# DEVELOPING ENGLISH MODULE FOR TURTLE CONSERVATION GUIDES

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Received: 7 October 2020 Accepted: 10 December 2020

#### **Abstract**

Most of the six species of sea turtles in Indonesian waters have seen a decline, mainly due to human exploitation. One of the efforts to prevent the extinction of this pre-historic reptiles is the establishment of conservation centers. In Bali, one of the conservation centers actively involved in the efforts to conserve turtles is the Turtle Conservation and Education Center (TCEC). As more foreign tourists who are aware of turtle conservation come to this place, guides at TCEC are expected to able to provide sufficient explanation about turtles and their environment in English. They should provide a thorough insight of the turtle's anatomy, behavior, and reproductive cycle. This study aimed at developing English module for turtle conservation guides at TCEC. In developing the module, a framework of material development model was adopted. The framework consists of some stages namely, needs analysis, formulation of goals and objectives, development of English learning materials, and evaluation. The results of this study provide some implication and contributions for English language teaching.

**Keywords**: English module, guides, TCEC, turtle conservation

# **INTRODUCTION**

# Sea turtle conservation center

Marine ecosystems are among the most productive on the planet, yet at the same time they are the most threatened (Hunt & Vargas, 2018). In Indonesian waters, there are six species of sea turtles, most of which are experiencing a decline, mainly due to human. Massive commercial exploitation and domestic market occurred in the last few decades seem to significantly pose threat to this reptile. A great decrease of the number of the population at various main nesting sites is one of the indicators. The other causes of population decline include damage of the turtles' habitats and feeding areas, turtle mortality due to fishing activities, poor management of conservation techniques, as well as climate change and disease. The eggs and meat are consumed as meals, whereas the shell is believed to possess medicinal properties, in addition to being crafted into house decoration. Furtheremore, some religious rituals requiring turtle meat contribute to this decline. This conditions cause all turtle species in Indonesia to be threatened

with extinction that they are protected by Indonesian government (Adnyana, 2016; Firliansyah et al., 2017).

One of the efforts to prevent the extinction of this prehistoric reptiles is the establishment of conservation centers. The centres serve as an option to promote a unique and authentic environment, as well as to provide an alternative tourist attraction. The centres offer environmental development concept, based on maintenance and conservation (Rismang et al., 2018). Besides protecting the turtles, a conservation centre develops the surrounding community. Turtle Conservation and Education Center (TCEC) on Serangan Island, Denpasar Bali, one of the conservation centers, is actively involved in conserving the endangered reptiles, and incorporating the local community.

TCEC is a preservation site for various types of protected sea turtles. This centre cooperates with WWF, Natural Resources Conservation Agency, Hindu Dharma Council of Indonesia, and Udayana University (Firliansyah et al., 2017). Sea turtle eggs are buried and hatched in this preservation site. The hatchlings, or what are often referred to as tukik, are nurtured to a certain phase until they are considered ready to be released into the open sea. Tourists come to TCEC to see eggs, baby turtles, and adult turtles. Further, they gain knowledge about the threats faced by various types of turtles due to the severly damaged ecosystems. Visitors can also contribute to the releasing of baby turtles into the sea by giving donation.

# English for guides at sea turtle conservation

Foreign visitors, who are mostly westerners, visit the centre with curiosity about the conservation effort and ask a wide range of questions. Guides at the turtle conservation should be able to offer satisfying explanation about various species of the sea turtles and their environment. They should provide an overview about the turtle's anatomy, behavior, and reproductive cycle. They should also be able to explain the obstacles that impede the conservation of these turtles and steps necessary to overcome those problems. These skills would have the maximum impact if the guides are capable of fluenty communicating in English.

English for Specific Purposes (ESP) is one of the most important branches of teaching English today. Teaching General English sometimes does not adequately address the needs of students of English language skills in special situations, both academically and professionally. This special need requires certain steps or procedures in the development of teaching materials that suitable teaching materials can be properly designed. The role and task of teachers in the development of ESP materials are in some ways different from those in the development of general English materials. Teachers are required to do needs analysis to determine the language needs of the students. Moreover, they have to establish a syllabus aimed at optimizing learning. In addition, ESP teachers need to design specific vocabulary and phrases needed by students in their workplace. ESP teachers are also expected to have an overview of the fields they teach (Hutchinson & Waters, 1987; Vicic, 2011)

While General English covers aspects of the target language in general, ESP is a more specific category of the English Language Teaching (ELT) branch. Compared to teaching general English, which is aimed to pass an exam, ESP prepares English learners to perform certain roles, both academically and professionally (Richards, 2001). However, according to Hutchinson and Waters (1987) ESP is not teaching various English fields, instead ESP focuses on language components that are specific to certain fields of English. ESP is also not a separate type of English language instruction from general English instruction. They argue that ESP is different from teaching general English in terms of students' need for a more specific English material.

Tomlinson (1998) suggests a material development model which is presented in Figure 1.

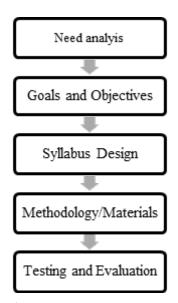


Figure 1. Material Development Model (Tomlinson (1998)

Figure 1 shows the construction of teaching material development consisting of learner needs analysis, goals and objectives of the course, syllabus, material development, and evaluation.

# 1. Need analysis

Nunan (in Gözüyeşil, 2014) criticized the development of a curriculum that generalizes learning needs without paying attention to the differences in student learning needs. In relation to this, ESP caters the specific needs of certain learners, both academically and professionally. Instead of developing English lessons based on language analysis, ESP is therefore initiated through an analysis of the learner needs (Richards, 2001). According to Hutchinson and Waters (1987), it is first necessary to examine the necessity that refers to what the learners need to know in order to be able to work well in the target situation. The second thing is to discover learner lacks. This is necessary to determine what skills are being achieved that the learner does not currently have. Sometimes the learner's needs and lacks do not go in line with what they expect the learning to be. In the needs assessment phase, the researcher should assess learner wants, this phase assesses what the learners want to learn and how they expect the teaching instruction is designed. Dudley-Evan and John (1998) proposed eight points in the needs assessment.

- a. Information about the learners in relation to their profession
- b. Personal information about the learners
- c. English proficiency level of the learners
- d. The lack of the learners in mastering English
- e. Information about their learning needs
- f. An understanding of how English will be used in their target situation
- g. What learners want from this class
- h. Information about the environment in which the course takes place

# 2. Goals and objectives

Richards (2001) states that goals, which are also referred to aims, are general development that resembles learners' progress during their learning process. Goals are a more specific and concrete description of the learning process.

# 3. Syllabus design

Hutchinson and Waters (1987) states that a curriculum is a document that specifies what the learners will, or at least should learn at the end of the class. The definition of the curriculum is based on the fact that what is to be studied will go through several different phases before

reaching its goal. A curriculum describes the main elements of language teaching and forms the basis for the content and focus of the teaching (Richards, 2001).

# 4. Material

The next step is to construct the learning design into learning material. The material will assist learners and teachers in carrying out learning activities so that they can achieve the expected end result (Hutchinson and Waters, 1987). Further, what teachers feel and think about the learning process should also be reflected in the material. A teaching material should have an impact, appeal to learners, boost self-confidence, accommodate different abilities of the learner and enable feedback from learners (Tomlinson, 1998).

# 5. Evaluation

According to Dudley-Evan and John (2009) the purpose of the evaluation phase is to obtain constructive feedback on learning and to measure competence achievement. According to Richards (2001), evaluation on the material design, learning process, teaching skills and the motivation of the learners are needed to assess the success of the program.

Issues of turtle protection and conservation have been investigated in a number of studies. Ario et al., (2016) examined conservation techniques and the percentage of successful hatching of turtles at TCEC Bali. The results show that the breeding grounds for turtles are situated in strategic location, making the temperature and humidity unstable. However, the researcher also found out the increasing awareness of the local community about the importance of turtle conservation. A study conducted by Firliansyah et al. (2017) found out that some turtle sanctuaries are more focused to tourism than to conservation. He advised the Natural Resources Conservation Agency to have a better turtle management process. In a study, Hunt & Vargas (2018) raised a question on how turtle conservation management can coordinate with local community to extend the "extinction horizon for endangered sea turtle species". The research ended up with suggestion about correlation between toursim and conservation.

In regard to the development and teaching ESP, several studies have been carried out. Irmayanti (2012) conducted a study on the development of English teaching for small industries in Kebumen. Her study investigated the challenges faced by the craftmen in communicating with foreign prospective buyers and designed a module to help them. Fatmasari (2013) developed English material for travel agencies that went through steps of doing need analysis, writing the course grid, as well as developing and revising the material. Saputri (2014) investigated the need for tour guides on the Merapi Lava Tour to use English to serve tourists. She designed English module for tour guides. Further, the development of English teaching materials in the tourism sector was researched by Prachanant (2012). This study highlighted the importance of needs analysis in the development of English module.

Previously mentioned studies focused on the development of English material in various fields. However, only a few studies discussed the development of English module for sea turtle conservation guides. Therefore, this study aims at developing English module for turtle conservation guides to improve the guides' English skills.

The turtle conservation is expected to contribute for both the endangered sea reptiles and to the local community. In the other words, the turtle conservation can continue to survive if income from tourists visit is economically promising. One of the efforts to maintain the number of tourists at TCEC is to increase the Englis skills of the guides.

## **METHODS**

This study employed research and development method to create models and principles that guide the design, development, and evaluation process of learning (Jonasenn, 2004). This re-

search was carried out at the TCEC, a conservation center located in Serangan Island, Denpasar, Bali. TCEC has a main mission to combat the illegal turtle trade and attempts to offer a fair alternative. TCEC, which is supported by WWF, the Governor of Bali, Denpasar Government, Provincial Natural Resources Conservation Agency, and local communities, helps injured turtles, collects turtle eggs from the beach, hatches the eggs, and releases the young into the sea. The data were collected through observation and interviews. During the observation, the researchers captured the activities of the tourists and the guidance procedures carried out by the turtle conservation guides. The researchers also interviewied guides to gather the data. The data obtained from interviews, observations, and questionnaires were then qualitatively analyzed by drawing various processes such as data review, data reduction, data presentation and conclusion. The design and development of an English training model for turtle protection guides are described descriptively. The results of the design and development of an English training model were discussed in a focus group discussion (FGD) where experts were asked to give suggestion on the content of the modul.

#### FINDINGS AND DISCUSSION

# **Needs analysis**

Derived from triangulation of the questionnaires, observations, and interviews, this analysis provides insight about the language needs of the turtle conservation guides. Based on Hutchinson and Waters (1991), needs analysis involves three aspects, namely necessities, lacks and wants. These three aspects are going to be explained further in the following discussion.

# **Necessities**

Interviews and observation have revealed that guides in turtle conservation need to master turtle anatomy-related English vocabulary. They need this vocabulary to explain the life cycle of turtles and the threats they face from humans. The data gathered from observations revealed that guides should also be able to explain the types of turtles found in Indonesian waters. Moreover, the guides should be able to explain the process starting from the process of laying the eggs until the newborns hatch. Lastly, they should know how to persuade tourists to participate in conserving the turtles.

# Lacks

This refers to the gap between the needs of the students and their current proficiency. The results of the interviews revealed that students had difficulty constructing sentences with proper English grammar. This prevents them from explaining specific topics, such as body anatomy and sea turtles handling, to foreign visitors.

# Wants

This aspect refers to learner's perception of what is needed in the learning. Interview results indicated that the guides expected to have conversation practice with various topics related to sea turtle conservation to help them explain a wide range of information to the guests verbally.

# Developing English module for guides at turtle conservation

Based on the results of needs analysis, the researchers developed the materials accommodate the guides' needs, lacks and wants. The materials are compiled into a module called "English Module for Turtle Conservation Guides" which is intended for guides at the Turtle Conservation and Education Center, on Serangan Island, Denpasar. In addition to helping the guides explain how turtle conservation works, this module also includes English material on turtle anatomy, its life cycle, and threats to its population. This module aims not only to improve En-

glish language skills, but also to raise awareness of the importance of marine conservation as one of tourist attraction.

As the title suggests, this module provides lessons with simple but applicable material to help guides provide guide services to English speaking tourists. This module is designed for learners at beginner level, although more advanced users can also learn from its content. The expressions and vocabulary required for basic conversation in guiding procedures are also covered in this module. Although all four aspects of the language are covered in each unit, speaking is the aspect mostly emphasized, as guiding work requires them to use English orally.

The guiding process is expected to last for 2 hours, starting from the visitor arrival gate and ending at the exit. Visitors were initially directed to a large panel of map that displays the six protected turtle species: green turtle, loggerhead turtle, hawksbill turtle, flatback turtle, leather back turtle, and olive ridley turtle. This step is important, as most visitors often has little knowledge when it comes to distinguishing one turtle sepecies from another. They are then guided to the hatchery to see a 3x3 meters box with sand in which turtle eggs, taken from various beach location are burried. At this site they get an explanation about the period from the incubation until the hatchlings that takes around 60 days. The next is the steps where the tourist are shown the baby turtles tank, to observe how the tukik are taken care of. Next stop is a pool for adult turtles, also known as the exhibition pool, where tourists are given explanation about the threat of extinction of the turtle, as well as the measures to prevent it. Visitors can see some turtles with damaged fins as a result of sea irresponsible fishing activities. Below is the overview of the English Module for Turtle Conservation Guides, which is designed for six meetings, each lasting 90 minutes.

#### Unit I

"Welcome to the Turtle Conservation and Education Center" is the title of the first unit. It contains a telephone conversation as a simulation of a reservation. The unit also presents the lesson of how the guides can introduce himself, as well as the lesson of some greeting expressions. The grammar section focuses on prepositions, to help the guides explain what site of the centre located in which position. In addition, since the visitors come from different countries, the guides should be able to pronounce and spell their names. The spelling of names is therefore the material presented in the next section

# Unit II

The title of this unit is "Your Marine Friends". It introduces the six endangered turtle species, as for most tourist, difference between turtles species is often hard to tell. The anatomy of the turtle body is also discussed, to help the guides identify and explain the kinds of turtles based on their body morphology. The grammar included in this unit is comparison, as a reference for the guides to compare one turtle to the other. In addition, this unit also describes the life cycle of turtles that elaborate each stage of a turtle life, from hatchling to, jouvenile, to adult, and to the nesting stage. The next section teaches how to ask questions using what, where, why, who, when and how.

#### Unit III

The last unit, "Save Our Souls", focuses on conservation efforts to prevent turtles from extinction. The first part introduces the threats facing the turtles, such as sea debris, fishing activities, and light pollution. This comes in the form of a reading titled "Endangered Turtles". This unit also includes knowledge of quantifier, such as much, many, few and little. Some guides still need help with number. The module therefore presents a part about ordinal and cardinal number. The last section displays a reading exercise that describes the steps to save turtles.

In addition to the interview with the guides and observation on the conservation centre, construction of the module was also based on several literatures referencing. One valuable reference was the handbook of turtle conservation management authored by Dermawan et al., (2009). The other were books of Gerosa & Aureggi, (2001) and U.S. Fish and Wildlife Service (2008). Those books contributed to the materials in the module, such as the six kinds of turtle, the turtle's life cycle, the threat to their population and the measure to prevent extinction.

From what those three units have displayed, we can see how the module attempted to accommodate the professional needs of the guides at turtle conservation. English modules created for other workfields have also shown similar effort. For example, "English for Travel Agent", a module constructed by Munir (2014), covers greeting and leave taking, offering helps and giving suggestion. The module of English for guides of turtle conservation also to some extend shows similarity to the work of Fatmasari (2013), whose module focus on helping guides of temple tour. Reader can obviously see the differences in content, as one module brings up issues of sea reptile conservation, whereas the other one discuss cultural ancient heritage. English module aimed for workers at health sector, as created by Wahyudi (2016), does also accommodate the learners' professional needs, such as language related to hospital, nursing care and medical treatment.

# **CONCLUSION**

This is a research and development that aims to build a module for guides of turtle conservation. The needs analysis explored the necessities, lacks and wants of the guides in learning English. It was found that what the guides explain to the guests was the knowledge of the turtle species, the life cycle, threats to life, and efforts to maintain the population. The needs analysis also reveals that turtle conservation guides wanted a lot of conversational practice, as the job requires them to speak directly to guests. In terms of the lacks, the research conveyed that the guides found difficulties when they need to arrange sentence with proper structure and vocabularies.

Based on interviews data, combined with data obtained from observations in the field, the English module was compiled. To meet the needs of the guides, the module covers the explanation of different turtle species, their life cycle, extinction threats and the conservation efforts. The next step was to consult an expert about the content of the modul. This last phase was aimed at determining the feasibility and effectiveness of the teaching material, and as a base for module revision. Guides can use this module to increase their professionalism in providing screening services. Students or teachers, especially those focusing on language teaching, can refer to this module to help them learn or teach English. Future researchers can refer to this study to develop material in English for other specific purposes. It is hoped that the module can give contribution in preserving the sea turtle, while at the same time giving help in improving the language skill of local people.

# REFERENCES

- Adnyana, W. (2016). Bio-ekologi penyu laut di Indonesia. *Proceeding Seminar Nasional Dan Workshop Sea Turtle Conservation*, 1–21.
- Ario, R., Wibowo, E., Pratikto, I., & Fajar, S. (2016). Pelestarian habitat penyu dari Ancaman kepunahan di Turtle Conservation And Education Center (TCEC), Bali. *Jurnal Kelautan Tropis*, 19(1), 60. https://doi.org/10.14710/jkt.v19i1.602
- Dermawan, A., Nuitja, N. S., Soedharma, D., Halim, M. H., Kusrini, M. D., Lubis, S. B., Alhanif, R., Khazali, Murdiah, M., Wahjuhardini, P. L., Setiabudiningsih, & Mashar, A. (2009). Pedoman teknis: Pengelolaan konservasi penyu. *Direktorat Konservasi dan Taman Nasional Laut*, *53*(9), 1689–1699. https://doi.org/10.1017/CBO9781107415324.004

- Dudley-Evans, T., & St John, M. J. (2009). *Developments in ESP: A multi-disciplinary approach*. Cambridge: Cambridge University Press.
- Fatmasari, Reni. (2013). Designing English learning modules for the hidden temples tour guides in Viavia travel agents. (Bachelor's thesis). Universitas Negeri Yogyakarta, Yogyakarta, Indonesia.
- Firliansyah, E., Kusrini, M. D., & Sunkar, A. (2017). Pemanfaatan dan efektivitas kegiatan penangkaran penyu di Bali bagi konservasi penyu. *Journal of Tropical Biodiversity and Biotechnology*, 2(1), 21. https://doi.org/10.22146/jtbb.25690
- Gerosa, G., & Aureggi, M. (2001). Sea turtle handling guidebook for fishermen–teaching book. UNEP/MAP RAC/SPA, Tunis, Tunisia.
- Gözüyeşil, E. (2014). An analysis of engineering students' English language needs. *Procedia Social and Behavioral Sciences*, 116, 4182–4186. https://doi.org/10.1016/j.sb-spro.2014.01.913
- Hunt, C. A., & Vargas, E. (2018). Turtles, ticos, and tourists: Protected areas and marine turtle conservation in Costa Rica. *Journal of Park and Recreation Administration*, 36(3), 101–114. https://doi.org/10.18666/jpra-2018-v36-i3-8820
- Hutchinson, T and Waters, A. (1987). *English for Specific Purposes: A learner-centered approach*. Cambridge: Cambridge University Press
- Irmayanti, Dian. (2012). Developing English speaking learning materials for the personnel of small-scale craft industries and department of industry, trade, and cooperatives in Kebumen district. (Bachelor's Thesis). Universitas Negeri Yogyakarta, Yogyakarta, Indonesia
- Jonasenn, David H (ed). 2004. *Handbook of research on educational communication*. New Jersey: Lawrence Erlabaum Associates
- Munir, S. (2014). Pengembangan materi ajar bahasa Inggris untuk agen travel (sebuah kajian English for occupational purposes). *Ragam*, 14(3), 260–274.
- Prachanant, N. (2012). Needs analysis on English language use in tourism industry. *Procedia Social and Behavioral Sciences*, 66, 117–125. https://doi.org/10.1016/j.sbspro.2012.11.253
- Richards. J., C. (2001). *Curriculum development in language teaching*. Cambridge: Cambridge University Press.
- Rismang, R., Rauf, A., & Rustam, R. (2018). Kajian pengembangan kawasan konservasi penyu sebagai kawasan ekowisata di dusun Tulang Desa Barugaiya kabupaten kepulauan Selayar. *Jurnal Pendidikan Teknologi Pertanian*, 1(29). https://doi.org/10.26858/jptp. v1i0.6230
- Saputri, Tiara Sandi Winar. (2014). Developing learning English module for mount Merapi lava tour guides in desa wisata Kembang Arum Donokerto Turi Sleman. (Bachelor's thesis). Universitas Negeri Yogyakarta, Yogyakarta, Indonesia.
- Tomlinson, Brian (ed). (2009). *Materials development and language teaching*. Cambridge: Cambridge University Press.
- U.S. fish and wildlife service. (2008). *Alabama sea turtle conservation manual*. Alabama: Department of the Interior.
- Vicic, P. (2011). Preparing materials for ESP teaching. *Inter Alia*, 2, 107–120.
- Wahyudi. (2016). Developing English learning materials based on content-based approach for nursing students of STIKES Payung Negeri Pekanbaru. Proceedings of ISELT FBS Universitas Negeri Padang. Retrieved from http://ejournal.unp.ac.id/index.php/selt/article/view/7004/0