

ISBN : 978-602-1178-11-9

Bukittinggi, October 16-17, 2015

PROCEEDINGS

3rd International Conference on Technical and Vocational Education and Training (TVET)

Theme :

Technical and Vocational Education and
Training for Sustainable Societies



PENERBITAN & PERCETAKAN UNP PRESS
Jln. Prof Hamka Air Tawar Padang,
Telp. (0751) 7051260, 7055689 Fax (0751) 7055628



Penerbitan & Percetakan

UNP PRESS

UNIVERSITAS NEGERI PADANG



FOREWORDS

This proceeding aims to disseminate valuable ideas and issues based on research or literature review in the field of vocational, technical and engineering studies, which have been presented in 3rd International Conference on TVET. This conference have taken place in Rocky Hotel Bukittinggi West Sumatra, october 16 and 17, 2015.

The theme of Conference focused on the perspective of technical and vocational education and training for sustainable society to face the chalenges of 21st century, globalization era, and particularly Asian Economic Community. To overcome the challenges, we need the innovation and change in human resources development. Vocational and technical education and training have essential roles to change the world of education and work in order to establish sustainable society.

Undoubtedly, TVET need to enhance the quality of learning by developing various model of active learning, including learning in the workplace and entrepreneurship. Create innovation and applied engineering as well as information technology. Improvement of management and leadership in TVET Institution, and develoment of vocational and technical teacher education.

Many ideas and research findings have been shared and discussed in the seminar, more then 70 papers hava been collected and selected through scholars, saintists, technologist, enginers .as well as teachers, profesors,and post graduates students who participated in the conference.

Five keynote speakers have taken apart in the conference, namely Prof. D. Stein Ph.D (Ohio State University-USA), Prof. Yusuke Ono (Tottori University- Japan), and Prof. Nashruddin A. Rahim Ph.D (University of Malaya, Malaysia), and Prof. dr. Ali Gufron Ph.D (Directorate General of Human Resources Development in Higher Education-Indonesia), and Syahril Ph.D (Dean of Faculty Engineering UNP-Padang). They all have a great contributions for the success of the conference.

Finally, thank a million for all participants of the conference who supported the success of 3rd International conference onTVET 2015. and most importantly, our gratitude to all scholars who support and tolerated our mistake during the conference.

Padang, 9 Oktober 2015

Prof. Dr. Nizwardi Jalinus, M.Ed
Chair of Scientific Committee



TABLE OF CONTENTS

1. PostgreSQL, A Platform for Multiple Sources Data Retrieval Abdul Yadi	1
2. Information Retrieval System For Research Abstract Using Genetic Algorithm With Jaccard Similarity Factor Elin Haerani, Rubanam	8
3. Addie Model Approach Through The Task Learning Course Of Knowledge In Textile Clothing Depateman Procedures State University Educational Field Dina Ampera	15
4. Role Of Information Technology In Education Entrepreneurship In Higher Education Gunawan Ali, Wulan Andang Purnomo, Wahyu Prima	21
5. Development Media Study Of Natural Culture Minangkabau With Kim Arga Budaya	25
6. Improving Quality Community-Based Education Zonny Amanda Putra	32
7. Study Of Student Learning Activities On The Subject Of Physics Using Cooperative Learning In State 3 Of Senior High Schools In Bungo Despita, Agus Suparno	38
8. The Role Of Locus Control And Learning Styles In The Development Of The Blended Learning Model At UNP Z. Mawardi Effendi, Hansi Effendi, Hastria Effendi	42
9. Learning Outcomes In Vocational Education: A Business Plan Development By Production- Based Learning Model Approach Indrati Kusumaningrum, Hendra Hidayat, Ganefri, Sartika Anori, Mega Silfia Dewy	48
10. Effect Of Social Network Of Adolescent Learning Behaviour Ikhwansyah	61
11. Implementation Of Media Interactive Learning Based Wlan Technology (Study At SMK Kampar) Kori Cahyono	67
12. Model Development Work-Based Learning The Course Of Blasting Mining Engineering Department Murad	72
13. Professional Development Of Vocational Teachers Padang Through Advanced Education and Training Ramli	81
14. Intelligent System Design "QAIS"Based On Artificial Intelligence At The University Of Muhammadiyah Riau LPMI Resmi Darni	88
15. Geographic Information System Design Shortest Route Location-Based Health Care Android Rice Novita, Welita	93
16. Implementation Of Green Productivity To Increase Productivity And Environmental Performance (Case Study At Sme Bowo) Riko Ervil, Nesky Luciana	99
17. Strategy Implementation Of Supervision In Vocational High School In Bungo, Jambi Sayuti Hamzan, Eman Tu Ferli	103
18. Learning Of Crystal Symmetry By Using 3Ds Max Software Fadhilah	107
19. Computer-Based Learning Media Development In Vocational High School Baharuddin, Indra Daulay	113
20. Development Of Blended Learning Model In Human-Computer Interaction At University Faiza Rini, Ari Saiful Arifin Rahman	118
21. Online Tracer Study Of Bung Hatta University Karmila Suryani, Khairudin	125
22. Identifying Initial Damage Of Palm Oil Screw Press Of Drive Shaft Purwo Subekti, Eddy Elfiano, Legisnal Hakim	132
23. Weather Stations Prototype To Flood Detection In High Rainfall Area Yulastri, Era Madona, Lifwarda, Anggara Nasution	136



45. Evaluation Program Work Practice Industry (Prakerin) In The Era Centralized Vocational Education In The West Sumatra Using Model CIPPO Ambiyar.....	252
46. The Need Analysis For The Design of The Entrepreneurship Product-Oriented Graphical Design Interactive CD of The Students of SMK of Dharmasraya Regency Kasman Rukun, Asrul Huda, Yeka Hendriyani	260
47. Transient Response Study on Transformer Windings Under Impulse Voltage Stresses Hendri Masdi, Rusnardi Rahmat.....	265
48. Design Of Portal Door In Vehicles Parking System Using Programmable Logic Device (PLD) Technology Muhammad Irmansyah, Era Madona, Amelia Yolanda, Ratna Dewi.....	271
49. Ground Motion Characteristics In Padang, Indonesia Rusnardi Rahmat, Hendri, Syahril, Henry Yustisia	275
50. Developing Life Skills Education Model For Disabilities Children Of Underdeveloped Region In West Sumatra Khairani, Syafri Anwar, Asniati Bahari, Rahmanelli, Asrul Huda.....	282
51. The Need Analysis of Instructional Model Development Project-Based Learning at Vocational Studentin Mechanical Engineering Department Muhibbuddin, Nizwardi Jalinus, Ramli	290
52. Need Analysis With Fishbone Diagram On Learning Procces Algoritma Course And Data Structure In Stain Batusangkar Lita Sari Muchlis.....	297
53. Analysis Of Interactive Learning Inelectrical Installation Engineering Amirhud Dalimunthe.....	308
54. Implementation Of Impacts Test And Modeling Simulation Of Car Rim On Courses Of Equipment Engineering And Machinery Batumahadi Siregar.....	314
55. Policy Analysis Of The Republic Of Indonesia Presidential Decree No. 6 Of 2009 Concerning The Development Of The Creative Economy. Indra Koto	322
56. Improvement Concept Of Simple House, Healthy And Safe Through Education And Participation Of Househ Old Community Kemala Jeumpa	325
57. Analysis Of Structure Behaviour In Building Using Different Partition Receiving Expense Earthquake Sutrisno.....	330
58. Web-Based information System formarketingpetrified Small, Microandmedium Enterprises(Smme) Particularlyin North Sumatera Izwar Lubis.....	336
59. Entrepreneur Development Concept In Us Nining Tristantie.....	341
60. Application Methods For Learning Project Improving The Subject Of Learning Tata Busana Class X Man Koto Baru Padang Panjang Nofrawenti, Syahron Lubis, Yuliana.....	349
61. Interactive- Practical Computer Assisted Instruction (Cai) Model For Education And Training Of Short Circuit Calculation Rahmaniar, Agus Junaidi	355
62. Analysis Ofentrepreneurshipinhigher Educationcurriculum Riski Elpari Siregar.....	359