

Elearning Administrative Simplification Through Integration With Academic Information System of Higher Education

Syamsu Qamar Badu, Sukarman Kamuli, Zulaeha Laisa,
Arbyn Dunga, Moh. Isnaeni Nurdin

Abstract

Since 2006 there was no increase of elearning implementation in Gorontalo State University. The assessment results in 2011 showed elearning implementation should be simplified by integrating elearning system into the integrated system of academic information (SIAT). Integration patterns covers four aspects: user (faculty, students, operator), subject, attendance and assignment grade. After four months implementation of new elearning application, there are a significant increase in the use of elearning

Keywords: elearning, academic information systems, system integration

Elearning is one method of distance learning that uses information and communication technology. Distance learning is a distance education which includes education through the air (radio), teleconferencing and via the Internet (elearning). Elearning is a model of information technology applied in education. However, the term elearning is more appropriate to say in an effort to make a changes in the teaching and learning activities in the college into a digital form that is bridged by the internet technology.

Adjustments that occur when using elearning is a lecturer still in touch with students, but no longer directly but uses a computer that is connected via the internet. Whiteboards and other learning tools in an interactive display and digital computer in a single device.

Rosenberg (2001)¹ emphasized that elearning refers to the use of nternet for delivering a series of solutions that can improve their knowledge and skills. This is similar to Cambell (2002), Kamarga (2002)² which essentially emphasizes the use of the Internet in education is the essence of elearning. The term "e" stands for electronic or in elearning is used as an umbrella term for any technology that is used to support the efforts of the teaching through electronic internet technology. More over, elearning can be defined as follows³ :

elearning is a generic term for all technologically supported learning using an array of teaching and learning tools as phone bridging, audio and videotapes, teleconferencing, satellite transmissions, and the more recognized web-based

¹ On line di <http://nurmartono.blogspot.com/2006/06/distance-learning.html>

² Ibid

³ Soekartawi., Prinsip dasar e-learning : teori dan aplikasinya di Indonesia, Jurnal Teknodik, Edisi No.12/VII/Oktober/2003. On line di www.JurnalTeknodikNo.12.htm#isi [01/10/07]

training or computer aided instruction also commonly referred to as online courses

Some institutions that implemented elearning ⁴ :

1. University of Phoenix Online is the most successful virtual university in the United States. University of Phoenix Online's has 37,569 students from 78,700 students overall, 38 campuses and 78 learning centers spread across the United States, Canada, and Puerto Rico. In addition, the university has graduated 10,000 students while other private Virtual Universities in the United States only able to pass far below (Pethokoukis, 2002).
2. Jones International University is one college that is also successful in implementing eLearning. This university has 6.000 students who are studying online (Pethokoukis, 2002).
3. United Kingdom Open University (UKOU) is the largest university that organize elearning activities in the world with 215,000 students (Daniel, 2000).
4. The College of Business at the University of Tennessee start a special course in eLearning to the 400 physicians who work in emergency rooms across the state in the United States and in 11 other countries. Colleges which is held for one year MBA program for physicians to use elearning and face to face.
5. Universiti Tun Abdul Razak (UNITAR) is the first university in Malaysia and in Southeast Asia that presents lectures electronically (eLearning). This electronic lectures has been started by UNITAR in 1998 (Alhabshi, 2002)
6. Open University (UT) has conducted pilot implementation Electronics Tutorial (Tutel) in 1999 for students. Reasons for testing electronic tutorial is appropriate to the needs of students to help them solve the difficulties encountered during the self-study (Anggoro, 2001)
7. Universitas Gadjah Mada (UGM) has prepared learning activities that use the Internet to graduate programs for hospital management and healthcare management in 1996 (Prabandari et al., 1998)
8. Florida Virtual School is one program of the high schools in the United States that has grown exponentially in the implementation of electronic learning. In its fifth year, has received 3505 students to employ approximately 41 full-time teachers and 27 other teachers are part-time. The motto of this school is "anytime, anywhere, through any place, at any speed." (Wildavsky, 2001)

Learning method using internet in conveying the message/lecture material is essentially the process of media communication. Understanding courses material will be reached when the communication that occurs in mediated learning methods can be applied effectively. Not only in the understanding of the material, but essentially more students can be more open in communicating with lecture. Problems that become an obstacle for students, both in understanding the course material and personal issues that affect the learning activities can be revealed through this mediated learning methods. The use of elearning in teaching and learning does not mean that the role of teachers could be replaced, but with elearning methods can be seen in the context of changes in the communication that occurs between

⁴ On line di <http://smkpasundan1-bdg.com/moodle/mod/resource/index.php?id=1> [01/10/07]

lecturer and students. Maybe the conventional methods of communication process has not changed due to the position of each of the elements of communication, but in an elearning will be easier communication between lecturer and students. As expressed by Zainal A. Hasibuan that "Elearning is not just the process of downloading the material already available on the internet, but it should provide an environment to make the learning process as well as through conventional classroom learning (face to face)."⁵

The use of elearning in Gorontalo State University

Elearning implementation in Gorontalo State University using Moodle LMS has begun to be used in Computer Centers for Diploma 1 Program of Computer. The application continued when Grant Competition held Web-Based Instructional Materials by Puskom implemented in 2006 that are still using moodle. It was about 20 professors get grant after the upload SAP, lectures, assignments, etc. In 2007, PJJ PGSD started using moodle-based elearning for their student. Department of Informatics in 2009 started using moodle-based elearning addressable at <http://sportif.ung.ac.id> followed by the Faculty of Engineering who also use Moodle in <http://spot.fatek.ung.ac>. Still in the year 2009, Faculty of Economics and Business train their lecturer to use elearning moodle based in domain fekon.ung.ac.id (already non-active). In 2010 Puskom also carry a full week of training with sources of Seamolec using moodle in UNG server can still be accessed at <http://workshop.ung.ac.id>. Still in 2010 also some lecturers of the Faculty of Education elearning training are also using Moodle in Puskom.

A long period of over seven years of implementation based elearning moodle in Gorontalo State University showed no increase in the use of elearning. Based on the assessment conducted by the PUSTIKOM elearning State University In 2011, there were four things that became the foundation elearning development at the State University of Gorontalo, namely

1. Interest in increasing using of elearning in Gorontalo State University has risen.
2. UNG lecturers who have been trained using by elearning, has been familiar with the moodle interface
3. From all elearning in moodle based has been used, still difficult to be applied course because moodle has been created for course template system pattern only, not specific for college.

⁵ Presented by Zainal A. Hasibuan dalam Seminar nasional "Teknologi Informasi dan Komunikasi (TIK) Untuk Pendidikan" dalam rangka Hibah Kompetisi K2 di Universitas Negeri Gorontalo tgl 23 Desember 2006

4. This moodle can not be integrated with academic system that caused the administrative process is very troublesome for faculty and students⁶

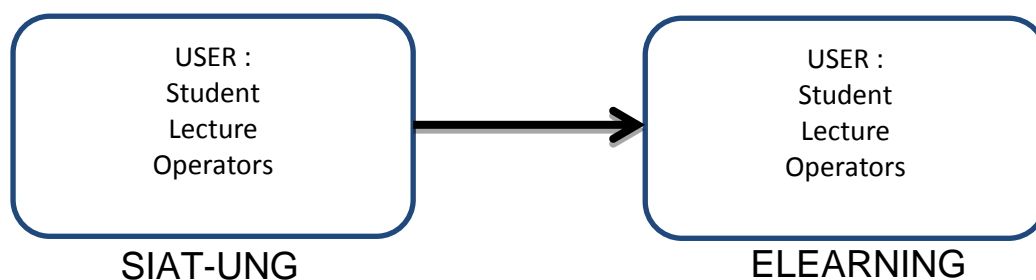
The results of this assessment also recommends five things related to the development of elearning in Gorontalo State University, they are :

1. Developing elearning application which has features that similar to the elearning moodle-based model that is simpler and easier to use
2. Integrated with Academic Information System (SIAT) so that the process of making course, number of meetings, lecturers, students participating in automatically from the KRS Online and scheduling at SIAT
3. Integration with attendance online elearning sessions at SIAT
4. Student Assignment grade in elearning integrated with the assessment process at SIAT
5. Implementation of elearning above will be implemented starting this 2012/2013 academic year

To realize elearning recommendations above, the research team conducted a study of the integration of these systems produce patterns of integration as follows

User Students, Lecturers and Operators Integration Patterns

Through the integration of eLearning into the Integrated Academic Information System (SIAT) Gorontalo State University, user students and lecturers at SIAT user automatically becomes the student and lecturer in elearning. Operators in SIAT not all be the operator in eLearning. Only operators who were given previllage can access the elearning



Subject Integration Patterns

In the academic information systems, curriculum and schedule information is available on the course each semester. Subjects were scheduled in each semester refers to the existing

⁶ Assesment eLearning Universitas Negeri Gorontalo, 2011, PUSTIKOM Universitas Negeri Gorontalo

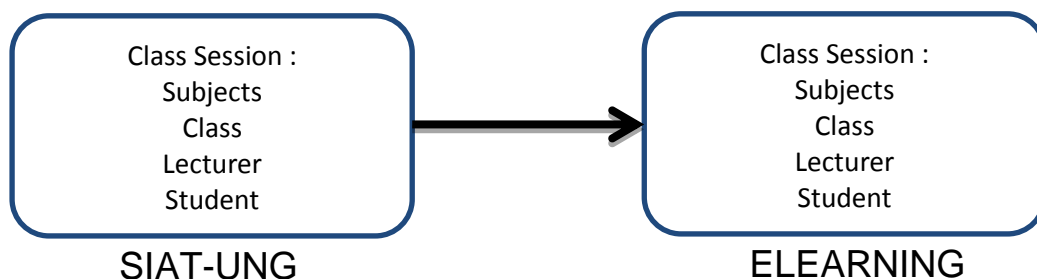
curriculum at each academic year. Scheduling courses are held in the Academic Information System set course name, grade, teacher and lecturer. Based on the schedule of the courses that have been incorporated into SIAT, students taking online courses (KRS Online) at the specified time period. After receiving approval by Lecturer Academic Advisor approval through KRS online at SIAT, students will be enrolled in an approved course. This process will result in a class that contains information subject, lectures, classes, and students participating in course. This lecture class which would then be integrated into the elearning system. The lecturers have access to enable and disable taught courses use elearning sessions

Here are the results display the activation and deactivation capture settings using elearning courses

The screenshot shows the SIAT web interface for Universitas Negeri Gorontalo. The top navigation bar includes 'Sistem Informasi Akademik' and 'Universitas Negeri Gorontalo'. Below the navigation bar, there are search filters for 'Tahun Akademik' (2012/2013), 'Ganjil', and 'Cek Nilai'. The main content area displays a table of course sessions for 'KAMIS' and 'JUMAT'.

NO	PROGRAM STUDI	KODE	NAMA MATA KULIAH	SKS	KELAS	SESI	MULAI	SELESAI	RUANGAN	TIPI PENGAJAR	ELEARNING
1.	ILMU KOMUNIKASI	291420312	APLIKASI KOMPUTER DAN INTERNET	3	A	1	13:20	14:50	GEDUNG SOSIOLOGI Lt. 1	ARBYN M E DUNGGGA, ST	
JUMAT											
1.	AGROTEKNOLOGI	613430212	Komputer dan Multimedia	2	A	1	07:00	08:30	RK.MM.06	ARDIYANTO SALEH MODJO, S.Pd., M.P., ARBYN M E DUNGGGA, ST	
2.	AGROTEKNOLOGI	613430212	Komputer dan Multimedia	2	B	1	08:31	10:00	RK.MM.07	ARDIYANTO SALEH MODJO, S.Pd., M.P., ARBYN M E DUNGGGA, ST	
3.	AGROTEKNOLOGI	613430212	Komputer dan Multimedia	2	C	1	10:01	11:30	RK.MM.04	ARDIYANTO SALEH MODJO, S.Pd., M.P., ARBYN M E DUNGGGA, ST	

Subject integration pattern is described as follows



Attendance Integration Patterns

Academic Information System has facility to conduct online attendance. This is done by charging absences course lecturer or delivered to the operator. With the integration of classroom lectures to elearning academic information system, the attendance can be done automatically with certain arrangements. At the session settings should be specified that will be added will be attendance or not, if yes, attendance to specific meetings. Here is a capture of the initial setup

Sesi

Fakultas : FIS Tahun Ajaran : 2012/2013 Ganjil
 Jurusan : ILMU KOMUNIKASI Mata Kuliah : 291440353 - MANAJEMEN KOMUNIKASI
 Program Studi : S1 - ILMU KOMUNIKASI Kelas : A

[Tambah Session]

No.	Tanggal	Sesi	Keterangan	Dosen Pengajar	Tanya Jawab	Absensi Pertemuan	Opsi
1.	2012-09-25	PENGANTAR	Komunikasi dan Manajemen	ZULAEHA LAISA, S.Sos,M.Si	Ya		
2.	2012-09-25	Pertemuan 1-5	Manajemen dan Manajemen Komunikasi	ZULAEHA LAISA, S.Sos,M.Si	Ya		

Session > Edit

Tanggal : 25 September 2012

Judul : PENGANTAR

Keterangan : Manajemen komunikasi merupakan salah satu penerapan kegiatan manajemen dalam komunikasi yang menjadi bagian dari penggerak aktivitas komunikasi guna mencapai tujuan komunikasi.

Dosen Pengajar : ZULAEHA LAISA, S.Sos,M.Si

Bisa Tanya Jawab : Ya

Absensi Pertemuan : Tidak

Update **Batal**

- Session identik dengan 1 (satu) kali tatap muka diruang kelas
- Jika kolom Absensi Pertemuan diisi maka isi dari kolom Keterangan akan dimasukkan ke dalam Pokok Bahasan absensi perkuliahan sesuai dengan pertemuan yang dipilih

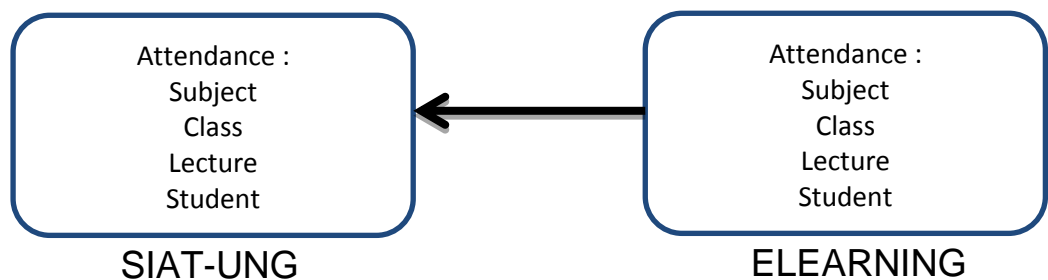
The other settings are automatically set by the system is related to its elearning absence. This is a method of taking attendance data. In general, attendance will be done automatically when the student downloading a material provided by the lecturer. If in elearning session file is not uploaded by the lecturer, attendance conducted through its assignment. Lecturers can manage attendance decision made at the time of download or upload assignment such as following the capture

Absen Saat : Download Tugas

Download Tugas
Upload Tugas

- Jika kolom File Tugas diisi maka mahasiswa yang mendownload file tugas akan diabsen sesuai dengan kolom Absensi Pertemuan yang dipilih saat membuat sesi
- Jika kolom File Tugas dikosongkan maka mahasiswa yang mengupload file tugas akan diabsen sesuai dengan kolom Absensi Pertemuan yang dipilih saat membuat sesi





Integration patterns of attendance described as follows::



Assignment Grade Integration Pattern

One of the features that are available at the State University of Gorontalo eLearning is assignment of the lecturer to the students. Here is the settings

Tugas Mid Semester
Mid Semester
Tambah Tugas

No.	Judul	Keterangan	Batas Waktu	Tanya Jawab	Opsi
1.	Tugas Pengganti Mid Semester	Buatlah Makalah dengan topik 1. Email : Prinsip kerja, sejarah dan perkembangan email 2. Blog : Prinsip kerja, sejarah dan perkembangan blog Malakah dibuat minimal 3 halaman di ketik dengan format kertas A4, spasi 2	2012-11-20 13:29:00	Ya	   

Tugas > Edit

Judul : Tugas Pengganti Mid Semester

Keterangan :
Buatlah Makalah dengan topik
1. Email : Prinsip kerja, sejarah dan perkembangan email
2. Blog : Prinsip kerja, sejarah dan perkembangan blog
Malakah dibuat minimal 3 halaman di ketik dengan format kertas A4, spasi 2

Mulai : 8 November 2012 13 30

Selesai : 20 November 2012 13 29

File Tugas : Browse... Max Size : 64M





Bisa Tanya Jawab : Ya

Absen Saat : **Download Tugas**
Download Tugas
Upload Tugas









































- Jika kolom File Tugas diisi maka mahasiswa yang mendownload file tugas akan diabsen sesuai dengan kolom Absensi Pertemuan yang dipilih saat membuat sesi
- Jika kolom File Tugas dikosongkan maka mahasiswa yang mengupload file tugas akan diabsen sesuai dengan kolom Absensi Pertemuan yang dipilih saat membuat sesi

The task given by the teacher must be inputted by students. The results uploaded by the students can be assessed by the lecturer. The results of this assessment will be integrated into the grade into SIAT UNG. Here is the capture process of assignment grade given by lecturer

Tugas Mid Semester
Mid Semester
Tambah Tugas

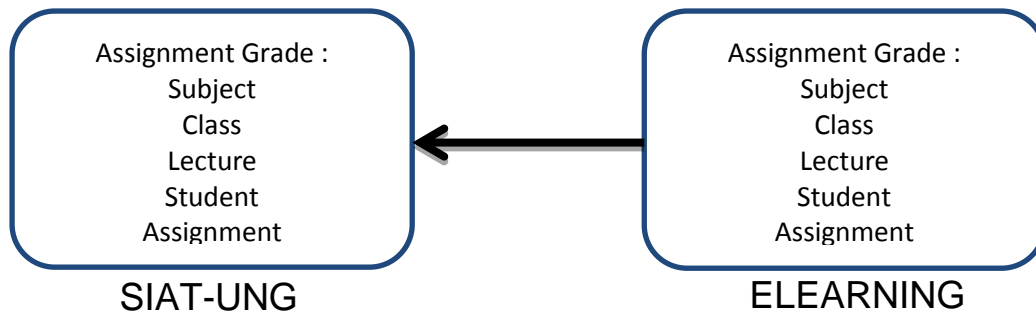
No.	Judul	Keterangan	Batas Waktu	Tanya Jawab	Opsi
1.	Tugas Pengganti Mid Semester	Buatlah Makalah dengan topik 1. Email : Prinsip kerja, sejarah dan perkembangan email 2. Blog : Prinsip kerja, sejarah dan perkembangan blog Malakah dibuat minimal 3 halaman di ketik dengan format kertas A4, spasi 2	2012-11-20 13:29:00	Ya	   

Uploaded Tugas
Tugas : Tugas Pengganti Mid Semester
[Refresh List](#) | [Ekspor to Excell](#) | [Download All](#) | [Close](#)

No.	Tanggal	NIM	Nama Mahasiswa	Opsi	Nilai	Simpan	Komentar
1.	2012-11-10 12:17:43	291412015	MUJIONO H. POHI	   	80	<input type="checkbox"/>	
2.	2012-11-11 15:09:14	291412007	FERLIN DAMA	   	75	<input type="checkbox"/>	
3.	2012-11-13 14:29:26	291412003	WIDYAWATI	   	90	<input type="checkbox"/>	Tugas yang dimasukkan sudah baik, jika mengambil referensi baik dari buku maupun internet, cantumkan sumber
4.	2012-11-13 19:08:39	291412013	RISMAN R. DETUBIA	   	nol	<input type="checkbox"/>	
5.	2012-11-14 21:39:07	291410013	MOH. TAUFIK ABDULLAH	   	nol	<input type="checkbox"/>	
6.	2012-11-14 22:02:33	291412014	SRI YUNITA LANANGAWA	   	nol	<input type="checkbox"/>	
7.	2012-11-14 22:05:58	291412008	KHUSNUL KHOTIMAH	   	nol	<input type="checkbox"/>	
8.	2012-11-15 09:08:54	291412016	USRIA H. KATILI	   	nol	<input type="checkbox"/>	
9.	2012-11-15 09:13:25	291412012	NELSIAWATI ABDULLAH	   	nol	<input type="checkbox"/>	
10.	2012-11-15 09:48:31	291412006	PUTRI KASANDRA TANAIJO	   	nol	<input type="checkbox"/>	

Simpan

Assignment Grade integration patterns described as follows:



Through this four integration patterns that are implemented at the Gorontalo State University elearning systems, there has been a very significant increase in the use of elearning in Gorontalo State University. Based on the assessment elearning in 2011, since 2006 has provided 39 subjects were entered into the system elearning, 15 subjects performed just to download the material and would but none of the subjects that apply to attendance and assessment. With integration of elearning system into SIAT, in November 2012, there are 1680 elearning class , 122 subjects who provided materials, assignments and attendance. There are five courses for the assignment that integrate into academic information system.

The following table shows the increase in the use of elearning systems after the integration of the information systems academic.

No	Pattern of using	Old Elearning (2006 – 2011)	New Elearning (2012)
1	Download/Upload Material	39	122
2	Assignment	1	122
3	Attendance	1	122
4	Assignment Grade	0	5

Based on the table above, it can be concluded that there has been a significant rise in the use of elearning since implemented its integration into SIAT at Gorontalo State University in the early 2012/2013 academic year.