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# Proceedings of the 6th International Conference on Educational, Management, Administration and Leadership

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The 6th International Conference on Educational, Management, Administration and Leadership (6th ICEMAL 2016) was held on August 28, 2016 in Bandung, Indonesia. The aim of 6th ICEMAL 2016 is to provide a platform for educators, administrators, managers, leaders, policy makers, researchers, scholars, principals, supervisors, graduate students, practitioners, academicians, professionals and teachers from different discipline backgrounds to present and discuss research, developments and innovations

in the fields of educational administration. It provides opportunities for the delegates to exchange new ideas and application experiences, to establish business or research relations and to find global partners for future collaboration.

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# Proceedings of the 6th International Conference on Educational, Management, Administration and Leadership

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The 6th International Conference on Educational Management Administration and Leadership (ICEMAL) 2016 is held by Educational Administration Education Program, School of Post Graduate Universitas Pendidikan Indonesia on August 28, 2016. This conference is aimed to provide a platform for educators, administrators, managers, leaders, policy makers, researchers, scholars, principals, supervisors, graduate students, practitioners, academicians, professionals and teachers from different discipline backgrounds to present and discuss research, developments and innovations in the fields of educational administration. It provides opportunities for the

delegates to exchange new ideas and application experiences, to establish business or research relations and to find global partners for future collaboration. Thus, it is not merely for Indonesian context, but all around the globe.

The Theme of 6th ICEMAL 2016 is "Empowering Educational Leadership for Global Development", which targeted for educators, administrators, managers, leaders, policy makers, researchers, academics, principals, supervisors, graduate students, practitioners, academics, professionals and teachers.

There are 264 papers from various topics including Educational Policy, School Management, Organizational Culture, Learning Management, Educational Organization management, Staff Educational & Teachers Management, Educational Finance Management, Leadership, Educational Quality Assurance Management, Strategic Management, Educational Marketing, Supervision, Educational Planning, Higher Education Management and Learning Technology. More than 156 papers are selected to go through a strict peer-reviewed process, and these papers are published in conference proceedings.

We would like to thank the organizing committee and the members of reviewers for their kind assistances in reviewing the papers. We would also extend our best gratitude to Ministry of Research, Technology and Higher Education of the Republic of Indonesia (Kemenristekdikti RI), Prof. Furqon as the Rector of Universitas Pendidikan Indonesia, especially to Prof. Didi Sukyadi as the Vice Rector for Research, Partnership and Business Universitas Pendidikan Indonesia for the tremendous support. Furthermore, Prof. Simon Clarke, Prof. Tom Nelson Laird, Prof. Udin S Sa'ud, Dr. M. Sofwan Effendi and Assoc. Prof Dr. Mariani Md Nor for their invaluable contribution and worthwhile ideas shared in the conference.

The Editors

Aan Komariah – Editor in Chief

Ade Gafar Abdullah

Asep Bayu Dani Nandiyanto

Taufani C Kurniatun

Rita Anggorowati

Irwan Gunawan

Widia Murni Wijaya

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**Proceedings Article**

## Unit Cost Analysis in Higher Education

Asep Kurniawan, Tjutju Yuniarsih, Sumarto Sumarto

This study analyzed the calculation of unit costs in higher education. The focus of this research is on how the needs analysis process in college, and how the calculation of unit costs in higher education. The method used was a case study with a qualitati

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### Proceedings Article

## Measuring of Teacher Asset Value

Asep Sunandar, Djum-Djum Noor Benti, R. Bambang Sumarsono

School asset management is effort to maximizing function of schools asset based effective and efficient principle. Teacher is one of the school's assets, whose value is likely to increase or even decrease. This study aims to describe assets management pro

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### Proceedings Article

## Evaluation on Financing Collaboration in Improving the Quality of Primary Education

Bambang Ismanto

Financing is one of the resources investment in education. Basic education is one of the regency responsibilities or city governments in the regional autonomy. This study aimed to analyze the budget collaboration of Government, Local Government and Commun

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### Proceedings Article

## Learning Leadership Role in Funding Education in The Era of Regional Autonomy

Dedy Achmad Kurniady

In the era of regional autonomy, financing of education is not only the responsibility of the central government, but it is a shared responsibility between government, local government, and society. Particularly, schools' operational funding is highly dem

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### Proceedings Article

## The Implementation of Budget Model Programme in Forming the Primary School Operational Assistance Budgets

Maman Rusmana, N. Leni Sri Mulyani

School operational assistance is one of the government assistance programs given to the school to reach the compulsory education completion. This study aimed to determine the effectiveness of such assistance to the equitable teaching learning process. The

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### Proceedings Article

## Cost Analysis in Indonesia Open University Post Graduate

## Program

Taufani C. Kurniatun, Tita Rosita

The aim of this study is to find out student cost spending in distance learning program due to financing plan in Open University post graduate program. Cost spending is related to unit cost term which is consists of fixed cost, variable cost, and opportun

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### Proceedings Article

## Leadership in Planning and Budgeting on Higher Education

Yahya Yahya, Kasman Rukun

Planning and budgeting are routine activities in a university to achieve its vision and mission made by the leaders as annual programs and five yearly activities. Rector of the University Tanjungpura (UNTAN), during the Occupation 2011-2015 has a vision "

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### Proceedings Article

## Marketing Management in Higher Education

Imanuddin Hasbi, Djam'an Satori, Agus Rahayu, Mohammad Fakry Gaffar

Marketing management problems faced by marketing higher education is getting tighter. This study is focused to examine in more detail the market, product, price, resources, competition, marketing strategies, satisfaction, loyalty, and growth of the higher

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### Proceedings Article

## The Effects of Marketing Mix to Buying Interest and Their Implication toward the Decision of Choosing Private Higher Education

Oyon Saryono, Nana Darna, Mujaddid Faruk

the upcoming implementation of ASEAN Economic Community is predicted to generate new trend of competition among educational institutions in Indonesia. The growth of private higher education has significantly increased since the issuance of UU No. 22 of 19

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### Proceedings Article

## Early Childhoods Cost of Education in Indonesia: An Ethical Consideration in Educational Marketing

Taufani C. Kurniatun, Peri Akbar Manaf

In discussing the cost of early childhood education/kindergarten, it is also pertinent to examine the financial ethics and the related financial aspects. It is important based on the fact that the achievements of ECE GER in Indonesia are still low and the

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### Proceedings Article

## Developing Character Education Management Model for The Empowerment of Ethos Transformation based Multiple-Intelligence of Junior High School Student's

Abdul Kadim Masaong, Asrin Asrin, Ikhfan Haris, Sutrisno D.J. Yunus

This research is aimed at developing character education management model to empower ethos transformation based multiple-intelligence of junior high school students that covers: Guidelines on its basic concepts, program, implementation, and monitoring and

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### Proceedings Article

## A Model for School Management Capacity Building through Professional Learning Community in Senior High School

Aan Komariah, Cucun Sunaengsih

Efforts to solve the problem of schools' low capacity in providing high-quality education service to their students call for a development program, integrated in daily activities of the school and performed continuously, not just as an incidental activity

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### Proceedings Article

## Developing the Capacity of School Management to Build Understanding of Vision and Mission

Dwi Sukaningtyas, Djam'an Satori, Udin Syaefudin Sa'ud

In many schools, the vision mission just "exist" and not become a guideline

especially implementation of learning. The school just execute school routine without knowing the meaning of implementation. This is unfortunate, because the vision and mission is

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## Proceedings Article

### Training Management Effectiveness

Erna Kusumawati

This study examine the effectiveness of training management in privat higher education. This studi aim to is a means to develop the competence of lecturers in terms of skills, knowledge and attitudes. The study evaluated the effectiveness of management tr

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**Proceedings Article**

## The Obstacles of Geographical Information System (GIS) Development: A Study of Teachers' Distribution in Sukabumi, Indonesia

Ahmad Yani, Rosita Rosita

Geographical Information System (GIS) is an application used to process data in form of thematic maps which is arranged overlapping to produce informations needed by the user. Employing descriptive method, this study indicated that basically the GIS deve

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**Proceedings Article**

## Strategic Information System Planning: Information Systems Required in Vocational School Models

Widia Murni Wijaya

The main purpose of this study was to meet the need for the provision of information systems in vocational school models quickly and structured, to answer some problems that using the needs of information systems identified, and can be a guide in the deve

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**Proceedings Article**

## The Alternative Model of Controlling Change in Educational Policy Implementation

## Aceng Muhtaram Mirfani

The failure of efforts to change is a common phenomenon, not an exception in the implementation of education policies. The problem is how to keep it for later can be avoided. One of the key depends on controlling the change effort itself. To find an alter

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### Proceedings Article

## The Use of Trade-Off Analysis in Analyzing the Implementation of New Students Admissions Selection Policy in Bandung State Middle School

Rita Anggorowati, Aan Komariah, Eka Prihatin

The admission process of the prospective students who wish to continue their studies to the next level in the public school called the New Students Admissions Selection. The selection process is carrying the standard criteria that must be met by all prosp

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### Proceedings Article

## Resource Acquisition in Providing Free Education for Street Children

Titim Eliawati

There is a need for a flexible education management system yet stable, providing special education services also offering space for street children to adjust the changes of street life to the sedentary life, have a new family and

school. School Master has

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#### Proceedings Article

### The Development of Online-Based Eka Lopen Program (Evaluation Of Academic Competence in Management Education)

Eka Prihatin

The purpose of this paper was to develop a program called EKA LOPEN which was an online program used to evaluate academic competence. This research was conducted on the timeframe of less than one year using research and development design that followed th

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#### Proceedings Article

### Prospects and Sustainability Analysis Diploma Program Three Faculty of Economics, Universitas Negeri Jakarta

Marsofiyati Marsofiyati, Susan Febriantina

This study is a qualitative study that aims to identify prospects and sustainability of D III program in the Faculty of Economics UNJ, which consists of courses in Accounting, Marketing Management and Secretary. The data used in this study are primary dat

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**Proceedings Article**

## Beyond Vocational High School and Corporates Cooperation: A Social Exchange Perspective in Education

Nunuk Hariyati, A. Sonhadji

Most of social life involves interaction between individuals and group, included school and individuals or corporate actors, can be viewed as social exchange. It is assumed as Social Exchange Theory. This study focused on three Vocational High Schools whi

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**Proceedings Article**

## Capacity Building of Associate Professors for Improving Lecturers' Performance: A Case Study in a Leading University in Indonesia

Andita Fitriana, Djam'an Satori, Diding Nurdin

Nowadays, the duty of a lecturer is not merely teaching but also becoming a professional teacher as well as a scientist who is responsible for transforming, developing and disseminating knowledge, technology and arts through teaching, research, and commun

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**Proceedings Article**

## Improving the Quality of the Integrated Junior-High School of Lampung, Subang, West Java, in Achieving National Education

## Standards

Asep Priatna

This study aims to reveal the efforts and results achieved by the Integrated Private Junior-High School of Lampung, Subang, in improving its learning quality to meet the National Education Standard (SNP-Standar Nasional Pendidikan). It is the process on h

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### Proceedings Article

The Effectiveness of Study Program Quality Improvement (A Case Study at Islamic Education Management Department, Faculty of Tarbiyah and Teacher Training)

Badrudin Badrudin

The effectiveness of a study program's quality improvement is its strength, capacity, and habit in implementing the functions of department management in order to gain the expected quality. The lack of efforts in the improvement of the quality caused by m

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### Proceedings Article

Model Development of Quality Management Education in Vocational Schools Bandung

Endang Herawan, Dedy Achmad Kurniady

This research was conducted on the basis of the observation that the obtained information that there are some vocational graduates have been able to

compete with graduates of higher education, but it is still a small part only and that too for graduates w

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### Proceedings Article

## The Effectiveness of the Vocational High School

Heni Mulyani

The research problem is related to the structure of the relationship variables that affect the effectiveness of the Vocational High School of Business and Management Expertise in West Java directly or indirectly, which consists of school leadership, schoo

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### Proceedings Article

## The Effect of Self Efficacy on Burnout Mediated By Stress Among Kindergarten Teachers in Indonesia

Deliana Sri Maryati, Pramudhita Ghia Mustika

The objective of this study is to investigate the effect of stress variable as a mediating role between self-efficacy on burnout. Likert scale questionnaires were distributed to a sample of 60 kindergarten teachers who have not been certified in Gunungpat

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## Managerial Performance Model of Private Higher Education in The South Sumatra

Anuar Anuar Sanusi, Linda Septarina

This paper tries to assess the application of quantitative approaches and hypothesis testing using 'Path Analysis' technique as an alternative approach to the performance of managerial leadership that can be used to achieve the goals in finding and determ

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## New Paradigm of Research Management in Higher Education: The Case of Politeknik Negeri Bandung

Carolina M Lasambouw, Ediana Sutjiredjeki, Neneng Nuryati

Based on the enactment of law of the Republic of Indonesia each lecturer is required to do research beside teaching and community services. It is not an easy task for some lecturers in vocational education, such as Politeknik Negeri Bandung/ Bandung State

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## Effective Leadership in Quality Assurance for Higher Education: A Literature Review

Priska Maranata Setiawati

Leadership plays key role in quality assurance effort. Higher education institution needs to be led by leader who can apply his leadership effectively. This paper provides the importance of quality assurance for higher education and the effective leadersh

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#### Proceedings Article

### Essential Practices for Instructional Leadership in the Implementation of Elementary Science and Technology Education from Preservice Teachers' Perspective

Zulkefli Daud, Noorafizah Daud, Zainab Ari, Zamidi Ismail, Abu Bakar Kassim

The main purpose of this study was to investigate the essential practices for instructional leadership in the implementation of elementary science and technology (S&T) education from preservice teachers' perspective. Three dimensions of instructional lead

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#### Proceedings Article

### Authentic Leadership for Conducive Madrasa Climate

Aan Komariah

The main objective of this study is to assess the effect of Authentic Leadership to Madrasa (Senior High School) Climate in Public Madrasah and Private Madrasa Aliya (Islamic Senior High School) in Tasikmalaya Regency. This research was conducted by using

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### Proceedings Article

## Development of Value-Based Leadership: Model in Quality Culture Improvement on Primary Schools

Asep Suryana, Minnah El Widdah

Leader's personal values and commitment related to school quality culture. Principal leadership with universal-values in primary schools can improving culture quality in primary Schools. This study is aimed to analyze strengthened-universal values in prim

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## Teacher Leadership: Promoting a Reflective Practice Model

Endah Yanuarti, David F. Treagust

This paper focuses on the development of a reflective practice model for secondary teachers because it is related to the context of teacher competence standards in Indonesia. The research used a qualitative interpretive approach to examine the teaching pr

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### Proceedings Article

## Improving the Capacity of Private Universities Management

Faurani Santi Singagerda, Mery Berlian

This research explain the influence of leadership style and organizational culture to the motivation and the implications of the lecturer performance in private universities, by taking research location in Bandar Lampung, Indonesia. The Private universi

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#### Proceedings Article

### Authentic Leadership Principals and Teachers' Commitment to Improve Work Discipline

Herlina Herlina, Abubakar Abubakar, Aan Komariah

The quality of education in the education unit depends fully to the professionalism of teachers are professional, disciplined, diligent, moral teacher, to concentrate full time, and promote the quality. Instead of teachers who dogged laziness, lack of dis

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#### Proceedings Article

### Implementation of Leadership Style to Improve The Quality of Education

Irwan Suryadi

Improving the quality of education is to improve educational services in the form of teaching and learning in the classroom, and technical service of educational operation that brought the climate change in the community, there are several important indic

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### Proceedings Article

## Principal Performance Evaluation Model in Managerial Field in Improving Kindergarten Teacher's Professionalism

Lia Yuliana

The purpose of this research was to determine the evaluation model of kindergarten principal performance of managerial field in DIY. This study used Research and Development method, which consists of four stages, namely: (1) the preliminary stage, (2) the

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### Proceedings Article

## The Role of School Principal Leadership in Implementation of Eco School Program as the Effort to Support Sustainable Development

Mirza Desfandi, Enok Maryani, Disman Disman

Eco School is a program which aimed to create school members who are responsible in the effort to protect and manage school environment through good school governance to support sustainable development. School principal as leader in school should be able

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### Proceedings Article

## The Role of Madrasah Supervisor in Sustaining Management of Quality Madrasah Aliyah

Mulyawan Safwandy Nugraha, Ai Rohayani

The management and sustaining of Madrasah Aliyah (Formal Islamic Senior High School) in Indonesia sometimes the Madrasah Supervisors find it not easy to carry out their responsibility accurately and diligently as prescribed by the process of achieving the

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### Proceedings Article

## The Effect of Principal's Leadership and Work Climate on Teachers Leadership with Work Motivation as Intervening Variable

Juliana Juliana, Niko Sudibjo

Integrated Islamic Primary School Al Islam is one of the favorite Islamic schools in Kudus with "A" level accreditation for three respective years. However, pre-study analysis shows there is a gap between the teachers' expectations and the realities. The

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### Proceedings Article

## The Effects of Lecturers' Leadership on Pre-Service Teachers' Perception of Mathematics as an Elective Subject

Nor Azizah Badri, Mohamad Nurizwan Jumiran, Raha Yahya, Kharshiah Khalid, Norrila Satari, Fazidah Jonid, Norazmah Mohd. Said

This research was conducted to identify the effects of lecturers' leadership towards on Pre-Service Teachers' (PST) perception on Mathematics as an elective subject. The respondents for this research were seven Pre-Service Teachers (PST) who chose Mat

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## Teacher Leadership Behaviors on Sport Class

Pandit Isbianti

Quality learning is the important thing to the school advance. In fact, learning activities can't be separated from the behavior of teacher leadership. To give more explanation about the kind of teacher leadership behaviors, the author conducted a study t

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## The Role of Values-Based Leadership within the Framework of Values Shifting Appearing in Indonesian Education

Rita Anggorowati

Shifting values that appear in the Indonesian education is inevitable. They are due to changes that occur in the life of the nation as a result of the progress and changes in the climates of politics, economics, social, and cultural. The leader position,

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## Young Generation and Future Leadership: Learn from now for Better Tomorrow

Kama Abdul Hakam, Siti Nurbayani, Ratna Fitria, Fajar Nugraha Asyahidda

Indonesia's young generation is the generation that will be able to lead the nation in the future. Leadership in the future depends on the understanding of the younger generation about forms of leadership. However, today's young generation has been much a

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## Outstanding Female Leadership in Implementing Effective School

Susan Febriantina

We studied female leadership style combined with skills in implementing effective school to investigate phenomenon by using qualitative case study method. The result are female principal uses many styles in leading effective school, such as interactive, t

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### Proceedings Article

## The Difficulties of Vocational High School History Teachers in Developing Historical Learning Evaluation Instrument

Aman Aman

This research is aimed to know: 1) the difficulties experienced by vocational high school teachers (SMK) in Yogyakarta Special Region in developing historical learning evaluation model, 2) the teachers' efforts in handling difficulties to develop historic

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### Proceedings Article

## The Development of Performance-Based Remuneration Scheme (EKPUPI) at a State University (A Study at Indonesia University of Education)

Eka Prihatin

The purpose of this paper is to implement the EKPUPI model as performance-based remuneration program at Indonesia University of Education. This

research was conducted in the timeframe of less than one year using the research and development design that fo

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#### Proceedings Article

### Classroom Talk as a Classroom Management Practice at Junior High School

Endah Nur Tjendani

Teacher is the most important person who has to manage the class activities. As a manager, teacher has to control the real action of the lesson planning into the classroom, so the investigation was stressed on the teaching preparation as a written plan an

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### Developing School Performance Index for Assessing Innovation Capability of School in Quality Improvement

Ikhfan Haris

Measuring the school performance becomes an important issue in education. In line with the increasing demand from stakeholders for better transparency, accountability and excellent services had made it a key component in the planning, development and eff

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## Evaluation of Teaching Methods in the Individual and Team

Junardi Harahap

Education and teaching have long process and need evaluation in it. With the evaluation, the learning process will be well-implemented, and also, the quality of learning in teaching will work well too. Creative ideas in learning will also appear better an

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## Behaviour Management Plan for Elementary School Students

Sri Diana

The paper aims to explore the Glasser's Choice Theory, Neo Adlerian and Humanism Theory for the implementation of behavior management plan in elementary level. It starts with an explanation of some assumptions related to those theories. The paper then exp

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## Teaching Indonesian as Foreign Language in Indonesia: Impact of Professional Managerial on Process and Student Outcomes

Kundharu Saddhono

Indonesian language has now become a part of popular languages in the

world. Therefore it is a need to be an effort for learning Indonesian language for foreign speakers can be performed well. To conduct the learning process properly, professional managem

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### Proceedings Article

## Lesson Planning The Key to Success of The Teachers Teaching in the Classroom

Martono Martono

Successful teacher is a teacher who can establish a sympathetic relationship with the students, create a classroom environment that is nurturing, caring, has a love of learning, in full control of their field of study and to motivate students to work. To

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### Proceedings Article

## The Role of Augmented Feedback on Motor Skill Learning

Yadi Sunaryadi

The purpose of this literature study was to examine whether augmented feedback enhances motor skill learning in sports, and if so, how this can be explained. When athletes or students perform a skill, they receive two types of performance-related feedback

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**Proceedings Article**

## Assessing and Analysing Students' Vocabulary Understanding Through 6 Kinds of Tasks

Uswatunnisa Usman

Vocabulary is a language element which plays an important role. A student cannot master English well if they do not master vocabulary and have a good vocabulary understanding. This study is a mixed method study. It aims to assess and analyze students' voc

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## E-Portfolio Assessment Design in Learning

Ambar Sri Lestari

This study examined the quality of learning outcomes; which can be assessed through a web-based portfolio assessment system. This student portfolios assessment includes reflective thinking skills through the collection of products that were made, in which

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## Developing Cooperative Learning Video for Studying Economics at Senior High School

Armiati Armiati, Rose Rahmidani

This study aims to products produced in the form of video of cooperative

learning for high school economics teachers using Student Team Achievement Division (STAD) methods combined with Course Review Horay (CRH) methods at the material of the price balanc

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Model of Development Students Softskill With Credit System by Integration of Academic and Student Activities in ORMAWA Activity

Armida S., Yuhendri LV, Ramhat Richard

Challenges of education organized is the graduates are absorbed in the world of work with the appropriate quality of the standards of careers. The graduates are faced with competition among universities in the country and abroad in line with the ASEAN Eco

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The Ability of Prospective Teacher of Elemetary School to Solve The Problems Related to Water, Air, and Soil Themes

Atep Sujana, Anna Permanasari, Wahyu Sopandi, Ahmad Mudzakir

This study aims to improve the ability of Prospective Teacher of Elementary School (PTES) in solving problems related to water, air, and soil themes. Learning was designed in several themes and was implemented by using problem-based learning (PBL) model.

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### Proceedings Article

## The Effect of Integrated Scientific Approach and Brain Exercise to The Result, Interests, and Motivation to Learn Indonesian Language

Rukayah Rukayah, Aziz Thaba

The purpose of this study were to (1) describe the results, interest, and motivation to learn Indonesian of class XI students of SMAN 1 Bone-Bone before and after the application of the integrated scientific approach and brain exercise, (2) know the effec

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### Proceedings Article

## The Implications of Cognitive Neuroscience in Optimizing the Balance Function of Right and Left Brain through Learning on the Introduction to Accounting 1 Courses

Dessi Susanti, Menik Kurnia Siwi

This research examines the differences in cognitive value of students that taught on Introduction to Accounting 1 courses using Brain-based Learning model and Expository-based Learning Model. The purposes of this study are

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### Proceedings Article

## The Interest of Prospective Students in Study Programs in Higher Education: a Preliminary Study

Dian Cahyawati

The purpose of this research was to describe the interest of prospective students in study programs in public higher education in Indonesia. Data of enrollment selection participants to all public higher education were drawn from the official website SBMP

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### Proceedings Article

## Physical Education and Character Education

Helmy Firmansyah

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## A Scalable Management Model for Developing Reading Habits in Children through "Proactive Reading" and "Early-Literacy-Awareness" Approach

Ikhfan Haris, Siti Roskina Mas, Fory A. Naway

Reading is recognized as a main literacy skill for learning and it is an indispensable tool for life-long learning. This paper aims to present some

results from the first year of the ongoing research on the children reading habits. This study investigated

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## Physical Fitness Test Through Portfolio Assessment

Komarudin Komarudin

Students' achievement in learning physical education has been measured using traditional assessment. The assessment, however, is considered partial so that it can only assess few parts of the whole learning activities. It usually results in the outcome wi

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## Design of Intelligent Robot as a Tool for Teaching Media Based on Computer Interactive Learning and Computer Assisted Learning to Improve the Skill of Learner

M. Syariffuddien Zuhrie, Achmad Imam Agung, Nur Kholis, Subuh Isnur Haryudo

The development of robotics in Indonesia has been very encouraging. The barometer is the success of the Indonesian Robot Contest (Kontes Robot Indonesia). In the contest no less than 40 major universities in Indonesia took part. The focus of research in t

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## Women Athletes Endurance and Menstruation Cycle; Pre-Menstruation, 2nd day of Menstruation and 5th Day of Menstruation

Nina Sutresna

Raised the issue about menstruation effects towards athlete's endurance, formally as a research, can help athletes and coach to anticipate any matter that can affect athlete's activity. The aim of this research is to know the difference of menstruation cy

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## Needs Analysis in Learning History Model of Senior High School

Nur Ahyani, Soetarno Joyoatmojo, M. Ahyar, Nunuk Suryani

The purpose of this study was to determine the condition of learning the history of high school in the city of Palembang and the needs of the learning model history. This is a qualitative research, research strategy that is used is single-embedded. Resear

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### Proceedings Article

## The Enhancement of Teaching-Learning Process Effectiveness through The Development of Instructional Media Based on E-learning of Surabaya's Vocational Student

Puput Wanarti, Euis Ismayanti, Hapsari Peni, Yuni Yamasari

In the context of e-learning, many learning theories used in the physical classroom situation, including learning in a community adaptive, collaborative, scaffolding, and scenario learning, have been adopted and validated, The development of instructional

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## Developing Comic Media Carrying Character Building to Teach An Introduction to Accounting for Students of Vocational High School

Benedecta Indah Nugraheni, Rita Eny Purwanti

This research was aimed to develop an educational product in a form of comic books carrying character building that were used as the appropriate media for learning An Introduction to Accounting for grade X students of Vocational High School (VHS), taking

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The Implications of Quantum Teaching Model by Combination of Write Stacking Notes and Passing of Idea Paper Techniques Compare With Expository Learning Model

Rose Rahmidani

This research examines the differences in student learning outcomes using Quantum Teaching model by combination of write stacking notes and passing of idea paper techniques compare with the use of Expository Learning Model. This research determine the di

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Can We Use E-Learning to Increase Cognitive Process on Physic Equation Understanding? A Preliminary Result

Sintia W. Niasari, Eddy Hartantyo

E-learning was used widely on higher education (i.e. university). E-learning also gives unlimited distance and time as long as the students have internet connectivity. In this study, we used online learning, as one of e-learning forms, containing short vi

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### Proceedings Article

## Role Playing Method: Learning to Avoid Cheating

Siti Khorriyatul Khotimah

Nowadays a lot more teachers and educators realize that cheating increase in academic settings. Students cheat in doing their homework and exam by reading books or ask their friends. This research aim is to test the influence of role playing method toward

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### Proceedings Article

## The Implementation of Beyond Centers and Circle Times (BCCT) in Early Childhood Education

Slamet Lestari

There are several aims of this study. First, is to describe the implementation of Beyond Centers and Circle Times (BCCT) at Rumah Ibu, an early childhood education institution in Yogyakarta. Second, is to investigate the constraints in the implementation

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### Proceedings Article

## The Determinant of Quality ICT-based Teaching and Learning

## Slameto Slameto

The Open / Distance Learning was deemed feasible to produce an undergraduate education equivalent to regular on-campus graduate program. For the development of on-line learning, managers needed to select the variables determining the success; Factors that

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### Underwater Archaeological Heritage: A Media for Maritime Learning

Prabawa Dwi Putranto

Indonesian people evolved in the archipelago along the equator. Its strategic location and natural wealth of producing spices appeals foreigners to come. People in Nusantara are common with seafaring and thrive as a maritime nation. Cultural contact and a

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### The Prediction of Academic Emotions on Cognitive Load in Hypermedia Learning Environment

Sunawan Sunawan, Junmei Xiong

The purpose of current study was to investigate the prediction of academic emotions (namely, happiness, sadness, anxiety, and angry) on each type of cognitive load (namely, intrinsic load, extraneous load, and germane load). Thirty university students wer

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## Introducing Gender Perspective in Darussalam Islamic Boarding School

Yuyun Sunesti, Argyo Demartoto

The study of gender and Islamic boarding school which is known well as pesantren has been numerous. The scholarly research showed the efforts of introducing gender awareness as well as the challenges. This paper aims to discuss one of the challenges in in

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## Judging Social Behavior and Level of Intellegence Changes as A Result of Team Sport Training

Berliana Berliana, Ira Purnamasari

This study aimed to investigate whether athletes in team sports (football) who have been training for a long time, had social behavior changes. In this research ,a behavioral shift is the most important factor, because family, school, and sports club are

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## Climate Establishment in An Ex-Indonesian International Standardized School

Cepi Safruddin Abdul Jabar

the success of the school in the academic side is embedded to the surrounding environment, especially how the relationship between the school communities in activities that binds them in a meaningful activity. A school surrounding environment is impact of

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### Proceedings Article

## Identification of The Problems Faced by Madrasahs in Response to Institutional Change

Supa'at Supa'at

Within form and its current status, the existence of madrasah actually has passed a long history in struggling for the recognition and equality. National Education System Act No. 2 of 1989 and Act No. 20 of 2003 are the basic policy which decided by the g

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### Proceedings Article

## Profiles of Self-Reliance of Elementary School Students in Indonesia

Endin Mujahidin, Syamsuddin Ali Nasution

Sexual crimes to children (pedophilia) are very anxious because children who are the victims of the crimes would be traumatized for a long time. It can

occured not only outside home but also at home by their own family.  
Pedophilia that occured in several

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### Proceedings Article

## The Differences of Emphasis Among Teachers, Students and Parents Concerning School Climate

Rahmania Utari, Mada Sutapa

This paper is based on the research which is conducted at Gunungkidul regency, Indonesia. The final objective of this research is to create web-based school climate measurement instrument. This research uses design and development method which was the com

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### Proceedings Article

## Antecedent Factors of Attitude toward Corruption: an Empirical Study of Indonesian Students Context

Sabrina O. Sihombing

Corruption is one main national enemy in Indonesia. Three variables (i.e. personal values, religious values, and integrity) are as antecedent variables in explaining attitude toward corruption. This research aims to examine the relationship between person

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## Ethnicity, Nationalism, and Global Values in Peace Education: Cross-Sectional Survey

Sar Joni Herri

The quest for equality and identity between ethnicity, nationalism, and global values can be done side by side and be able to compete with each other. The most important issue is how the educational institutions in Indonesia can reconcile these differenc

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## The Influence of Vision, Mission, And Values Statement on Performance the Organization of Economic Education Study Program Faculty of Teacher Training and Education Science

Witarsa Witarsa

Vision and mission statement of economic education courses have been good, but in result practice is not ideal, especially in the field of research and community service. To realize the vision and mission statement of values needed as the main priorities

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## Implementation of School-Based Management Towards Peace Building and Child Protection

## Agustinus Hermino

The purpose of this research is to describe about implementation of school-based management in three pillars towards peace building and child protection in primary schools in the District Jayawijaya, Central Mountains Papua. The research method applied is

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### Teacher Deployment Policy Towards the Effective School Management

Nurkolis Nurkolis

The focus of this research was the process of policy-making of teacher deployment. The policy analysis refer to Anderson and Dunn is the problem formulation, policy formulation, policy determination, policy implementation, and policy evaluation. It is a p

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### Counsellors' Personal Quality in Public Senior High School

Zakki Nurul Amin, Mulawarman Mulawarman, Edwindha Prafitra Nugraheni, Carti Carti

Counsellors' personal quality is an important factor that support the effectiveness of the school counselling services. The purpose of this study is to describe the counsellors' personal quality from educational qualification, gender, and working experien

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## The Effectiveness of Teachers Professionalism Development Management by Local Government

Aty Susanti

The main aim of the study is to analyze the effectiveness of the management of teacher professional development in Bogor district that includes: need analysis and designing an alternative model of effectiveness of teachers professional development to loca

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### Proceedings Article

## The Pedagogical Communication Skill of Senior High School (SHS) Teachers in North Maluku Province, Indonesia

Caraka Putra Bhakti, Suyatno Suyatno, Siti Urbayatun, Ika Maryani

Teacher is an educator who is clearly recognized in Law of National Education System No 20 of 2003. Teachers' Competences consist of pedagogical competence, personality competence, social competence, and professional competence. One of the most important

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### Proceedings Article

## Student Teacher Recruitment in Indonesia: An Initial Step to Promote Teacher Professionalism and Teaching Professionalization

Priadi Surya

Teacher professionalism should arise since the recruitment into initial teacher education (ITE) program, during teacher education process, and graduation to become a novice teacher. This consecutive process supports the promoting of teacher professionalis

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## The Competence and Readiness of Teachers in West Sumatra Indonesia in Implementing Curriculum 2013

Rino Rino, Armida S.

Curriculum 2013 requires teachers' creativity, innovation and independence. The change of paradigm required teachers to move from teacher oriented to student oriented and also to pay attention on balance achievement among cognitive, affective, and psy-ch

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## Service Encounter Condition, Service Quality and Frontline Employees Role in Higher Education

Taufani C. Kurniatun, Elin Rosalin

Frontline employees (FLE), has an important role in supporting the successful

delivery of services to support the achievement of customer satisfaction through the delivery service encounter. In a business environment services, customer satisfaction is oft

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The public national schools of the third millennium have to be given an opportunity to become more autonomous along the lines of the primary financial resources of government fund. The schools should have ownership of the school and its own resources thro

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## Leader's Strategy In Building Organizational Commitment

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Aehmad Supriyanto

This article aims to explore a leader's strategy in building organizational commitment. The development of this topic is based on a critical review of the literature. The discussions are directed to find the base of leaders` strategy in building organizat

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## The Influence of Implementation of Human Resources Management towards the Success Rate of Management of Early Childhood Education Institutions in Sumedang Regency

Ipong Dekawati, Dadang Suhendar

This study aims to identify and obtain an overview of the implementation of human resource management influence towards the success rate of management of early childhood education institutions in Sumedang regency. The method used is descriptive and verifi

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## Context, Input. Process, Product Evaluation of The "SMK Rujukan Program in Salatiga"

Bambang Suteng Sulasmono, Nining Mariyaningsih

The study aimed to evaluate: (1) Context of "SMK Rujukan" development program implementation in SMK Negeri 2 Salatiga, (2) Input of "SMK Rujukan" development program implementation in SMK Negeri 2 Salatiga, (3) Process of "SMK Rujukan" development program

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# The Enhancement of Teaching-Learning Process Effectiveness through the Development of Instructional Media Based on E-learning of Surabaya's Vocational Student

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**Abstract**— In the context of e-learning, many learning theories used in the physical classroom situation, including learning in a community adaptive, collaborative, scaffolding, and scenario learning, have been adopted and validated. The development of instructional media has been built used the adoption of responsive web design techniques developed by the modern web markup language HTML5 and CSS3 style formatting pages while bootstrap frame work was used to build e-learning. A deep analysis of learning effectiveness done in the instructional media based on e learning. The instructional media was applied on vocational high school. Research and Development method was used in this study. The following development procedures were arranged: planning, design, and development phases. In the development phase, on-going evaluation was carried out until a preliminary product was materialized. The result of instructional media based on e-learning development underwent three experimentation phases. In the first experimentation, a media and material experts' validation, were executed. In the second experimentation, through individual experimentation and small group experimentation involving teacher and students (clients) were carried out up to the final phase revision. In the third experimentation, the product validation, also known as summative test, was obtained from extensive field experimentation to discover the effectiveness of the instructional media based on e-learning in a real teaching process using e-learning model. This web based e-learning system provided electronic, illustration, group learning, comprehension, and workshop learning units and complied with the training objectives of the designated course. The validation of this model was positive and the results indicated that the proposed web based e-learning course could be further improved by taking into consideration individual learners' attributes.

**Keywords**—component; instructional media; e-learning; HTML5; CS3; bootstrap framework, research and development method; validation.

## I. INTRODUCTION

The objective of learning, teaching methods, learning materials, of instructional media and evaluation become critical element in teaching and learning activities. The selection of teaching method will greatly affect to deliver knowledge. The use of instructional media is one way that can be used by teachers to deliver subject to student. Student will easily understand the subject that will be delivered. Instructional media will greatly assist the effectiveness of a learning process and are also able to raise the motivation and interest of students in learning process. The use of instructional media can also help students improve comprehension, presenting the data to attract, facilitate the interpretation and condense information.

There are several reasons why instructional media can affect students learning process, that is: (1) teaching learning process more attractive to motivate students to learn, (2) the teaching materials will be quite vague so that it can be better understood by students, (3) methods of teaching will be more varied, not only limited to verbal communication through the narrative of words by the teacher and students do not get bored in teaching learning process, (4) students has more learning activities, because not only listen to the description of the teacher, but also other activities such as observing, demonstrating, etc.

Based on the findings of the preliminary field research, the followings can be revealed: 1) teacher has not yet created creative, dynamic, and autonomous learning atmospheres; 2) the students' learning autonomy is still low, and the students are still dependent on the material and the information passed on by the teacher in the learning activity in the class; 3) the e-learning model has not been applied by the vocational high school teachers, despite the fact that the ICT infrastructure in the school is quite adequate to support it; 4) teacher has not

yet utilized e-learning in the learning process; 5) the average score of the Vocational Competency Basics subject is  $65 < 75$ , which is still below the minimal learning completeness criteria for (Kriteria Ketuntasan Minimal/KKM) that has been decreed; 6) e-learning has not been applied as it should be, and the teacher only uses power point (offline), because there are no supporting and appropriate media, yet. Those facts mentioned above become good reasons for the development of e-learning media, especially in the Vocational Competency Basics subject in vocational high schools. The development of the e-learning media with regard to the integration of integrated pedagogical aspects becomes an effort to achieve an effective learning process as to improve the learning process which is full of meaning and as to increase the speed of comprehension and creativity, and thus, gaining optimum learning result.

## II. THEORETICAL REVIEW

A medium as any person, material or event that creates circumstances that put the pupils in a position to acquire knowledge, skills and dispositions [1]. The media that carry messages or information that contains the purposes of teaching, the media is called instructional media. According to Gagne (1970) defines that media are various components in learners' environment which support the learners learn.

There are many aspects of the user experience that can be considered and ways of taking them into account when designing interactive products. Of central importance are the usability, the functionality, the aesthetics, the content, the look and feel, and the sensual and emotional appeal [2]. The media that carry messages or information that contains the purposes of teaching, the media is called instructional media. In order to instructional media actually used for learning, then there are a number of principles that should be considered include: (1) The media used by teachers must be appropriate and directed to achieve the learning objectives, (2) media to be used must be in accordance with the learning materials, (3) Instructional media must be in accordance with the interests and needs of the student condition, (4) media to be used should pay attention to effectiveness and efficiency, (5) the media used be in accordance with teacher's ability to operate.

Three major principles, which could be used as a reference for teachers in selecting instructional media. The description of each principle is as follows: (1) principles of effectiveness and efficiency, (2) principle of relevance, (3) principle productivity [3].

Principle of effectiveness, in the concept of learning, learning effectiveness is success measured by the level of interest exhaustion after the teaching and learning process completed. If all the learning objectives have been achieved then called effective learning. While efficiency is the achievement of learning objectives by using the cost, time, and other resources to a minimum.

Principle or relevance, considerations media conformity with the material that will be presented also need to be considered in selecting instructional media teacher.

Principle of productivity, productivity can be understood in learning achievement optimally with the use of existing resources like human and natural resources. The medium used to generate and achieve goals on learning objectives It will be categorized as productive media. The more productive instructional media used the faster and precise learning objectives realized.

Indicators of instructional media can be determined based on the merits of the instructional media. Feasibility of instructional media is comprised of three aspects of validity, practicality, and effectiveness. [4]

Validity, components of teaching materials should be based on basic knowledge (content validity) and all components must be related to one another (validity of construction). If these requirements are fulfilled, the instructional materials can be said to be valid.

Practically, high-quality instructional media that is the end use (teachers and students) consider teaching materials to be used and an easy to use teaching materials through appropriate manner.

Effectiveness, efficacy parameter is the result obtained as expected. In the process of learning that it relates to the learning outcomes of students. Learning effectiveness is measured by the achievement of learners. The achievement of learners in this case is the result of student learning. Student learning outcomes include three terms, namely cognitive, affective, and psychomotor.

E learning unites two main areas, learning and technology [5]. Learning is a cognitive process for achieving knowledge, and technology is an enabler of the learning process, meaning that technology is used like any other tool in the education praxis, as is a pencil or a notebook, for example. Although this seems quite simplistic and logical, a pencil is more technologically transparent tool, and its use may therefore seem more natural to many. Furthermore, technology underpins other problematic situations because it includes various dimensions. E-learning systems aggregate various tools, such as writing technologies, communication technologies, visualization, and storage

E-Learning is defined as all forms of electronic supported learning and teaching, which are procedural in character and aim to effect the construction of knowledge with reference to individual experience, practice and knowledge of the learner. Information and communication systems, whether networked or not, serve as specific media to implement the learning process [6]. E-learning is essentially the computer and network enabled transfer of skills and knowledge. E-learning refers to using electronic applications and processes to learn. E-learning applications and processes include Web-based learning, Computer-based learning, virtual classrooms and digital collaboration. Content is delivered via the Internet, intranet/extranet, audio or video tape, satellite TV, and CD-ROM. It is used by the educational Institutions to enhance and support the class room teaching and offering courses to a larger population of learners across the Globe. It can be self-paced or instructor led and includes media in the form of text, image, animation, streaming video and audio. The focus of e

learning is the learners. They are given the freedom to learn independently, according to their pace and time, therefore giving more autonomy and responsibility to the learners. This could bring to a more interactive and active learner. Learners will have to plan and prepare thoroughly by searching materials and information regarding a topic with their own initiative. It allows self-learning to happen, revisiting difficult topics repeatedly and most of all allowing learning to happen without embarrassing oneself in front of their colleagues. Questions could be posted on-line [7].

The e-learning systems' theoretical framework contains the three main components of information systems. These components are people, technologies, and services. People interact with e-learning systems. E-learning technologies enable the direct or indirect interaction of the different groups of users. Technologies provide support to integrate content, enable communication, and provide collaboration tools. E-learning services integrate all the activities corresponding to pedagogical models and to instructional strategies. The complex interaction combination is the direct or indirect action with e-learning systems. At the same time, systems provide services according to the specified strategies for activities. In other words, service specifications are e-learning activities aligned with the e-learning pedagogical models and the instructional strategies. With the recent advances in web standards and responsive design techniques it is now possible to provide a progressive, gradually enhanced experience across a wide array of browsers, using one HTML5 markup document and a variety of different Cascading Style Sheets (CSS) [8]. This approach does not selectively deliver content to the user through browser sniffing or server-side device detection, but rather is requested by the mobile browser itself by only rendering the supported web technologies. Mobile devices that fall under the smartphone category currently have superior mobile browsers and support for HTML5 when compared to feature phones.

### III. METHOD

This research employed a research and development approach, and it was intended to develop the e-learning media for the laws of magnetism on the electrical circuit basic competencies in vocational high schools. The method to be used is the type of research and development methods (research and development (R & D)). This research and development had produced: (1) e-learning media using responsive web design as its base for the laws of magnetism on the electrical circuit basic competencies learning, (2) tutorial book on how to use e-learning media for the teacher and the student, (3) the laws of magnetism on the electrical circuit basic competencies learning instrument set. The subjects of the experimentation were the students in Grade X, majoring in Audio Video Engineering Program. The subjects of group experimentation were students in State Vocational High School Number 3 of Surabaya. In this research, there are two classes, experimental and control classes. For the experimental class will be given treatment by means of applied learning by using instructional media based on e learning. While the control

group was given no treatment. This research uses experimental designs Quasi-Experimental Design (Non-equivalent Control Group Design) because of the difficulty of controlling all the variables that affect the conduct of research, other than that the design was also done to find the effect of an independent variable on the dependent variable in a study.

The data of the research were gathered through primary and supporting instruments. The former was the assessment sheet (questionnaire) for the e-learning product. The questionnaires used were: (1) the questionnaire for the media experts encompassing three aspects namely the aspects of display design, interaction design, and information design; (2) the questionnaire for the material experts including two aspects, namely pedagogical and content correctness; (3) the questionnaire for students and teacher as a product users, in order to get the formative evaluation of the product that had been developed. Their validity and reliability on this research and the development of the e-learning media development were reached in two ways: logical theoretical validity and reliability, obtained by asking for the expert supervisors, material experts, and media experts justification (criticism, suggestion, and revision) on the hints and instrument items that had been composed by the researchers. Those instruments were questionnaire, note sheet, observation guide, and interview guide; The data gathered in this research were: (1) the data of the need analysis of vocational competency basics material and the criteria of hybrid e-learning media; (2) the validation of lesson plan; (3) the validation of the material experts' appraisal; (4) the validation of the media experts' appraisal; (4) the data of accomplished learning; (5) the data of student responses upon applying the e-learning product; The types of the compiled data were the quantitative data using scoring scale as the main data; (6) the appraisal data of the students' evaluation on the e-learning product. The types of the compiled data were the quantitative data using scoring scale as the main data and the qualitative data in the form of suggestion embellishments and written inputs from the respondents as an additional data.

### IV. RESULT AND DISCUSSION

The result of this research is e-learning media web design using responsive web design. The technique that used for responsive web design was flexible grid layout, flexible images, and media queries. E-learning media built with responsive web design supported using modern web markup language and CSS3 page style format. The result of e-learning media using responsive web design showed bellow

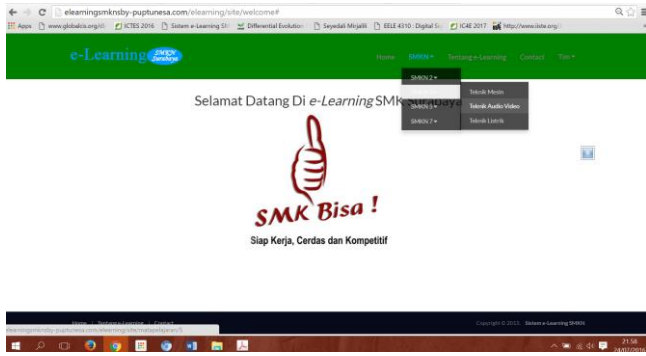


Fig 1. E-learning media on Personal Computer

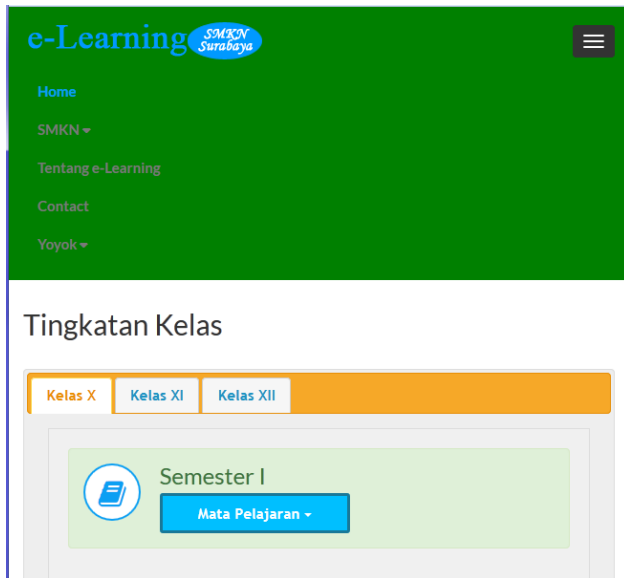


Fig 2. E-learning media on Smart Phone using responsive web design technique.

This study aims to produce instructional media e-learning in Electric Engineering basic competence in applying transformer single phase electrical circuit at Vocational High School number 3 Surabaya. Media validated by media experts and material experts. Three aspect developed through media validation; (1) integration of media, (2) balance of media, (3) form of media. The result of media validation total was 87,49 % with 87,5% for integration of media, 83,3% for balance of media and 91, 67% form media.

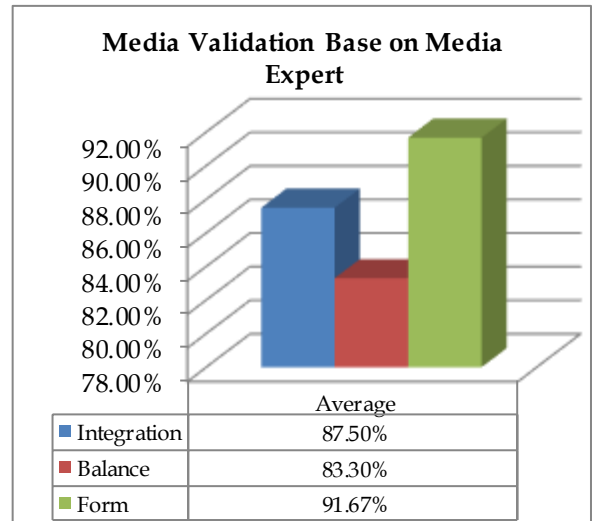


Fig 3. Result of media validation base on media expert

Material expert validation accomplish two aspect that was instructional media format and contain.. The result for instructional media format was 87,5% and 88,63% for contain. The average validation expert as the graph below

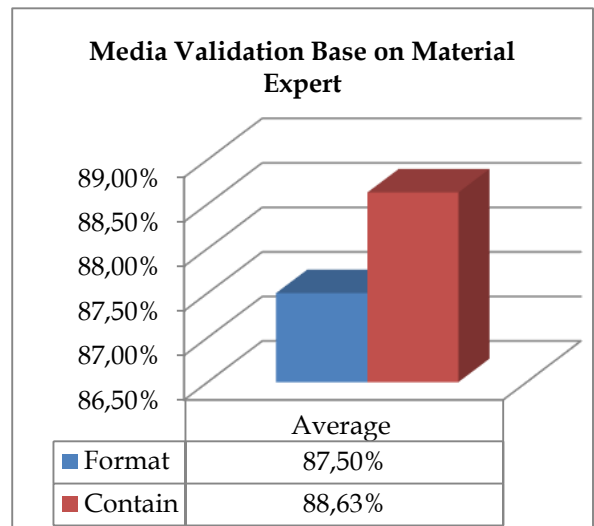


Fig 4. Result of media validation base on material expert

The validation result above show that instructional media that was designed for basic competency in implementing transformer single phase electrical circuit very valid. The instructional media according to subject matter experts with the results of a rating of 88.06%. The experts give a positive respond that this media is very suitable to be applied in vocational high schools. Based on the validation result elaboration from both the media and material experts, it can be concluded that there is no principle mistake, especially those related with the procedure of e-learning development. It shows that observed from the point of view of development procedure, curriculum, and strategy that is used, the design of

the product material of the e-learning development is suitable, so that the instructional media product is deemed feasible, acceptable, and in demand, so instructional media based on e-learning can be used as instructional media in Vocational High School Number 3 Surabaya.

Thus, the next stage is the field experimentation after the preliminary review as suggested to improve the quality of the e-learning product that will be employed in the learning of vocational competency basics using the e-learning model. The average pre-test score on the experimentation class is 70.81 and the post-test is 83.14, which shows that there is an average improvement with the Gain Score of 12.33. The fact shows that the students who study vocational competency basics through e-learning media using e-learning model fulfills the standard of minimum criteria of completeness (KKM) > 75. This means that on experiment class the students have studied thoroughly and the required basic competency has already been reached. Thus, the procedure of the e-learning product development program has taken place as the proposed planning design.

Student responses obtained after instructional media tested for class X students TAV 3 in Vocational High School Number 3 Surabaya. The following describes a large percentage of the student responses from each aspect and interpretation of responses from the research that has been described previously: (1) In the aspect of media formats included in the category of strongly agree. In the category of strongly agree, the value of getting a percentage of 89.93% which is interpreted that the students respond very well to media-based learning e-learning. This means that if the media get very good responses, most students are happy to study media format based e learning; (2) In the aspect of media contents included in the category of strongly agree. In the category of strongly agree, the value of getting a percentage of 86.2 % interpreted that the students respond very well to the media based learning e-learning. This means that if the media get very good responses, most students are happy for the contents of media-based learning e-learning; (3) in the aspect of the language used in the media included in the category of strongly agree. In the category of strongly agree, the value of getting a percentage of 85.3%, which is interpreted that the students respond very well to media-based learning e-learning. This means that if the media get very good responses, most students are happy to language that is primarily used in media-based learning e-learning; (4) in the aspect of ease of operation of the media included in the category of strongly

agree. In the category of strongly agree, that value gets a percentage of 83.6%, which is interpreted that the students respond very well to the media based learning e-learning. This means that if the media get very good responses, most students are happy to ease of operation based learning media e learning.

From the details of the percentage of these aspects can be concluded, overall students' response to the media get a percentage of 86.25%, which means that the media obtained a very good response, instructional media based on e-learning can be concluded that 86.25% students are convenient to use instructional media based on e-learning as a instructional media. This is consistent with the definition of learning media according Munadi [9], namely that the learning media is anything that can convey and deliver the message from the source in a planned manner so as to create a conducive learning environment in which the recipient can make the learning process efficient and effective manner.

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