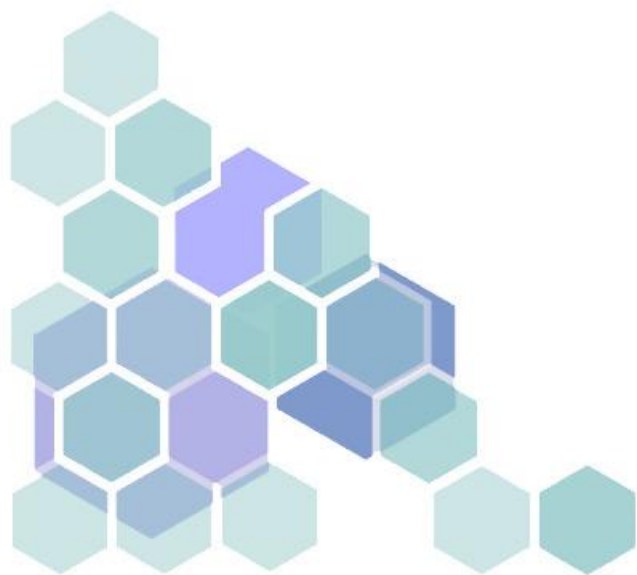
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: [khalil@ansci.unand.ac.id](mailto:khalil@ansci.unand.ac.id)

## ABSTRACT

Forages and green fodder are the main feed source for ruminants of cattle, buffaloes in West Sumatra. The forages composed of various species of wild plant collected from various lands, but the livestock will select and consumed the palatable plant types. The objective of the present study was to offer the animal nutrition student a project-based learning (PjBL) to gain their experience in the diversity of plant species normally offered and consumed goat raised by traditional farms. Enrolled students visited and interviewed goat farm owners, followed by collecting of forage samples for botanical identification and laboratory analysis. Data were analysed and presented in a scientific paper. There were about 46 kinds of vegetation used for feeding for goats in Payakumbuh. They were composed of about 31-43% of grasses, 37-42 percent of broadleaves, 9 percent of legumes, 2-11 percent tuber leaves and 7-9 percent tree leaves. Farm owners offered palatable and nutritious plant species according to the preference of their livestock there is wide variety of plant species utilized as green fodder feed for goats in Payakumbuh. In conclusion. the students experienced that farm owners offered palatable and nutritious plant species according to the preference of their livestock

**Keywords:** *project-based learning, forage, goat nutrition*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

# Horticulture Course Based on Project Based Learning in Faculty of Agriculture, Andalas University

Nilla Kristina<sup>1</sup>, Warnita Warnita<sup>1</sup>, Elara Resigia<sup>1\*</sup>

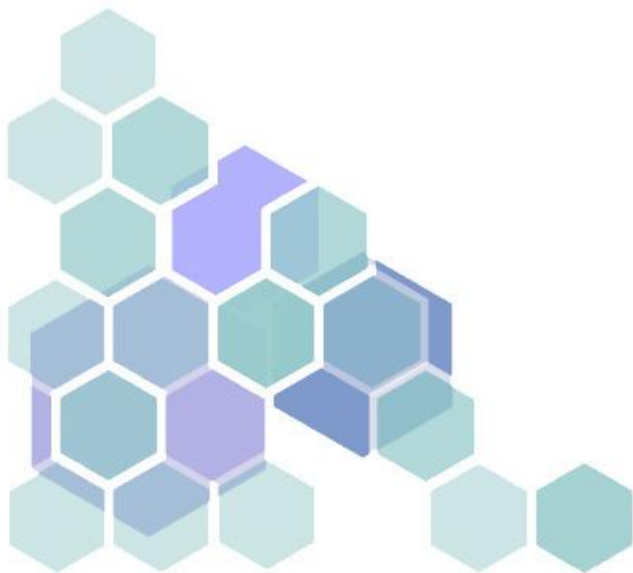
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: elara.resigia@gmail.com

## ABSTRACT

The Advanced Horticultural Crop Production Technology course is one of the elective courses in the Agrotechnology study program. The learning achievement in this course is students can apply agronomy, plant breeding, plant protection, soil science, and social sciences that are oriented towards effectiveness, efficiency, quality, and sustainability of resources by good agricultural practices on various tropical horticultural commodities consisting of vegetables, ornamental plants, medicines, spices, and fruit plants. The research subtopics are commodity prospects, morphology, growing conditions, plant varieties, special plant cultivation (seeding, land preparation, planting, maintenance, fertilizer, pest and disease control, harvesting, and propagation systems). One of the methods used to achieve this learning is the project-based learning (PjBL) method. The PjBL method in the advanced horticultural crop production technology course is to design a plan for the project and time schedule; analyze the characteristics of learners; guide questions for experimental design; monitor progress reports and brainstorming. Student learning motivation is calculated based on one of the indicators, namely seriousness in attending lectures and concentration in participating in brainstorming. Brainstorming in PjBL grows a positive attitude towards learning. Field experiments improve the knowledge and skill of the student. Students more understood about the habit of the plant, the concept of cultivation from various horticulture plants.

**Keywords:** *project based learning, horticulture course, brainstorming*



ID 28

# Project Based Learning: An integrated Approach to Enhance Student’S Competencies in Stock Trading Simulation

Rayna Kartika<sup>1\*</sup>, Annisaa Rahman<sup>1</sup>

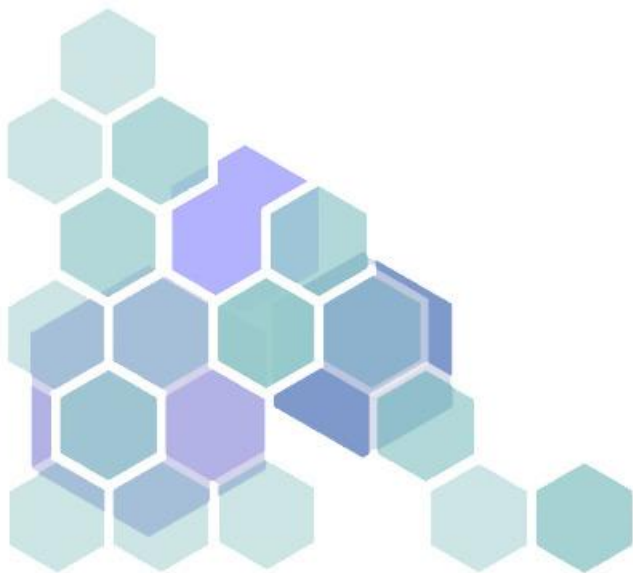
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: raynakartika@eb.unand.ac.id

## ABSTRACT

This study aims to describe how project-based learning can enhance student’s competencies to lean about stock trading. As student’s competencies in finance, especially in portfolio, is one of the expected learning outcomes at accounting department, Universitas Andalas. students must be able to implement their knowledge and skills in stock trading. Stock trading focuses on short term planning and mechanism. Before starting to conduct stock trading, students have been equipped by fundamental and technical analysis which the basic concept of investment understanding. Therefore, this research is to prove and to elaborate the details on how project-based learning can improve student’s insights and knowledge especially in stock trading. To prove this, project based learning in stock trading simulation is set up into 3 meetings to discuss the process and the mechanism, and then, 2 meetings are used to reporting, evaluating, and giving some feedbacks and suggestion from the lecturer. By focusing 5 meetings in stock trading or 33% from all meetings, project -based learning will enhance student’s knowledge and capacity to implement stock trading in real life.

**Keywords:** *project based learning, stock trading simulation, competencies portfolio and investment*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 29

# Development of Student-Centered Learning With Problem-Based Learning Through Blended Learning in 3B Block (Normal Delivery Care)

Yulizawati Yulizawati<sup>1\*</sup>, Henni Fitria<sup>1</sup>

<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: yulizawati@yahoo.co.id

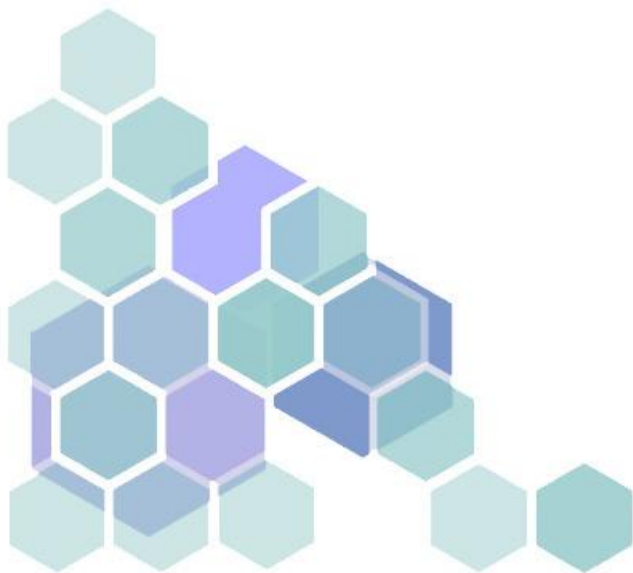
## ABSTRACT

3B Block is the second block that give students the opportunity to understand the concepts, changes and mechanisms of normal delivery, basic needs of mothers in labor, implementation of assessments of mothers in labor and neonates, determining planning, management and evaluation of labor. This study applies a blended learning and tutorial in the PBL method to improve students' critical thinking skills

The Type of this research is Classroom Action Research was held at the Undergraduate Program of Midwifery, Faculty of Medicine, Andalas University. The subject of this study was the third semester student in the 2021/2022 academic year . This study compares the development of student scores from the first meeting to the fourth meeting of the tutorial. Data collection tools using assessment sheets and written tests

The results showed that the blended learning model could improve students' creative thinking skills. This can be seen from the increase in the average value of students' creative thinking abilities from 79,24 at the first meeting to 84,69 at the fourth meeting. This study also showed the increased value of the pre-test and post-test scores of students. Where the results showed that the majority of students had a score range in 75-79 (30.30%).

**Keywords:** student centered learning, problem based learning, blended learning



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 30

# Video Case-Based Learning and Motivation Among Third Year Midwifery Students

Ulfa Farrah Lisa<sup>1\*</sup>, Feri Anita Wijayanti<sup>1</sup>

<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: ulfaffarahlisa@med.unand.ac.id

## ABSTRACT

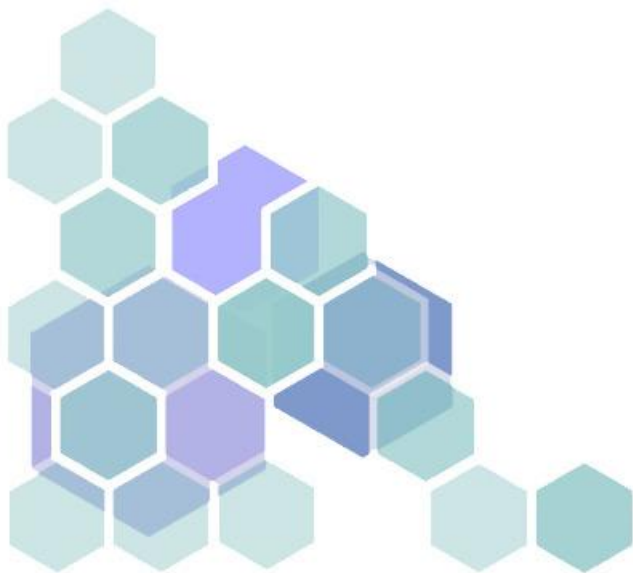
Case-based learning is commonly used in various settings including the medical field. This study aimed to explore the influence of video case-based learning on motivation among midwifery students.

Mixed-methods (sequential explanatory design) using both quantitative (a quasi-experimental with pre-test and post-test design) and qualitative approaches (case studies) were carried out at the Bachelor of midwifery program, Medical Faculty, Andalas University (August – October 2021). 49 midwifery students were selected using total sampling. Pre-test and post-test collected demographic information and motivation using the Motivated Strategies for Learning Questionnaire (MSLQ). Responses were analyzed using descriptive statistics, ANOVA / Kruskal-Wallis test, and Paired T-Test / Wilcoxon Rank-sum test. A p-value <0.05 was considered statistically significant.

This study revealed no significant differences between age and the MSLQ subscales. However, there were some significant differences between parents' income and intrinsic motivation ( $p=0.012$ ), task value ( $p=0.044$ ), and self-efficacy ( $p=0.02$ ). Intrinsic motivation and residence were found significant differences ( $p=0.012$ ) among the other subscales. The mean scores for all subscales of motivation increased after the intervention. Two subscales (task value and efficacy) had a significant difference with p-value 0.026 and 0.000, respectively. Students felt happy and motivated and gained critical thinking and problem-solving skills in the learning process of CBL.

In conclusion, case-based learning using the video is effective to improve motivation among the students. These findings are essential to developing suitable learning methods for the students.

**Keywords:** case-based learning, students, midwifery, motivation



ICED 2021  
-QAIV



ID 31

# Project Based Learning (PjBL) Learning Method: Improving Critical Thinking and Problem Solving Skills for Nursing Students

Yulastri Arif<sup>1\*</sup>, Zifriyanthi Minanda Putri<sup>1</sup>

<sup>1</sup>Universitas Andalas, Indonesia

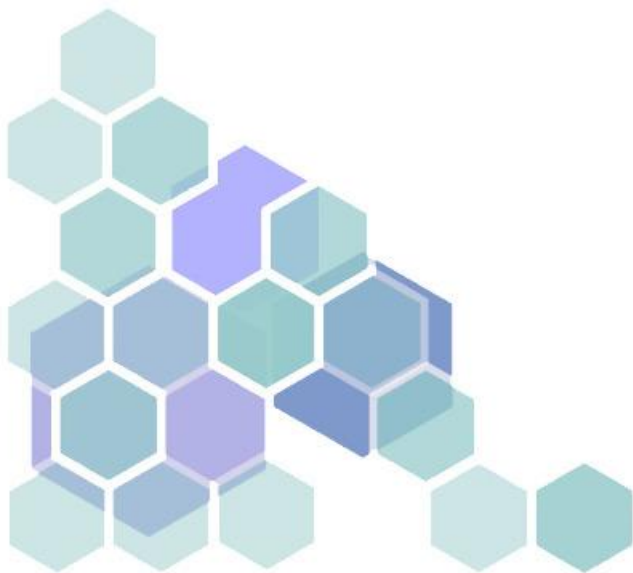
\*Corresponding author. Email: yulastri.arif@gmail.com

## ABSTRACT

Problem solving skills and critical thinking are very important for nursing students in carrying out their roles as nursing managers after graduation. Many nursing managers are not optimal in their critical thinking skills and problem solving abilities within the hospital service units. Based on this fact, it is important for the nursing faculty to improve the ability of graduates through effective learning methods to improve critical thinking skills and problem solving skills, one of which is the application of Project Based Learning (Pjbl) in nursing management residency courses. The purpose of the study was to prove that the Pjbl method was able to improve students' critical thinking skills and problem solving abilities.

The method used is classroom action research using three cycles. Each cycle is carried out in four stages, namely implementation, action, observation and reflection. The research subjects are Master of Nursing students taking residency courses in the third semester of 2021. Each student is evaluated for critical thinking skills through questionnaires and problem solving skills through observations and assignment reports. Data were analyzed using descriptive statistics and presented with averages. The results showed that there was an increase in critical thinking skills at an excellent category in cycle III (score 85.08 out of 100), while the results of observations on the ability to solve problems at the identification stage of problem priorities were in the sufficient category (score 73-14 out of 100), constructing problem solving program at good category (score 77.63 out of 100) and the ability to implement problem solving programs in good category (score 81.2 out of 100).

**Keywords:** *project based learning (pjbl), problem solving, critical thinking, nursing management*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 32

# Project-Based Learning in An Element Machine II Course : A Review

Gasni Dedison<sup>1\*</sup>, Chandra Devi<sup>1</sup>, Dedison Gasni<sup>1</sup>

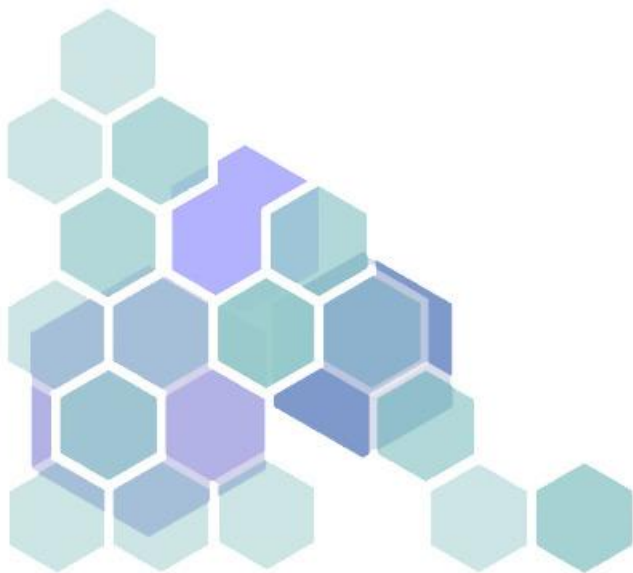
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: dgasni@eng.unand.ac.id

## ABSTRACT

The purpose of this paper is to review project-based learning (PjBL) methods as an effective pedagogy to improve knowledge and skills of mechanical engineering students in engineering design components. To produce engineers who are needed in industry, curriculum should integrate between knowledge of engineering and skills in design components and process. In this paper, We reviewed that PjBL in engineering course offers opportunity for students to experience in engineering design components that are a real world problem and practical knowledge. Students were asked to design a transmission system for coffee peeler machine on an Element Machine II Course and direct and indirect assessment were conducted to measure student's performance and perception, respectively, using two categories: knowledge and skill. The results show that students had demonstrated ability in both cognitive and skill, otherwise team work skill was still in an issue. Results from the student perception show that there was strong correlation (Pearson methods) between knowledge and skills with  $p = 0,003$  and  $r = 0,607$ .

**Keywords:** *project-based learning, engineering education, engineering design component*



ICED 2021  
-QAIV

ID 33

# Application of Case Based Method in Pre-Professional Courses Family Plan to Improve Critical Thinking Students of Midwife Study Program Andalas University

Uliy Iffah<sup>1\*</sup>, Hindun Mila Hudzaifah<sup>1</sup>

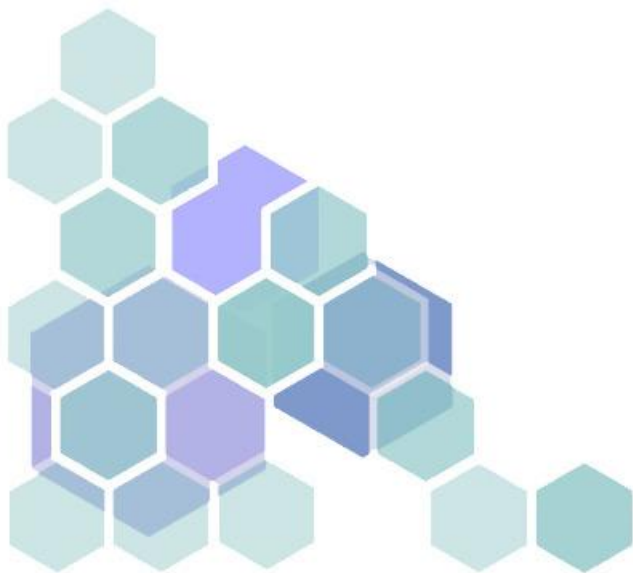
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: uliyiffah07@med.unand.ac.id

## ABSTRACT

The learning method applied so far in the Pre-Professional Family Planning Course is in the form of discussion and question and answer. This method is deemed not able to hone students' analytical skills, sensitivity to problems, practice problem solving and the ability to evaluate problems, especially in this course which requires high analysis and critical thinking. Case based learning is one of the case-based student center learning methods designed to improve higher-order thinking in solving a case. By using this method, students are expected to be able to hone critical thinking to solve problems holistically. This study uses a quasi-experimental method or Quasi Experimental Design with the experimental design used is one group pre-test-post test. Respondents in this study were students of the seventh semester of the Midwifery Study Program, Faculty of Medicine, Andalas University, totaling 46 people. Paired T-Test test results show the value of sig. <0.05, which means that there is a significant difference between students' critical thinking skills before and after the Case Based Learning (CBL) intervention. The critical thinking ability of students of the Midwifery Study Program, Faculty of Medicine, Andalas University increased after the change in learning strategy to Case Based Learning

**Keywords:** case based, learning, critical thinking



ICED 2021  
-QAIV

ID 34

# Project Based Learning on introduction to Accounting 1 Subject

Rita Rahayu<sup>1\*</sup>

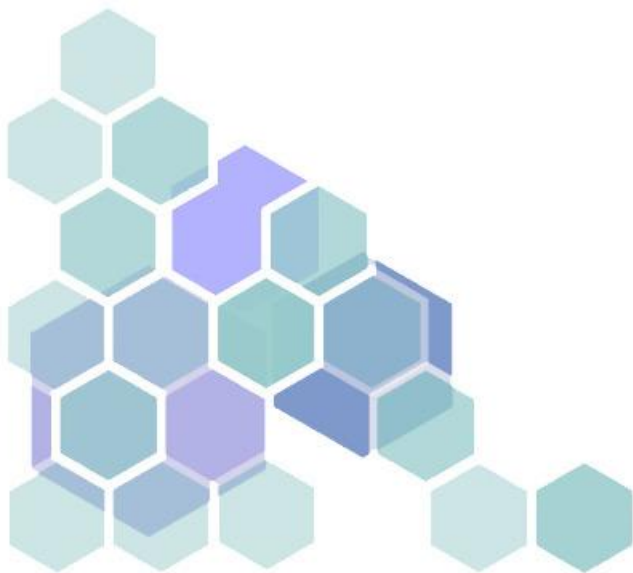
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: aretrahayu@gmail.com

## ABSTRACT

This study aims to evaluate the implementation of project-based learning on the Introduction to Accounting I class. In this regard, three measures were used to evaluate the implementation, which are student perception, distribution of assignment score and achievement of learning outcomes. Twenty students registered in the Introduction to Accounting I class were participated in this study. Based on the perception of the student, it is reported that the project- based learning can increase student knowledge, communication skills, integrity and ethics, student's accuracy, team work, critical thinking and innovativeness. This result is also supported by the student's assignment score. In this regard, 15 students (75%) got higher than 85, while 5 students (25%) got the score between 76-85. This result implies that the implementation of project-based learning on the Introduction to Accounting I class has been running successfully as planned.

**Keywords:** *project based learning, accounting, financial statement*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 35

# Case-Based Method Implementation in Taxation: Acceptance, Satisfaction, and Its Impact on Learning Outcome

Fauzan Misra<sup>1\*</sup>, Dian Yuni Anggraeni<sup>1</sup>

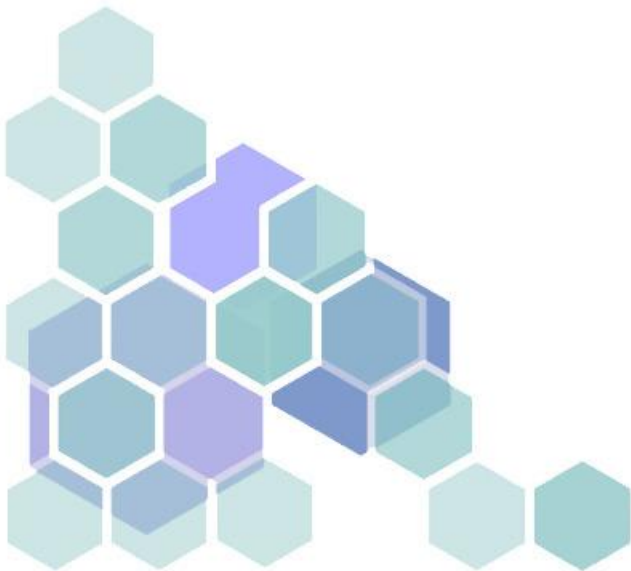
<sup>1</sup>Faculty of Economics, Universitas Andalas, Indonesia

\*Corresponding author. Email: [fauzanmisra@eb.unand.ac.id](mailto:fauzanmisra@eb.unand.ac.id)

## ABSTRACT

This study aims to examine the influence of the case-based method implementation on learning outcomes in Taxation courses. The population of this research is the 3rd semester of undergraduate students of the Department of Accounting at Universitas Andalas. Results show that the Case-Based Method (CBM) was more successful in increasing students' course learning outcomes acquisition than the conventional approach. The learning method encourages students to identify case situations and perform tax calculations at various calculation stages. Students also perceived that CBM is to be more capable of encouraging their teamwork skills. Students also show their acceptance and satisfaction with the approach. The findings of this study provide an important message that a well-designed and planned learning method and the process will provide better outcomes.

**Keywords:** case-based method, blended learning, taxation, learning outcomes



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 36

# The Implementation of Case-Based Method and Simulation in The Computer'S Organization and Architecure II Class at Universitas Andalas

Rian Ferdian<sup>1\*</sup>, Tati Erlina<sup>1</sup>

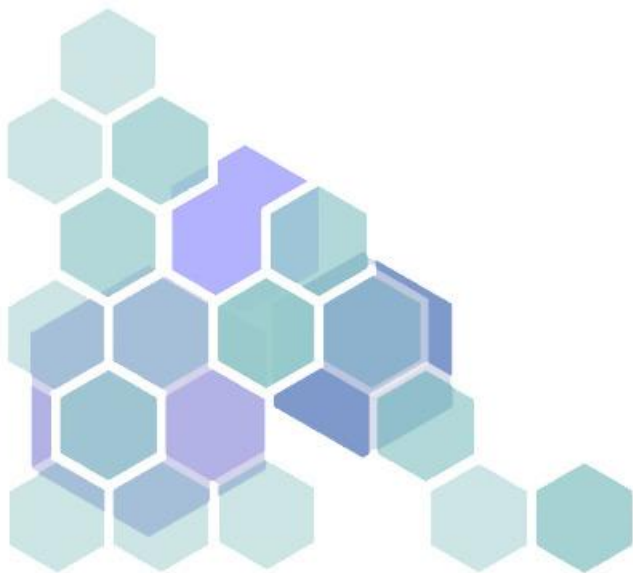
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: rian.ferdian@it.unand.ac.id

## ABSTRACT

The computer's organization and architecture II class focuses on the principles of processor design in the computer. This class presents the topology of a processor starts from the machine languages structure, instruction, addressing, control unit, arithmetic logic unit, and memory. Previously, the learning method used in this class was based on teacher-centered learning. Based on the grade distribution from the previous year, the course difficulty can be considered high. Some improvements have been made to this course to enhance lesson delivery by applying a case-based method to the student. Furthermore, learning media such as simulator tools are also introduced to improve the student experience. We conducted this research on 76 students who attend the computer organization and architecture II class in the Department of Computer Engineering, Universitas Andalas. The results of these improvements show the grade distribution of the students improves after the implementation of the case-based method and the application of the processor simulation during class delivery.

**Keywords:** case-based learning, computer architecture, processor simulation, student assessment



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 37

# Case Based Method in Sharia Accounting: The Effect on Students' Understanding of Sharia Financial Accounting Standard

Dian Yuni Anggraeni<sup>1\*</sup>, Vima Tista Putriana<sup>1</sup>

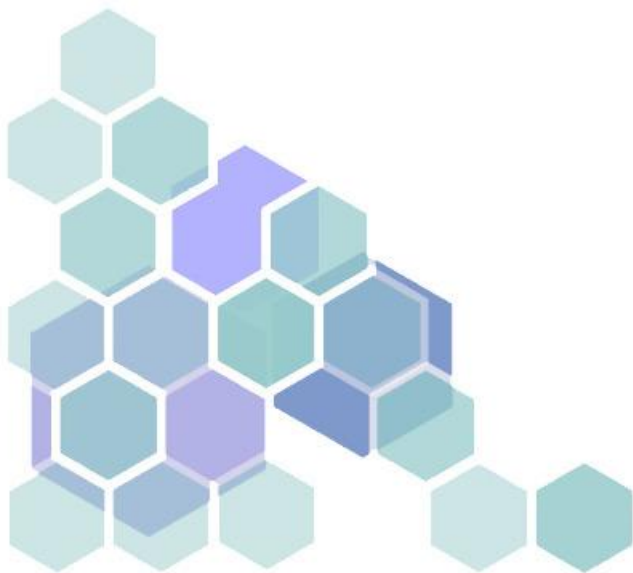
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: [dianyuni@eb.unand.ac.id](mailto:dianyuni@eb.unand.ac.id)

## ABSTRACT

This study aims to examine the influence of the case based method (CBM) implementation toward understanding of sharia financial accounting standard. The population of this research is the undergraduate students of accounting department at Universitas Andalas. Sampling technique in this research is purposive sampling with certain criteria such the student who enrolled Sharia Accounting as their elective course. The study uses action research design, pre-test, and post-test design and lastly, we compare the score by t-test. The results show that there are differences in student learning outcomes apply case-based method to those do not apply case-based method. This means that the case based learning method is effectively used in sharia accounting courses. The case based method presents cases of sharia transaction (aqad) to more easily understand all forms of sharia financial accounting standard.

**Keywords:** case based method, blended learnings, sharia accounting, understanding



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 38

# The Use of Rubrics for Peer-Assessment With The Pbl Method in Folklore Courses

Rima Devi<sup>1\*</sup>, Rachmidian Rahayu<sup>1</sup>

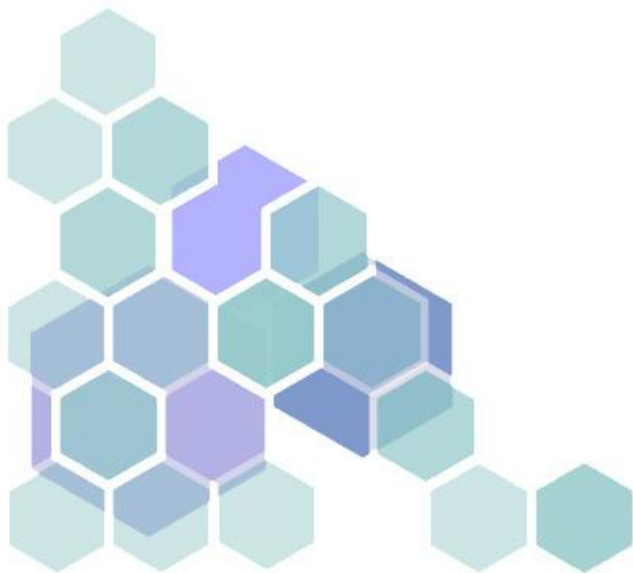
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: rimadevi@hum.unand.ac.id

## ABSTRACT

Assessing the achievement of a course needs to use clear indicators, which are valid for the assessment itself and for the students being assessed. The rubric is a good indicator to use, which is also an indicator for students in doing assessments. Rubrics and peer assessments are used as indicators to assess course achievement. Each student knows the assignment assessment points from the rubric, and their colleagues use the rubric to assess the performance of each group. The results of the application of this method show that students can explain the material to the audience. However, online teaching methods have not honed students' abilities to work together in teams.

**Keywords:** *online teaching, team work and, outcome based learning*



ICED <sup>20</sup><sub>21</sub>  
-QAIV



ID 39

# Implementation of Case Base Method (CBM) and Outcome Based Assessment (OBA) in Development Communications Course

Sri Wahyuni<sup>1\*</sup>, Yenni Oktavia<sup>1</sup>

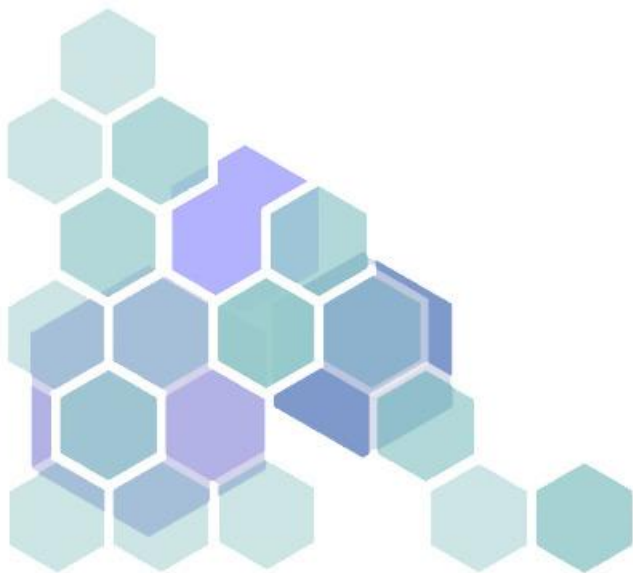
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: sriwahyuni@agr.unand.ac.id

## ABSTRACT

Learning Method Student Center Learning in the form of Case Based Method (CBM) is a learning method that provides a stage for students. This is also supported by an assessment using the Outcome Based Assessment (OBA) method. The combination of these two methods is expected to increase students' cognitive and psychomotor abilities. This research is descriptive correlational, sampling is done by census, namely 50 students who take the Development Communication Course. Data analysis using qualitative descriptive. This paper discusses the challenges faced in implementing Case-based learning. Case-based learning implemented in the Development Communication course consists of four main stages, namely topic events, case planning (how to apply theories and concepts to cases), investigating cases on selected topics, preparing case products. Fifty participants were involved in this course. The assessment includes daily reports, self-assessments, and solution performance. Despite some challenges such as creating the nature of collaboration and creativity among the participants, case-based learning is an appropriate teaching method for Development Communication courses. most of the participants agreed that they had studied and developed the idea, using the available resources to solve their case in a limited time.

**Keywords:** case based method, outcome based assessment, development communication



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 40

# Emphasizing Student Engagement in Blended Learning: The Case of Students in Business Digital Course

Valeny Suryaningsih<sup>1\*</sup>, Alfitman<sup>1</sup>

<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: [valenysuryaningsih@eb.unand.ac.id](mailto:valenysuryaningsih@eb.unand.ac.id)

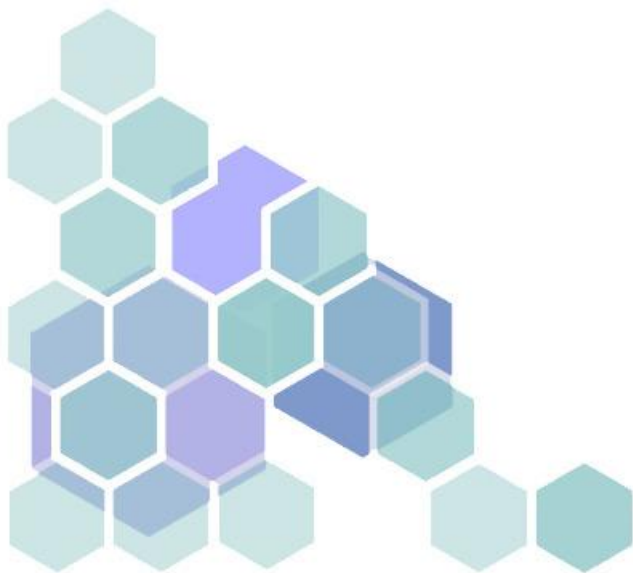
## ABSTRACT

Digital business is aimed at enhancing the competitiveness of an organization by deploying innovative digital technologies throughout an organization and beyond, through links to partners and customers and promotion through digital media (Chaffey, 2015). To have better understanding, students are required to engage in learning process especially in blended learning.

The aim of the study is proving the effectiveness by combining the learning deliveries method and providing the platform to emphasize student engagement in blended learning. This study is descriptive research. This study used census sampling method for 48 students of Digital Business Class RM-3/M2 UMSP. The instrument is online questionnaire. Techniques for data analysis are quantitative descriptive analysis techniques.

As shown by the results, the combination of learning deliveries in blended learning; synchronous (live synchronous by using zoom meeting, virtual synchronous by using WAG) and asynchronous (by giving mind-mapping task.) is effective to encourage student engagement. In particular, utilization of small team WAG help students in discussion to deliver all message clearly because it is texted, also can be corrected. It is confirmed that students agree it is effective media to develop students' activeness in discussion.

**Keywords:** *student engagement, blended learning, business digital*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

**ID 41**

# **Development of Cost Accounting Learning With Case-Based Method (CBM)**

Susiana Susiana<sup>1\*</sup>, Yindrizaral Yindrizaral<sup>1</sup>

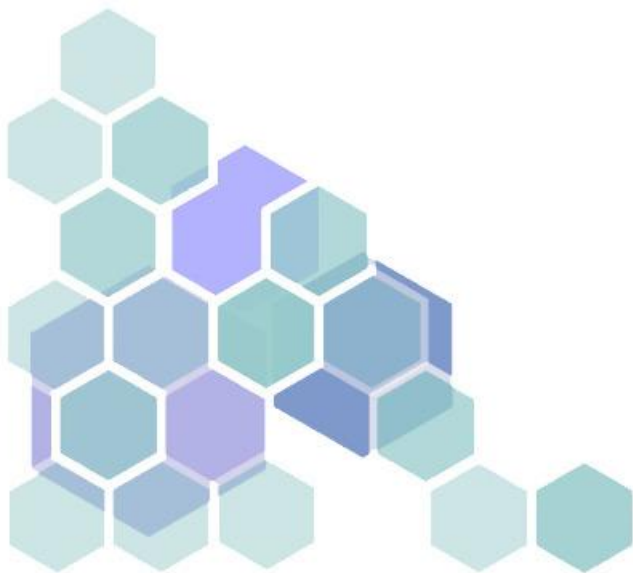
<sup>1</sup>*Universitas Andalas, Faculty of Economics, Payakumbuh, Indonesia*

<sup>\*</sup>*Corresponding author. Email: susiana@eb.unand.ac.id*

## **ABSTRACT**

This study investigates the case-based learning model (CBM). theory and its application in designing online and independent learning. The purpose of this study is to validate and refine the theory for the context of online learning. The respondents of this research are 67 students who are taking Cost accounting courses in 2021. The research methodology uses formative research, this study develops an online tutorial based on a design synthesized from the financial statements of companies listed on the Indonesia Stock Exchange (IDX). The results of the formative evaluation are: The high interest in student learning, as evidenced by: 1). UTS scores obtained by each student. 2). Students' enthusiasm for learning and enthusiasm for teaching materials and applying them with financial reports. These findings extend the understanding of CBM to the online learning context, providing useful insights for students and for the design of online learning that implements CBM.

**Keywords:** *case-based method, online learning, cost accounting*



**ICED** 2021  
**-QAIV**

ID 42

# Problem Identification and Solution Design: Project Based Learning Approach in Improving Student Active Participation and Confidence in English Class

Putiviola Elian Nasir<sup>1\*</sup>, Rifki Dermawan<sup>1</sup>

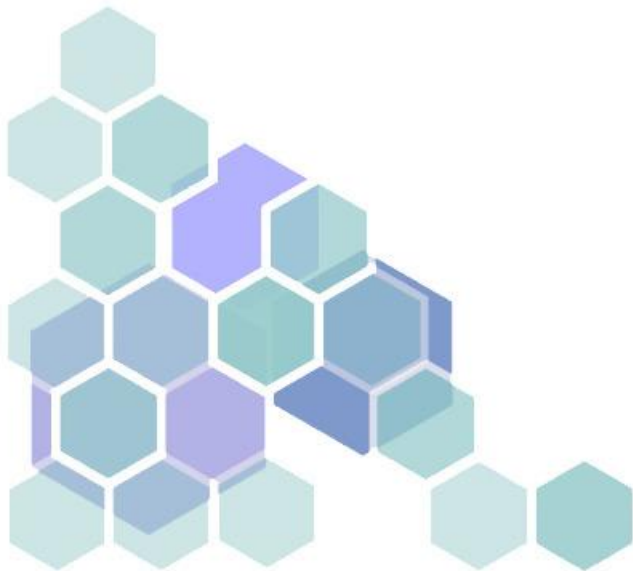
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: putiviola@gmail.com

## ABSTRACT

Previous experience related to teaching English as a foreign language for International Relations Department of Universitas Andalas demonstrated that the majority of the students' English language ability is within the intermediate level. This should lead to English speaking students with no difficulty to express their ideas and opinions. On the contrary, this has yet to be the culture of IR students. Before this study, researchers have concluded that this is due to ineffective class activities because the root of the problem has not been solved. This research analyses the use of Project Based Learning approach as possible solution to the issue. Students are positioned as the owners of the class, thus actively shaping the class including their abilities. They are encouraged to identify the root problems of English language learning, create solutions, design activities appropriate for the solutions and implement the programs. The method of this research is mixed methods, using both quantitative and qualitative methods. This research design is necessary to measure the change in student attitude, which becomes of the learning outcomes of this class. After implementation of this approach for the first half of the semester, positive results have already been demonstrated, where 100% of the students have experienced an increase in their confidence to use and speak English. However, there is still 11% of the total students who although experienced a boost of confidence, were not able to meet the desired 30% increase of confidence.

**Keywords:** *confidence, problem identification, solution oriented, project based learning, english*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 43

# Analysis of Students' Perception toward Distance Learning With Project-Based Learning Model

Asniati Bahari<sup>1\*</sup>, Fauzan Misra<sup>1</sup>, Alya Ledias Anshar<sup>2</sup>

<sup>1</sup>Universitas Andalas, Indonesia

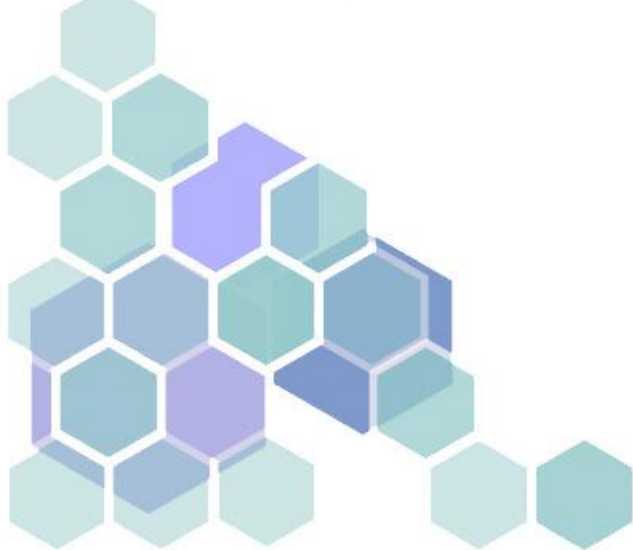
<sup>2</sup>Universiti Teknologi Malaysia, Malaysia

\*Corresponding author. Email: [asniati@eb.unand.ac.id](mailto:asniati@eb.unand.ac.id)

## ABSTRACT

Distance learning through a student exchange program will maximize its results by combining its activities with other MBKM programs, namely independent study activities. Independent projects can realize students' ideas in developing creative innovative products and can improve student achievement in solving problems around them based on their knowledge. By implementing this program, the foundation for the transformation of Higher Education will be achieved, or what is known as the Main Performance Indicators (IKU) of Higher Education. The purpose of the study is to explore students' opinions related to distance learning by using Project-based Learning. There were 31 students involved in the credit earnings program from 4 other High Learning Institutions. They are from Institut Agama Islam Batu Sangkar, Indonesia Banking School Jakarta, Sekolah Tinggi Ilmu Ekonomi Agus Salim Bukittinggi, and Universitas Muhammad Yamin Solok. The students were asked to answer questionnaires given through Google form related to their opinion on their perception of Distance learning, positive and negative experiences. They were also asked about their perception toward using the Project-based Learning methods in studying Accounting Information Systems. The results of the study found out that the students, in general, did not have difficulties in studying Accounting Information Systems that use the Project-based Learning method. They think that distance learning is very helpful in replacing conventional learning during the Covid-19 pandemic. They also mentioned that Project-based learning methods make it easier for students to understand Internal Control in a company. In conclusion, it is found out that distance learning that is combined with Project-based Learning will be a good combination as an alternative learning method during a pandemic.

**Keywords:** *distance learning, project-based learning model, accounting information system, distance-project-based learning model*



ICED 2021  
-QAIV

ID 44

# The Implementation of Case-Based Method on Cost Accounting Course

Riwayadi<sup>1\*</sup>, Ika Sari Wahyuni Td<sup>1</sup>

<sup>1</sup>Universitas Andalas, Indonesia

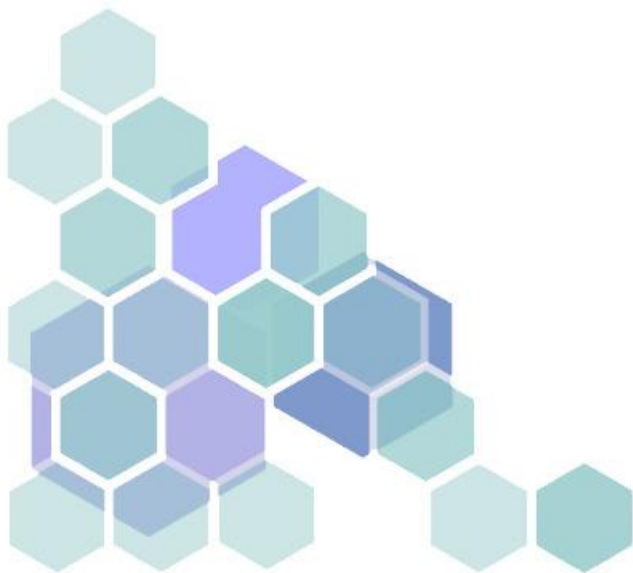
\*Corresponding author. Email: riwayadi@eb.unand.ac.id

## ABSTRACT

This research aims to evaluate the implementation of CBM on cost accounting course to optimize the achievement of course's and lesson's learning outcomes. The research type is applied research. The population is the students who are taking cost accounting courses. This research uses census sampling.

This study found that more students choose problem solving model of CBM that can make them easier to understand the learning materials than problem-based learning. With CBM, students agree that they gain a lot of learning experience, and real-world cost accounting practices, Further, CBM make them easier to achieve course's and lesson's learning outcomes, to build team work in group, and to understand cost accounting concepts. Students also agree that CBM presents challenges form them to solve the case.

**Keywords:** *problem solving, problem-based learning, course learning outcomes, lesson learning outcomes.*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 45

# Implementation of Project Based Learning on The Sanitation of Public Places Subject

Trisfa Augia<sup>1\*</sup>, Azyyati Alfian<sup>1</sup>

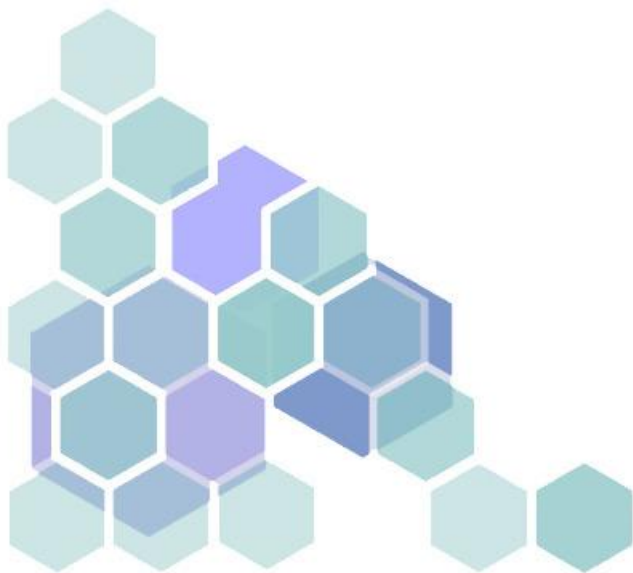
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: trisfaaugia@gmail.com

## ABSTRACT

The Public Places Sanitation (STTU) is a compulsory subject in the field of Occupational Safety and Health / Environmental Health (K3 / Kesling) of the S-1 Public Health Study program, Faculty of Public Health. Evaluation of learning outcomes in the previous year showed students had low interpersonal skills. The objectives of this class action research are to improve and change the measures to solve the problems and to find models and procedures that provide reassurance against troubleshooting efforts by making modifications or adjustments as necessary. This class action research was conducted in the Public Places Sanitation subject in Academic Year 2021/2022 in the S-1 Public Health Study Program, Faculty of Public Health, Andalas University for 2 months from September to October 2021 using quantitative method. Based on the results of the data analysis, there was an increase in students' midterm exam scores when compared to achievements in the previous year. This research has limitations, among others, online learning situations make it difficult for students to create projects together.

**Keywords:** *project based learning, public health, sanitation, public places, environmental health*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 46

# Development and Implementation of Blended Learning in The Practical of Bank Financial Statement Analysis Course

Dian Yuni Anggraeni<sup>1\*</sup>, Sanda Patrisia Komalasari<sup>1</sup>

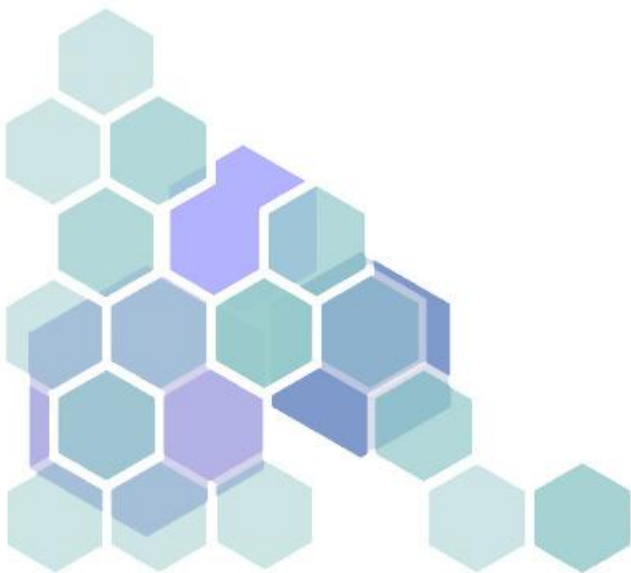
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: [dianyuni@eb.unand.ac.id](mailto:dianyuni@eb.unand.ac.id)

## ABSTRACT

Blended learning is used to describe a solution that combines several different delivery methods. It provides several conveniences in the teaching and learning process, both process and materials. It is hoped that it can enhance student performance. The observation and survey method are used in this research on the Practical of Bank Financial Statement Analysis course, which consists of 29 students; we find the impact of using blended learning. The result shows that by implemented blended learning and the improvement of it, the performance of students are better than previous year. However, the result also show that the students are preferred to choose conventional learning (study in class room) than online based learning. And based on these results, it would be a challenge for lecturers to enhance the students' attention.

**Keywords:** *blended learning, student perception, learning experience*



ICED <sup>20</sup>/<sub>21</sub>  
-QAIV



ID 47

# Improving The Quality of Student Learning Through Learning Methods Project Based Learning (PjBL) in Communication Sociology Course

Sarmiati Mia<sup>1\*</sup>, Elva Ronaning Roem<sup>1</sup>

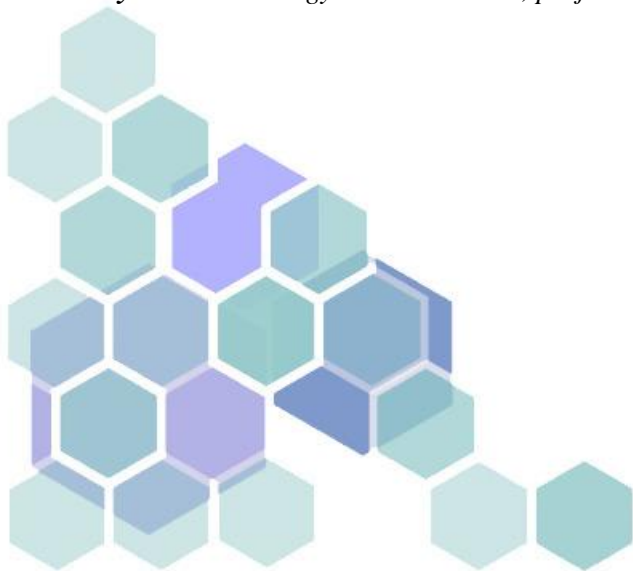
<sup>1</sup>*Communications Science Faculty of Social and Political Science, Universitas Andalas, Indonesia*

\**Corresponding author. Email: sarmiati@soc.unand.ac.id*

## ABSTRACT

The sociology of communication course studies various analyzes and cases of the sociology of communication, as well as the development of the sociology of communication both practically and theoretically. In the sociology of communication lectures, the learning method applied is face-to-face lectures, where students listen, take notes, ask questions and criticize. Then a Small Group Discussion (FGD) was conducted by forming groups, then selecting discussion materials by presenting papers and discussing them in class. Meanwhile, the lecturer is in charge of drafting discussion materials and discussion rules, being a moderator and at the same time reviewing at the end of each student discussion session. Based on the analysis of problems in the achievement of student learning outcomes (hard skills and soft skills) and the satisfaction of lecturers/students, it turns out that the achievement of learning outcomes in the sociology of communication lectures is still not optimal. The low student learning outcomes so far in this course may be due to the learning activities that have taken place so far only include coming, sitting following the lecturer's lecture, remembering or even copying all the information presented by the lecturer without any effort from the student asking questions on the material presented. not yet understood. In addition, the teaching materials developed by the lecturers so far have only been in the form of Power Point, so they do not support the essence of the achievement of the course. These problems make researchers make changes to the lecture method so far with a lecture method that has never been done in this sociology of communication lecture, namely by choosing the Project Based Learning (PjBL) lecture method. This lecture method is a project-based lecture method, where students are expected to carry out a project in analyzing a social problem that exists in society.

**Keywords:** *sociology communication, project based learning, case study*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 48

# Implementation of Project-Based Learning Using online Lab Media in interface and Peripheral Course

Ratna Aisuwarya<sup>1</sup>

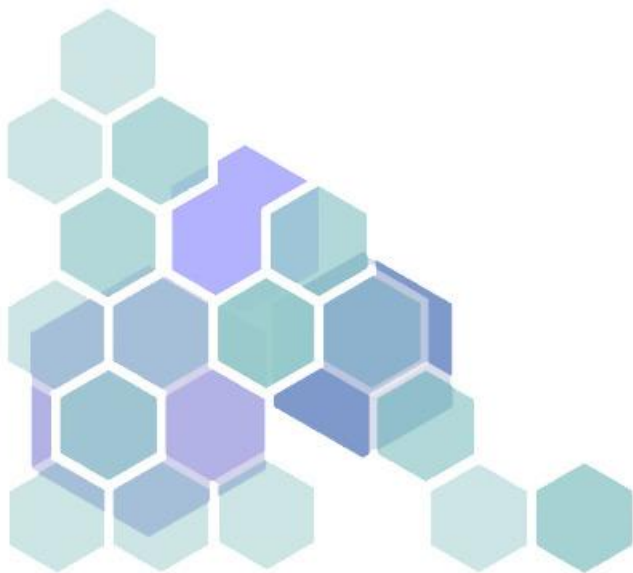
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: [aisuwarya@fti.unand.ac.id](mailto:aisuwarya@fti.unand.ac.id)

## ABSTRACT

The brief description of the Digital System Design course discusses the basic principles of digital system design, digital system design parameters, analysis and synthesis of combinational and sequential logic circuits, use of state diagrams in digital system design, modeling and simulating systems designs, formal verification methodologies for designs, fault models, design testing, design constraints, and design optimization techniques. The learning method applied in the previous year is the Teacher-Centered Learning (TCL) method. Based on the previous year's assessment result, the level of difficulty in this subject is classified as high, so it is necessary to change the learning method so that students can learn more effectively and efficiently. This course's learning method development is the student-centered learning (SCL) learning method, specifically Project Based Learning (PjBL). The implementation of the project-based learning model is proven to enhance the process and achievement of student learning outcomes in the Digital System Design course by providing projects according to the topics discussed. Assignments are given during in-class sessions every week and discussed in the subsequent lecture session based on students' feedbacks. The final assessment results show an improvement in the distribution of grades.

**Keywords:** *project-based learning, digital system design, student assessment*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

**ID 49**

# **Project Based Learning Method to Achieve Learning Outcomes in The Entrepreneurship Subject**

Rahmi Eka Putri<sup>1\*</sup>

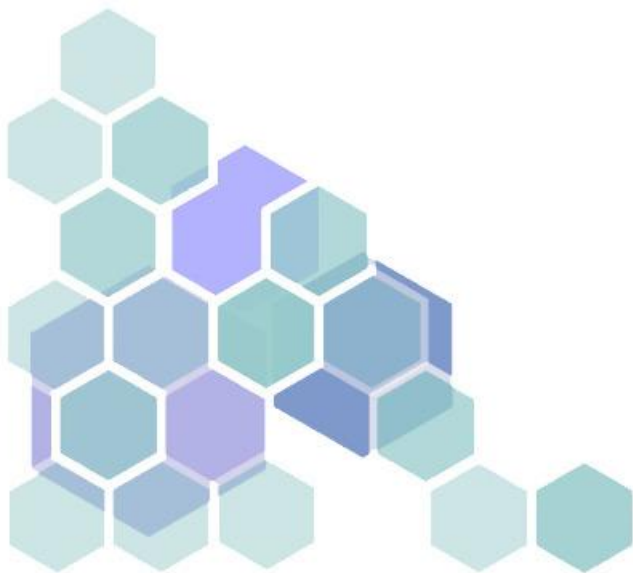
<sup>1</sup>*Universitas Andalas, Indonesia*

<sup>\*</sup>*Corresponding author. Email: rahmi@it.unand.ac.id*

## **ABSTRACT**

Entrepreneurship is a compulsory subject in the Computer Engineering Department in the third semester. The learning method used is project based learning, where students make a business plan project in groups. The implementation of the project based learning method aims to achieve learning outcomes by improving students' hard skills creating a business plan, and improving students' soft skills through group discussions. Assessment of the implementation of project based learning methods is carried out using a questionnaire consisting of nine questions using a Likert scale of 1 to 4. The questionnaire results show that the highest percentage is on a scale of three, followed by a scale of 4, then a scale of 2, and a scale of 1. These results indicate that project based learning can be implemented to achieve learning outcomes in entrepreneurship courses.

**Keywords:** *project based learning, learning outcomes, entrepreneurship*



**ICED** <sup>20</sup><sub>21</sub>  
**-QAIV**

ID 50

# Project-Based Learning Application Methods (Pbl) to Improve Learning Achievement and Business Activities in Creative Public Relations (Pr) and Publication Course

Revi Marta<sup>1\*</sup>, Ilham Havifi<sup>1</sup>

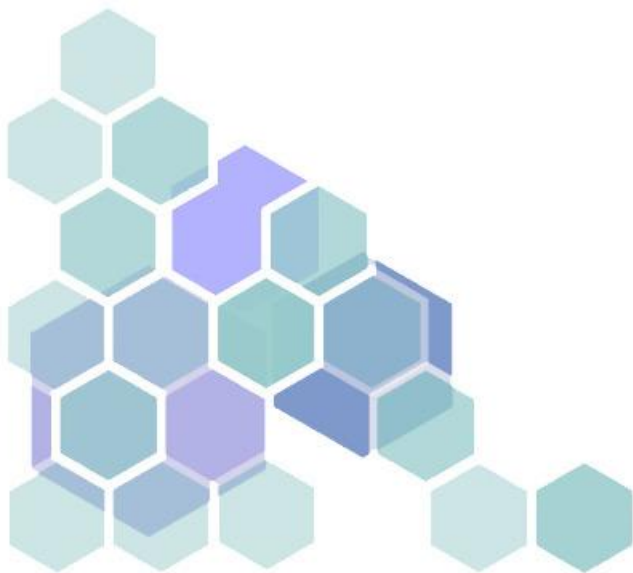
<sup>1</sup>*Communications Science Faculty of Social and Political Science, Universitas Andalas, Indonesia*

<sup>\*</sup>*Corresponding author. Email: unirevi@gmail.com*

## ABSTRACT

Creative PR and Publicity is a compulsory subject in the Communication Studies Program. This course has a weight of 3 credits (2-1) where in this course students not only have to get hard skills but also soft skills, there is a combination of theory and practice where the portion of practice is bigger than theory. Creative PR and Publicity courses are mandatory courses in several Departments at Andalas University. Because this course is in accordance with the vision and mission of Andalas University which is very thick with its entrepreneurial base (entrepreneurship) and in accordance with the vision of the Department of Communication Science. For this reason, it is very necessary to carry out Classroom Action Research so that later RPS, learning methods and technology, as well as student assessments are adequate to realize students who have a good business spirit in this course by managing an event. The method used is classroom action research, which means that the main idea is that someone who conducts classroom action research uses qualitative methods in collecting and analyzing data. After taking this course, students are expected to be able to obtain and achieve learning outcomes, namely being able to understand the concepts of Creative PR and Publicity, able to understand and apply interpersonal communication in Creative PR and Publicity. From the soft skills aspect, students are also expected to be able to think creative, innovative, and able to manage events and public relations well, able to present their thoughts clearly, confident, independent, disciplined, ethical, and able to work in a team.

**Keywords:** *creative publicity, public relations, publicity*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

**ID 51**

**Implementation of Project Based Learning (PjBL)  
Method for Business Simulation Courses in Master of  
Management Study Program Faculty of Economics  
Universitas Andalas**

Hendra Lukito<sup>1\*</sup>

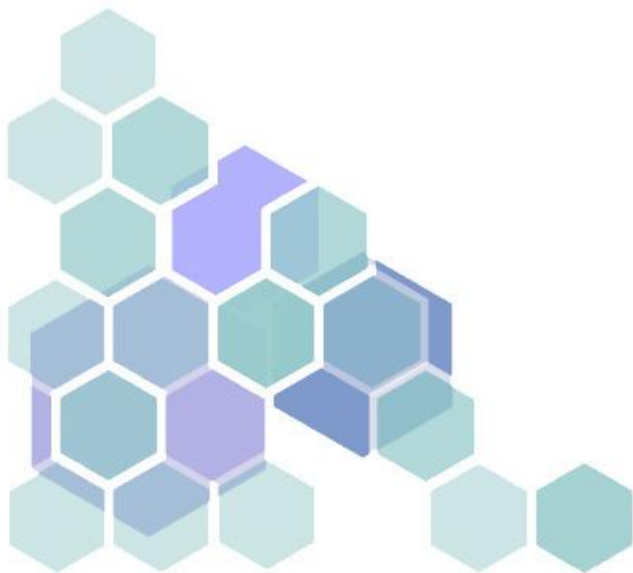
<sup>1</sup>*Universitas Andalas, Indonesia*

<sup>\*</sup>*Corresponding author. Email: hendralukito2406@gmail.com*

**ABSTRACT**

This classroom action research aims to determine the effectiveness of case-based learning methods and outcome-based assessments for business simulation courses in the Master of Management study program, Faculty of Economics, Universitas Andalas. The business simulation course is a course offered in the odd semester of the 2021/2022 academic year which is a course that prepares students to be able to prepare a business feasibility study proposal that discusses the feasibility of a business from all aspects related to functional areas in management science. The outputs result from this course encourage students to understand well all aspects of starting a business or business. In order to achieve learning outcomes in this business simulation course, project-based learning methods are used. The results show that the project-based method used in this study has been implemented through the RPS which has accommodated the project base in the form of teaching materials and an assessment rubric that explains this in detail.

**Keywords:** *business simulation, project base, learning achievement*



**ICED** <sup>20</sup><sub>21</sub>  
**-QAIV**

ID 52

# Overview of Students' Perspectives on The Project Based Learning Method on Bridge Design Course

Masrilayanti Masrilayanti<sup>1\*</sup>, Ridho Aidil Fitrah<sup>1</sup>

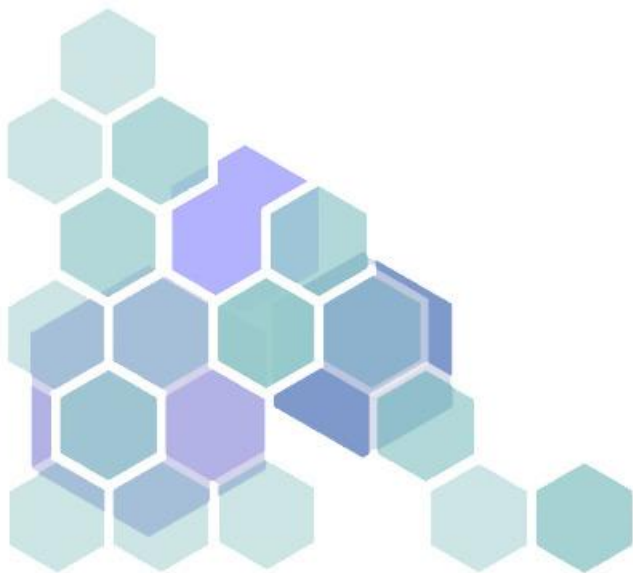
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: masrilayanti@gmail.com

## ABSTRACT

In the midst of a pandemic that is still ongoing in the world, the learning system in universities is much different from before. Academic staff including lecturers, continue to strive so that learning objectives can still be achieved. One of the learning methods used is Problem Based Learning, which focuses on student creativity in understanding learning materials. This study aims to determine the student's point of view on the concept of the Problem Based Learning method for the Bridge Design course. The research method used is to collect data through questionnaires distributed to students in the bridge design course. As many as twenty six respondents have given their opinion and then analyzed by descriptive statistical method. Some basic questions have been asked to the respondents related to their understanding of problem based learning, their difficulties in problem based learning, and which type of learning they prefer. The results of the analysis show that problem based methods is preferred by students compared to teacher centered learning. They have the greatest difficulty of understanding the assigned task (38.5%), finding references (30.8%), report (19.2%), and working with groups (11.5%)

**Keywords:** *problem based learning, engineering course, higher education*



ID 53

# Case Based Method in Practical of Computer Accounting: The Effect on Students' Capability in Preparing Financial Statements

Sylvi Astari<sup>1\*</sup>, Dian Yuni Anggraeni<sup>1</sup>, Rayna Kartika<sup>1</sup>

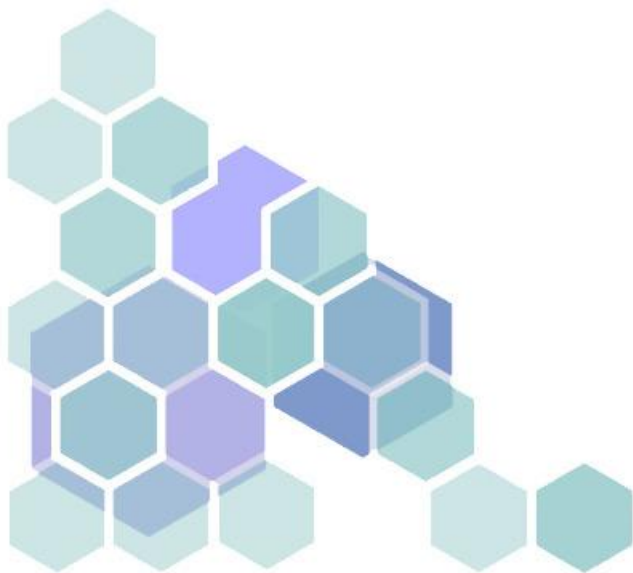
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: silvyastari24@gmail.com

## ABSTRACT

This study aims to examine the influence of the case based method (CBM) implementation toward capability in preparing the financial statements. The population of this research is the students of accounting department at Diploma III Program, Universitas Andalas. Sampling technique in this research is purposive sampling with certain criteria such the student who enrolled Practical of Computer Accounting course. The study uses action research design, pre-test, and post-test design and lastly, we compare the score by t-test. The results show that there are differences in student learning outcomes apply case-based method to those do not apply case-based method. This means that the case based learning method is effectively used in this courses. The case based method presents cases of company's transactions (journals) to more easily and so they could prepare the financial statements.

**Keywords:** case based method, blended learnings, practical, computer accounting, capability



**ID 54**

# **Case Based Learning Method in intelligent System Course**

Nefy Puteri Novani<sup>1\*</sup>, Desta Yolanda<sup>1</sup>

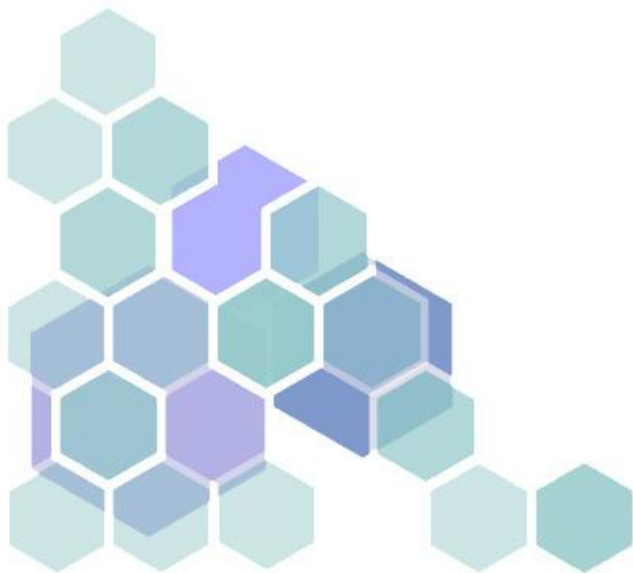
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: nefyputeri@it.unand.ac.id

## **ABSTRACT**

The learning method discussed in this study is a case-based method which is implemented in the Intelligent Systems course. Activities in this research include action planning and compiling teaching materials in the form of cases scenarios/problems that students find solutions in small groups. In its implementation in this study, students were given cases that will be solved in groups, so as to encourage students to get a higher order of thinking skill level because real problems require problem solving together by using information for problem solving with different perspectives and with various strategies that group members can suggest. Students test scores results was collected by given an evaluation test for Fuzzy Logic topics and Neural Network topics. The results showed that 63% of the students can achieved the maximum point from the evaluation test.

**Keywords:** case-based method, learning method, case-based learning method, high order thinking



**ICED** 2021  
**-QAIV**



ID 55

# Enhance Accounting Student’S Academic Skill By Implementing Project Based Learning on information Technology and Computer Programming Subject

Verni Juita<sup>1\*</sup>

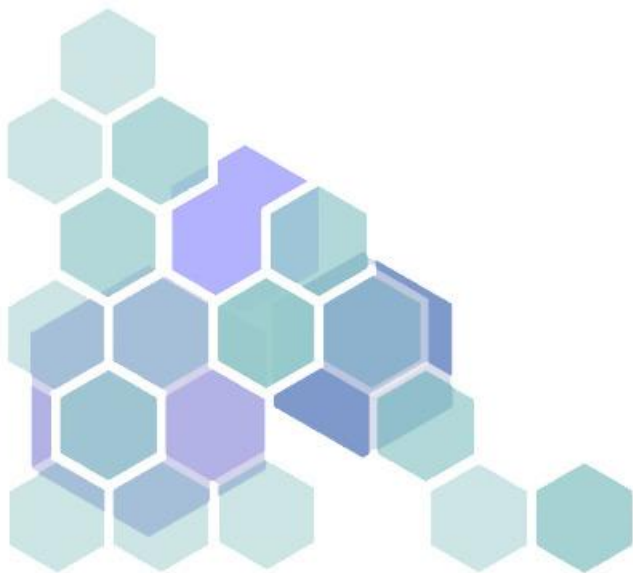
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: verniakuntansi@gmail.com

## ABSTRACT

The current changes in learning activities that support online learning have brought new challenges. One of these challenges is achieving learning objectives such as students' understanding and critical thinking as part of their academic skills. Therefore, this study aims to evaluate the implementation of project-based learning (PBL) methods on the Information Technology and Computer Programming subject. Furthermore, Project-Based Semester Learning Plan (SLP) has been developed and implemented on this subject since September 2021. There are two indicators used to evaluate the implementation of Project-Based learning on this subject: student perception and the achievement of learning outcomes that imply in the distribution of assignment scores. Online questionnaires are shared with the thirty-two students who enrolled in this class to see students' perceptions. The result shows that PBL method has a significant impact on increasing students' understanding of Ms. Excel application use for data processing. In addition, there are three top skill advancements experienced by students during PBL, namely: communication skills, data processing and technological skills, and teamwork. However, the most preferred learning method chosen by the students is direct explanation by the lecturer using zoom (teacher-centred learning). While only one fifth of the students preferred project-based learning as the best learning method. Regarding the distribution of assignment scores and the achievement of learning outcomes, this study also found that all students have high scores, ranging between 75 to 100.

**Keywords:** *project-based learning, accounting, information technology*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 56

# Cased Based Method and Improvement Student'S Performance on Life Cycle Nutrition Course Among Nutrition Science Students

Azrimaidaliza Azrimaidaliza<sup>1\*</sup>, Deni Elnovriza<sup>1</sup>, Syahrial Syahrial<sup>1</sup>

<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: azrimaidaliza@ph.unand.ac.id

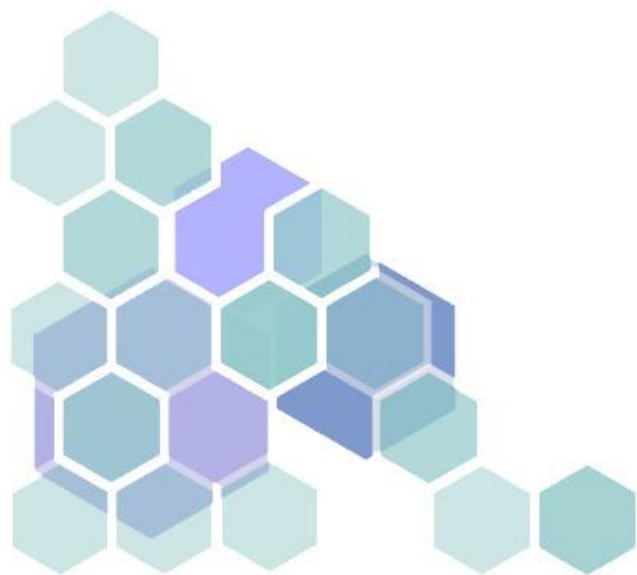
## ABSTRACT

**Background :** One of skills which must have for graduated student of nutrition science program study is higher thinking skill. These skills are needed when nutritionist overcome nutritional problem. The aim of the study is to analyzed the effectiveness of case based method according to improve student's performance. **Methods :** The study was class action research using quantitative study which was applied case based method in life cycle nutrition course. This method was implemented in two classes through e-learning and online form. The samples were 92 students which were registered in life cycle nutrition course. The effectiveness of the method was assessed through pre-post test, mid semester mark, observation of student's performance during the class and evaluation method using instrument.

**Results :** The posttest scores after case based method sessions were significantly better than pretest scores (pvalue < 0.05). Student's mark in the mid test on year 2021 for life cycle nutrition course was also better than mid test on year 2020 after using the case based method in learning process. Students' were looks like more active in participating the CBM session than previous learning method. It was supported from student's perception about the effectiveness of CBM activity in their learning.

**Conclusions :** Case based method was effectively improve student's performance such as student's mark, active participation and critical thinking skill on solving problem.

**Keywords:** case based method, improve, student's performance



ICED 2021  
-QAIV

ID 57

# Development and Implementation of Case Based Methods in Block 3A. Midwife Care on Pregnancy at The S1 Midwife Program Faculty of Medicine Andalas University in 2021

Miranie Safaringga<sup>1\*</sup>, Fitrayeni Fitrayeni<sup>1</sup>

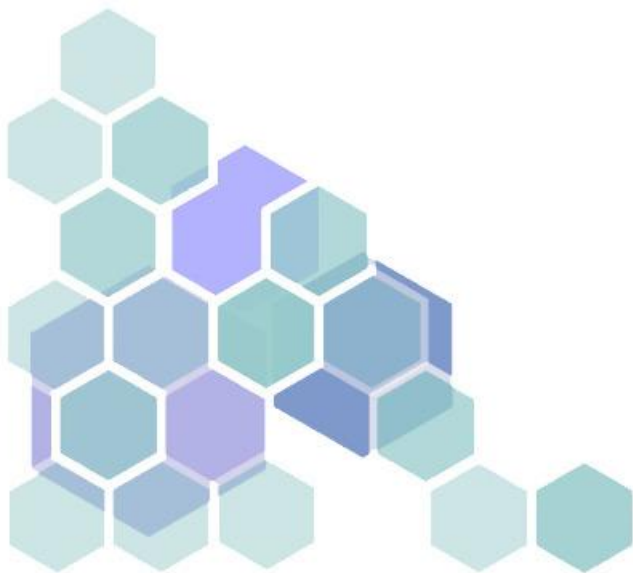
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: miraniesafaringga@med.unand.ac.id

## ABSTRACT

Achievement of the learning objectives of a student with the method of learning problem based learning (PBL), can be influenced by the results of extracting their peer information in small groups because the information obtained by students will be discussed to perfect the knowledge gained. This study applies a blended learning and tutorial in the PBL method. The results of the study, there was an increase in the value of students before and after treatment with a value of  $p = 0,000$ , and there was a difference in grades of students in 2020 and 2019, where the grades of students in 2020 were better than in 2019, with  $p = 0.00^1$ . The results of the interview that students prefer the Blended Learning method over discussion in large classes, students feel better understand the discussion material, each group member is more active and gives their opinions according to the theory of the book or journal that has been studied, lecturer attention to each student is greater, so students are very enthusiastic in studying the material and discussing it. PBL method with blended learning is very effective to be applied in learning to increase the activeness, interactive, learning motivation, and critical thinking of students.

**Keywords:** learning methods, problem based learning, case based method



ICED 2021  
-QAIV

**ID 58**

# **The Implementation of Blended Learning in intermediate Accounting**

Silvy Astari<sup>1</sup>, Rayna Kartika<sup>1\*</sup>

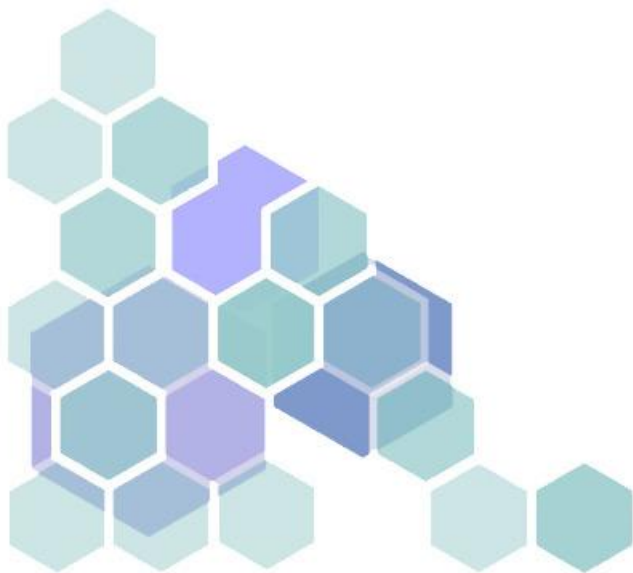
<sup>1</sup>*Universitas Andalas, Indonesia*

<sup>\*</sup>*Corresponding author. Email: raynakartika@eb.unand.ac.id*

## **ABSTRACT**

The blended learning method is used in the accounting intermediate subject in the Diploma program, Andalas University. The lecturer provides five videos and a PowerPoint to increase the understanding of the student to the subject. The teaching method uses the combination of Teaching Center Learning (TCL) and Student Center Learning (SCL). We survey in terms of knowing the benefit of video media and PowerPoint to students. We found that students have more understanding in accepting the material using media video compare to PowerPoint. However, when students do the assignment, video media did not help them as they expected. The aim of this study is to explain the implementation of blended learning in an intermediate accounting class and distinguish the benefit of video media and PowerPoint to develop the student's knowledge.

**Keywords:** *blended learning, video media, online method, learning development*



**ICED** 20  
21  
**-QAIV**

ID 59

# Case Base Method: A Collaborative Learning to Improve Student'S Soft Skills in Business Analytics

Ares Albirru Amsal<sup>1\*</sup>, Rayna Kartika<sup>1</sup>

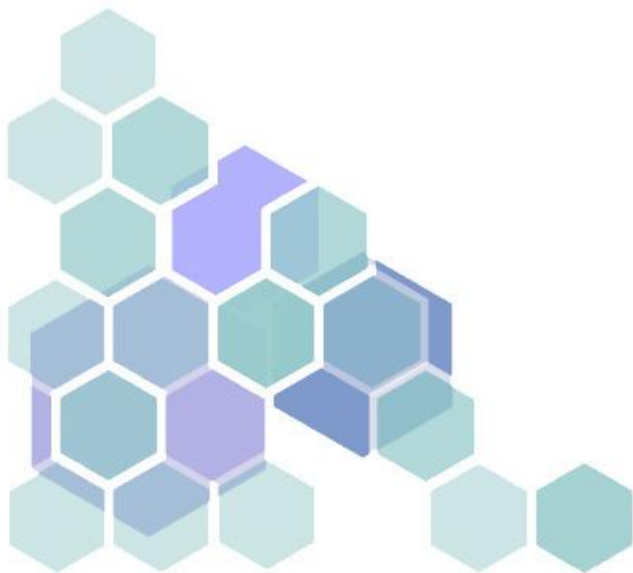
<sup>1</sup>Faculty of Economics, Universitas Andalas, Indonesia

\*Corresponding author. Email: aresalbirruamsal@eb.unand.ac.id

## ABSTRACT

The objectives of this research are to investigate the readiness of students using case-based method in Business Analytics course subject in the Department of Management, Universitas Andalas. Since Business Analytics is a new course subject offered to student in 2021 at Management department, the readiness of students to learn this subject must be identified and prepared. Hence, the teacher will obtain information on what the suitable materials and learning approach is conducted in the class. Another objective of this research is to find out the extent of case-based method have contributed in improving student's interests and soft skills. The survey has been addressed to 97 students who enrol in business analytics class by distributing questionnaires related to implementing case-based method in learning approach. Based on these two objectives, the finding shows that students are interested and ready to learn this subject collaboratively and the teacher has utilized case-based method to assist and improve student's soft skills in Business Analytics.

**Keywords:** case-based method, business analytics, soft skills, collaborative learning



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 60

# The Effectiveness of Case-Based Methods increasing Knowledge of Nursing Students in Community Courses

Rika Sabri<sup>1\*</sup>, Mohd. Jamil<sup>1</sup>, Siti Yuliharni<sup>1</sup>

<sup>1</sup>Faculty of Nursing Universitas Andalas, Indonesia

\*Corresponding author. Email: rikasabri@nrs.unand.ac.id

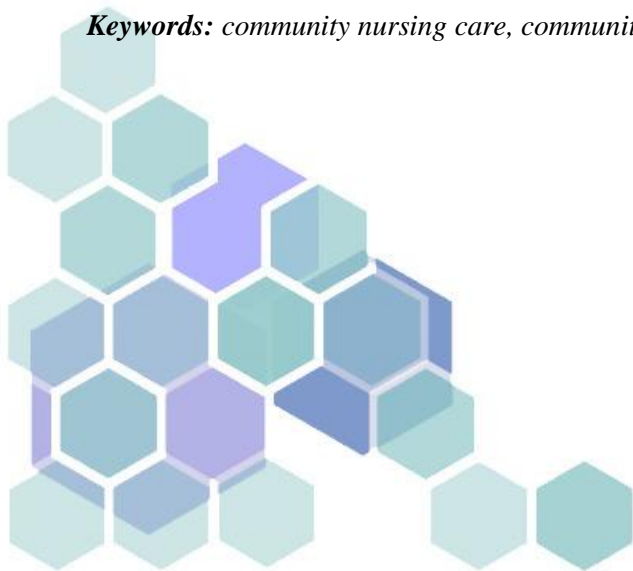
## ABSTRACT

**Background:** providing nursing care in the community or the community is one of the competencies of nurses that must be achieved in semester 6. Many students are not ready to go down to the community to provide nursing care because they are afraid of giving wrong actions to the community. Conceptually, students are still not ready to provide nursing processes and analyze public health problems because the conventional learning process is packaged online. Study results are not satisfactory. The purpose of this study was to prove that the case-based learning method was more effective in improving the ability of community nursing students to provide nursing care to the community, which was seen from the satisfactory learning outcomes.

**Methods:** This study uses a pretest and post-test design in the intervention group (Class of 2019 with CBM learning) by including secondary data comparisons from the Class of Class 2018 (not yet applying the CBM method). The ability to provide community nursing care was evaluated through the CBM learning method. Through discussion assessment through the available rubrics, it is seen that students master case resolution. Each student is assessed through an exam that is also case-based, using case analysis and reasoning, and continues to answer questions related to the case. Data were analyzed by paired t-test and unpaired t-test. **Results:** there was a significant change between pre and post-test in the intervention group after using the case-based learning method, while the control group did not show a significant change between pretest and post-test (lecture learning method).

**Conclusion:** the case-based learning method is more effective in improving the ability of community nursing students to solve a given case than the lecture method conducted in the control group. Patience is needed in preparing cases that are more factual and easily understood by students.

**Keywords:** community nursing care, community nursing, cbm, case-based method



ID 61

# Trengthening The Teaching and Learning Process Through Blended Learning in Sociology Study Program

Maihasni Maihasni<sup>1\*</sup>, Indraddin Indraddin<sup>1</sup>, Wahyu Pramono<sup>1</sup>

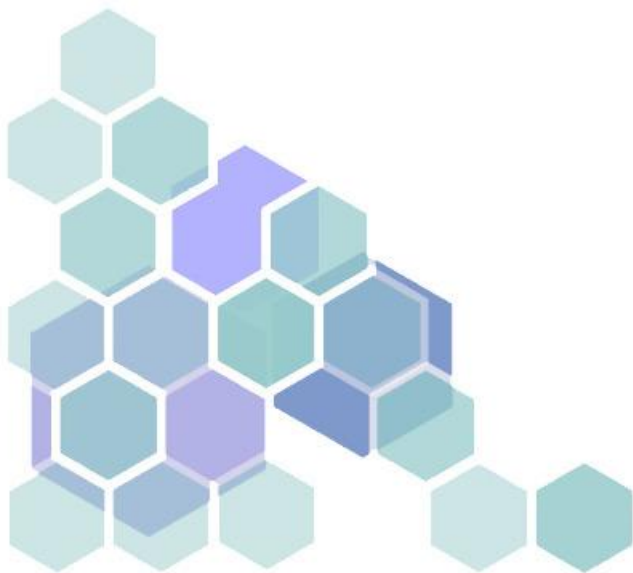
<sup>1</sup>*Department of Sociology Faculty of Social dan Political Science, Universitas Andalas, Indonesia*

\**Corresponding author. Email: maihasni@yahoo.co.id*

## ABSTRACT

The teaching and learning process in a study program is a patterned activity that is carried out regularly with curriculum guidelines and standards that apply in a study program. To get the results and quality as expected, it is necessary design an appropriate learning method. The Department of Sociology applies blended learning methods as a guide and guide for students and teachers in every teaching and learning process. Preparation of a good lesson plan according to standards is an option. The lesson plan is followed by learning media that can be followed online, synchronously, or asynchronously. The learning strategy that is prepared is to build a learning plan using the OB method, namely by determining the learning theme based on the objectives to be achieved (learning outcomes) starting from the learning outcomes at the study program level to the achievements charged to the courses. While the learning media utilizes the e-learning program built at the university level.

**Keywords:** *learning process, learning achievement, ob*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 62

# Portfolios As An Outcome Assessment in Community Health Nursing Project Based Learning

Mahathir<sup>1\*</sup>, Rika Sabri<sup>1</sup>, Agus Sri Banowo<sup>1</sup>, Mohd Jamil<sup>1</sup>

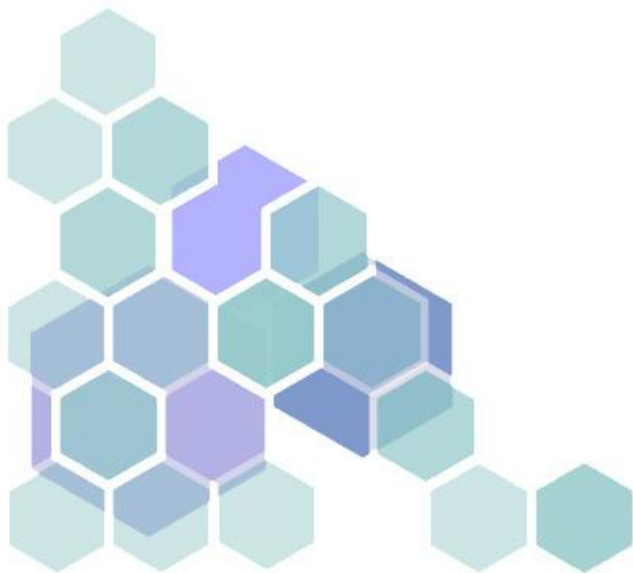
<sup>1</sup>Faculty of Nursing Universitas Andalas, Indonesia

\*Corresponding author. Email: mahathirmahat@nrs.unand.ac.id

## ABSTRACT

Clinical assessment portfolio is type of outcome-based evaluation method project based learning teaching method. The development of the use of clinical assessment portfolios as a learning achievements evaluation method is growing, but the use of clinical assessment portfolios is still focused on social science field. This study aimed to measure the definitive outcomes of the assesment method with spesific learning achievements. The study was conducted by quasi experimental pre and post with control group design. The sample size is done by hypothesis test two pairs population (numeric data) formula. The result of the evaluation of learning outcomes with the clinical assessment portfolio provides several benefits, especially in facilitating students to get effective feedback, learning continuity, communicating difficulties and obstacles experienced during providing care, case variations, learning environment control and personal learning development. It is suggested to used such type of evalutaion to increase the learning experience of the nursing student.

**Keywords:** nursing students, project-based learning, nursing education



ICED <sup>20</sup><sub>21</sub>  
-QAIV



ID 63

# Why 6 Cs ? The Urgency of Learning at Elementary School

Poppy Anggraeni<sup>1\*</sup>, Dadang Sunendar<sup>1</sup>, Bunyamin Maftuh<sup>1</sup>, Wahyu Sopandi<sup>1</sup>,  
Ryan Dwi Puspita<sup>2</sup>

<sup>1</sup>Universitas Pendidikan Indonesia, Indonesia

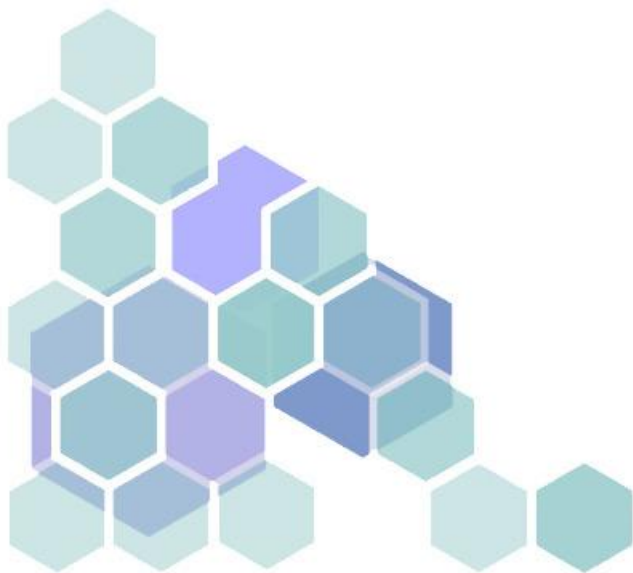
<sup>2</sup>IKIP Siliwangi, Indonesia

\*Corresponding author. Email: poppysofia04@upi.edu

## ABSTRACT

Science and technology continues to develop and bring changes and new orders in various fields of human life, including the education system. The implication is that current learning practices must be oriented towards learning in accordance with the demands of human competence in the 21st century. This study aims to obtain information about 21st century skills that are important to be implanted in elementary school classrooms. The method used is a systematic literature review of a number of data related to 21st century skills. The results show that there are six skills that must be instilled in elementary schools, it is character, critical thinking, creativity, citizenship, collaboration, and communication which are then called the 6 Cs. The 6 Cs are important because elementary school students must be equipped with various skills in order to have more complex skills, have mastery of technology and a good understanding of information in a globalized world. This research has an impact on the availability of information about the 6 Cs that must be instilled in elementary school classrooms and opens opportunities for further research on the use of appropriate methods, learning media, and conditioning learning environments to develop 6Cs in elementary schools as a whole.

**Keywords:** 6 cs, 21st century skills, elementary school



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 64

# The Implementation of Creative Problem Solving (CPS) in Mobile Ad Hoc Network Course: Simulation and Case Study

Budi Rahmadya<sup>1\*</sup>, Rifki Suwandi<sup>1</sup>, Tri Kurniawati<sup>1</sup>

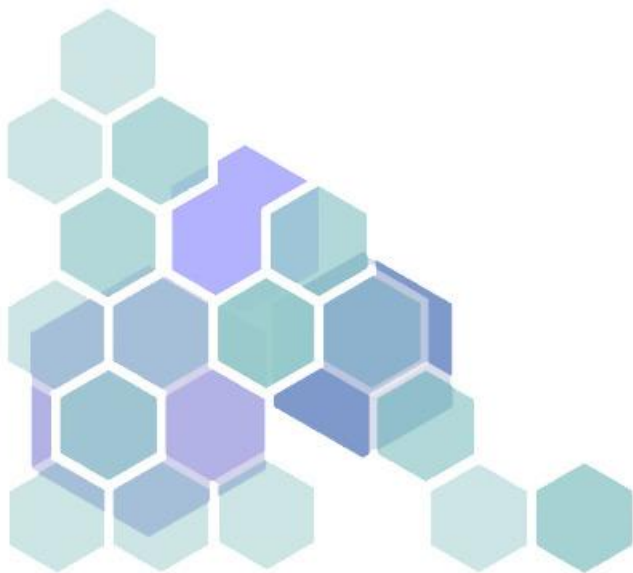
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: [budi-r@it.unand.ac.id](mailto:budi-r@it.unand.ac.id)

## ABSTRACT

This teaching method is an implementation of creative problem solving (CPS) for ad hoc mobile network courses. This course requires students to understand the concept of communication from mobile networks. In this lecture, students are divided into two groups of discussion, where each group is given the same case study using network simulation (NS) 2. In the simulation, students are able to simulate cases that have been determined by the lecturer and analyze the results obtained. The use of project-based learning methods in this study can improve the collaboration and communication skills of participants which are very useful in real work in the future.

**Keywords:** *teaching method, creative problem solving (cps), mobile ad hoc network network courses*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 65

# Evaluation of online Learning of Logistics Distribution Practicum Courses Based on Future Orientation and Study Cases

Ares Albirru Amsal<sup>1\*</sup>, Laela Surdiani<sup>1</sup>

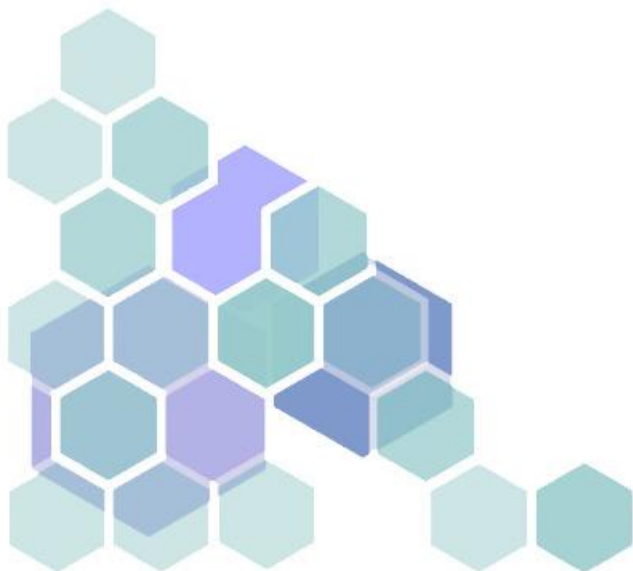
<sup>1</sup>*Faculty of Economics, Universitas Andalas, Indonesia*

\**Corresponding author. Email: aresalbirruamsal@eb.unand.ac.id*

## ABSTRACT

Logistics distribution practicum is a course that plays an important role in the industrial era 4.0. This course provides skills regarding the movement of goods and services that are very relevant to today's online buying and selling transactions. Course learning can not be separated from the motivation to learn from students. This paper aims to evaluate the PDL teaching and learning process for half a semester of lectures from the aspect of interest, job perception, and case questions given. The study took data from 2 classes with the survey method. Of the 51 data collected, 30 were further processed. The results of the study found that students had a high interest in studying PDL. However, many of them are still hesitant to work in the logistics distribution sector. Cases given in learning are considered to help students understand the learning material. On the other hand, the material still needs to be updated. This research is useful for developing logistics distribution skills in a case-based curriculum.

**Keywords:** *case method, future orientation, logistics distribution*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 66

# Effectiveness of Entrepreneur Education for Entrepreneurial intention Through Creativity and Entrepreneurial Self Efficacy

Tri Rahayuningsih<sup>1\*</sup>

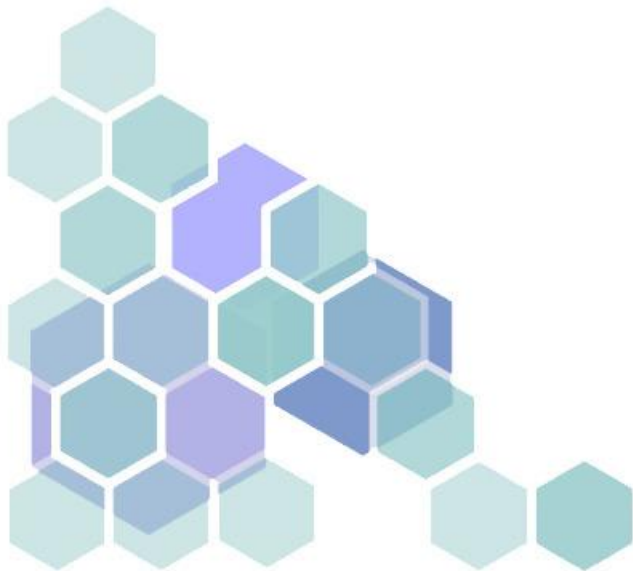
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: trirahayuningsih@med.unand.ac.id

## ABSTRACT

Entrepreneurship course is one of the compulsory subjects at Universitas Andalas. However, its effectiveness has not been measured to foster entrepreneurial intention, especially for psychology students. The purpose of this classroom action research is to find out whether entrepreneurial intention can be assessed from differences in creativity and entrepreneurial self-efficacy in students during the period of taking entrepreneurship courses. This study used a onegroup pretest-posttest design. Lectures are given using case discussions and analysing entrepreneurs to be innovated by students as project learning. It was found that there were differences in the Mean value of entrepreneurial selfefficacy and impact of creativity toward entrepreneurship intention after eighth lesson or mid semester, after implementation case based method and project based learning. Thus, the methods can increase student entrepreneurial self-efficacy.

**Keywords:** *entrepreneurial self-efficacy, creativity, entrepreneurial intention, action research, entrepreneurship course*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 67

# Implementation of Problem-Based Learning in Video and Image-Based Tutorial Discussion With increasing Student Learning Outcomes for Block <sup>1</sup>.A Courses (Introduction to Midwifery Education)

Aldina Ayunda Insani<sup>1\*</sup>, Feni Andriani<sup>1</sup>

<sup>1</sup>Universitas Andalas, Indonesia

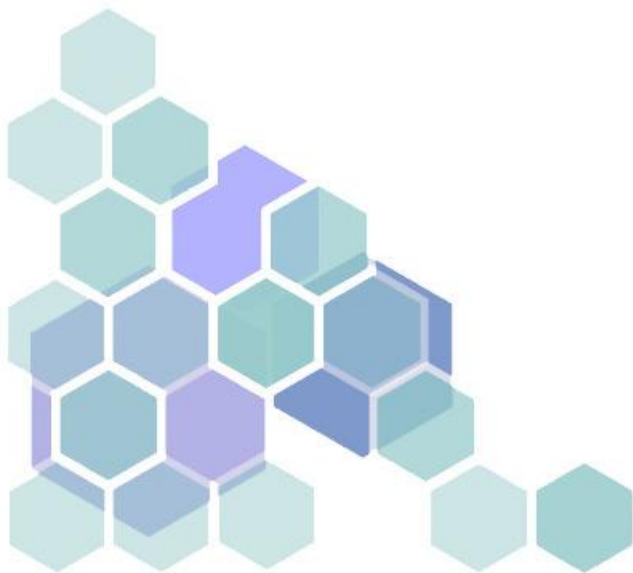
\*Corresponding author. Email: [aldinaayundainsani@med.unand.ac.id](mailto:aldinaayundainsani@med.unand.ac.id)

## ABSTRACT

Midwifery education has implemented a Student-Centered Learning system with a Problem Based Learning (PBL) method approach. One of them is using a block system, and the activities are in the form of tutorials. Tutorials are carried out by utilizing videos and pictures when explaining the learning outcomes or learning outcomes obtained. In the situation of the Covid-19 pandemic, the Blended Learning system learning method was carried out on the i-Learn application. Guides and tutorial activity results are uploaded to the application, and the evaluation process in the form of a final block assessment also uses a computer-based test (CBT) on the i-learn application. The purpose of this study was to improve student learning outcomes in Block <sup>1</sup>.A course by comparing the effect of using videos or pictures on tutorial activities.

The research subjects were the intervention group (Class of 2021 students who used the I-Learn application, videos, and pictures) and the control group (Class of 2020 students with an online system without videos and pictures). The activity was carried out for 5 weeks, and in the 6th week, an assessment was carried out for all aspects of the learning method. Based on the results of the study, it was found that student learning outcomes had increased and were above the average (40%), and there is a decrease in the percentage of students who repeat in block <sup>1</sup>.A.

**Keywords:** *problem-based learning, videos, tutorialsst, udent assessments*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 68

# Implementation of Project Based Learning (PjBL) Method to Improve Higher Order Ability Thinking Skills (HOTS)

Hafizah Hanim<sup>1\*</sup>, Ricky Akbar<sup>1</sup>

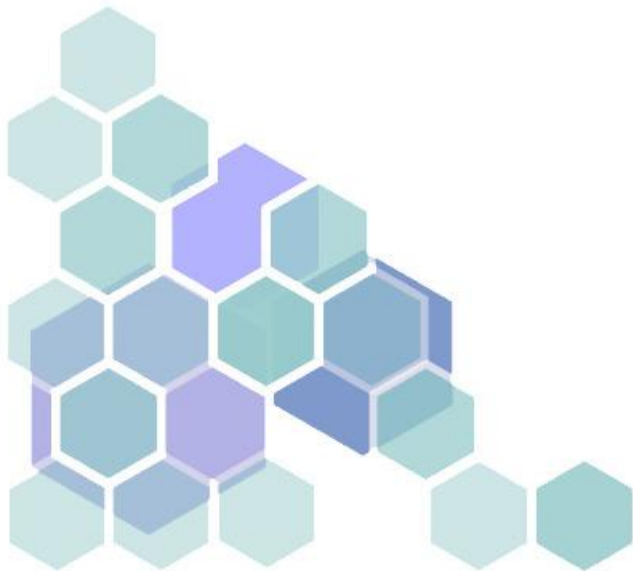
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: 0209hafizahhanim@gmail.com

## ABSTRACT

This study aims to improve the Higher Order Thinking Skills (HOTS) of students taking e-Commerce courses in the Information Systems Department. The method used is the Project Based Learning (PjBL) method. This study uses a scheme of 16 meetings with a combination of Synchronous and Asynchronous processes. There is a significant change between the 2020 e-commerce class that has not used the PjBL method and the 2021 e-commerce class that has used the PjBL method. The PjBL method can improve the student's HOTS skills so that the website as the output of the course can be achieved properly.

**Keywords:** e-commerce, high order thinking skill, student center learning, project based learning



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 69

# Improving Student Learning Using Case Based Method in Hybrid Learning of Basic Pharmaceutical Chemistry Practicum

Purnawan Pontana Putra<sup>1\*</sup>, Friardi Ismed<sup>1</sup>, Regina Andayani<sup>1</sup>

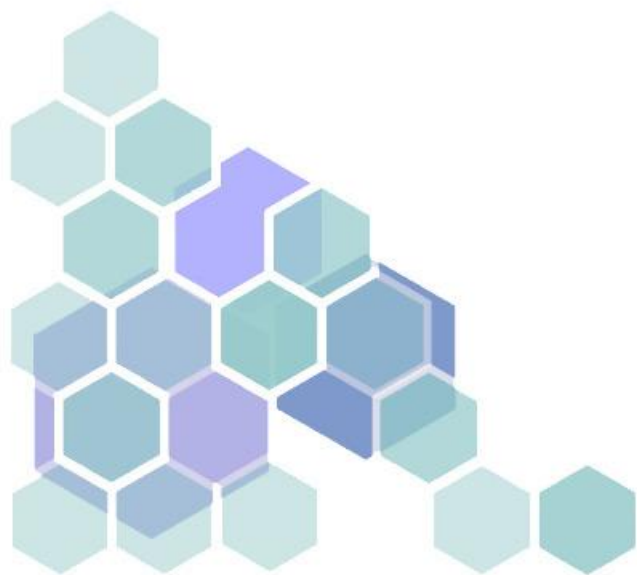
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: [purnawanpp@phar.unand.ac.id](mailto:purnawanpp@phar.unand.ac.id)

## ABSTRACT

The COVID-19 pandemic has caused universities to adjust the state of education on campus without reducing learning outcomes. In this case, Hybrid learning was developed, which combines offline and online learning and practicum. The method used in developing this learning is the Case-Based Method, in which a total of 30 students, as subjects in this study, evaluated students' understanding using pretest and posttest. This assessment was conducted to see the success of the case-based method and the challenges of this method. An increase in students' understanding was obtained using pretest and posttest assessments. The average pretest value per class is 60, and after using the case-based learning method, the class posttest score increases to an average of 84.

**Keywords:** case based method, hybrid, practicum, basic pharmaceutical chemistry



ICED <sup>20</sup><sub>21</sub>  
-QAIV

**ID 70**

# **The Implementation of Case Based Method in Advanced Financial Accounting I Subject**

Indah Permata Suryani<sup>1\*</sup>, Husna Roza<sup>1</sup>, Jonhar Rusli<sup>1</sup>

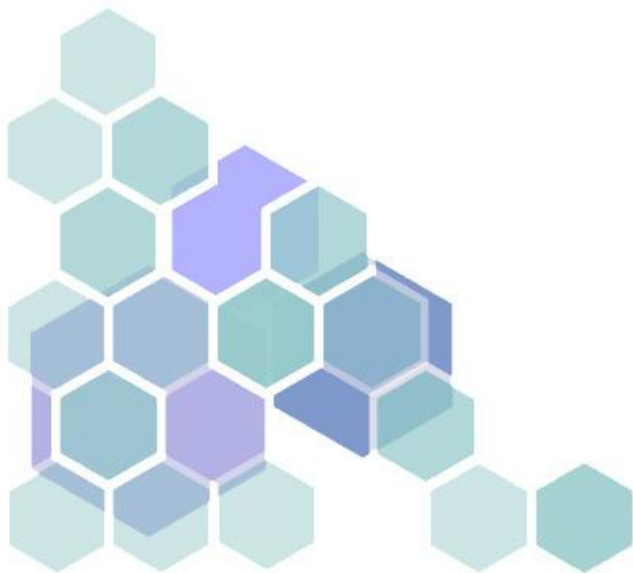
<sup>1</sup>*Universitas Andalas, Indonesia*

<sup>\*</sup>*Corresponding author. Email: indahpermatasuryani@eb.unand.ac.id*

## **ABSTRACT**

The aim of this study to evaluate the implementation of Case Based Method in Advanced Financial Accounting I Subject in International Class, Accounting Department Universitas Andalas. Semester Learning Plan firstly discuss in team teaching by evaluating the previous method implement in this subject. The research conducted in half semester and bring more benefits for students' effectiveness in learning process. Case-based method trigger students to think critically, communicate effectively and increase the competence especially related to the current issue. Furthermore it also enhances lectures performance as facilitator to design the case method for students.

**Keywords:** *case-based method, learning method, accounting*





**ID 71**

# **Project-Based Learning to Understand Students About The Application of Code 1726:2019 in Earthquake Engineering Courses**

Jati Sunaryati<sup>1\*</sup>, Masrilayanti Masrilayanti<sup>1</sup>, Ruddy Kurniawan<sup>1</sup>

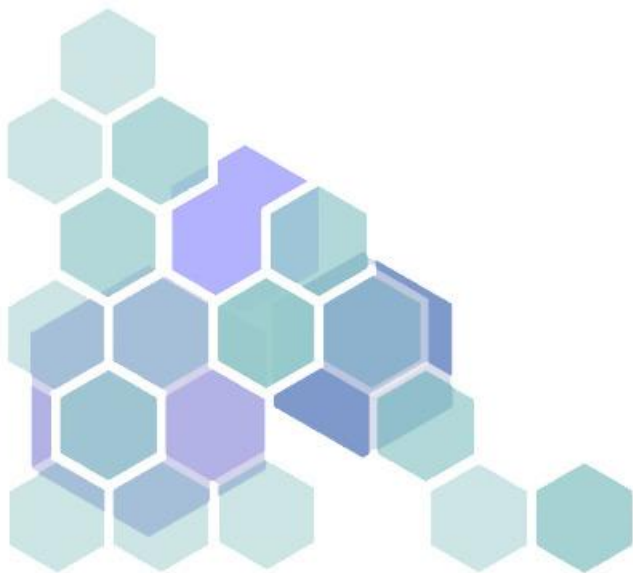
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: [jati@eng.unand.ac.id](mailto:jati@eng.unand.ac.id)

## **ABSTRACT**

Indonesia updated its earthquake regulations by issuing Code SNI 1729:2019 concerning Procedures for planning earthquake resistance for building and non-building structures. Likewise with SNI 1726: 2019, which contains various rules so that an engineer can design and analyze earthquake-resistant buildings. Therefore, a learning method is needed that bridges students' understanding as prospective engineers in applying this code in Earthquake Engineering courses. In this study, the Project-Based Learning method was chosen for the learning process to design earthquake-resistant structures based on the SNI 1729:2019 code. Therefore, the Project Base Learning method was applied in the Earthquake Engineering class, which involved 15 students in one class. So that the concept of teamwork can also be emphasized on the benefits to students, a group consisting of 2 students per group was created, while group 7 consisted of 3 students. Furthermore, each group is required to complete an earthquake-resistant building planning project based on SNI 1726:2019 regulations. The class action is carried out on the design process in accordance with the context of the study. Students feel 100% of the benefits in the form of ease of understanding using the PBL method. 83.7% of students find it challenging to understand the structural design concept if it is not applied in a project. Students are also willing to complete their soft skills in using structural analysis software so that the completion of the project they are working on can be completed comprehensively

**Keywords:** *project-based learning, earthquake engineering, earthquake resistance structure, soft skill*



**ICED** 2021  
**-QAIV**

ID 72

# Project-Based Learning Models in The Development of international Cooperation Framework Course

Anita Afriani Sinulingga<sup>1\*</sup>, Haiyyu Darman Moenir<sup>1</sup>

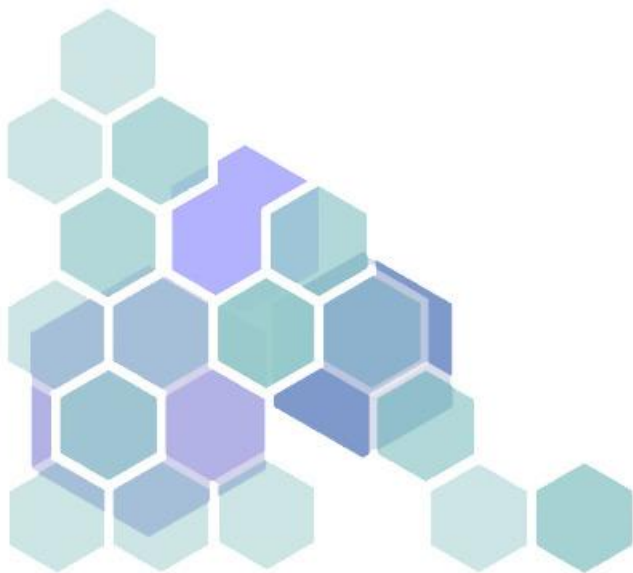
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: nanisinulingga@gmail.com

## ABSTRACT

This research aims to develop a project-based learning model in the subject of the Development of International Cooperation Framework. This type of research is classroom action research that develops models and project-based assessments in the Development of International Cooperation Framework. This research was conducted on fifth-semester students majoring in International Relations in the odd semester of the academic year 2021-2022. The selected development stage is the development stage of The George Lucas Educational Foundation which has been modified into a series of project-based learning stages for one semester. The results showed that applying the project-based learning method helped achieve the learning objectives of the course. The performance assessment method discovered an increase in student learning outcomes in the Development of International Cooperation Framework course.

**Keywords:** *project-based, assessment, learning method*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 73

# Design and Implementation of Autonomous Fish Behaviour in Virtual Interactive Aquarium Application

Allin Junikhah<sup>1\*</sup>

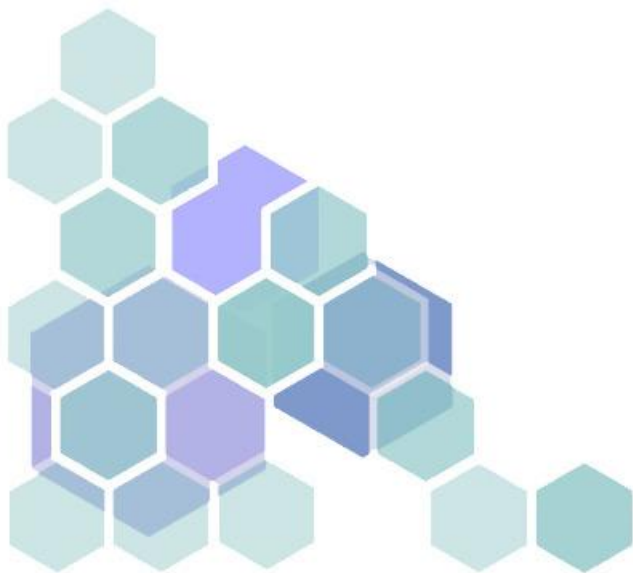
<sup>1</sup>Asia Malang Institute of Business and Technology, Indonesia

\*Corresponding author. Email: non.junic@gmail.com

## ABSTRACT

The Interactive Aquarium Application is an application that represent the real environment of aquarium into an interactive virtual environment. Children as users can interact with objects in the aquarium through user gesture processing. In the development of the Interactive Aquarium application, several supporting elements are needed such as a visual representation of the aquarium environment through Non Playable Character (NPC) objects or in simulations called autonomous characters. One of the autonomous characters in this game is a fish. To simulate fish with their behaviour, several techniques are needed to build artificial intelligence in fish, for example the behaviour of the control movements (fish steering behaviour).

**Keywords:** *interactive aquarium, simulation, autonomous character, finite state machine, steering behaviour*



ICED <sup>20</sup>/<sub>21</sub>  
-QAIV

ID 74

# The Effectiveness of Implementation Case-Based Method: Students' Perspective

Valeny Suryaningsih<sup>1\*</sup>, Alfitman<sup>1</sup>

<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: valenysuryaningsih@eb.unand.ac.id

## ABSTRACT

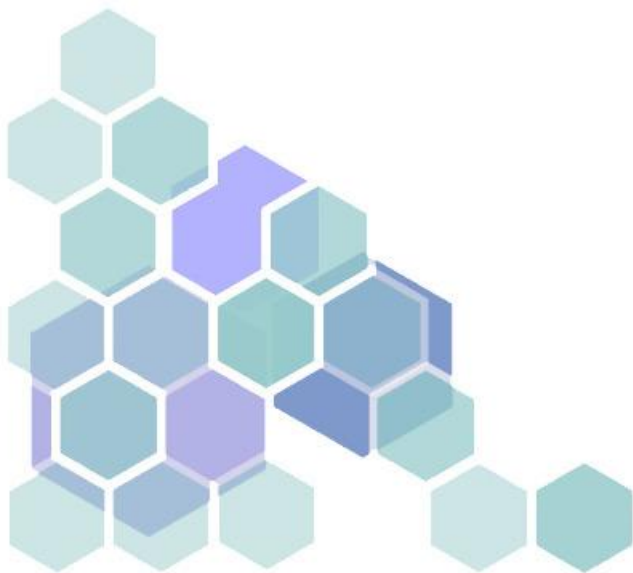
Case method, one of the characteristics of case-based pedagogy, is defined as “a teaching approach that consists of presenting students with a case that puts them in the role of a decision maker facing a problem (Golden & Zlateva, 2018). Digital business is aimed at enhancing the competitiveness of an organization by deploying innovative digital technologies throughout an organization and beyond, through links to partners and customers and promotion through digital media (Chaffey, 2015). The study that conducted by Suryaningsih (2021) discovered to strengthen student engagement, enhancing students' soft skill along online learning during Covid-19 pandemic, this study found by optimizing the usage of media and method of learning; up to date Semester Learning Plan (SLP), integrated the Learning Management System (LMS) – ilearn with Whatsapp function through Collaborative Learning.

The aim of the study is proving the effectiveness of implementation case based method (CBM) from students' perspective.

This study is descriptive research. This study used census sampling method for 48 students of Digital Business Class RM-3/M2 UMSP. The instrument is online questionnaire. Techniques for data analysis are quantitative descriptive analysis techniques.

As shown by the results, implementing mini-case discussion by using small-team WAG in course's hour as the instructional design to implement case base method (CBM), it is effective for student to train about being active, time management, critical thinking, presentation skill, public speaking skill, and problem solving.

**Keywords:** case-based method, blended learning, student engagement, business digital



ICED 2021  
-QAIV

ID 75

# Education Development in Utilizing Indonesian Demographic Dividend to Become A Developed Country

Taofik Andi Rachman<sup>1\*</sup>, Euis Latipah<sup>1</sup>, Supiana Supiana<sup>1</sup>, Qiqi Yuliati Zaqiah<sup>1</sup>

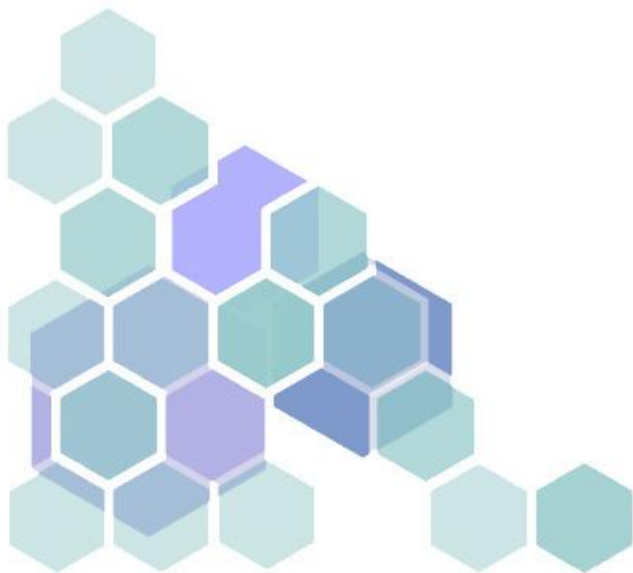
<sup>1</sup>UIN Sunan Gunung Djati Bandung, Indonesia

\*Corresponding author. Email: tarachman40@gmail.com

## ABSTRACT

Indonesia is experiencing a demographic dividend where the productive age is greater among its people. This phenomenon is often used to make a leap towards developed countries by several countries. This will be successful if it is used to encourage the performance of the human and economic resources of the nation. Education is at the forefront of achieving this desire because it is related to humans who are the main actors. This study aims to describe the Indonesian education development to take advantage of its productive age numbers to become a developed country based on the results of related research, expert opinions and experiences of other countries. The library research method is used in this research. The data are compiled, analyzed, and concluded so as to describe the development of education in accordance with the current development of Indonesian education and the desire to get out of the middle-income trap to a developed country in order to utilize the demographic dividend. The results of the study propose several educational developments that can be done, namely reducing disparities in the quality of Indonesian education, becoming an inventor of science and technology in Indonesia development needs, quality education with PISA standards, developing innovation skills, revitalizing vocational education, entrepreneurship education for young people. So that the development of this education will have a positive impact on the utilization of the demographic dividend.

**Keywords:** *education development', 'indonesian education', 'developed country', 'demographic dividend'*



ICED 2021  
-QAIV

ID 76

# Evaluation of Learning Process in The Agricultural Extension Study Program Andalas University During The Covid 19 Pandemic

Nuraini Budi Astuti<sup>1\*</sup>, Sri Wahyuni<sup>1</sup>, Yenny Oktavia<sup>1</sup>

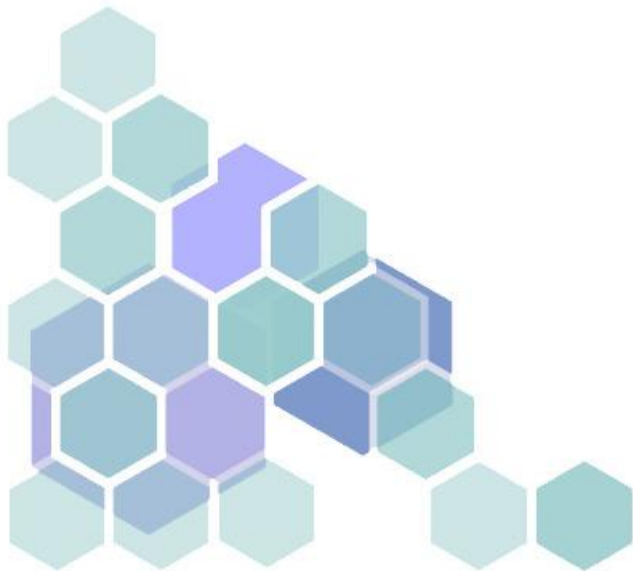
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: nurainibudiastuti96@gmail.com

## ABSTRACT

This study aims to describe the learning process in Agricultural Extension Study Program during the Covid-19 pandemic. Using the survey method, data were collected from 13 courses with 325 respondents. The results of the study indicate that around 70% of lecturers use video conferences as a learning media with an intensity of 6-7 meetings. The downside of using video conferences is network constraints. This is especially complained about by students who are in rural areas. For this reason, it is recommended that lecturers can record lectures and upload them on ilearn – is an online learning platform provided by Andalas University

**Keywords:** learning process, learning media, virtual media



ICED <sup>20</sup><sub>21</sub>  
-QAIV

**ID 77**

# **Development of Student Satisfaction Questionnaire for Midwifery Professional Education Study Program in The Learning Process**

Ulfa Farrah Lisa<sup>1\*</sup>, Laila Rahmi<sup>1</sup>, Hindun Mila Hudzaifah<sup>1</sup>

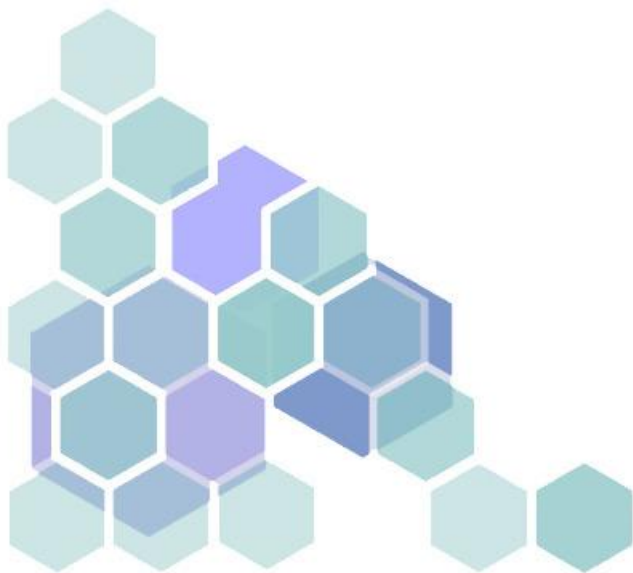
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: [ulfafarrahlisa@med.unand.ac.id](mailto:ulfafarrahlisa@med.unand.ac.id)

## **ABSTRACT**

Gugus Kendali Mutu (GKM) is a quality assurance tool at the study program level that unites and improves continuous improvement of the implementation of learning. The obstacle faced at this time is that the evaluation of student satisfaction with the learning process has not been carried out through a measuring instrument in the form of a relevant questionnaire. The proposed development of a student satisfaction questionnaire in the learning process is expected to become one of the quality documents that can be used regularly. The development of the instrument using a 4D model and what has been developed at this time is the development stage bytesting the validity of experts and testing the validity of the satisfaction questionnaire items from students of professional education of midwifery class III, practicality testing from students of professional education of midwives class III, and testing the effectiveness of the professional education of midwives batch VI and V. The results obtained on each item of the student satisfaction questionnaire were  $<0.05$  which indicates that all items of the student satisfaction questionnaire are valid.

**Keywords:** *quality assurance, learning process, evaluation, questionnaire*



**ICED** 2021  
**-QAIV**

ID 78

# Agricultural Economics Student Perceptions About online Lectures During The Covid-19 Pandemic

Dian Hafizah<sup>1\*</sup>, Rusda Khairati<sup>1</sup>, Widya Fitriana<sup>1</sup>

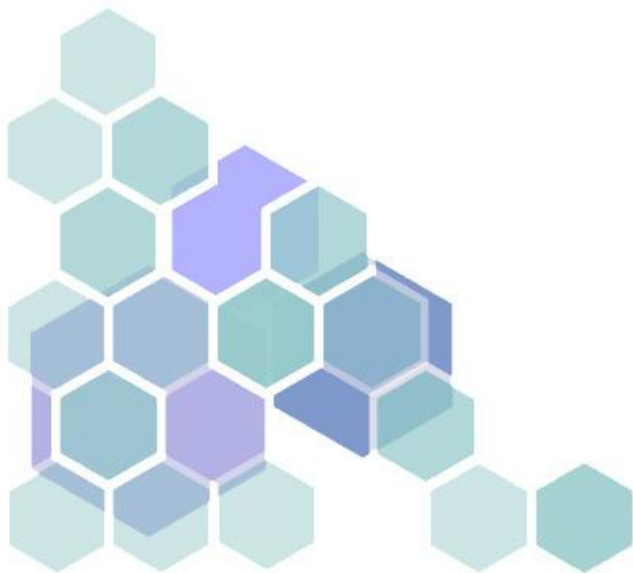
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: dianhafizah@agr.unand.ac.id

## ABSTRACT

The covid pandemic that began in March 2021 in Indonesia has changed activities in society. Including those affected by the pandemic are lecture activities in the Master's Degree Study Program in Agricultural Economics. Lecture activities that had been conducted face-to-face have now been replaced with online lectures. This affects students' perceptions of the lectures they undergo. The purpose of the study was to analyze the main topics considered important by students during online lectures and to analyze the opinions of Agricultural Economics students on covid and online lectures. Primary data was collected using a questionnaire. The result is that students can accept changes to online lectures to offline lectures but once they prefer to run offline lectures compared to online. There are limitations in transferring knowledge from lecturers to students during online lectures, but students can still follow along well. Expenditures made by students are more when offline than when online. The most influential variables in online lectures are unstable internet networks and other disturbances that make it difficult for students to focus and concentrate.

**Keywords:** covid 19, online, lectures, offline, perception, lecturers



ICED <sup>20</sup><sub>21</sub>  
-QAIV



ID 79

# Development and Implementation of Distance Education (PJJ) With Credit Earning System at The Andalas University Agribusiness Study Program

Zednita Azriani<sup>1\*</sup>, Rika Hariance<sup>1</sup>, Rini Hakimi<sup>1</sup>, Nuraini Budi Astuti<sup>1</sup>

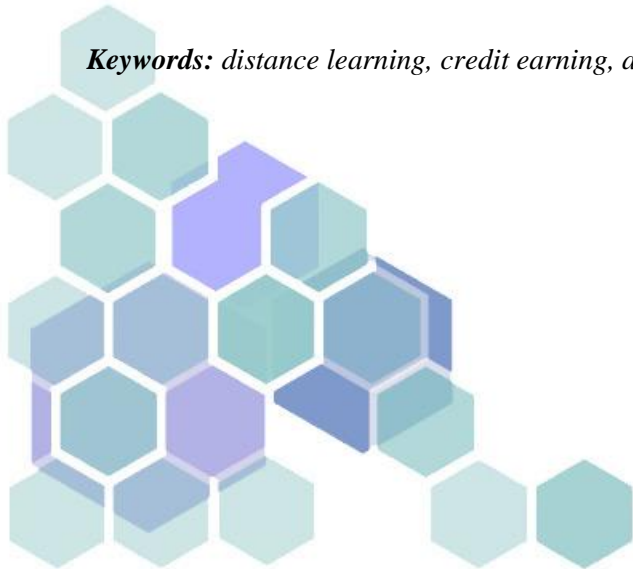
<sup>1</sup>*Agribisnis Universitas Andalas, Indonesia*

\**Corresponding author. Email: zednitaunand@gmail.com*

## ABSTRACT

One of the Merdeka Learning programs at Merdeka Campus is the implementation of Credit Earning activities. The credit earning system can be applied with face-to-face learning and distance learning. The Agribusiness Study Program is conducting credit earning activities with Distance Learning with 4 private universities in West Sumatra. This is also supported by the Covid-19 condition which causes lectures to be conducted online. Activity Distance Learning is carried out in 3 courses in the Agribusiness Study Program, namely Organizational Behavior, Agribusiness Communication, and Gender and Agricultural Development. The purpose of implementing PJJ is to provide opportunities for other tertiary students to gain experience studying in the Agribusiness Study Program, Faculty of Agriculture, Andalas University, to encourage the team of course supervisors at the Agribusiness Study Program to develop and administer unique and quality PJJ courses. The learning method used is a combination of virtual synchronous and asynchronous virtual. For the virtual synchronous method, zoom meeting and whatsapp group platforms are used, while for the virtual asynchronous method, it is done using the ilearn platform. The generally applied learning methods are student center learning such as: small group discussion, case based learning, class discussion In general, PJJ activities went well. The results of the evaluation that have been carried out show that partner students can easily attend lectures held at the Agribusiness Study Program. There is a slight difference in learning methods between the Agribusiness Study Program and the university of origin, but the activeness of students in following the learning materials and assignments is still low. This PJJ lecture program needs to be continued with several improvements, including: <sup>1</sup>). Improved coordination between home universities, study programs, and course lecturers. 2). It is necessary for each course to socialize the rules of lectures and RPS to PJJ students, 3). PJJ lectures are better done not only with private universities around West Sumatra but also with other equal state universities.

**Keywords:** *distance learning, credit earning, agribusiness study program*



ICED 2021  
-QAIV

ID 80

# Implementation of Project Based Learning (PjBL) Learning Model to Improve Student'S Soft Skill

Verinita<sup>1\*</sup>, Yanti<sup>1</sup>

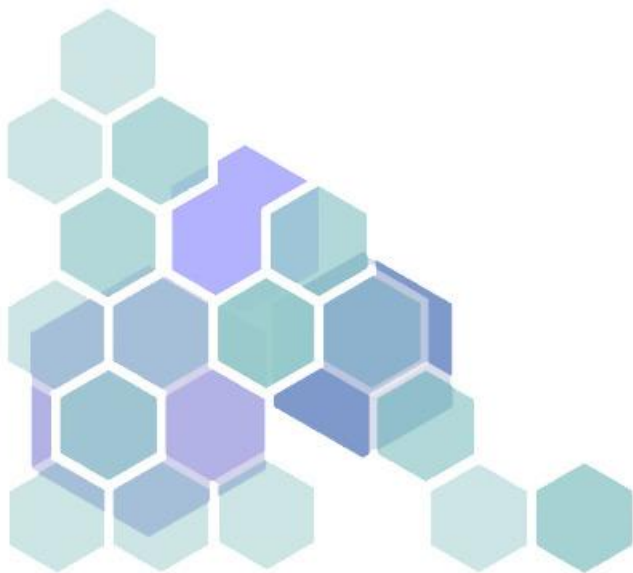
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: [verinitaarsya@eb.unand.ac.id](mailto:verinitaarsya@eb.unand.ac.id)

## ABSTRACT

The Management Study Program, Faculty of Economics, Andalas University offers Marketing Management courses in odd semesters. Based on last year's evaluation of learning in the Marketing Management course, students have difficulty understanding the application of marketing management in the business world. They understand concepts and theories, but when looking for solutions to problems that occur in the business organization, they have not been able to provide applicable solutions and have not been able to hone their soft skills. To overcome these shortcomings, the project based learning (PjBL) method is applied. This PjBL method is centered on students who improve their soft skills. The PjBL method is here to overcome the limitations of current teaching methods. This method is considered appropriate to achieve educational goals based on learning achievement. The PjBL learning method is a learning model that can improve students' soft skills, which consists of 6 components, namely communication skills, critical thinking skills and problem solving, team collaboration skills, information management skills, professionalism skills and leadership skills. These six components were reduced to 29 indicators. This method is useful because it can improve students' ability to communicate, improve critical thinking skills and solve problems, improve the ability to work in teams, improve the ability to manage information, improve the ability to be professional and leadership skill

**Keywords:** *pjbl learning method, marketing management course, soft skill, solution*



ID 81

# Improving Learning Achievements Through Case-Based Method

Mery Ramadani<sup>1\*</sup>, Hamidatul Yuni<sup>1</sup>

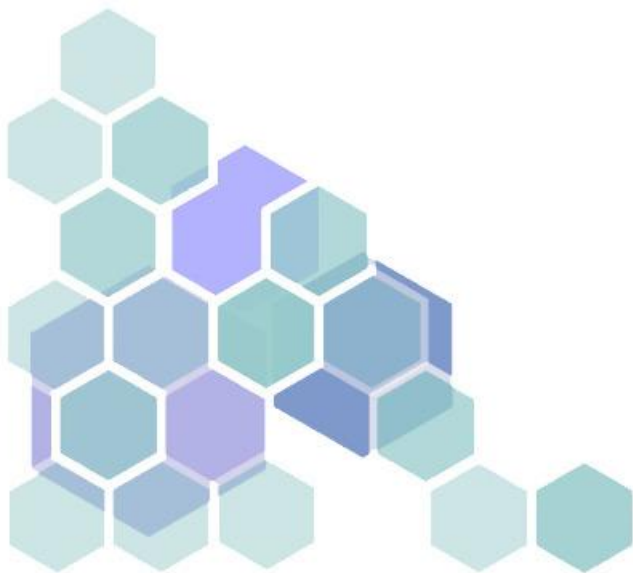
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: meryramadani81@yahoo.com

## ABSTRACT

Student-centered learning based on social and cognitive constructivism theories asserts that students' prior knowledge is the basis for learning and is a creative, relational process. Student-centered learning mirrors and promotes the paradigm shift from teacher to student-centered learning. This study's objective was to determine the difference between student-centered learning (case-based method) and teacher-centered learning (conventional method) on learning outcomes. This study was quasi-experimental with 64 samples using a t-test. The result showed that the learning outcome on the case-based method (81.86) was higher than the conventional method (78.59). There was a significant difference between student-centered learning and teacher-centered learning on learning outcomes (P Value=0.042). The student-centered learning method can improve the learning outcomes levels.

**Keywords:** student centered learning, case based method, learning outcomes



ID 82

# Reproductive Health Psychology Course Action Research: increased Student Engagement Through The Application of Case Based Method (CBM) and Outcome Based Assessment (OBA)

Yessy Markolinda<sup>1\*</sup>, Suci Maisyarah Nasution<sup>1</sup>

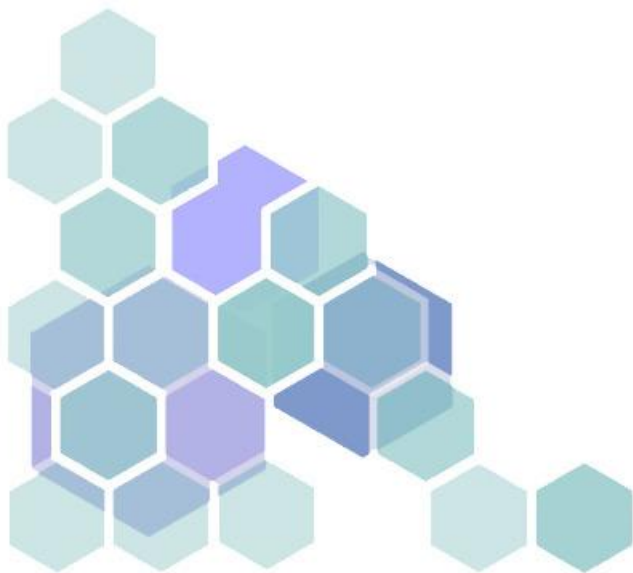
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: [yessimarkolinda@ph.unand.ac.id](mailto:yessimarkolinda@ph.unand.ac.id)

## ABSTRACT

This article discusses the subject development of Reproductive Health Psychology through learning management system in ilearn Unand v2.0 with Moodle Based. All learning materials like handouts shared through ilearn Unand v2.0. We use Microsoft Teams Meeting and Zoom Online Meeting in implemented the synchronize learning. In this subject development we use full online learning with combination asynchronize methods using ilearn Unand v2.0. This is one of the mandatory subjects at the study program of the Undergraduate Degree Program of Public Health Science at the Faculty of Public Health at AndalasUniversity. We use the method of research and development (R & D) in this research. This result shows that the use of synchronize and asynchronize method in full online learning instrument, recorded video of learning process shared through Youtube may be used to support the flipped class, particularly asynchronous model in developing the learnability subject of Reproductive Health Psychology.

**Keywords:** *learnability subject, reproductive health, psychology*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 83

# Implementation of Storytelling Podcast in Case-Based Method

Berri Brilliant Albar<sup>1\*</sup>, Indah Maya Sari<sup>1</sup>

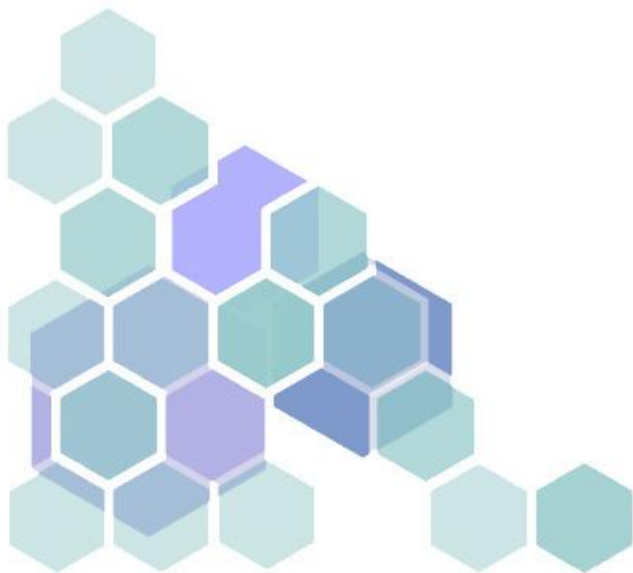
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: [berribrilliantalbar@eb.unand.ac.id](mailto:berribrilliantalbar@eb.unand.ac.id)

## ABSTRACT

Storytelling is effective for all types of learners. Visual learners learn through mental imagination of stories, auditory learners learn through the words and sounds of storytellers, kinesthetic learners learn through emotional connections and feelings from a story. Storytelling helps the learning process by making it easy to remember. In this course, international business consists of various materials which are history and examples of international cases that have story elements. Starting from stories about the start of international business in the world, adaptation of culture-economic-social-political-technology, to the history of international business organizations. The potential application of the storytelling method through cases is very conducive to this course. Storytelling is done through podcasts, face-to-face in class or online, and case-based method assignments with storytelling presentations.

**Keywords:** *storytelling, podcast, learning*



ID 84

# Implementation of The Case Based Learning Method in introduction to Circuit Analysis Course

Desta Yolanda<sup>1\*</sup>, Rifki Suwandi<sup>1</sup>

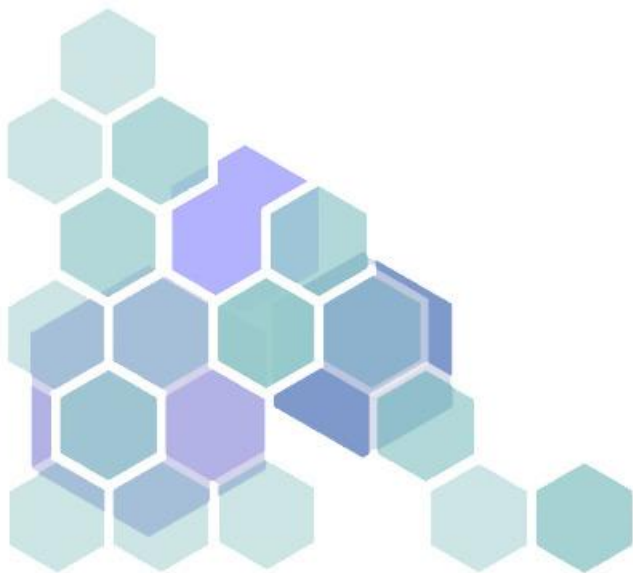
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: [destayola@it.unand.ac.id](mailto:destayola@it.unand.ac.id)

## ABSTRACT

Classroom Action Research (CAR) is one of the techniques so that learning managed by teachers/lecturers is improved through continuous improvement. CAR in the Introduction to Sequential Analysis course is carried out on the teaching and learning process and assessment of learning outcomes or assessments that occur in the classroom with the aim of improving the quality of learning in this course. The learning method applied to this CAR is a case-based method called CBM. Activities in this research include planning and compiling scenarios or case studies to develop students' reasoning knowledge and skills in solving problems at hand. The completion of the CBM scenario was completed by students in the form of small groups. In its implementation, students conduct small group discussions in solving the problems contained in the scenario so as to encourage students to get a higher order of thinking skill level. The results of the group discussions were presented in class and compiled in the form of a report. By applying the CBM learning method in the Introduction to Sequential Analysis course, the target achievement in mastery of the material and composition of students who get good grades is more than 90% with the distribution of student scores ranging from A ( $80 \leq SV \leq 100$ ) and A- ( $75 \leq SV < 80$ ). The assessment of student responses to the development of learning methods and/or assessments that were applied was measured from the survey results which showed that 100% of students stated that this method was effective and suitable to be applied to the Introduction to Circuit Analysis course

**Keywords:** *car, introduction to circuit analysis, case-based method, scenarios, team work*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 85

# The Effectivity and Efficiency of Project Based Learning in Achieving Student's Expected Learning Outcome (A Case Study of Vocational School Students)

Rayna Kartika<sup>1\*</sup>, Annisaa Rahman<sup>1</sup>, Iswardi Iswardi<sup>1</sup>

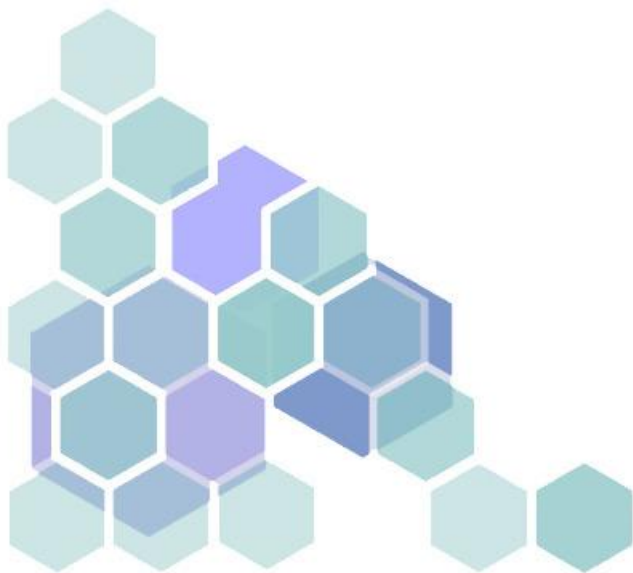
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: raynakartika@eb.unand.ac.id

## ABSTRACT

The research paper aims to investigate the effectivity and efficiency of project-based learning method to achieve student's expected learning outcome. There are several aspects and strategies which need to be considered to achieve effectivity and efficiency in the project-based learning method with student's expected learning outcome, they are: grouping students, working comprehensively, knowledge seeking through project, self-evaluation, and conclusion. To conduct this research, students of vocational school in Faculty of Economics, Universitas Andalas are required to make projection of common size and comparative analysis for manufacture companies in order to predict their financial statement in the future. The observation of the research is held for 16 weeks whereas 3 weeks focus on the project and 2 weeks are for evaluation. The results show that project-based learning can assist students and lecturers to achieve the expected learning outcome of the course program effectively due to student's self-paced learning within a team and active student's collaboration.

**Keywords:** *project based learning, expected learning outcome, self paced learning, collaborate, knowledge seeking*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 86

# Correlation Learning Outcome of Special Sensory Disorder Block With Physiology System Block of Undergraduates Medical Students of Universitas Andalas

Hendriati<sup>1\*</sup>, Dian Pertiwi<sup>1</sup>, Zurayya Fadila<sup>1</sup>, Aisyah Elliyanti<sup>1</sup>

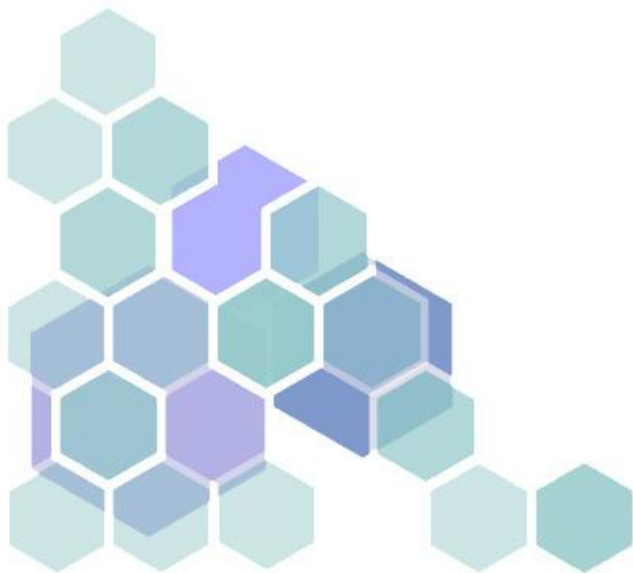
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: [hendriati.jefrianto@gmail.com](mailto:hendriati.jefrianto@gmail.com)

## ABSTRACT

Background: Problem-based learning (PBL) method is a learning method that is very useful for developing competency and improving critical thinking and self-directed learning. The study aims to assess the correlation of learning outcomes between special sensory disorder block with physiology system block in the PBL method. Material and Methods: The study is retrospective. Data were taken from the learning outcome of the special sensory disorder block and physiology system block of the 2018 students batch, included tutorials and computer-based tests (CBT) results. They were analyzed using the Mann Whitney and Spearman test. Results: The average value of student tutorials in block 3.4 is higher than the tutorial scores in block 1.2 ( $p = 0.00$ ). The average CBT scores were higher in block 1.2 compared to block 3.4. The study found a good correlation between CBT score block 3.4 with block 1.2 ( $R = 0.510$ ,  $p < 0.00^1$ ). The tutorial score correlation is very weak, which means that the tutorial value of block 3.4. Conclusion: The cognitive test found a good correlation between the learning outcome of the block physiology system and the special sensory system. Tutorial score is a learning process assessment that cannot be avoided by the personal standard perception of the tutor.

**Keywords:** *assessment score, competency learning process, problem-based learning, tutorials*



ICED 2021  
-QAIV



ID 87

# The Impact of Field Research on Student'S Learning in A Prose Class at English Department, Faculty of Humanities, Andalas University Padang

Ferdinal Ferdinal<sup>1\*</sup>, Seswita Seswita<sup>1</sup>, Isramirawati Isramirawati<sup>1</sup>

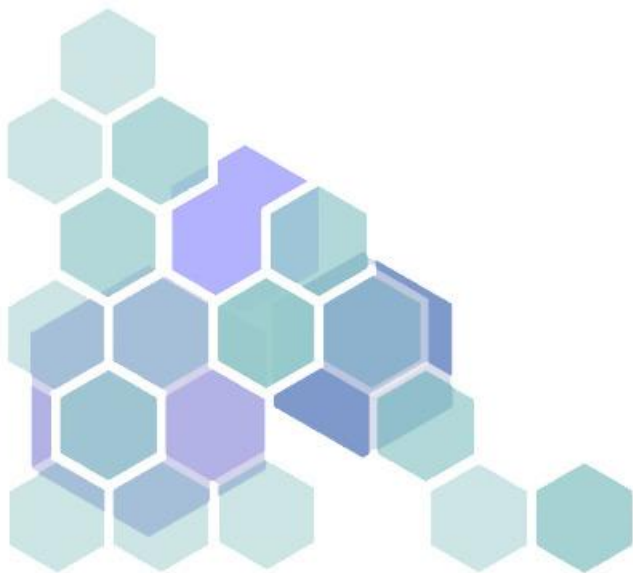
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: ferdinal09@gmail.com

## ABSTRACT

This article deals with the application of Project-Based Learning (PjBL) to writing skills at a university in Indonesia. It seeks to investigate to what extent field research impacts the improvement of students' writings. This study applies an experimental investigation that centers on 22 English undergraduates, the academic year 2020-2021. The results show that the subjects have positive attitudes towards project-based learning on writing. Specifically, PjBL offers at least three essential aspects of student performance. First, it has significant impacts on the student's writing skills, second on their positive attitudes, and last on their strategy in writing. PjBL can be implemented on a small scale class participants.

**Keywords:** *field research, learning process, prose studies, project-based learning, biography*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 88

# Improving Student Learning Activities in Islamic Macroeconomics Courses Through A Project-Based Learning (PjBL) Approach

Neng Kamarni<sup>1\*</sup>

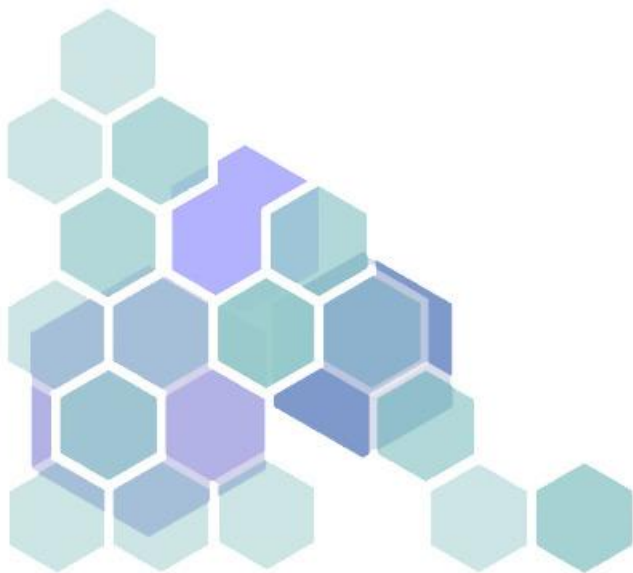
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: nengkamarni@eb.unand.ac.id

## ABSTRACT

One solution to solving problems faced by students in Blended Learning is to apply one of the learning approaches, namely the Project Based Learning (PjBL) approach where with this learning approach students will be creative, because through this learning approach students are expected to deepen their knowledge and realize learning experience. Adjustment of the learning system to keep up with current developments, blended learning innovation in Islamic Macroeconomics is expected to increase students' enthusiasm and understanding. The implementation of this project Based learning method aims to create a learning system that requires students to study more effectively and have the skills needed in the world of work, as well as to trigger students to be creative and enthusiastic about Islamic Macroeconomics courses. This study aims to determine student responses to project Based learning and the quality of student learning in the Islamic Macroeconomics course. This study uses qualitative methods, data obtained from students using direct observation method by distributing questionnaires so that a conclusion can be drawn from what is learned. Based on the results of research and data analysis, it can be concluded that learning with the Project Based Learning approach in the Islamic Macroeconomics course can improve understanding, creativity, critical thinking, effectively and efficiently. Learning achievement is in very good criteria. Furthermore, the indicators of Student and Lecturer Interaction Aspects, Motivation of student interest in learning, Understanding of subject matter, Time management, student learning outcomes, The suitability of the application of the learning model with the characteristics of the subject, has a good value.

**Keywords:** *project based learning, islamic macroeconomic, blended learning*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 89

# Implementation of Project Based Learning for Improving A Student's Ability in Analysis, Critical Thinking and Systematic in Calculus

Riri Lestari<sup>1\*</sup>, Des Welyyanti<sup>1</sup>

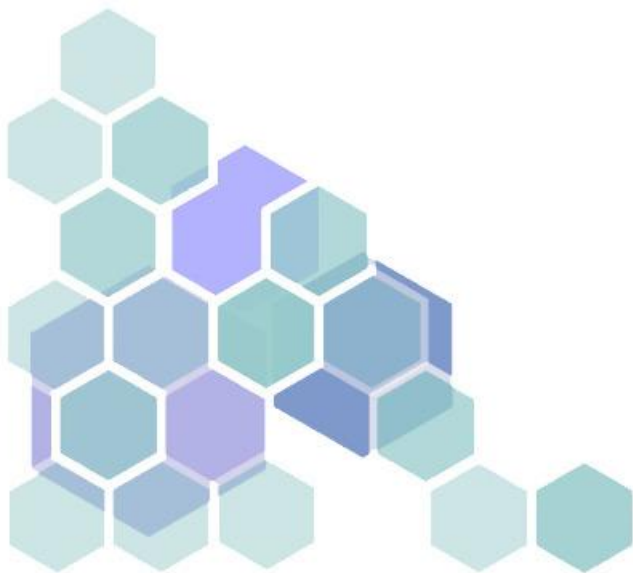
<sup>1</sup>*Departmen of Mathematic, Faculty of Math and Science, Universitas Andalas, Indonesia*

*\*Corresponding author. Email: ririlestari@sci.unand.ac.id*

## ABSTRACT

Calculus is one of the important subjects in the fields of science and engineering. This course explains the basic concepts of mathematics so that this course tends to be boring. During the Covid-19 pandemic, course were conducted online, it gave a lot of new problems. For these reasons, it is important to improve the way of teaching. The aim of this research is to implement the Project Based Learning method in calculus courses to reduce existing problems so that this method can provide a better understanding of mathematical concepts for students and to improve student's ability in analysis, critical thinking and systematics. This is a qualitative research. The research subjects were students of calculus of department mechanical engineering and the object of the research was the implementation of the Project Based Learning method. The results of this study indicate that the implementation of the Project Based Learning method can provide a better understanding of mathematical concepts and improve student's abilities in analysis, critical thinking but still have problems with systematic.

**Keywords:** *implementation, project based learning, critical thinking, systematic*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 90

# Case-Based Method (CBM) implementation in financial management 1 to reach the outcome learning

Silvy Astari<sup>1\*</sup>

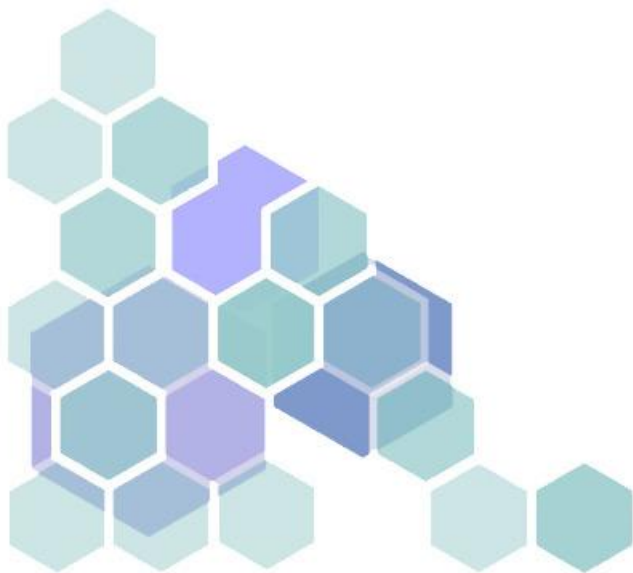
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: silvyastari24@gmail.com

## ABSTRACT

The objective of this paper is to examine the effect of the Case-Based Method (CBM) in reaching the outcome learning in the Financial Management 1 course in the international class, Accounting Department, Economic Faculty, Andalas University. One of the topics in financial management 1 is analyzing financial statements. The learning outcome of this subject is students capable to calculate and interpret the financial ratio from financial statements. The result shows that the Case-Based Method can reach the objective of this subject. Students are able to make a satisfactory report and CBM can increase the student's soft skills.

**Keywords:** *casebased method, learning development, financial management*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 91

# The Role of Using Problem-Based Learning in Engineering Economics Course

Yervi Hesna<sup>1\*</sup>, Benny Hidayat<sup>1</sup>

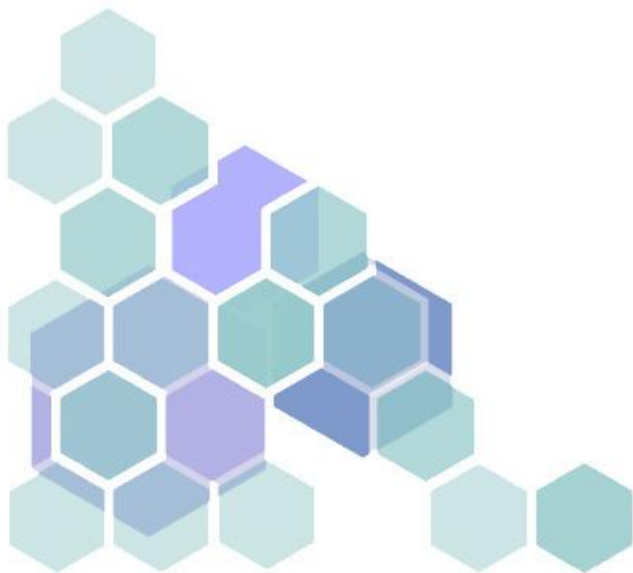
<sup>1</sup>Universitas Andalas, Indonesia

\*Corresponding author. Email: yervi@eng.unand.ac.id

## ABSTRACT

The Engineering Economics course is a compulsory subject for civil engineering students at Andalas University in semester 7. The learning achievement of this course is that students can analyze and make decisions about infrastructure investment. Infrastructure is often associated with basic facilities for public purposes such as roads, toll roads, stadiums, bridges, building construction, electricity networks, dams and other public facilities. In engineering economics courses, students must conduct a feasibility study on infrastructure so that the infrastructure has maximum benefits in supporting a region's economy. Using Problem Based Learning method, some of the activities carried out can improve students' abilities in terms of time management. In this study, the statistical modelling technique used Structural Equation Modelling so that the analysis carried out was in the form of factor analysis, path analysis and regression. The values obtained from this SEM are R squared, path coefficient analysis, and Predictive Relevance analysis indicate that the PBL method can increase the self-learning value of students.

**Keywords:** *Engineering Economic, Problem Based Learning, Structural Equation Method, Student Learning*



ICED <sup>20</sup><sub>21</sub>  
-QAIV

ID 92

# The Implementation of a Case-based Learning Method on Physical Pharmacy Course

Henny Lucida<sup>1\*</sup>

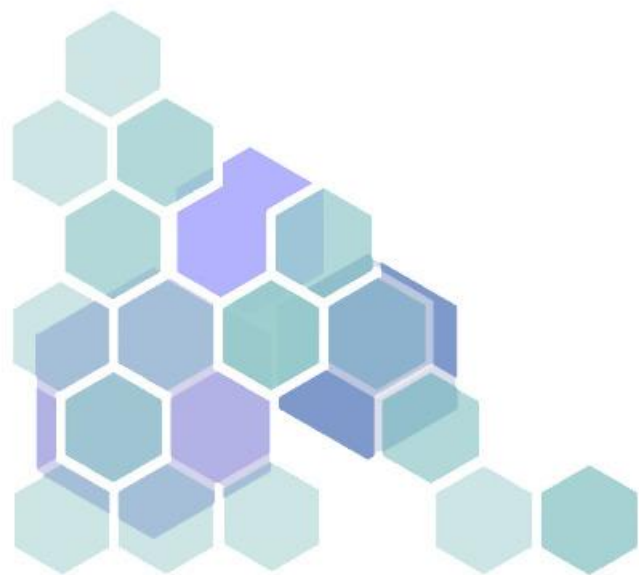
<sup>1</sup> Department of Pharmaceutics, Faculty of Pharmacy, Andalas University, Indonesia

\*Corresponding author. Email: [hennylucida@phar.unand.ac.id](mailto:hennylucida@phar.unand.ac.id); [hennylucida@gmail.com](mailto:hennylucida@gmail.com)

## ABSTRACT

This article reports on active learning techniques applied to the Physical Pharmacy course taught to the third-semester students of the Undergraduate Pharmacy Study Program, with a total class of 145 students divided into two parallel classes. The purpose of this action research is to develop a Case-Based Method in the teaching and learning process of Physical Pharmacy courses in accordance with the main performance indicators of the Ministry of Education, Culture, Research, and Technology. Learning guidelines are prepared, and the method is implemented in the Odd Semester of the 2021/2022 academic year. There were 3 cases presented to students during seven synchronous meetings before the midterms, which were discussed in small groups of 7 to 8 students. The outputs are in the form of mid-semester test scores and case completion scores. There is an increase in the average score of the students' midterm exams from  $(52.39 \pm 14.47; n=71)$  for Class A;  $(57.78 \pm 16.44; n=72)$  for Class B in the odd semester academic year 2020/2021 to  $(71.69 \pm 11.38; n=67)$  for Class A;  $(69.40 \pm 13.63; n=78)$  for Class B in the odd semester academic year 2021/2022. The survey of student satisfaction with the learning method showed an average score of  $3.03 \pm 0.28$  ( $n=109$ ) out of 4. The implementation of case-based learning methods in Physical Pharmacy course can add insight to students in applying the theory of physicochemical properties of drugs in designing drug dosage forms.

**Keywords:** Action Research, Physical Pharmacy Courses, Case-based method, Undergraduate Pharmacy.



ICED <sup>20</sup><sub>21</sub>  
-QAIV

**ID 93**

# **Application of Case Based Method in Praprofesi Courses to Improve Student Learning Outcomes**

Erda Mutiara Halida<sup>1\*</sup>, Rafika Oktova<sup>1</sup>

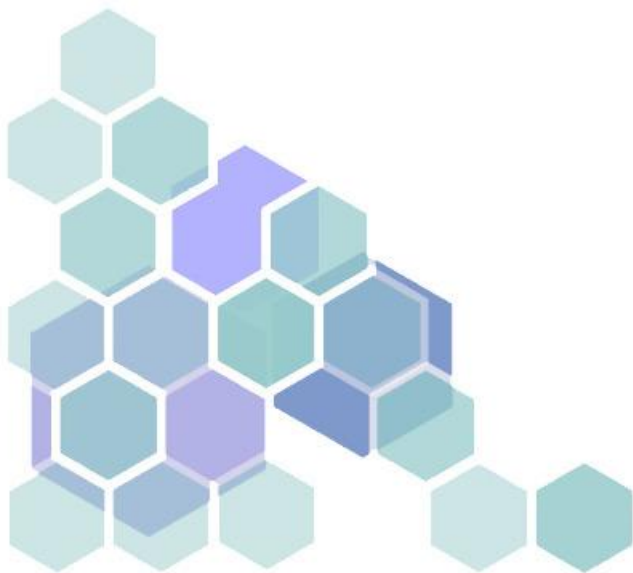
<sup>1</sup>*Universitas Andalas, Indonesia*

<sup>\*</sup>*Corresponding author. Email: erdamutiarahalida@med.unand.ac.id*

## **ABSTRACT**

Case Based Method is a flexible form of learning that includes problem-based learning and encourages the development of reasoning skills. It enables students' high order thinking skills following Bloom's taxonomy of cognitive learning by exposing knowledge in the form of a narration with questions and activities that foster group debate and problem solving. The purpose of this study is to find out the effect of applying case based methods of learning to student learning outcomes. This research is Quasi Experimental Design with a posttest only control group design approach. The sample number was 88 people, consisting of 44 intervention groups and 44 control groups. The sampling technique is purposive sampling. The results showed the positive effect of applying case based methods to student learning outcomes in praprofesi nifas courses

**Keywords:** *Case Based Method, Learning Outcomes, Learning Method*



**ICED** <sup>20</sup><sub>21</sub>  
**-QAIV**

ID 94

# Case-Based Method as the Way to Motivate the Students in Learning English Pragmatics

Ike Revita<sup>1\*</sup>, Rovika Trioclarise<sup>2</sup>, Farah Anindya Zalfikhe<sup>1</sup>, Reschi Andriani<sup>1</sup>

<sup>1</sup>Universitas Andalas, Indonesia

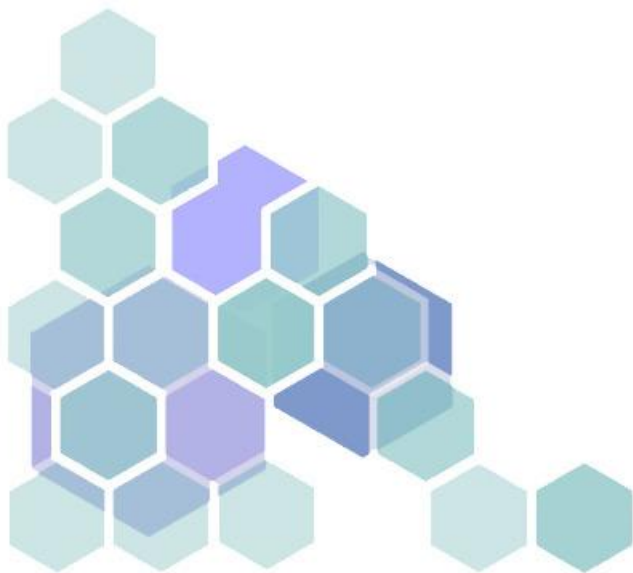
<sup>2</sup>Poltekkes Kemenkes III RI, Indonesia

\*Corresponding author. Email: ikerevita@hum.unand.ac.id

## ABSTRACT

The learning and teaching process needs the creativity of the lecturer in order for the course learning outcome could be reached. The lecturers are of great responsibility to design the class and to select the appropriate method. One of the various methods offered is the case-based method. This article is aimed at describing the effectiveness of the case-based method in English Pragmatics Class. The research is conducted at English Pragmatics Class A. There are around thirty students taking the course. The class is offered to fifth-semester students. The case-based method is implemented in the class as the strategy to measure the motivation and the achievement of the course outcome. After observing the students through mid-test and questionnaires, it is found that around 58% of students get A for their marks and the rest are A-, B+, and C. The motivation of the students is escalated; namely, 87% are highly motivated, 10% are motivated, and 3% are common. The case-based method works effectively and efficiently in English Pragmatics Class.

**Keywords:** Case Based Method, English Pragmatics, Learning



ICED <sup>20</sup><sub>21</sub>  
-QAIV