



SEMINAR PENDIDIKAN KEJURUAN
DAN TEKNIK SIPIL (SPKTS 2019)

BUKU PEDOMAN SEMINAR

TEKNIK SIPIL
UNIVERSITAS NEGERI JAKARTA

Supported by:



KATA PENGANTAR

Puji syukur kami panjatkan kehadirat Allah SWT yang atas nikmat-Nya karena proposal ini dapat diselesaikan. Shalawat serta salam semoga tercurah pada junjungan kami Nabi Muhammad SAW.

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Mahasiswa dengan segala kelebihan yang dianugerahkan Tuhan merupakan pembeda antara generasi mereka dengan generasi di bawah maupun di atasnya. Akan tetapi hal ini belum sepenuhnya disadari mahasiswa. Peran potensial mereka belum dimainkan secara optimal dalam pembangunan negara. Kegiatan kemahasiswaan nasional seperti Civil Expo 2019 ini diharapkan menjadi gerbang untuk membangun semangat mahasiswa.

Proposal ini merupakan bagian dari usaha kami untuk mengajukan bantuan ke Wakil Rektor Bidang Mahasiswa dan Alumni agar kiranya dapat mendukung keikutsertaan mahasiswa dalam ajang kemahasiswaan Nasional Civil Expo 2019.

Terakhir, kami mohon maaf jika dalam penyusunan proposal ini terdapat kesalahan. Semoga proposal ini dapat memberikan informasi yang berguna.

Jakarta, 19 September 2019

Panitia Civil Expo UNJ 2019

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Mochamad Rangga Mahendra

JADWAL SEMINAR

WAKTU	KEGIATAN
12.45 – 13.00	Registrasi Pemakalah Seminar Penelitian
13.00 – 13.05	Pembukaan oleh MC
13.05 – 13.45	Presentasi pemakalah sesi 1 dan tanya jawab
13.45 – 14.15	Presentasi pemakalah sesi 2 dan tanya jawab
14.15 – 14.45	Presentasi pemakalah sesi 3 dan tanya jawab
14.45 – 15.00	Pemberian sertifikat kepada pemakalah dan sesi foto
15.00 – 15.05	Penutupan

SESI PARALLEL

Ruang : Aula UPT
Topik : Teknik Sipil
Moderator : Daffa Fadhil

No.	Waktu	Judul	Pemakalah
1	13.05 – 13.45	1) Pengujian Agregat Kasar Ringan Buatan Fapet (Flyash Pet) Untuk Campuran Beton Ringan 2) Analisa Penambahan Serbuk Kaca Terhadap Ketahanan Natrium Sulfat pada Paving Block 3) Analisa Banjir Dengan Aplikasi HEC-RAS pada Jalan Gaya Motor Raya, Tanjung Priok	Fauzan Apriyanto Adhi Krenoto Imaduddin
2	13.45 – 14.25	1) Pemanfaatan Abu Limbah Bonggol Jagung Sebagai Bahan Tambah dengan Variasi Suhu Pembakaran Terhadap Kuat Tekan Beton 2) Pengaruh Pengetahuan Kebencanaan terhadap Mahasiswa Menghadapi Bencana Di jurusan Teknik Sipil Universitas Andalas 3) Kesesuaian Manajemen Perawatan Bangunan Sekolah Berstatus Cagar Budaya di Jakarta 4) Pemanfaatan Limbah Kabit Sebagai Bahan Tambah Pada Mortar Ditinjau dari Kuat Tekannya	Achmad Rizco H Haviz Ramadhan Marvakri Resowijoyo Wisnu Adhi S
3	14.25 – 14.55	1) Pemanfaatan Multimedia Interaktif Sebagai Media Pembelajaran 2) Penerapan Bahan Ajar Desain Interior Berbatuan Multimedia 3D terhadap Motivasi Belajar 3) Tingkat Kepuasan Mahasiswa Terhadap Manajemen K3 Di lingkungan Gedung L FT UNJ	Yusrina Luthfiana Raka Gustinanda Aradea Permana

Ruang : L3 201, Fakultas Teknik
Topik : Teknik Sipil
Moderator : Diaz Raviv Nur

No.	Waktu	Judul	Pemakalah
1	13.05 – 13.45	1) Pengembangan Media Pembelajaran Berbasis Video Tutorial Pada Mata Kuliah Praktek Batu Program Studi	Hegar

		<p>Pendidikan Teknik Bangunan Universitas Negeri Jakarta</p> <p>2) Analisa Kebutuhan Pengembangan Media Pembelajaran pada Mata Kuliah Gambar Teknik 1</p> <p>3) Sarana dan Prasarana Penunjang Proses Pembelajaran di Program Studi Pendidikan Teknik Bangunan UNJ</p>	<p>Wahyu Indrianus</p> <p>Dika Dwi Noviyanti</p>
2	13.45 – 14.15	<p>1) Pengembangan Bahan Ajar pada Mata Kuliah Ilmu Ukur Tanah II</p> <p>2) Pengembangan Media Pembelajaran Video Tutorial Mata Kuliah Mekanika teknik 1 <i>Tutorial Video Development As Learning Media iIn Analysis Structure I</i></p> <p>3) Analisa Kebutuhan Pengembangan Media Pembelajaran Berbasis Video Tutorial pada Mata Kuliah Ilmu Ukur Tanah I Program Studi Pendidikan Teknik Bangunan Universitas Negeri Jakarta</p>	<p>Dendi Wahyu K</p> <p>Fadlan Karim</p> <p>Ayyub Denirian R.R</p>
3	14.15 – 14.45	<p>1) Pengembangan Bahan Ajar Drainase Perkotaan pada Prodi Pendidika Vokasional Konstruksi Bangunan</p> <p>2) Tingkat Kepuasan Mahasiswa Pendidikan Teknik Bangunan Universitas Negeri jakarta Terhadap Proses Pembelajaran</p> <p>3) Hubungan Sertifikat Keahlian (SKA) Terhadap Penerimaan Alumni PTB UNJ pada Dunia Konstruksi</p>	<p>Mei Yuni W</p> <p>Rifqi Prasetyo S</p> <p>Ryan Fahri H</p>

LOKASI SEMINAR



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PEMANFAATAN ABU LIMBAH BONGGOL JAGUNG SEBAGAI BAHAN TAMBAH DENGAN VARIASI SUHU PEMBAKARAN TERHADAP KUAT TEKAN BETON

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ABSTRAK

Beton merupakan salah satu bahan yang umum digunakan untuk konstruksi bangunan. Pesatnya pembangunan infrastruktur di Indonesia seperti saat inipun, menyebabkan keperluan pemakaian beton semakin meningkat. Salah satu usaha untuk mengurangi pemakaian semen yang merupakan penyumbang polusi udara serta berupaya membantu mengurangi biaya produksi beton yang timbul dari kenaikan biaya semen, dan memanfaatkan produk limbah menjadi bahan yang berguna untuk industri konstruksi, pembuatan dan pengembangan beton memanfaatkan limbah yang sudah tidak terpakai perlu ditingkatkan. Penambahan abu tongkol jagung diharapkan dapat memberikan kontribusi positif terhadap beton yaitu dengan memberi daya lekat pada campuran beton sehingga dapat meningkatkan kuat tekan beton. Penelitian ini dilakukan untuk mengetahui pengaruh penambahan abu tongkol jagung pada campuran beton terhadap variasi suhu yang akan digunakan dalam pembakaran bonggol jagung. Pengujian kuat tekan dibuat dengan menggunakan metode standar SK SNI T-15-1990-03. Semua sampel dibuat dengan menggunakan cetakan kubus dengan dimensi 150 mm x 150 mm x 150 mm. Pengujian kuat tekan menggunakan total 30 sampel terdiri dari beton normal dan 4 variasi kadar abu tongkol jagung mulai dari 2,5%; 5%; 7,5%; 10%. Pengujian akan dilakukan pada umur 14 dan 28 hari. Berdasarkan analisis data dari hasil pengujian kuat tekan, nilai untuk masing – masing beton normal dan variasi abu 2,5%; 5%; 7,5%; 10% berturut – turut pada umur 14 hari adalah 17,773 Mpa; 22,262 Mpa; 22,807 Mpa; 21,812 dan 21,011 Mpa. Nilai kuat tekan pada umur 28 hari adalah 21,875 Mpa; 23,049 Mpa; 23,771 Mpa; 23,369 Mpa dan 22,045 Mpa. Dengan peningkatan kuat tekan maksimum yaitu 23,714 Mpa pada kadar optimum 5,3%. dimana kadar bahan tambah sebesar 5,3% tersebut berdasarkan umur beton selama 28 hari justru memiliki nilai kuat tekan paling tinggi dibandingkan dengan kadar penambahan abu bonggol jagung dengan kadar 2,5% yaitu 23,049 Mpa, dan kadar 7,5% yaitu 23,369 MPa. Hal ini tentunya juga akan berpengaruh jika variasi suhu pembakaran limbah abu bonggol jagung yang digunakan berbeda.

Kata Kunci : Beton, Bahan Tambah, Abu Tongkol Jagung, Kuat Tekan

PENGEMBANGAN MEDIA PEMBELAJARAN BERBASIS VIDEO TUTORIAL PADA MATA KULIAH PRAKTEK BATU PROGRAM STUDI PENDIDIKAN TEKNIK BANGUNAN UNIVERSITAS NEGERI JAKARTA

Hegar ¹⁾

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Abstract

This study is a development research that aims to develop video-based instructional media tutorials on practice stone courses using Wondershare Filmora.

This development research was using Borg & Gall's model. This research using questionnaire as data collection instrument feasibility of the media through the validation by media experts, material expert and student assesment who join stone practice

The results of the development of instructional media consist of three main components, namely

(1) making recordings, (2) editing recordings, and (3) recording production. Student assessment of learning media can be categorized as feasible criteria with a score of 82.4%, so that the development media can be used as learning media with student learning outcomes increasing from the average value of B to A.

Keywords : Pengembangan, Praktek Batu, Video Tutorial

**PENGUJIAN AGREGAT KASAR RINGAN
BUATAN FAPET (FLYASH PET)
UNTUK CAMPURAN BETON RINGAN**

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ABSTRACT

Concrete is one of the materials in building construction. Concrete has a weakness that is high enough specific gravity so that the dead load structure of building structures becomes large. Some ways that can be used to reduce the weight of concrete are by making lightweight concrete using lightweight coarse aggregate. This research will be tested on lightweight, coarse aggregate made by FAPET which will be compared with lightweight coarse aggregate of pumice. Light aggregate FAPET (Fly Ash and PET) is a coarse aggregate made from a mixture of PET plastic waste with coal waste (fly ash). This study aims to determine the quality of FAPET aggregate testing by comparing the quality of pumice aggregate testing. The method used is to use data collection techniques. The results obtained in this study indicate the value of specific gravity SSD FAPET aggregate 1.42 gr/cm³ and pumice aggregate 1.04 gr/cm³, FAPET aggregate dry weight 1.418 gr/cm³ and pumice aggregate 0.93 gr/cm³, absorption FAPET aggregate 0.005% and pumice aggregate 50.9%, FAPET aggregate moisture content 0.0007% and pumice aggregate 0.001%, The results showed that the FAPET aggregate had better quality than pumice aggregate in terms of higher specific gravity values bigger and smaller absorption value.

Keyword : Material Light Coarse Aggregate, Lightweight Concrete

ANALISA PENAMBAHAN SERBUK KACA TERHADAP KETAHANAN NATRIUM SULFAT PADA PAVING BLOCK

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ABSTRACT

This study aims to analyze the effect of adding glass powder from the impact of glass bottle waste on the resistance of sodium sulfate to paving blocks. The percentage of the addition of glass powder used in the paving block mixture is 0% (normal), 5%, 10%, 15%, dan 20%. Silica is the main chemical compound in glass powder, therefore glass powder is indicated to have pozzolanic properties that are able to produce products that will fill pores so as to reduce the permeability of concrete and have the ability to withstand sulfate attack. According to SNI 03-0691-1996, Paving blocks (concrete brick) must be able to meet the testing requirements, one of which is sodium sulfate resistance testing. In this study, it was found that the percentage level of glass powder addition of 10%, 15%, and 20% was able to withstand the resistance of sodium sulfate. Optimum levels of increasing the percentage of glass powder are found at 20% with a difference in weight before immersion of 0,41.

Keywords: Paving Block, Glass Powder, Silica, Pozzolan, and Sodium Sulfate Resistance

ANALISA BANJIR DENGAN APLIKASI HEC-RAS PADA JALAN GAYA MOTOR RAYA, TANJUNG PRIOK

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Abstract

This research is motivated by the occurrence of flooding on Jalan Gaya Motor Raya. This research was conducted to determine the causes and resolve the flood. This research begins with drain measurement activities, namely drain elevation, drain width, drain length, drain depth and drain sedimentation thickness. The data that must be processed in order to get the discharge plan are rainfall at 3 weather stations for 10 years, drain slope, area of drainage, land use data and road technical data. After the drain data and discharge plan has been obtained, drain simulation in the HEC-RAS application can be run. The results of drain simulation showed that all cross sections were overflowed except for cross sections 93, 92, 94, 95 and 96. After seeing the highest overflow height at cross section 8 is 1.7 m and the thickness of the drain sediments is 52 cm the simulation was repeated with 3.5 m depth. The results of simulation show that all drains cross sections can accommodate discharges plan. This proves that flooding is caused by existing drains that cannot accommodate rain with high intensity. Then the existing drain must increase the depth so that flooding does not occur.

Keywords : Gaya Motor Raya, *Flood, Drainage, Discharge Plan, HEC-RAS*

ANALISA KEBUTUHAN PENGEMBANGAN MEDIA PEMBELAJARAN PADA MATA KULIAH GAMBAR TEKNIK 1

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Abstract

This study attempts to analyze the needs of students to development of the media learning in courses Pictures of Engineering 1 with e-modul flipbook maker in a course of tudy Education of Building Techniques , Jakarta State University. Needs analysis done by means of observations learning classes in the first half of 111 and use of the questionnaire was against a student who have took a course called included the of the questionnaire was by using microsoft form consisting of the 2015, 2016 , 2017 and 2018. There are 82 responses indicating learning the material that has been used for this. The period of filling out the questionnaire was that is the 5th of – 6 November 2019. Based on the result analysis needs that have been done, identified several problems in a media learning pictures of engineering 1, namely ; (1) Required media an interesting and easy to use; (2) Media learning that will be developed expected to improve understanding learners against matter , interest and satisfaction with the media learning; and (3) Students need media learning interesting , easy to use and can be used anywhere. With development media learning in lecture picture of engineering 1 use e-modul flipbook maker, is expected to support learning picture of engineering 1

Keywords : *Learning Media, E-Modul, Pictures of Engineering 1*

PENERAPAN BAHAN AJAR DESAIN INTERIOR BERBANTUAN MULTIMEDIA 3D TERHADAP MOTIVASI BELAJAR

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Abstract

The application of 3D multimedia assisted teaching materials using the SketchUp application in the Interior Design course is carried out to produce learning outcomes that are expected to facilitate and increase student motivation in understanding Interior Design courses, as well as equip students of Building Engineering Education Study Program at the State University of Jakarta in the PKM program (Practice Skills Teaching) to become a professional teacher. This type of research is Experimentation. Analysis of the level of satisfaction is done by applying teaching materials and using questionnaires to students who are taking courses in Interior Design. There are 37 responses that indicate the assessment of the application of teaching materials used today. The level of student satisfaction with teaching materials applied showed 82.4% of students answered agree that teaching materials applied with 3D multimedia can help student motivation, 9.3% of students answered doubtfully, and 8.3 answered disagreement. From the above analysis it can be concluded that learning using 3D multimedia assisted teaching materials is going well, but there are still students who disagree with these teaching materials. So with this application of Interior Design teaching materials can be continued because the percentage of students 82.4% agree.

Keywords: *Effectiveness, SketchUp, Implementation, Teaching Materials, Interior Design*

PENGEMBANGAN BAHAN AJAR PADA MATA KULIAH ILMU UKUR TANAH II

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Abstrak

Bahan ajar merupakan bahan yang disusun secara sistematis serta menampilkan sosok utuh dari kompetensi yang akan dikuasai peserta didik dan digunakan dalam proses pembelajaran dengan tujuan untuk perencanaan dan penelaahan implementasi. bahan ajar yang dimaksud tersebut adalah bahan ajar cetak yang berupa materi, lembar kerja, dan latihan. Bahan ajar dapat menghemat waktu dalam kegiatan belajar mengajar serta menciptakan suasana belajar yang efisien dan interaktif. Bahan ajar juga dapat membantu mendorong kemandirian belajar peserta didik.

Kata Kunci: Bahan Ajar Cetak, Ilmu Ukur Tanah II.

Abstract

Printed teaching material is material that is arranged systematically and displays a complete figure of the competencies that will be mastered by students and used in the learning process with the aim of planning and reviewing implementation. the intended teaching materials are written or unwritten teaching materials in the form of materials, worksheets, and exercises. Teaching materials can save time in teaching and learning activities and create an efficient and interactive learning atmosphere. Teaching materials can also help encourage students' learning independence.

Keywords: *Printed teaching material, Land Surveying II*

**PENGEMBANGAN MEDIA PEMBELAJARAN VIDEO
TUTORIAL MATA KULIAH MEKANIKA TEKNIK 1**

***TUTORIAL VIDEO DEVELOPMENT AS LEARNING
MEDIA IN ANALYSIS STRUCTURE 1***

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Abstrak: Penelitian ini dilakukan untuk mendapatkan nilai kebutuhan mengenai pengembangan media pembelajaran menggunakan video tutorial pada pembelajaran mata kuliah Mekanika Teknik 1 di program studi Pendidikan Teknik Bangunan Universitas Negeri Jakarta. Metode penelitian yang digunakan yaitu studi literatur. Pengumpulan data – data berasal dari pustaka, membaca jurnal terkait dan mengolah data hasil studi mahasiswa teknik sipil universitas negeri Jakarta pada mata kuliah mekanika teknik 1 selama 2 tahun terakhir. Berdasarkan data hasil studi tersebut menunjukkan bahwa; rata – rata nilai yang diperoleh Mahasiswa Teknik Sipil adalah berada pada rentang D+ hingga B+ pada semester 107 dan 109. Berdasarkan hasil studi literatur didapatkan bahwa; penggunaan media pembelajaran menggunakan video dapat meningkatkan prestasi belajar peserta didik. Secara umum hasil studi yang dilakukan dapat dijadikan acuan dalam mengembangkan media pembelajaran video tutorial pada mata kuliah Mekanika Teknik 1

Kata Kunci: Media Pembelajaran, Mekanika Teknik 1, Pengembangan, Video Tutorial,

Abstract: *This research was conducted to obtain the value of needs regarding the development of instructional media using video tutorials on learning Mechanical Engineering 1 in the Building Engineering Education study program at the State University of Jakarta. The research method used is the study of literature. Collecting data - from literature, reading related journals and processing data from the study results of civil engineering students at the Jakarta State University in Engineering Mechanics 1 for the past 2 years. Based on data from the study results show that; the average final score obtained by Civil Engineering Students is in the range D + to B + in semester 107 and 109. Based on the results of the literature study it is found that; the use of instructional media using video can improve student learning achievement. In general, the results of studies can be used as a reference in developing video tutorial learning media in Analysis Structure 1*

Keywords: *Analysis Structure 1, Development, Learning Media, Video Tutorial*

**ANALISA KEBUTUHAN PENGEMBANGAN MEDIA PEMBELAJARAN
BERBASIS VIDEO TUTORIAL PADA MATA KULIAH ILMU UKUR
TANAH I PROGRAM STUDI PENDIDIKAN TEKNIK BANGUNAN
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Abstract

This study aims to develop video-based learning media tutorials on the introduction of tools and practices in the Building Engineering Education Majors, Jakarta State University. Requirement analysis is done by collecting questionnaires for students who have taken the course and the form of questionnaires using Microsoft Forms taken from batches of 2015,2016,2017 and 2018. The period for filling out the questionnaire was conducted on 12 October 2019 until 15 October 2019. There were 79 Learning Media respondents who have been used so far.. It has been identified how many debates in the learning media of the Soil Measuring Science course I. after introduction analysis done, it is expected: (1) The learning media of Soil Measuring Science course I still use print media, slide power point (2) renewal of learning media in the Soil Measuring Science course I ; and (3) Most students need a renewal of learning media consisting of video tutorials on the Soil Measuring Science course.

Keywords: Tutorial Video, Soil Masuring Science I

PENGEMBANGAN BAHAN AJAR DRAINASE PERKOTAAN PADA PRODI PENDIDIKA VOKASIONAL KONSTRUKSI BANGUNAN

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Abstract

The aims of this research was to develop teaching materials on urban drainage to foster student motivation and interest in learning this course. Learning material is a component of the message content in the curriculum that must be delivered to students (Hernawan, Permasih, & Dewi, 2008). the concept of developing this teaching material is blended learning. Blended Learning is the use of two or more different methods in learning. For example: combining classroom instruction learning with online instruction (Walsh, 2005) This research was conducted using the Research and Development (R&D) method using the Four-D development model as follows: 1) define, 2) design, 3) develop, and 4) disseminate. the results obtained through needs analysis are as follows: 1) from 53 student respondents 43 (82.7%) of them have attended urban drainage lectures, 2) 30 (65.2%) respondents stated that they only received lecture material in class, 3) 47 (95.9%) respondents agreed to do teaching material development, 4) 31 (62%) respondents wanted teaching materials in the form of e-module. based on needs analysis, the form of teaching materials to be developed is e-module.

Keywords: teaching materials, e-module, blended learning, R&D, four-d

PENGARUH PENGETAHUAN KEBENCANAAN TERHADAP MAHASISWA MENGHADAPI BENCANA DI JURUSAN TEKNIK SIPIL UNIVERSITAS ANDALAS

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ABSTRACT

Indonesia is one of the countries prone to experiencing natural disasters. Seeing this the author wants to examine how the influence of disaster knowledge on student preparedness attitudes in dealing with earthquake disasters.. The population in this study were several students majoring in civil engineering at Andalas University with a sample of 97 students. The research variables include knowledge of Student disaster (X) and Student's preparedness attitude in facing earthquake (Y). Data collection techniques used were questionnaire or questionnaire. Data analysis was performed using quantitative methods to describe all variables. Based on the research results, the level of disaster knowledge was in the medium category. The attitude of student preparedness in facing earthquake disaster in Andalas University majoring in civil engineering is in the high category. The results of hypothesis testing with the t test and the coefficient of determination test, then there is a positive influence of disaster knowledge on the attitude of student preparedness in dealing with earthquake in the civil engineering department of Andalas University.

Keywords : Disaster Knowledge, Preparedness, Earthequake Disaster

PEMANFAATAN MULTIMEDIA INTERAKTIF SEBAGAI MEDIA PEMBELAJARAN

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Abstract

The rapid development of information technology indirectly forces educators to develop in line with these developments. In fact, the use of information technology in learning is still relatively low, even though students nowadays are using technology on daily basis. The purpose of this paper is to increase knowledge and information related to improving the quality of learning through the use of interactive multimedia as a learning media. the method used in this paper is literature review. Interactive multimedia as a learning media can be used as an alternative to improve the quality of learning. The use of interactive multimedia is also in line with the use of technology. Because of the development of interactive multimedia that continues to grow in line with the development of information technology, then the need for learning in accordance with the development of information technology can be met. Interactive multimedia also has several different forms that can be utilized based on the needs and learning objectives.

Keywords: interactive multimedia, learning media

PEMANFAATAN LIMBAH KARBIT SEBAGAI BAHAN TAMBAH PADA MORTAR DITINJAU DARI KUAT TEKANNYA

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Abstract

Pembangunan diberbagai daerah Indonesia menyebabkan permintaan produksi semen meningkat tiap tahunnya. Disamping gencarnya produksi semen maka dihasilkan pula berbagai dampak, salah satunya yaitu peningkatan gas karbon dioksida (CO₂) pada atmosfer bumi yang dapat menyebabkan terjadinya percepatan pemanasan global hingga saat ini. Untuk mengurangi produksi semen dibutuhkan alternative lain sebagai bahan penggantinya sehingga dapat mengurangi dampak yang ditimbulkan dari produktifitas pembuatan semen. Salah satunya yaitu dengan memanfaatkan limbah yang memiliki kandungan seperti semen contohnya adalah limbah karbit. Limbah karbit dihasilkan dari pencampuran batu karbit dengan air yang menghasilkan limbah karbit dan zat etylena yang digunakan untuk pengelasan, sehingga perlu diteliti apakah pemanfaatan limbah karbit ini dapat dijadikan sebagai bahan tambah agar menghasilkan kekuatan tekan mortar lebih baik dibandingkan kuat tekan mortarnormal. Serta apakah dapat mencapai mutu mortar tipe M untuk digunakan pada campuran trasram dengan perbandingan semen dan pasir 1:2. Untuk perbandingan pencampuran limbah karbit sebagai bahan tambah sebesar 2,5%, 5%, 7,5%, 10% dan 12,5% dari berat semen yang digunakan dengan nilai factor air semen 0,5.

TINGKAT KEPUASAN MAHASISWA TERHADAP MANAJEMEN K3 DI LINGKUNGAN GEDUNG L FT UNJ

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Abstract

As of the basic human needs, a guarantee of safety in the form of threats, diseases, and even accidents has become a necessity, especially in the industrial or work environment. The implementation of Occupational Health and Safety is a solution to guarantee the commonweal, both business owners, workers, community and the surrounding environment. Jakarta State University as one of the educational work environment is possible to have the hazards potential especially for engineering students, so that a good OHS implementation is required in order to prevent and overcome hazards that may have occurred. This research was conducted to find out the level of student satisfaction of OHS management in the engineering faculty environment. This is a quantitative descriptive research that using a questionnaire and distributed on Microsoft Form. The research were carried out in July to August 2019. Student satisfaction was assessed based on five dimensions of SERVQUAL (tangible, reliability, responsiveness, assurance, and empathy). The results showed that [1] the application of OHS was good enough in terms of tangible aspects (66%), reliability (58%), assurance (49%) and empathy (50%) while responsiveness showed good criteria (57%). [2] Improvements need to be made in OSH management, especially those relating to reliability aspects.

Keywords: *Satisfaction Level, OHS Management, SERVQUAL*

HUBUNGAN SERTIFIKAT KEAHLIAN (SKA) TERHADAP PENERIMAAN ALUMNI PTB UNJ PADA DUNIA KONSTRUKSI

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Abstract

Law Number 02 Year 2017 regarding construction services, regulates that every worker who works in the field of construction services must have a work competency certificate. The Building Engineering Education Program in Jakarta State University as one of the tertiary institutions has a graduate profile, one of which produces workforce in the field of construction services that is relevant to their expertise. But in practice, not all students make Certificate of Expertise (SKA) because there are not many construction service providers that require certificates in applying for a job or consider it as an added value. This study aims to determine the relationship between the Certificate of Expertise (SKA) on the reception of Building Engineering Education alumni in Jakarta State University in the construction world. The research was conducted using the gap analysis interview method in October 2019 with 3 alumni respondents working in the construction sector. The results show that all alumni interviewed when applying for a job are not required to have SKA; in question Impact and career benefits are obtained 1 in 3 people doubt SKA gives added value, while 2 people answer has an impact but for those who know and have competence and experience.

Keywords: alumni, certifications, SKA, workforce, expert staff

TINGKAT KEPUASAN MAHASISWA PENDIDIKAN TEKNIK BANGUNAN UNIVERSITAS NEGERI JAKARTA TERHADAP PROSES PEMBELAJARAN

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Abstract

The learning process is the main of learning and teaching activities that all components of the education system synergized in it, including the college. To find out the quality of the learning process, it need a concrete data as a reference to improve service quality. Jakarta State University as providers of educational services are required to provide the best services. In this study, the data was obtained by measuring the level of user's satisfaction in educational services, specifically students of the 2015-2019 Building Engineering Education for the learning process that they had taken. The study was conducted from July - August 2019 with a quantitative descriptive study that data collection techniques using a questionnaire distributed via Google Form. Student satisfaction is assessed based on five SERVQUAL dimensions (tangible, reliability, responsiveness, assurance, and empathy). The results showed the average respondent stated [1] the existing learning process had been going on "very well" in the tangible dimensions (57%) and responsiveness (54%) and "good" in the dimensions of reliability (51%), assurance (56 %), and empathy (49%). [2] There are several points that need to be improved, especially the assurance dimension. This research shows that implementation of the learning process has been going satisfactorily.

Keywords: Satisfaction Level, Learning Process, SERVQUAL

KESESUAIAN MANAJEMEN PERAWATAN BANGUNAN SEKOLAH BERSTATUS CAGAR BUDAYA DI JAKARTA

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Abstract

Di DKI Jakarta terdapat 600 bangunan cagar budaya diantaranya terdapat 24 bangunan cagar budaya yang difungsikan sebagai sekolah, beberapa di antaranya rusak berat hingga rawan ambruk. Pada dasarnya bangunan cagar budaya wajib dilestarikan dan dilindungi, Perawatan bangunan berstatus cagar budaya dibuat menyesuaikan kondisi bangunan. Bangunan cagar budaya yang dilestarikan juga harus memenuhi persyaratan bangunan gedung, persyaratan pelestarian, dan persyaratan keandalan meliputi keselamatan, kesehatan, kenyamanan, kemudahan sesuai dengan peraturan yang berlaku. Namun, karena digunakan untuk kepentingan dunia pendidikan maka semua persyaratan harus terpenuhi dengan benar. Setiap sekolah memiliki metode perawatan yang hampir sama namun, jika kita melihat bahwa bangunan yang digunakan berstatus cagar budaya maka perlu ada perawatan khusus yang dilakukan agar bangunan tetap bisa menunjang sarana pendidikan dan tentunya melestarikan bangunan cagar budaya itu sendiri.

Abstract

In DKI Jakarta, there are 600 cultural heritage buildings including 24 cultural heritage buildings that function as schools, some of which are heavily damaged to collapse. Basically, a heritage building must be preserved and protected. The maintenance of a heritage building status is made to adjust the condition of the building. Preserving cultural heritage buildings must also meet building requirements, preservation requirements, and reliability requirements including safety, health, comfort, convenience in accordance with applicable regulations. However, because it is used for the benefit of the education world, all requirements must be fulfilled correctly. Every school has almost the same maintenance method, however, if we see that the building used is a cultural heritage, then special care needs to be taken so that the building can still support educational facilities and of course preserve the cultural heritage building itself.

Keywords : heritage buildings, school, Preserving building.

SARANA PRASARANA PENUNJANG PROSES PEMBELAJARAN DI PROGRAM STUDI PENDIDIKAN VOKASIONAL KONSTRUKSI BANGUNAN

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Abstract

Higher education is an education level pursued after secondary education. Based on data held by the Ministry of Research, Technology and Higher Education in 2019 the number of universities in Indonesia currently is 4,719 which consists of academies, polytechnics, high schools, institutes, universities and community colleges. In the Regulation of the Minister of Research, Technology and Higher Education of the Republic of Indonesia Number 44 Year 2015 concerning National Standards for Higher Education states that one of the SNPT is the National Education Standards. National education standards are the minimum criteria for learning at tertiary levels in tertiary institutions throughout the jurisdiction of the Unitary Republic of Indonesia. Facilities and infrastructure are one of the national education standards. the existence of high-quality graduate competencies. The Building Engineering Education Study Program is one of the study programs at Jakarta State University which was trained to become a vocational high school teacher. As the main task as a producer of educators in the field of technology, especially building engineering, it is necessary to have a good understanding by students of existing learning material. For this reason, adequate facilities and infrastructure are needed to support learning materials and their competencies.

Keywords : Facilities and infrastructure, National Education Standards.

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