

Enhancing Students' Green Ethic-Based Problem Solving Skills in English for Tourism Subject Course

I Nyoman Kanca^{1*}, Gede Ginaya², Ni Nyoman Sri Astuti³, Ni Putu Wiwiek Ary Susyarini⁴, Ni Wayan Wahyu Astuti⁵

^{1, 2, 3, 4, 5}Tourism Department, Politeknik Negeri Bali, Indonesia

*Corresponding Author: nyomankanca@pnb.ac.id

Abstract: This study aims to examine the development of students' core competencies in learning English for Tourism at Tourism Department Politeknik Negeri Bali, where the main product is a green ethical-based measurement instrument for Core Competencies Practices of Problem Solving Skills. Two types of instruments have been created and designed and then used to assess the level of Development in the teaching and learning process for students and lecturers. The results of the Students' Report trial show that overall the instrument is suitable for widespread use. Confirmatory factor analysis results also show the validity of the sub constructs for each main construct. The results of the level of development of Core Competencies show that the minimum development of students' Core Competencies is above 4.2. This means that the development of student Core Competencies has been achieved. For this reason, the Core Competencies development model must maintain to be developed, tested and finally implemented.

Keywords: problem solving, green ethics, English for Tourism

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Introduction

The growth of higher education in Indonesia is triggered by the increasing demand for jobs that require qualified workers with S1, S2 and even S3 qualifications. The impact of these job demands increases the enthusiasm of the Indonesian people to continue their education to the tertiary level, with the hope that they can meet the demands of employment or the requirements of the career path where they work. On the one hand, the demands of work in the era of globalization not only require S1 graduates as job requirements but also require them to have interpersonal problem solving skills (Hadiyanto, 2012). In the research, Zalizan et al. (2007) prove that Stakeholders in Malaysia are not satisfied with the skills and competencies possessed by graduates from local universities they employ. Long before, in the 90s era of higher education, developed countries such as England, Australia, America and New Zealand had received many complaints from stakeholders stating that most university graduates in these countries did not meet stakeholders' expectations of the competency standards they needed (LTSN). 2002).

Malaysia and Singapore have the same essence of vision and mission by emphasizing that employment must be seen in the context of the global job market and not only limited to local needs (UNESCO 2006). This means that the competitiveness of their graduates will be at stake to seize every job market opportunity at home and abroad. Therefore, Zalizan et al (2007) emphasize that the Malaysian Higher Education system must integrate 'core competencies' into curriculum content and develop them through teaching and learning processes, and not just lip-service. These policies must be taken to produce qualified and skilled human resources, while at the same time meeting the demands of the global job market which requires workers to be able to work in a multi-tasking environment.

Indonesia itself in responding to this challenge, DIKTI has started a study and began to make changes to the curriculum paradigm since 2003, as emphasized in the Basic Framework for Higher Education Development Indonesia that the higher education curriculum must lead students to become quality graduates and highly competitive in the global job market. (Basic Framework for Higher Education Development KPPTJP IV 2003-2010). The paradigm shift in the new higher education curriculum is clearly stated in the 2013 Higher Education Curriculum, which is called the KKNI. The acquisition of hard skills must go through a process of developing core competencies, the learning strategies used are more focused on students who are looking for using various learning strategies (student center).

Previously, Hadiyanto (2010) in an article in an International Journal has suggested a paradigm shift in the curriculum must be carried out by policy makers in higher education, in essence he emphasized the change from the emphasis on teaching 'Knowledge' to the acquisition of core competencies. Fallows & Steven (2000) and Hadiyanto (2011) both assert that in this century it is no longer sufficient for university graduates to only acquire knowledge of academic subjects. They argue that broader skills including providing and obtaining information, communication and presentation, use of IT hardware and software, analysis and problem solving, attitude development, and social interaction are more important and useful skills for developing their self-worth.

The development of an integrated, problem-based Tourism English learning model aims to improve the quality of the English teaching and learning process (Tick, 2007; Mansor et al, 2017, Bilgin et al, 2009; Rodríguez González et al, 2016; Caswell, 2017). The development of this learning model targets two main objectives, namely the teaching pattern of the lecturers and the learning motivation and creativity of students. English lecturers will be enriched with new learning methods. They will be able to apply this method as a supplement, combine it with classroom learning, see its effectiveness, and will be motivated to apply other strategic and innovative methods (Chunta et al, 2010).

Student will be encouraged to be more active, creative, and independent. Students will more easily understand the content included in the teaching materials provided (Ginaya et al, 2020; Ginaya et al, 2018). All of these learning objectives are pursued to support the achievement of the PNB strategic plan, namely "To become a Vocational Higher Education Institution that produces Professional and Internationally Competitive Graduates in 2025". PNB's vision is translated into the vision of PNB's Research and Community Service Unit (P3M), which is "As a Center for the Study of Applied Science and Technology with a Tourism Umbrella towards Increasing Competitiveness and Community Welfare in 2025". More specifically, this research seeks to support one of the research topics that support tourism, namely "Communication and Information Technology in Tourism" and "Green Human Resources". Therefore, the application of problem-based and green ethic English for Tourism subject course is becoming urgent to be implemented in Tourism Department Politeknik Negeri Bali in order both students and lecturers are provided with insights of green tourism essence, especially in using English for communication. The problem is students often find difficulties in using the language in appropriate manner like using polite expressions so that they are considered to be polite when engage in communication.

From the problems above, the research questions are formulated as follows:

1. How to develop a measurement tool for the application of problem-based and green ethic English for Tourism subject course for students and lecturers?
2. What is the level of development (application) of green ethical-based problem solving skills in the teaching and learning process according to the analysis of student questionnaires, lecturers and lecturers' RPS analysis?

Methodology

The study examines how green ethical-based problem solving skills are applied in learning English for Tourism at the Tourism Department of Politeknik Negeri Bali. The development trial will be applied to the English for Room Division Operation subject course, evaluated, revised and designed an assessment model based on problem solving skills and green ethics.

The design of this research is development research using mixed-mode qualitative and quantitative methods. This research method is designed to follow a logical, scientific and accountable flow.

This research will be carried out in the Hospitality Study Program, Tourism Department of Politeknik Negeri Bali. The population of this study is the first semester students of the 2020/2021 Academic Year who studied English for Room Division Operation subject course and the English lecturer who taught the course.

The main instruments used in this research are questionnaires, Hospitality Study Program Curriculum, RPS and Documents. The supporting instrument is a recording device.

Results and discussions

Results

This study portrays the process and Results of Research Instrument Development. The research instrument was developed through several stages in accordance with scientific procedures for developing research instruments. The development of this research instrument was carried out in the following stages: 1) Analysis of the Higher Education curriculum based on the IQF, relevant theories such as current teaching and learning, results of observations (empirical studies) and related instruments, 2) examining relevant constructs and sub-constructs to be developed in teaching and has produced several main constructs and sub-constructs, 3) developing indicators of each established construct, 4) testing research instruments and testing consistency, 5) holding seminars in the tourism department, 6) conducting exploratory and confirmatory factors analysis. Researchers have developed two instruments with a multi-purpose model, namely the Students' Report and Lecturers' Report which aims to measure core competencies. The results of the instrument development are revealed below.

Research Instrument Specification

Curriculum analysis has been carried out by reviewing the IQF standards. From this analysis, it was found that the IQF emphasizes the development of soft skills which is far more important than hard skills. Through theoretical studies such as teaching and learning approaches, students' self-report instruments and lecturers self-report instruments are produced as shown in Table 1. The number of constructs and statements is the same between the instruments for lecturers and students. The constructs, sub-constructs and indicators developed are the same between student and lecturer instruments. Students' report asks about their frequency in carrying out learning activities that refer to core competencies. Meanwhile, the lecturers' report asked the frequency of respondents in applying statements related to the development of students' Core Competencies.

Table 1. Main Constructs and Sub Constructs, and Number of Indicators

Main Construct	Sub-Construct	No-Item	Number of Items
I. Soft Skills	a. Communication	A1 - A9	9
	b. Problem Solving Skills	B1 - B7	7
	c. Teamwork	C1 - C8	8
	d. Learning how to learn	D1 - D11	11
II. Hard Skills	-	E1 - E10	10
III. Academic Character	d. Honesty	F1 - F17	8
	e. Appreciating	G1 - G17	17
	f. Tolerance	H1 - H5	5
	g. Discipline	I1 - I8	8
	h. Patient	J1 - J18	18
	i. Confidence	K1 - K5	5
	j. Responsible	L1 - L7	7
Core Competencies			93

Table 1 shows the core competencies consisting of three main constructs, namely soft skills, hard skills and academic character. Soft skills consist of 3 sub-construct. Communication with nine indicators (statements), Problem Solving Skills consists of 7 indicators, Team Work consists of 8 indicators, learning how to learn consists of 11 indicators. Hard Skills has 11 indicators. While Academic Character contains seven indicators consisting of Honesty having 8 indicators, appreciating 7 indicators, tolerance 5 indicators, disciplined 8 indicators, confidence 5 indicators and responsible 7 indicators. The total statements in the instrument are 93 statements.

Discussions

Design Lay Out Types of Measurement Core Competencies Instruments

Core Competencies are built in two types of measurement, firstly measuring the level of application of Core Competencies in the learning and teaching process of students. Second, measure the importance of Core Competencies according to the perceptions of students and lecturers. Figure 1 shows the Students' Report model and figure 2 shows the Lecturers' Report display.

Students' Self Report

Figure 1 below is the model students' report (Questionnaires). There are three main columns, namely statement columns related to core competencies development, level of practices and level of importance (See Figure 1).

Core Competencies	Level of Practices					Level of Importance				
	Never	Almost never	Sometimes	Often	Very Often	Not Important at all	Not Important	Neutral	Important	Very Important
A1. Giving oral presentation	1	2	3	4	5	1	2	3	4	5
A2. Using different formats for presenting information memos, forms, and short reports.	1	2	3	4	5	1	2	3	4	5
A3. Using varied vocabularies, expressions and body language in oral presentation and discussion.	1	2	3	4	5	1	2	3	4	5
A4. Integrating ideas or information from various sources in project report and presentation (i.e. progress report and Business or related journals).	1	2	3	4	5	1	2	3	4	5
A5. Summarizing key issues from oral presentation.	1	2	3	4	5	1	2	3	4	5
A6. Giving feedback to an oral presentation	1	2	3	4	5	1	2	3	4	5
A7. Communicating some ideas in writing assignment report.	1	2	3	4	5	1	2	3	4	5
A8. Writing a report clearly, in detail and precisely.	1	2	3	4	5	1	2	3	4	5

Source: Response to Intervention (RTI) of Problem Solving Model (Saeki et al, 2011)

Figure 1. Model Students' Report; Lay Out, Statements, Answer Options and Types

Figure 1 shows that the Level of Practices and Level of Importance both use a Likert scale 5 answer. The answer choices are as follows:

Level of Core Competencies Practices

- Never = 1
- Almost Never = 2
- Sometimes = 3
- Often = 4
- Very Often = 5

Level of the Importance of Core Competencies Practices

- Not important at all = 1

Not Important = 2
 Neutral = 3
 Important = 4 Very Important

Lecturers' Reports

The instrument design used between the Students' Self Report and Lecturers' Report is the same. The difference is in terms of content, as explained earlier. Figure 2 below is a model of lecturers' report (Questionnaires). There are three main columns, namely statement columns related to core competencies development, level of practices and level of importance (See Figure 2).

A. Communication Skills Development	Level of Practices				Level of Important					
	Never	Almost never	Sometimes	Often	Very Often	Not Important at all	Not Important	Neutral	Important	Very Important
A1. Asking the students to give oral presentation individually	1	2	3	4	5	1	2	3	4	5
A2. Asking students for using different formats for presenting information, e.g. forms, points, and short reports.	1	2	3	4	5	1	2	3	4	5
A3. Asking students using varied vocabularies, expressions and body language in oral presentation and discussion.	1	2	3	4	5	1	2	3	4	5
A4. Asking students for integrating ideas or information from various sources in project report and presentation (i.e. progress report and Business or related journals).	1	2	3	4	5	1	2	3	4	5
A5. Asking students for summarizing key issues from oral presentation.	1	2	3	4	5	1	2	3	4	5
A6. Encouraging students for giving feedback to an oral presentation	1	2	3	4	5	1	2	3	4	5
A7. Asking students for communicating some ideas in writing assignment report.	1	2	3	4	5	1	2	3	4	5
A8. Asking students for writing a report clearly, in detail and precisely.	1	2	3	4	5	1	2	3	4	5

Source: Response to Intervention (RTI) of Problem Solving Model (Saeki et al, 2011)

Figure 2. Model Lecturers' Report; Lay Out, Statements, Answer Options and Types

Level of Developing Students' Core Competencies

Never = 1
 Almost Never = 2
 Sometimes = 3
 Often = 4
 Very Often = 5

The Importance Level of Developing Students' Core Competencies

Not important at all = 1
 Not Important = 2
 Neutral = 3
 Important = 4
 Very Important = 5

The exercises and communicative activities with green ethical-based problem solving skills were given to students in the English for Room Division Operations course intended to instill students' soft skills. In this case, student participation during the teaching and learning process increased well. It also means that students enjoy class, which allows them to use their

English intensively. As a result, their communicative competence would increase significantly in each learning cycle. Meanwhile, problem-based learning is able to make students active, autonomous, and develop collaboration in learning such as information exchange and communication skills that are very useful for future life. As a learning model for adults, green ethic-based problem solving skills combine three important aspects, namely knowledge construction, collaboration, and lifelong independent learning. By emphasizing the process, not only products, problem solving skills based on green ethics are able to build student character who prioritizes creativity, self-confidence, and social cooperation in a contextual learning environment. The model of problem solving skills based on green ethics that prioritizes the responsibility and creativity of students, learning in small groups, programmed to solve problems is able to make students think critically, construct knowledge. The description of students' core competencies including four components of soft skills carried out in the stages of the learning cycle with a green ethical-based problem solving skills model can be shown in Figure 3 below.

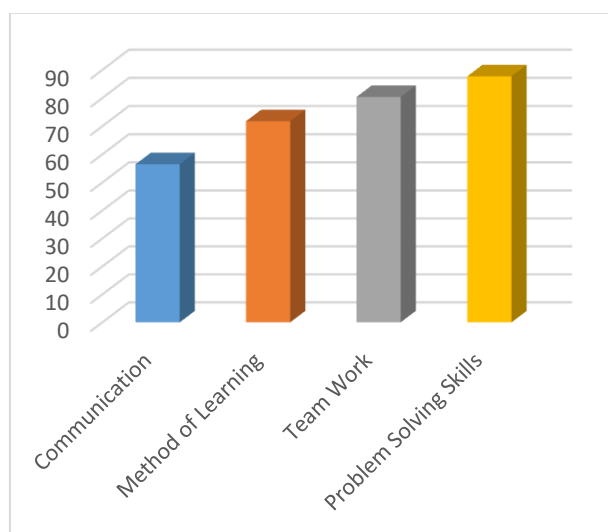


Figure 3. Comparison of student core competencies

Figure 3 shows the results of the comparative analysis of the application of core competencies of students with their level of interest or need for developing core competencies of soft skills, namely communication, learning how to learn, working with others, and problem skills. The findings show that student responses to the application of problem-based learning methods and green ethics in the subject matter of English for Room Division Operations show positive indications. Evidence of this statement can be seen in the results of the application of the questionnaire in the learning cycle. Students said that communicative exercises and activities with problem solving in group discussions and work in pairs were very helpful to improve communication and teamwork skills.

Conclusions

The paradigm shift in the KKNi-based curriculum has started from the 2004 competency-based curriculum, which implicitly describes core competencies containing three main components, namely hard skills, soft skills and character, the three components of core competencies must be possessed by graduates of the Tourism Department of Politeknik Negeri Bali. Therefore, each study program must be ready to prepare its graduates with core competencies to be able to answer current and future challenges. Especially in the current era of globalization which creates global competition, both in the context of the Asian Economic Community or MEA and the Global Free trade market.

The problem solving method as part of soft skills and green ethics as its derivatives can create innovative, creative, collaborative, cooperative learning through learning facilitation that

is able to generate critical thinking skills, mutual support (sharing ideas), problem solving skills, the ability to negotiate (negotiating), provide service orientation (service orientation), and have intelligence that is not rigid (cognitive flexibility) with a high level of critical thinking power. In essence, the learning process will cultivate the concept of green & sustainable tourism.

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