Needs Analysis of Academic-English Speaking Material in Promoting 21st Century Skills

Sebastianus Menggo  
STKIP Santu Paulus, Indonesia, sebastian.pradana@gmail.com

I Made Suastra  
Prof., Universitas Udayana, Indonesia, madesuastra@yahoo.co.id

Made Budiarsa  
Prof., Universitas Udayana, Indonesia, made_budiarsa@yahoo.com

Ni Nyoman Padmadewi  
Prof., Universitas Pendidikan Ganesha, Indonesia, nym.padmadewi@undiksha.ac.id

Needs analysis plays a vital role in developing speaking material and results in a powerful tool that helps teachers to design materials in line with the learners’ target needs and learning needs. The aims of this research are to analyse the types of learners’ target needs and learning needs for material development in the academic English-speaking course. This study surveyed 312 English department students from six universities in three Indonesian provinces. Questionnaire and in-depth interview were used in collecting data then those data were analysed by using a software program, namely an excel chart data series. Findings revealed that learners’ target needs are necessities, lacks, and wants. Meanwhile, learning needs cover input, procedure, setting, and learner’s role. The independent speaking task was necessitated by students (64.49%) and lack of vocabulary (32.69%). Moreover, communication & collaboration (39.10%) was students’ wants towards course design whereas video was learning media input (38.46%). Discussion as procedure desired (37.50%), group work (37.82%) as a classroom setting, and active communicator (39.74%) as the learners’ role. Students’ wants strongly indicated that material design must be able to promote 21st-century skills. Speaking practitioners are suggested to adapt their material based upon need analysis.

Keywords: academic English-speaking purposes, needs analysis, 21st-century skills, English speaking material, teaching, learning needs
INTRODUCTION

Needs analysis leads speaking lecturers to discover learners’ needs. It is an essential input in the design of curriculum and syllabus development. The major role of needs analysis provides crucial data to aid teachers in making an appropriate decision for material development. The result of needs analysis assists educators in examining the students’ target needs and learning needs (Akyel & Ozek, 2010). Needs analysis is important for both teachers and students (Eslami, 2010). According to Eslami, the teacher can collect data to reflect students’ goals of learning a language, linguistic resources, behavioural demands, and preferred learning/teaching strategies whereas, students are more responsive due to material designs being based upon their target needs and learning needs.

Previous researches about speaking materials development have been conducted in Indonesia (Ampa, Rasyid, & Basri, 2013; Andi & Arafah, 2017). They claimed that the needs analysis reflects the lectures to determine students’ wants, lacks, and inputs related to types of speaking activities, media, speaking exercises and tasks, classroom setting, assessment, etc. Speaking material designs should cover students’ target needs of speaking components such as pronunciation, structure, vocabulary, fluency, and accuracy. Moreover, English speaking materials should help how students are made ready to speak more natural when they are expressing their ideas.

Although previous researches present convincing evidence that needs analysis, it must be done by speaking practitioners in order to reflect students’ true needs, leading to focus on the learners’ learning outcomes, and sustainable competency of the students (Liton, 2015). The concept of a needs analysis toward English speaking material development to promote 21st-century skills in an Indonesian context has not been strongly supported by recent research findings.

While the assumption that needs analysis toward academic-English speaking material is vitally important for success in the 21st-century workplace (Heinrichs, 2016). In this paper, the concept of needs analysis toward academic English-speaking material development to promote 21st-century skills in Indonesia is highly supported.

Research findings have provided evidence that needs analysis of academic English-speaking material is vitally important for success in 21st-century skills demand (Andrade, 2016). Andrade found that material development in higher education must be in line with the achievement of learning outcomes for the 21st-century global world such as critical thinking, problem-solving, written and oral communication, collaboration, information literacy, and the other global competencies. Material must encompass the required 21st-century skills such as students having the right kind of work attitude and professionalism through interaction and collaboration, thinking critically and creatively, promoting independent-learning as well as collaborative team-work, being able to make judgments and decisions, and understanding the effective use of relevant technology in the workplace (Fandiño, 2013).
Research Problem

1. What are the types of students’ target needs toward academic English-speaking material development?

2. What are the types of students’ learning needs toward academic English-speaking material development?

Research Objectives

The researchers attempted to analyse and disclose the types of students’ target needs and learning needs in the development of academic-English speaking materials.

CONTEXT AND REVIEW OF LITERATURE

Developing Speaking Material Needs in the Indonesian Context

The Ministry of Research, Technology and Higher Education of the Republic Indonesia has legalised Indonesian qualification frameworks which aim to manage Indonesian qualification standards for higher education throughout Indonesia. Indonesian qualification frameworks has categorised three types of speaking subjects include informal speaking, formal speaking, and speaking for academic purposes (Kemenristekdikti, 2012). However, the material development of these speaking types has not been in line with promoting the 21st-century skills needed. In fact, communication skill is highly valued in the 21st-century education (Scott, 2015).

In recent years, English communication skills have played a vital role for fresh graduates so that they can function effectively in the workplace, cope better with the communication problems they encounter in their lives, and develop satisfying communication and collaborative skills with persons of diverse backgrounds (Crosling & Ward, 2002; Riemer, 2007). Moreover, nowadays, along with the strengthening position of English as a language for international communication, the teaching of speaking skill has become increasingly important in the English as a second or foreign language (ESL/EFL) context (Iman, 2017). The teaching of speaking skill is also important due to a large number of students who want to study English in order to be able to use English for communicative purposes.

As stated, the importance of English communication skill requires a supportive speaking material. Teachers are expected to be able to develop speaking materials to reinforce the learners to think positively about the learning and speaking of English. Speaking material development is useful to know the framework as a kind of map, depicting the field of challenges, and thereby mirroring the learners’ needs (Bundasgaard & Hansen, 2011).

Target Needs and Learning Needs

Learners’ needs are viewed as an essential part to be considered by material designers in developing teaching materials. Hutchinson and Waters (1987) define needs in terms of target needs (i.e. what the learner needs to do in the target situation) and learning needs (i.e. what the learner needs to do in order to learn) (p. 54). They further state that target
needs consist of necessities, lacks, and wants. Necessities can be understood as a demand by the learner to function effectively in the target situation. Furthermore, lacks refer to learners’ difficulties to cope with their target situation. Wants are related to the learners’ expectation after taking the course. Meanwhile, learning needs consists of four components including input, procedure, setting, and learner’s role (Nunan, 2004). The present study was conducted to examine target needs and learning needs in an attempt to probe the academic-English speaking needs of English department students in the Indonesian context.

**Major Trends Skills in the 21st Century**

The 21st-century education highlights how learners are able to combine content knowledge, specific skills, expertise, and literacies necessary to succeed in work and life (Ledward & Hirata, 2011). They further describe that skills are more than technological literacy and include proficiency in critical thinking, problem-solving, communication, and teamwork. These skills ensure students thrive in global competitiveness. The skills required are in line with the concept of education today which is much more about ways of thinking that involve creative and critical approaches to problem-solving and decision-making (OECD, 2006).

Reports and research studies (Partnership for 21st century skills (P21), 2005; Tan, Choo, Kang, & Liem, 2017; Trilling & Fadel, 2009) have identified the eleven major trend skills needed to succeed in the 21st-century globalised world such as communication and collaboration, critical thinking and problem solving, creativity and innovation, information literacy, media literacy, ICT literacy, flexibility and adaptability, initiative and self-direction, social and cross-cultural, productivity and accountability, and leadership and responsibility.

This present research was undertaken to meet students’ wants towards the trend skills required. The proficiency of these skills is a warranty for students to be able to access worldwide opportunities. Accordingly, materials are designed in accordance with those skills needed.

**METHOD**

The design of this study was a cross-sectional survey. It was conducted in May 2018 at six universities in three Indonesian provinces (Bali province: Universitas Pendidikan Ganesha Singaraja and Universitas Mahasaraswati Denpasar, West Nusa Tenggara province: Universitas Mataram and Universitas Muhammadiyah Mataram, and East Nusa Tenggara province: Universitas Nusa Cendana Kupang and STKIP St. Paulus Ruteng). The major function of this design is to measure community needs of educational services as they relate to programs, courses, school facility projects, or involvement in the school or in community planning (Creswell, 2008, p. 390).

**Population and Sample**

The population of the research was 9,288 students and 286 speaking lectures at English departments from 25 universities in three provinces in eastern Indonesia. The eastern part of Indonesia was chosen due to the academic-English speaking problems and
because the area was accessible for the researchers for distributing questionnaires and undertaking in-depth interviews as required in this study. 312 students and six speaking lectures from six universities were selected as a sample by using a multistage cluster random sampling technique.

**Instruments**

A questionnaire and in-depth interview were used to collect data. The questionnaire used referred to the needs analysis instrument proposed by Hutchinson and Waters (1987). It covered 15 items made up of closed-ended questions which consisted of 5 options. Students were asked to choose one of the four options provided, whereas, for the fifth option, students might offer communicative needs on the material design. The data from the questionnaire was then re-validated through an in-depth interview with a 10-item list of questions as a guideline. The in-depth interview was undertaken for six speaking lecturers and 180 students from six universities by using a purposive sampling technique. This technique was used by considering a sample from each university’s representation in the advanced, intermediate, and novice level. The sample from each university was 30 students categorised into these three levels. The questionnaire and interview items were then checked by three expert judgments for giving their relevant and irrelevant toward the content validity before the questionnaire was distributed.

**The procedure of Data Analysis**

Data were collected through two procedures: (1) the questionnaire was distributed to all respondents simultaneously. The respondents spent around 40 minutes answering the questions; (2) the in-depth interview was conducted about one and half hours after the questionnaire distribution and it was recorded on tape in order to have accurate data for analysis. These two procedures were done on different days and weeks due to the wide area of research within the 3 provinces in eastern Indonesia. In addition, the in-depth interview was done based upon the agreement among researchers, speaking lecturers, and students. Lecturers and students were divided into six groups and were seated in a face-to-face seating arrangement and the researchers proposed each question from the interview list. The lecturers and students could freely discuss what they know about students’ target needs and learning needs. Respondents voluntarily responded to any question given.

**Data Analysis**

Data were analysed by using the excel chart data series software program, then continued by qualitative interpretation. Data from the questionnaire deployed numerical calculations of the percentage; meanwhile, data from the in-depth interview were presented qualitatively, as they relied on respondents’ responses.
FINDINGS AND DISCUSSIONS

Descriptive Statistics

This section discusses the descriptive statistics and the percentage analysis of each aspect of the needs analysis. A summary of the needs analysis can be seen in the following table.

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Description of students’ target needs

**Question 1:** What are the types of students’ target needs toward academic-English speaking material development?

Based on the questionnaire, the results of the target needs were categorised into three types – necessities, lacks, and wants. The percentage and types of each target needs can be better understood through the figures below.

**Necessities**

The findings of students’ necessities were the types of speaking tasks, which can be better understood through the following figure.

![Figure 1: Types of Speaking Tasks](image)

Figure 1 shows that independent was the type of English-speaking task required by students. This type was in line with the interview results which affirmed that independent speaking tasks were the highest necessitated by students. Independent speaking tasks are tasks that require a student to speak about a topic based upon their personal experience or general knowledge without referring to any other source (Barkaoui, Brooks, Swain, & Lapkin, 2013). In the independent speaking tasks, learners
are asked to focus on speaking skill only and they speak freely among themselves about relevant topics based upon their own real experiences. This type can lead to self-monitoring, more confidence and enjoyment, as well as encourage students to participate more in various speaking exercises and tasks (Oradee, 2012).

Lacks

The questionnaire analysis result shows that students still have problems in following academic-English speaking courses, as presented in the figure below.

![Figure 2
Students’ Speaking Difficulties](image)

The result indicates that vocabulary is the prime problem. This was in accordance with six lecturers’ interview results who affirmed that limited vocabulary was the major obstacle for students to practice their English. Students are expected to be able to produce the words which are in line with the topic given, as well as use the appropriate conjunctions, meaning, word category, etc. Students were unable to construct the words of indicators cohesively in their utterances, i.e. students did not use conditional, additional, and conclusion conjunctions appropriately. However, vocabulary is recognised as a vital component of communication development. Vocabulary knowledge determines the quality of the speaker’s listening, speaking, reading and writing performances (Mokhtar et al., 2010). Similarly, Alqahtani (2015) claimed that vocabulary knowledge is a central component of communicative competence because a limited vocabulary impedes successful communication. Therefore, vocabulary is crucial and mandated to be explicitly written in speaking material books.

Wants

Wants are related to the learners’ expectation after taking an academic-English speaking course. The results of the learners’ wants are presented in the following figure.

![Figure 3
Learners’ Wants](image)
Figure 3 indicates that students’ wants include how to communicate and collaborate with others, how to think in solving several speaking problems, how to use digital technology, and understand how to work effectively in preparation for their future career. Students’ wants were supported by the interview results, which highlighted that the material of academic-English speaking courses must be explicitly written about the 21st-century skills demand in the Indonesian context. In line with the skills needed, the Partnership for 21st Century Skills (P21), (2005, p. 3) and Trilling and Fadel (2009, p. 45) presented eleven skills that must be possessed by students in this century. These are details below:

**Communication and collaboration:** These speaking activities are designed to enable learners working together to share their thoughts, questions, ideas and solutions in a number of speaking tasks and exercises. Collaborative learning helps the students to develop and achieve their communication skills. Learning together allows the students to overcome their speaking anxiety and nervousness, to develop social skills and critical thinking skills, to promote mutual interaction, and to help prepare students for the challenges in the workplace, where collaborative and communication skills are highly required in many careers (Aliyu, 2017; Trilling & Fadel, 2009, p. 54).

**Critical thinking and problem solving:** Such speaking activities are designed to allow learners to be able to use various types of reasoning as appropriate to the situation in their speaking exercises and solve different kinds of non-familiar speaking topics in innovative ways. Speaking activities can be explicitly designed through problem-solving exercises/tasks, questions and answers, group discussions, project-based tasks and many more. These activities give the valuable effects to stimulate the consciousness of learners’ critical thinking. Having good critical thinking leads the learners to increase their oral communication skill. This aligns with the research findings conducted by Sanavi and Tarighat (2014) and Shirkhani and Fahim (2011) who claimed that raising critical thinking awareness has positive impacts on speaking proficiency because it can increase learners’ oral communication abilities, expand their learning experience, and make the language more meaningful for them.

**Creativity and innovation:** These speaking activities are designed to encourage learners to be able to look at speaking issues in a new way and link learning across subjects and disciplines, as well as try new approaches to cope better solutions. In a number of speaking task designs, learners are urged to perform their maximum creative efforts, be able to elaborate their own ideas in the discussion, demonstrate originality, be open in diverse perspectives, and create useful contributions toward speaking topics provided. Teaching for creativity means understanding and developing students’ creative abilities as well as encouraging them to believe in their own creativity. It is a process of equipping students with knowledge about creative processes and providing opportunities for them to be creative by using hands-on activities and creative methods, media, and assessment (Tran, Ho, & Hurle, 2016).

**Information literacy:** These speaking activities are designed to allow learners to be able to access, evaluate, use, and manage information, which is adjusted to their relevant speaking issues. Information literacy (IL) facilitates undergraduate students to evaluate
and contextualise information sources and promote students as knowledge creators and contributors in the academic dissemination (Bury, Craig, & Shujah, 2017). IL is required by students, particularly university students, in their academic lives and everyday tasks (Nizam, Musa, & Wahi, 2010). They claimed that IL-enabled students will become more self-directed learners and take better control over their educational achievements.

**Media literacy:** These speaking activities are designed to aid learners to be able to analyse and create media products to support their speaking achievements. Learners understand and utilise the most appropriate media to express their ideas in the speaking tasks. Media is anything which is used to help to communicate in the target language (Tomlinson, 2007, p. xi). Tomlinson further describes that the types of media which can be used to facilitate students to communicate in the target language, such as linguistic, visual, auditory or kinaesthetic, and they can be presented in print, through live performance or display, or on cassette, CD-ROM, DVD or the internet.

**ICT literacy:** Such speaking activities are designed to apply relevant technologies (communication lab, speech recognition software, youtube, teacher tube, and video) in the learning process. Those technologies have been a great inspiration for students and have made them want to learn more about learning materials (Bahadorfar & Omidvar, 2014). These technological tools are much more interesting and provide fun and enjoyable learning, thus, motivating the students and helping them to enhance their language learning in a fruitful way. Moreover, these tools help students learn at their own pace and promote autonomy in them.

**Flexibility and adaptability:** These speaking activities are designed to stimulate learners to be able to adapt to change (e.g. varied roles in the conversations, schedules, context), be flexible toward input, and balance diverse views in discussing a number of speaking topics. The understanding of flexibility and adaptability lead to success in the discussion whereas a lack of these skills leads to stagnation and failure. Nowadays, employers actively seek out graduates that are not only resourceful and adaptable, but also able to be flexible and have the ability to adapt to changing circumstances and environments, welcome new ideas, and provide new ways of completing tasks (Kivunja, 2015).

**Initiative and self-direction:** These speaking activities are designed to help learners to be able to manage their own goals and time to practise independent speaking exercises/tasks and the like. The exercises can develop the learner’s own speaking skills and their involvement and commitment to their own learning pace. Thus, self-direction skills play a key role in the development of tasks designed to develop and enhance oral fluency of EFL students in and outside class (Buitrago, 2017). Self-direction proposes a set of speaking exercises/tasks in which students can be free to make decisions about speaking issues/topics discussed.

**Social and cross-cultural:** These speaking activities are designed to support learners to be able to interact effectively with others (i.e. know when it is appropriate to listen and when to speak, respond open-mindedly to different ideas, and leverage social and cultural differences to create new ideas in speaking exercises and tasks). The exercises
related to cross-cultural materials are helpful in preparing students to understand and develop skills and abilities in cultural diversity, intercultural communication, empathy, aptitudes for working collaboratively and networking across cultures, and interacting with people of different social and cultural backgrounds (P21, 2005, p. 6; Sun, 2015).

Productivity and accountability: These speaking activities are designed to motivate learners to be able to manage and prioritise speaking projects then demonstrate project results in front of the class effectively. The design of the speaking tasks ensures each student participates actively and cooperates effectively with teams. Individual accountability and commitment play an important role in handling the various English tasks (Albino, 2017; Astuti & Lammers, 2017). They further disclose that when students were believed to handle more than one English task, they produced spoken English more and got comprehensible inputs.

Leadership and responsibility: These speaking activities are designed to adjust the learners to be able to use interpersonal and problem-solving skills to influence, guide and be responsible to others in accomplishing English speaking tasks. Students are trained to be a leader and act responsibly through a number of tasks from an early age. This way helps them to get useful feedback related to problem-solving, building positive collaborative relationships, conflict resolution, diversity awareness, self-confidence, integrity and work ethic in and out of the classroom to ensure their academic success (Al-jammal, 2015).

Description of students’ learning needs

Question 2: What are the types of students’ learning needs toward academic-English speaking material development?

Based upon the questionnaire results, learning needs were categorized into four types: input, procedure, setting, and learner’s role. The percentage and types of each learning needs can be better understood through the figures below.

Input

The inputs given by students were types of media used in the speaking process, as presented in the figure below.

![Figure 4](image.png)

Learning Media Inputs

Figure 4 presents the desired inputs related to media usage. The result indicates that multimedia packages aid students to construct language skills, knowledge and
understand their world (Muslem & Abbas, 2017). They further claimed that the implementation of appropriate media is believed to be helpful in enhancing students’ speaking competence, for example, video. Video is an effective media to promote students’ pronunciation, vocabulary, grammar, writing, autonomous learning, self-confidence, and creativity insight (Khotimah, 2017).

Procedure

The procedure desired in speaking course is shown in the figure below.

Figure 5
Types of Activities

Figure 5 shows that students have a strong desire to practice their English through discussion techniques. Discussion helps learners to do the following: (1) think critically about the subject and develop their skills of analysis, synthesis and evaluation, rather than just memorise facts; (2) encourage them to work together and share their ideas by talking about them publicly; (3) develop their communications skills such as stating their ideas clearly, listening to others, or responding appropriately to others; (4) generate their own ideas; (5) discover new knowledge through sharing ideas in a group (Harizaj, 2015; Larson, 2000).

Setting

The preferred classroom settings for the speaking course are presented in the figure below.

Figure 6
Classroom Setting

Figure 6 presents that the desired setting for students to carry out the speaking tasks was group work activity. Group work activity is useful for upgrading learners’ speaking ability. By applying this, learners are able to think, offer opinions, develop logical argumentations and provide justifications. This setting is strongly believed to save time (especially with long tasks), develop communicative skills, and help practice cooperation (Abdullah, 2016). Abdullah further affirms that group work settings support
students to become better listeners, open to criticism, and be able to form new friendships.

Learner’s role

This component shows that an active communicator is a role required by the learner in the learning process. A role is given to encourage the learner to feel comfortable and to enjoy the speaking course.

Figure 7
Learners’ Role

Figure 7 above shows that 39.74% wished to be an active English speaker in the process of face-to-face group interaction in which they exchange ideas about a number of speaking issues discussed for the purpose of solving a problem, answering questions, enhancing their knowledge of understanding, or making a decision. This result indicated that respondents highly expected to be an active learner in a number of speaking activities. Language teachers should consider that, in their language classes, they need to include meaningful interactional activities that encourage student participation, which in turn would assist the development of the learners’ speaking skills in the classroom (Sanchez, 2017).

CONCLUSION

The current study examines a needs analyses regarding academic-English speaking material development. First, the result of students’ wants strongly indicates that material design is much more about 21st-century skills such as ways of thinking which involve creative and critical approaches to problem-solving and decision-making, ways of working including communication and collaboration, ways of using relevant technologies (ICT literacy), and how to live in a multi-faceted world as an active and engaged citizen. Second, speaking materials should be adapted in keeping with learners’ future workplace needs with special emphasis on communication and collaboration skills. English communication skill is the top key selection criteria employers look for. Indeed, this skill should be embedded as a major component in the teaching activities and learning experiences. Moreover, 21st-century teaching and learning require collaboration skills by encouraging students to contribute functions, solve problems, and apply different thinking strategies to achieve their academic achievement. Finally, it can be suggested to design the academic-English speaking material with linguistic resources to support the achievement of communication skills.
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REFERENCES


