

CHAPTER II

REVIEW OF THE RELATED LITERATURE

A. Theoretical Foundation

1. Definition of ESP

In a straightforward and pragmatic way, ESP is as the teaching and learning of English as a second or foreign language where the goal of the learners is to use English in a particular domain¹. Furthermore, ESP is a way of teaching and learning English for specialized subjects with some specific vocational and educational purposes in mind². ESP courses are narrower in focus than general English language teaching (ELT) courses because the center is on analysis of learners' needs³. Considering the definitions, it can be concluded that ESP is very important to be taught because it has been specific to support students learning English for a certain area.

2. Indicators of ESP

The indicators of a good ESP can be seen by looking at the core principles and the characteristics of ESP. If the ESP course fills the core

¹ Shaeda-isani& Brian Paltridge, Sue starfield (Eds), the handbook of English for specific purposes, (Boston:Isey Blackwell, 2013), accessed: <http://asp.revues.org/pdf/3806>, on: 24-03-2014.

² Mohammed Mizel Tahir, English For Specific Purposes (ESP) And Syllabus Design, 98, accessed: <http://www.iasj.net/iasj?func=fulltext&aId=45953> on: 04-11-2014.

³ Helean Basturkmen, *Developing Courses in English for Specific Courses*, (New Zealand: Palgrave Macmillan, 2010), 3, accessed: www.bookfi.org on: 06-05-2014.

principles and the characteristics of ESP means that the ESP course is good.

The core principles of ESP are: needs driven, specificity, and relevance⁴.

In addition, the expert of English shares their idea about the characteristics of ESP. Laurence Anthony cited in Duddley - Evan explains that ESP has some characteristics. The characteristics are divided into two groups according its 'absolute' and 'variable' attributes.

a. The absolute characteristics are:

- 1) ESP is defined to meet specific needs of the learner.
- 2) ESP uses of the underlying methodology and activities of the discipline it serves.
- 3) ESP is centered on the language (grammar, lexis, and register), skills, discourse and genres appropriate to these activities.

b. The variable characteristics are seen in five points:

- 1) ESP is designed for specific disciplines.
- 2) ESP uses specific teaching situations, a different methodology from that of general English.
- 3) ESP is designed for adult learners, either at a tertiary level institution or in a professional work situation.

⁴ Kevin Knight, et.al., *English for Specific Purposes: An Overview for Practitioners and Clients (Academic & Corporate, 2010)*,3, Accessed on: www.community.tesol.org , on: 28-02-2014

- 4) ESP is generally designed for intermediate or advanced students.
- 5) Most ESP courses assume some basic knowledge of the language system, but it can be used with beginners.⁵

Beside the principle and the characteristic, activity is also important aspect in a teaching process included the ESP teaching process. EAP as a part of ESP branch has the same activities as EGP. The activities in term of four skills in English are:

- a. ESP and speaking: university lectures, occluded academic encounters, classroom talk, project groups, small group discussion, and opening (greeting)-closing (leave taking)⁶
- b. ESP and listening: lecture comprehension, listening placement assessment, and note taking.⁷
- c. ESP and writing: Research articles, Book reviews, Conference abstracts, Grant proposals, Submission letters, Peer review

⁵ Milevica Bojović,, Teaching Foreign Language for Specific Purposes: Teacher Development, 487, accessed: <http://www.pef.uni-lj.si/atee/978-961-6637-06-0/487-493.pdf>, on: 07-04-2014.

⁶ CHRISTINE B. FEAKE, "ESP and Speaking". Brian Paltridge and Sue Starfield (Ed.). The Handbook of English for Specific Purposes (Oxford: A John Wiley & Sons, Ltd., Publication, 2013), 37-38

⁷ CHRISTINE C. M. GOH, "ESP and Listening". Brian Paltridge and Sue Starfield (Ed.). The Handbook of English for Specific Purposes (Oxford: A John Wiley & Sons, Ltd., Publication, 2013), 56.

reports, Undergraduate essays, article bios, Teacher feedback acknowledgments Editors`, and letters lab reports.⁸

- d. ESP and reading: reading comprehension skills, “reading textbooks”, and academic journals,⁹

Although the activities in ESP course are same as the EGP, the theme is different based on the specialization of each course. In English for mathematics the theme is about mathematics. Based on Lemania college university, the theme for teaching English for mathematics are number, sets and numbers, algebra, trigonometry, geometry, coordinate geometry, and statistics and probability.

Based on the first core principles that is need driven, and the first absolute characteristics, specific learner`s need, can be seen that need analysis is an important approach in designing ESP course.

3. Definition of need analysis

Need analysis is a process to identify what students require to learn in the target situation and how the learners learn the target language among the period of training time¹⁰. Iway et all cited in Mehdi Haseli Songhori that

⁸ KEN HYLAND, “ESP and writing”. Brian Paltridge and Sue Starfield (Ed.). *The Handbook of English for Specific Purposes* (Oxford: A John Wiley & Sons, Ltd., Publication, 2013), 103

⁹ ALAN HIRVELA, “ESP and Reading”. Brian Paltridge and Sue Starfield (Ed.). *The Handbook of English for Specific Purposes* (Oxford: A John Wiley & Sons, Ltd., Publication, 2013), 78

¹⁰ Hyun Hyo Kim, Needs Analysis for English for Specific Purpose course Development for Engineering Students in Korea, *International Journal of Multimedia and Ubiquitous Engineering*, Vol.8, No.6, 2013, 2, accessed : http://www.sersc.org/journals/IJMUE/vol8_no6_2013/28.pdf, on: 02-05-2014.

need analysis refers to the activities of collecting information that meet a particular group of learners to develop a certain curriculum¹¹. Moreover, needs analysis is a process which is conducted by trainers, teachers and course designers as pre developing a course along with its plan implementation¹². Needs analysis serves as a preliminary foundation for an ESP course in an attempt to locate the objectives of the course and to prepare the appropriate teaching activities and materials¹³. Needs analysis refers to students' study or job requirements as well as to what they would like to gain from and do with the language¹⁴. Therefore, need analysis is for knowing student` needs of an English training program conducted by trainers, teachers and course designers.

4. Indicator of need analysis

The indicator to design a good need analysis can be seen from the function of need analysis and the type of need analysis. A good need analysis can find out the function of conducting need analysis

¹¹ Mehdi Haseli Songhori, Introduction to Needs Analysis, English for Specific Purposes world, Issue 4, 2008, accessed: www.esp-world.info , on: 02-05-2014.

¹² Tariq Mahmood Khan, Ghulamullah, M. Naeem Mohsin, Ashiq Hussain Dogan, and Ahmed Sher Awan, Needs Analysis of English for Occupational and Specific Purposes, International Journal of Social Sciences and Education, Vol. 1, issue. 4, 2011, 1, accessed : <http://ijsse.com> , on: 28-04-2014.

¹³ Shaohua Jiang, ESBP Course Design for Chinese International Business Personnel, *Asian ESP Journal*, Volume 7 Issue 1, 65, accessed: <http://www.asian-esp-journal.com/images/pdf/January-2011-sj.pdf>, on: 15-04-2014.

¹⁴ Majdi J. Abu-Zahra & Ahmad Sh. Shayeb, Is ESP a Need? Birzeit Public Administration Students as a Case Study, 4, accessed: <http://www.qou.edu> , on: 11-04-2014

The functions of need analysis are¹⁵:

- 1) To find out what language skills that mostly needed by the learner for particular role.
- 2) To determine whether the course design has addressed the need of student`s potential.
- 3) To determine which group of students which is most in needed in a certain training program.
- 4) To identify a gap between what students are able to do and what they need to be able to do.
- 5) To collect information what problems commonly faced by the students.

5. Definition of syllabus

Brown states that syllabus is selecting and organizing instructional content including suggested strategy for presenting content and evaluation¹⁶. Moreover, syllabus is a statement of content which is used as the basic for planning various kinds of courses, and that the task of the syllabus designer is to select and grade this content¹⁷. As a conclusion,

¹⁵ Richard, Jack,C, *Curriculum Development In Language Teaching*, 53

¹⁶ Wahyu Sundayana, *Syllabus Design For Teaching English In The Context Of School-Level Curriculum Development (competence-based syllabus design)*,

¹⁷ David Nunan, "Syllabus Design". C N Callan and H G Widdowson (Ed.). accessed: <http://userbooks.bookfi.org>, on: 06-05-2014

syllabus is an aid made by a teacher for guidance in teaching process in the whole course for period of time.

6. Indicators of syllabus

Based on Claudia J. Stanny, a good syllabus has covered some points. the points put in syllabus are: course identifiers, information for instructor, text books and readings, catalog description for course, course student learning outcomes (SLOs), topics covered, exams and grading, attendance policy, university policy on academic misconduct, assistance for students with special needs, planning for course continuity (emergencies/weather), course calendar¹⁸.

a. The type of syllabus

Penny Ur divides the syllabus types into the ten types, they are:

- 1) Grammatical : the syllabus is based on the difficulty or the importance of grammar point, such as: present tense, adjective, etc.
- 2) Lexical : the syllabus associates collocation and idioms.
- 3) Grammatical-lexical : the composition of the syllabus combines both grammatical and lexical points.

¹⁸ Claudia J. Stanny, Rubric for Faculty Self-Evaluation of Course Syllabus, 2011, accessed: <http://uwf.edu/cutla>, on: 11-04-2014

- 4) Situational : the syllabus takes the real-life context of language using.
- 5) Topic-based : it takes the broader topic than the situational syllabus.
- 6) Notional : it shows the concept that language can express.
- 7) Functional-notional : it expresses something can do with language, for example: ‘denying’, ‘promising’, and ‘identifying’.
- 8) Mixed or ‘Multi-strand’ : it comprehends student`s ability. It combines some types of syllabus design.
- 9) Procedural : it describes the specific learning task.
- 10) Process : the content of the course is negotiated at the beginning of the course, and it listed only retrospectively. ¹⁹

Finocchiaro and Brumflt state that generally, there are two types of syllabus in teaching English, the types of syllabus are:

- a. Analytic - syntactic syllabus planning, means teaching a language step by step until a whole language are built up. However, syntactic syllabus planning is teaching a language and kinds of language performance in order to meet purposes in learning it.

¹⁹ Penny Ur, a course in language teaching: practice and theory (New York: Cambridge, Cambridge university press, 2006), 178.

- b. Functional – notional syllabus planning, is communicative syllabus planning²⁰.

In ESP syllabus, the teaching content is geared to the special language 'repertoire' pertaining to the specialized aims that are required of the learners²¹. Based on Richards & Rodger, in developing ESP Syllabus, there are integrated and interrelated components of ESP syllabus model comprised the aspects of the three language models, they are: structural, functional and interactional use of language²². It can be concluded that designing syllabus is not easy. Many consideration should be thought to decide a relevant syllabus for students.

7. Syllabus of English for mathematics

To be able to design a relevant syllabus to teach English for mathematics, a practitioner need to be considered the characteristics, dimension, and the components of mathematics.

- a. Characteristics

²⁰ David Nunan, 1998, *Syllabus Design*, 30, accessed: <http://www.postgradolinguistica.ucv.cl> , on: 10-03-2014

²¹ Mohammed Mizel Tahir, ENGLISH FOR SPECIFIC PURPOSES (ESP) AND SYLLABUS DESIGN, 2, accessed: <http://www.iasj.net/iasj?func=fulltext&aId=45953>, on: 11-04-2014.

²² J. Al Muzzamil Fareen, KCT. Namakkal, “Designing Communicative Needs Based Syllabus for EST Students to meet their demands of Professional Communication”, English for Specific Purposes World. Vol. 30 No.09, 2010, 2, accessed: www.esp-world.info/Article , on: 01-04-2014

Generally, the characteristic of Mathematical English is the special vocabulary. However, it can be roughly divided into three groups, they are:

- 1) Technical terms specific to mathematics (e.g. Multiplicand, quadrilateral).
- 2) Technical terms used in mathematics that also have unrelated everyday meanings (e.g., volume, product)
- 3) Mathematical use of words adapted from similar everyday meanings (e.g., similar, face, numbers, and etc.).

b. Dimension

After understand the characteristics of the English for mathematic should know the dimensions of mathematic, it includes:

- 1) Specialized syntax (e.g., the use of words like and, a, or if)
- 2) Use of symbols (e.g., 3-D)
- 3) Ways of talking and writing (e.g., word problems, writing a solution, giving an explanation)
- 4) Social factors (e.g., the use of we refer to people who do mathematics, as in “We call that a pentagon.”)

c. Components

The components of English for mathematics are:

- 1) Linguistic knowledge : Mathematics has its own specialized language, grammatical patterns, and rules.

- 2) Conceptual knowledge: Mathematics requires a conceptual understanding of a mathematical process in order to choose the correct operation(s) and perform the necessary steps to derive an answer.
- 3) Procedural knowledge: Just as one mathematics textbook differs from another textbook in its approach to teaching a concept, various cultures around the world approach computation using different methods²³. On the other word, there are many ways in solving mathematics questions which has a correct answer.

As a conclusion, English for specific purposes, need analysis, and syllabus design are interrelated. It means syllabus design in teaching ESP can be designed effectively by conducting need analysis. Therefore, a practitioner should conduct need analysis to find out what their student needs in learning ESP.

B. Review Of The Previous Studies

Teaching ESP has become a crucial issue in research among educators of languages and researches nowadays²⁴. Some researchers have studied some issues dealing with teaching ESP in different focus and different sub-branches,

²³ Richmond, 2004, 15, Mathematics: Strategies for Teaching Limited English Proficient (LEP) Students, Virginia Department of Education, accessed: <http://www.doe.virginia.gov>, on: 16-04-2014.

²⁴ Alduais, 2012, Analysis of ESP Syllabus: Analysing the Book Basic English for Computing as a Sample and Testing its Suitability for ESP Learners in Public and Private Yemeni and Saudi Arabian Universities, vol.2, no.11, accessed: <http://www.hrmars.com/admin/pics/1304.pdf> on: 15-03-2014

such as English for engineering, English for tourism, English for business, English for mathematics, etc. On the other word, English for specific purposes is developing.

The result of those studies show different condition of teaching and learning ESP whether the positive situation or the challenging situation. Tom Hutchinson and Alan Waters state that teaching ESP is easier than teaching EGP because English is taught as specialism²⁵. The students who are learn the specialism have already had the motivation to learn the specialism. The condition can help ESP teachers to transfer the knowledge easier than EGP teachers because the motivation comes from the learners intrinsically. Intrinsic motivation brings the greater impact than extrinsic motivation²⁶. Therefore, the knowledge can transfer easily.

However, Ardi Marwan finds some problems faced by the English teacher when they teach ESP. Those problems are: students has low motivation, the reality does not match to teacher`s expectation²⁷, the resource is hard to find, preparing material is time consuming,²⁸ especially for authentic material²⁹.

²⁵ Tom Hatchinson – Alan Waters, *English for specific Purposes: A learner centered approach* (New York: Cambridge, Cambridge university press, 1998),164, Accessed: www.tu-chemnitz.edu , on: 28-2-2014

²⁶ Roland Bénabou -Jean Tirole, “The Review of Economic Studies”, Vol. 70, No. 3, 2003, 516, accessed: <http://www.fatih.edu> , on: 01-04-2014.

²⁷ Ardi Marwan, 2009, ESP Teaching Challenge In An Indonesia Vocational Higher Education, Vol. 38 No. , accessed on www.melta.org.my/ET/2009/ET2009_p001-012.pdf , Pg.4

²⁸ James W. Porcaro, teaching English for science and technology: An approach for reading with engineering English, English teaching forum, vo. 51, no. 2, 2013, 32.

²⁹ Galina Kavaliauskienė, “CHALLENGES IN ESP: TEACHING MILLENNIALS”, *English for Specific Purposes World*, Issue 36, vol. 12, 2012, accessed on: <http://www.esp-world.info>

Therefore, although ESP considers as the important subject to be taught in English teaching, practically, for some teachers, it shows complex problems.

Considering the varying problems in teaching ESP, one of the solution to solve the problems is conducting need analysis. However, need analysis brings controversy among the expert of education. Some of them argue that need analysis is not important. Nevertheless, some others think that need analysis is crucial to conduct.

Spencer Salas, at all report that need analysis is an undervalued process and rush through³⁰. Moreover, changing might happen in every times. Therefore, Policy makers can learn from the experience by the times without doing need analysis in a formal research.

On the contrary, some experts of English think that need analysis is important to do³¹. Needs analysis is an important because it is a step in terms of developing curriculum and syllabus for different courses³². The other importance of need analysis is because by analyzing students need, it can minimalize the problems which might be happened to the teacher during the

³⁰Spencer Salas, Mercado,L, Ouedraogo,L, Musetti,M, 2013, English For Specific Purposes: Negotiating Needs, Possibilities, And Promises, English teaching forumvo. 51, No.4, 2013, 16

³¹ Belcher, D, 2009, English For Specific Purposes: Theories And Practices, book review, accessed: http://www.aelfe.org/documents/09_21_Calle.pdf , 24-03-2014.

³² Marjan Moiiinvaziri, 2014, GEMA Online Journal of Language Studies : Students' Voice: A Needs Analysis of University General English Course in Iran, vol.14, no.1, accessed : <http://ejournal.ukm.my>, on: 02-05-2014

learning process. Need analysis is a vehicle to identify the learner`s need³³. Thus, the research about need analysis is essential to do. If a program does not consider to the student needs means that the program chances to be wrong in stating the goal of the program itself. Moreover, if an educator just learn from the experience in designing the course, it will take a long time to know the student needs. To simply the process, need analysis is urgent to conduct.

Needs analysis also implements on teaching ESP. The first research about need analysis comes from low study. Need analysis is success to find out both of EOP and EAP. Moreover, the most important skill for low studies in University Tenaga Nasional, and Universiti Teknikal Malaysia Melak is writing. It confirms the lecture perspective that believe speaking skill as the most important skill to be mastered by the students³⁴. In the different sector, Miyake, M and Tremarco, J find that need analysis for nursing student brings an effective effect. They can know that nursing students need English for communication media to patients and the family, which needs listening and speaking more than reading and writing³⁵. Those phenomena show that lecture perception about student`s need is not always true, so to find out the real student needs, need analysis is urgent to conduct.

³³ Alhugbani, 2013, Assessing The Academic English Needs Of King Fahd Security College Officers: Implications For The Development Of An EAP Program, vol.01, no.02, accessed on: <http://espeap.junis.ni.ac.rs/index.php/espeap/article/viewFile/40/17> , 24-03-2014.

³⁴ Jalil, I, Kamarudin, F, 2009, Elap Needs Analysis for Law Students, vol.2, no.2, accessed: www.jhcd.utm.edu , on: 28-02-20014.

³⁵ Miyake,M, & Tremarco,J, 2005, Need Analysis For Nursing Students Utilizing Questionnaires And Interview, vol.11, no.1, accessed on: <http://www.kawasaki-m.ac> . , on : 28-02-2014.

Boniadi, et al also find the function of need analysis that can confirm misunderstanding between teaching method used by the lecture to the student`s expectation in learning. The lecture prefers to give some texts about medical study to be translated, but the students expect to learn English for oral communication³⁶.

Art studies also uses need analysis to find out student`s need in mastering English macro skills. Sarjit Kaur et al conduct a research about need analysis in art studies for designing ESP course, the result of the study is that English brings important role. Moreover, listening and speaking skills are the most important skills to be mastered by the art students³⁷.

Banking and finance professional in Taiwan also uses need analysis to find student`s need in testing. From the research can be found that oral communication, such as conversation, and presentation skill are needed to be mastered for businessman³⁸. Therefore, lectures can decide the testing mode for measuring student`s oral communication skill.

For mathematics studies, need analysis is used to find out the purposes of English learning among many participants. The participants is conducted by Tamara Bianco. It analyzes mathematics education student as one of the

³⁶ Boniadi,A, Ghojazadeh,M, and Rahmatvand,N, 2010, Problems Of English For Specific Purposes Course For Medical Student In Iran, vol.x, no.x, accessed on: <http://jhss-khazar.org> , on: 21-2-2014.

³⁷ Sarjit Kaur and Alla Baksh Mohd Ayub Khan, Language Needs Analysis of Art and Design Students: Considerations for ESP Course Design, ESP World, Issue 2 (28), Volume 9, 2010, <http://www.esp-world.info>, on: 01-04-2014

³⁸ Wu Yi Fen, R & Chin Shao, J, 200x, An Investigation Into The English Language Needs Of Banking And Finance Professional In Taiwan, vo.x, no.x, accessed on: www.lttc.ntu.edu.tw , 28-02-2014

participant. The result is the students lie a great opportunity to acquire knowledge and skills that can be very helpful for their future carrier in teaching³⁹. For mathematics studies, need analysis is also effective to use.

In some countries around the world whether it is in east or west find the urgency and difficulty of teaching mathematics through English. Based on Glenda Anthony and Margaret walshaw, mathematics plays the important role of private, social and civil life, but many students seem struggle to encourage the understanding of mathematic⁴⁰. Therefore, a mathematic teachers should be careful to design the mathematic course in order to help students understand the knowledge.

In this era, many teachers deliver mathematic in English whether it is in ESL or EFL context. Some experts state that it makes the course more difficult, but some others believe that the condition is beneficial. Richard Barwell is one of the researcher that believe English causes some troubles in teaching mathematics. He believes that teaching mathematic in home language is more beneficial than teaching in second or foreign language⁴¹. It can help learners understand mathematic without any difficulties in term of language used.

³⁹ Tamara Bianco, need analysis report for innoMathEd-Innovations in Mathematics Education, 7, accessed: http://www.math.uni-augsburg.de/prof/dida/dateien/Publikationen_InnoMath/8_1_Needs_Analysis_Report_final.pdf, on: 02-05-2014.

⁴⁰ Glenda Anthony and Margaret Walshaw, Characteristics of Effective Teaching of Mathematics: A View from the West, Journal of Mathematics Education, Vol. 2, No., 2009, 147, accessed : <http://educationforatoz.org>, on: 17-04-2014.

⁴¹ Richard barwell, ESL in mathematic classroom, 2008, 1, <http://www.edu.gov.on.ca> , on: 16-04-2014.

However, Suzanne Irujo has different idea. She states that English is recommended to use in teaching mathematic because “math is easier to combine with other subject as it dealt with numbers”⁴². Malaysia has been one of a country that apply English for teaching since 2003. Using English for teaching mathematics is also helpful to prepare students in global competition especially for technology purposes⁴³ because it can increase student`s proficiency in English⁴⁴. However, the focus of teaching mathematics not on language, but it is on the understanding the material. There are some recommendation in to connect mathematical content to language. The recommendations are: giving support to students, and use the language in daily activity⁴⁵.

Out of the controversies of teaching mathematic through English, a mathematics teacher needs to prepare themselves to learn how to use the English to teach mathematic. It is because the demand of English in mathematic is growing. Policy makers of mathematics education department Sunan Ampel State Islamic University has aware about the requirement of mastering English

⁴² Suzanne Irujo, Teaching Math to English Language Learners: Can Research Help?, ELL Outlook™ Contributing Writer, 2007, accessed: <http://notebook.lausd.net>, on: 17-04-2014.

⁴³ Mohamad Fadhili Bin Yahaya, Mohd Asri Bin Mohd Noor, Ahmad Azman Bin Mokhtar, Rafizah Binti Mohd Rawian, Mahmod Bin Othman, Kamaruzaman Jusoff, Teaching of Mathematics and Science in English: The Teachers' Voices, vol.2, no.2, 2009, 2, accessed: www.ccsenet.org/journal.html, on: 02-05-2014.

⁴⁴ RUTHM. H. WONG, The Effectiveness of Using English as the Sole Medium of Instruction in English Classes: Student Responses and Improved English Proficiency, Porta Linguarum 13, 2010, 119, accessed: <http://www.ugr.es>, on: 02-05-2014.

⁴⁵ Judit Moschkovich, Mathematics, the Common Core, and Language: Recommendations for Mathematics Instruction for ELs Aligned with the Common Core, understanding language, stanford university, 21-24, accessed: <http://ell.stanford.edu>, 24-04-2014.

for mathematic. Therefore, the department held an English for mathematic course.

In conducting an English for mathematic course that suits to students need can be designed by analyzing student`s need. Needs analysis must be a strong based research⁴⁶. Therefore, to find students need in term of English for mathematic course must be based on research. Up to the researcher design the research, the researcher does not find a research about an analysis of English syllabus and the student needs at Sunan Ampel state Islamic university, which has Islamic background.

Need analysis has some crucial functions are: developing syllabus, selecting appropriate material, finding a relevant methodology, and evaluating tools⁴⁷. From the function of need analysis, developing syllabus is one of the essential function. The research about need analysis in syllabus design for teaching ESP is conducted by Lynne Flowerde. In her study, she states that need analysis can improve syllabus at the previous course by considering three approach of designing syllabus, they are: task based, content based, and, text based syllabus⁴⁸. However, need analysis for English for mathematics course, especially in mathematics education department of Sunan Ampel State Islamic

⁴⁶ Ken Hayland, ENGLISH FOR SPECIFIC PURPOSES: Some Influences and Impacts, *Institute of Education, The University of London, UK*, 3, accessed on: <http://www2.caes.hku.hk> , on: 24-03-2014.

⁴⁷ Kucherenko, S, An Integrated View Of EOP And EAP, vol. 1, no.1, 2013, accessed: <http://espeap.junis.ni.ac.rs> on: 24-03-2014

⁴⁸ Lynne Flowerdew, Integrating traditional and critical approaches to syllabus design: the ‘what’, the ‘how’ and the ‘why?’, *Journal of English for Academic Purpose*, 2005, www.elsevier.com/locate/jeap , on: 01-04-2014

Univeristy still needs to be held because the syllabus does not create based on need analysis, yet.