Is It According to Plan? Evaluating the Effectiveness of the Vocational High School English Programme

Dewi Satria Elmiana[1], Shiyi Shen[2]
[1]University of Mataram, Indonesia
[2]Warner School of Education, University of Rochester, USA.

Abstract: *Some critics have argued that the quality of the teaching and learning process tends to be inappropriate; that it does not relate to industry needs, current technology, or innovation, and generates inadequate basic skills among students, particularly in learning English (Himpun, 2015; OECD, 2015; Serdyukov,2017). Grounded in the CIPP evaluation model proposed by Daniel L. Stufflebeam, this study evaluates the effectiveness of an aspect of the English study programme that has rarely been examined. The results suggest that the goal achievement of goals in the English programme is significantly affected by teachers' and students' activities; by teaching and learning materials; and by the school environment. However, school facilities – one of the pivotal elements - have not significant effect on English programme, even when they are not used properly to support the teaching and learning process. Thus, the implications of this study would be of interest not only to educational practitioners, but also to education policy makers in implementing English-medium education in vocational school.*

Keywords: *CIPP model; English programme; evaluation study; teaching and learning; vocational high school*

INTRODUCTION

English is an international language used by many countries in the world use English as a communication medium in all aspects of life (Simatupang, 1999; Crystal,2003; Lauder, 2008). Meanwhile, in Indonesia, English is considered as a foreign language (EFL). It has also been introduced in educational institutions, and learnt from the elementary schools up to university as a compulsory subject. According to Harmer (2007), English is the language studied as a foreign language by the greatest number of students in the world, because it is in the school curriculum whether they like it or not. Some people also want to study English because they think it offers the chance of advancement in their professional lives. From an educational point of view, teaching English to students who live in a non-English-speaking environment, and whose mother tongue is not English, imposes two roles distinct from those whose environment and mother tongue are English (Liu, 1999). EFL has risen to the status of being considered as an indispensable part of almost all educational institutions (Yurekli, 2012). Vocational high school students are those who learn English in order to be able to communicate or perform a set of professional skills, and to perform a particular job related to their field (Hutchinson and Waters, 1989). The goals of learning and teaching English in

vocational high schools are to help students pass the national examination, and to equip them with a skill needed for their future jobs/careers (Depdiknas, 2007). Therefore, English teaching and learning in vocational high schools should be based on the principles of English for specific purposes (ESP). According to a survey conducted at a vocational senior high school, graduates have inadequate understanding of the learning materials that are insufficiently industry- specific; this criticism reflects the quality of the implementation of the vocational education system (OECD, 2015). To evaluate the quality of programme implementation, research needs to identify factors affecting the programme itself. As a study conducted by Stronge (2007) states, an effective programme is the outcome of a combination of many factors that involved teacher and student activities, and of facilities provided by school. Moreover, according to Harmer (2007), these factors contribute to difficulties in learning and using English and to the kind of mistakes a learner typically makes in English pronunciation, grammar, and vocabulary. Given the significant role such factors play in affecting teaching and learning programmes, thus, this present study evaluates the effectiveness of the English programme at a vocational high school.

THEORETICAL FRAMEWORK

CIPP Model

English is one of the compulsory lessons at state vocational high school that students must follow from first to third grades. Moreover, English is one of the subjects in the national examination that students need to pass the standard in order to continue their studies to higher education level. Thus, it is crucial to evaluate the English programme in order to investigate whether it follows the criteria of effectiveness and of meeting students' needs. To investigate the effectiveness of the programme, this study adopted the CIPP evaluation model that was developed by Stufflebeam (1985), which consists of context, input, process, and product evaluation. This model for evaluation was employed to describe the factors affecting the effectiveness of English-medium education in a vocational school.

Among researchers who have studied teaching and learning is Wati (2011), whose study is entitled 'The effectiveness of Indonesian English teachers training programs in improving confidence and motivation'. The results suggest that the English language training programme was highly effective in terms of overall effectiveness and in improving teachers' confidence and motivation as EFL teachers; however, in terms of the most important aspect of producing effective EFL teachers – improving basic English knowledge – the programme was not yet effective. The current study has similarities in terms of evaluating English programme; however, the factors affecting the effectiveness of English programme were different. A further study, by Irambona and Kumaidi (2015), is entitled 'The effectiveness of English teaching programme in senior high school: a case study'.

The results indicate that the programme objectives, classroom conditions, students' needs, and barriers were all in the effective category. As regards the input component, teachers were found that to be qualified and experienced, but their teacher training was not sufficient; students' textbooks and course designs were in the effective category. The process component showed teaching materials, teaching methods, teaching activities and assessments also to be in the effective category. Furthermore, the product component showed that English marks, students' needs, and barriers were in the effective category. However, the teaching materials were in the 'not effective' category. Thus, the study used the CIPP model, similarly to this current study, but the school level was different.
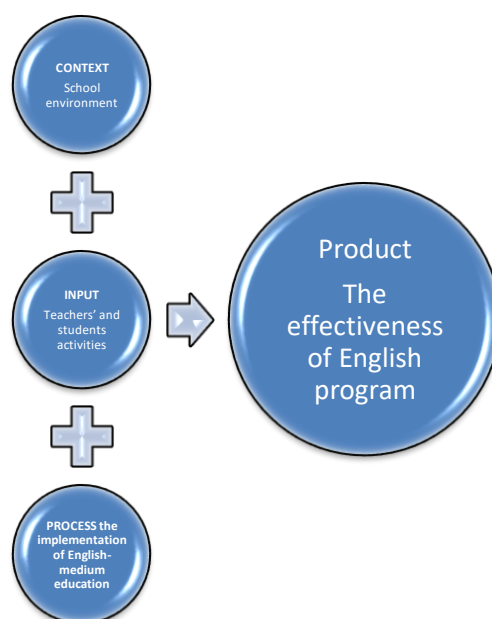

Figure 1. *Conceptual framework of factors affecting the effectiveness of the ESP programme in vocational school*

RESEARCH QUESTIONS

1. To what extent does the context of the school environment affects the English programme at vocational high school? (Context)
2. How significant is the effects of input in reference to the teachers' activities, school facilities, and students' activities in the English programme at vocational high school? (Input)
3. How significant is the effect of process in reference to the implementation on teaching and learning materials at vocational high school? (Process)
4. How significant is the effect of product in reference to the goal achievement of the English programme at vocational high school? (Product)

METHODOLOGY

This study took a quantitative approach, using questionnaires to gather the data, and participants were 210 students recruited from one of Indonesia's role-model vocational high schools. The participants, aged 15 to 17, were drawn from students in their last two years of study, and were at an intermediate level of English proficiency. At the end of their study, these students are expected to pass the national examination and achieve their career goals. In collecting the data, this study used a non-test method. (Johnson and Christine 2008), the procedures of which are summarised below:

Observation

This kind of observation takes a systematic approach to the object observed. Structured observation is conducted when the observer knows what variables are being observed, and the researcher uses this valid instrument. A researcher conducting structured observation usually uses checklists or other types of data collection instruments. The content of the data collection instrument will depend on the research problem and objectives of interest to the researcher. Data collection instruments in structured observation are usually more specific and detailed.

Documentation

Data documentation in this study comes from school's archives, attendance lists of students and teachers, lists of student grades, lesson plans, syllabus, and curriculum at a state vocational high school. The researcher can also find types of secondary data, which common include, for example, personal documents, official documents, physical documents, and archived research data.

Questionnaire

This study employs a rating scale, with four alternative answers for students; these are 4 for the answer of always, 3 for often, 2 for seldom and 1 for never. The purpose of this questionnaire was to obtain the data and information about the goal achievements of the English programme, the teachers' activities, the availability of school's facilities, students' activities, and the implementation of English programme.

Moreover, the instruments were tested for their validity using content validity, construct validity and item validity. This was carried out in several steps, which were: (1) arrange test items based on blueprints from the vocational high school English syllabus; (2) consult an English expert; and (3) analyse results using factor analysis to decode the validity of the test items. To test the construct validity, the researcher constructed the instrument according to the English syllabus. Based on the result of the expert's analysis, all items are considered valid and can be used to collect the data, as they fulfil the criteria of satisfactory items from the three aspects of material, construction and language. The items were tried out on 210 students, and the results were analysed by using factor analysis in SPSS. The items

were analysed from three angles: item difficulty, item discrimination and distractor function. Item validity refers to how far an item test has a difficulty index, discrimination index, and a good coefficient of correlation.

In addition, reliability can be defined as the extent to which a test produces consistent results when administered under similar conditions. The reliability of the instrument is measured by using factor analysis. The higher the result of the coefficient correlation, the more reliable is the test. The results of the instruments' reliability can be seen in the following Table 1:

Table 1. *Reliability results for the instruments*

No	Variables	Alpha scores	Result
1	Goal of the English programme	0.918	Reliable
2	Teachers' activities	0.767	Reliable
3	Availability of school's facilities	0.656	Reliable
4	Students' activities	0.688	Reliable
5	The implementation of the English programme	0.692	Reliable

Each variable has an Alpha Cronbach scores of > 0.6, which indicates that the score for each variable is reliable (Bland, 1997).

Results of multiple regression analysis for the teachers' activities (X1), school's facilities (X2), students' activities (X3) and implementation of the English programme (X4) are presented below:

Table 2. *Results of multiple regression analysis (Coefficient)*

Model	Unstandardised Coefficient		Standardised Coefficient	t	Sig.	Collinearity Statistic	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	51.052	7.246		7.046	.000		
Teacher's activities (X1)	.642	.189	.254	3.403	.001	.612	1.635
School's facilities (X2)	-.244	.238	-.066	1.029	.305	.834	1.199
Students' activities (X3)	.369	.134	.182	2.753	.006	.780	1.282
Implementation of the programme (X4)	.814	.223	.269	3.653	.000	.628	1.592

a. Dependent Variable: Goal achievement of the English programme.

RESULTS AND DISCUSSION

Context

The first hypothesis concerns how far the school environment affects the English programme at a vocational high school. The results of observation in the field enhance understanding about the environment's effect on the school programme. The school's capacity adheres to the building capacities standard (Depdiknas, 2008) and its condition supports teaching and learning activities. Furthermore, the school layout maintains the conditions for the teaching and

learning process in the classroom, and encouraging teachers and students to feel comfortable during their activities. This finding confirms an earlier study by Arikunto (2009, p. 295):

> *The categories of nature Environment are school condition, school yard, the condition of school's building and the way school gives the best situation to support students by providing what they need in school or create the comfortable situation in the class.*

Apart from the supportive element of the environment, there are some factors that cause concern. The distance from the main road and the lack of any public transportation passing the front of the school is among the disturbing attributes of the environment. The suitability and conveniences of the school buildings can be added to this list. Government regulation No. 40/2008 on National Education Standards mentions these there two categories of an effective school environment: the area and the buildings. Criteria regarding the area of a school are: (1) the width of the area must accommodate facilities to serve three study groups; (2) the area must be used to build the infrastructure for a sports field, with space for play and practical purposes; (3) the area must be far from dangerous places; (4) the declivity of the area must be less than 15% from river land or a traffic boundary; (5) the area must be away from crowded areas and pollution; (6) the surrounding can be adjusted; (7) the land is not in conflict; and (8) the area accords with the rules of regency government. The criteria for a school building are: (1) the width of the building is based on the total number of rooms students need for studying; (2) the building meets construction regulations; (3) it meets safety criteria; (4) it offers good and easy facilitation and accessibility; (5) it has a maximum of three floors; (6) it has an adequate comfort level; (7) the building is healthy; (8) it has minimum electrical power of 2.200 watts; and (9) the building has government approval. The information obtained through observation contributes to the understanding that the support provided by the surrounding environment of the schools - physical as well as non- physical - is conducive to the implementation and progress of the programme. The conclusion can be drawn that the responses about the environment in which the programme is implemented are positive, and in line with the study by Irambona and Kumaidi (2015), which suggests that classroom conditions supported the teaching and learning programme.

Input

The second hypothesis was that teachers 'activities (X1), the availability of school's facilities (X2) and students' activities (X3) have a significant effect on the English programme at a vocational high school. The results put the significance score for teachers' activities (X4) 0.00 lower than 0.05, with a t score of 5.557. The scores representing teachers' activities suggest a significant effect on the goal achievement of the English programme. This is in line with a previous study by

Arikunto (2009, p. 295), '[The] teacher is the important component in teaching and learning activities who ultimately determines the success of a programme'. Moreover, a study by Leung and Teasdale (1998) suggest that good teachers can frequently compensate for deficiencies in the resources they employ in their teaching, and their role can be sustained through programme. The other result concerned with teachers' activities was from the effectiveness analysis. Based on the data, this shows that teachers' activities are moderately effective. The average score of variables was 35. 46, and the criteria in formula: $29.25 \neg\leq$ score ≤ 35.75: moderately effective. This result confirms Irambona and Kumaidi's (2015) finding that the teaching process meets the criteria of 'effective'.

Moreover, the analysis of the availability of school's facilities (X2) returned a significance score 0.548 higher than 0.05, with a t score was of -.601. These scores suggest that school facilities have no significant effect on the English programme. Facilities at vocational school are not usually used to suppor the teaching and learning process in the classroom, since teachers use only LCDs and tape recorders rather than any other facilities. Besides, students go to the library or language laboratory when asked to do so by teachers; they do not exhibit self–encouragement in using school facilities to support their ability in learning. Interestingly, the other results concerning school facilities - based on the data - indicated that the availability of school facilities was effective. Based on the average score of variables at 20.271, and the criteria meets in formula: $19.25 \leq$ score < 22.75: effective. Government regulation No 40/ 2008 on National Education Standards identifies three categories of school facility: general learning and teaching room, supporting learning and teaching room. and specific teaching and learning room. Under the category of general room are the classroom, library, biology laboratory, physics laboratory, chemistry laboratory, science laboratory, computer laboratory, language laboratory and technical laboratory. Based on the government standards regulation, the facilities at the vocational school were compliant, but were not used properly to support the teaching and learning process.

Furthermore, the student activities (x3) results showed that the significance score was 0.01 lower than 0.05, and the t score was 3.473. These scores suggest that student activities have a significant effect on the English programme. This is in line with a previous study by Arikunto (2009), who found that students have their own ability to comprehend what a teacher explains in the class; the teacher must pay attention to students' characteristics in order to deliver teaching materials in a less demanding way, so that students can obtain the learning they need. The other analysis of student activities concerned their effectiveness. The data indicated that student activities were moderately effective. Based on the average score of variables, 41.7, and the criteria meets in formula: $40.5 \leq$ Score < 49.5: moderately effective. This result confirms the previous study by Irambona and Kumaidi (2015), who found that students activities meet the criteria of 'effective'.

Process

The third hypothesis is about the implementation of the English programme at a vocational high school (X4). Based on the results of regression analysis, the significance score was 0.00 and the t score was 9.476. The score for significance was lower than 0.05, so it can be concluded that the implementation of teaching and learning has a significant effect on the English programme come from the effectiveness analysis. The data indicated that the implementation was moderately effective. Based on the average score of variables, 35.586, and the criteria meets in formula: 29.25 ≤, score < 35.75 signals 'moderately effective'. Government regulation No 41/2007 on National Education Standards mentions that the teaching and learning process involves the implementation of lesson-plan activities, consisting of pre- activities, main activities, post-activities, and procedures established to ensure that the correct components are involved in the learning and teaching process. Thus, the implementation of teaching and learning meets the criteria of 'moderately effective', in line with the study by Irambona and Kumaidi (2015).

Product

The fourth hypothesis is about the goal achievement of the English programme at a vocational high school. The data analysis suggests that the goal achievement of the English programme is significantly affected by the teachers' activities (X1), students 'activities (X3), the implementation of the English programme (X4), and the school environment. Based on Table 2, the scores of regression coefficient (B) for b1 was 0.642, b2 was -0.244, b3 was 0.369 and b4 was 0.814, with the constant score 51.052. These scores of regression coefficient and constant are used in regression analysis below:

$$Y_1 = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4$$

$$Y_1 = 51.052 + 0.642\, X_1 - 0.244\, X_2 + 0.369\, X_3 + 0.814\, X_4$$

This regression analysis indicates a rising score for teachers' activities (X1) which directly increases the goal of the English programme by 0.642 ; the rising score for school facilities (X2), which directly decreases the goal of the English programme by 0.244; the rising score for students' activities (X3), which directly increases the goal of the English programme by 0.369; and the rising score of the implementation of the English programme (X4), which directly increases the goal of the English programme by 0.814. The other results for goal achievement in the English programme come from an effectiveness analysis. The data indicates that the goal of the English programme meets the criteria for 'moderately effective'. The average score of variables was 113.2, and the criteria meets in formula: 103.5 ≤, score < 126.5: moderately effective. The results confirm previous studies which confirmed that teachers' activities (Leung and Teasdale, 1998; Arikunto, 2009;

Irambona and Kumaidi, 2015), students activities (Arikunto, 2009; Irambona and Kumaidi, 2015), and the implementation of the English programme (Government regulation No 41/2007 on National Education Standards) have significant effects on the English programme; however, school facilities tend to have an insignificant effect on supporting the programme at a high vocational school.

LIMITATION OF THE RESEARCH

This research was conducted in accordance with the objectives of the study; however, some limitations still could not be avoided. These are:

1. Other aspects might affect the English programme. These were not observed in detail, and could not be controlled in this research. They include social environment, intelligence, teaching and learning style, motivation, etc.
2. The English skill test in this research is based only on the aim of teaching and learning in English lesson plans.

CONCLUSION AND IMPLICATIONS

The context reveals that the school environment has a significant effect on goal achievement in the English programme, so the result can be seen as positive, in terms of responses about the environment in which the programme is implemented. The input reveals that: (1) teacher activities (X1) have a significant effect on the goal achievement of the programme, and are considered as moderately effective; (2) the availability of school facilities (X2) are considered effective, in spite of facilities having not significant effect on the goal achievement of the English programme; and, (3) student activities (X3) have a significant effect on the goal achievement of the English programme and are considered as moderately effective. Moreover, the process reveals that the implementation of the English programme (X4) has a significant effect on its goal achievement, and is considered moderately effective. Furthermore, the product reveals that the goal achievement of the English programme is significantly affected by teacher activities, student activities, the implementation of the programme, and the school environment, and is considered moderately effective. Thus, the study contributes to deepening our understanding of factors affecting the effectiveness of the English programme at a vocational high school. This can assist teachers as well as students in applying suitable strategies for enhancing important dimensions of English for Specific Purposes. The study practically demands that vocational high schools provide more intensive and comprehensive and specifically targeted English programmes in order to meet the needs of industry and technology – and to equip students with adequate skills for their future careers.

DISCLOSURE STATEMENT

The authors declare no conflict of interest associated with this research.

REFERENCES

Arikunto, S. (2009). *Dasar-dasar evaluasi pendidikan*. Jakarta: Bumi Aksara

Bland, J.M. (1997). Statistics note: Cronbach's alpha. *BMJ,* 314-572. doi: https://doi.org/10.1136/bmj.314.7080.572

Crystal, D. (2003). *English as a global language* (2nd eds). Cambridge: Cambridge University Press.

Depdiknas. (2007). *Peraturan Menteri Pendidikan Naional Republik Indonesia Nomor 41 Tahun2007,* tentang Standar Proses Pendidikan Nasional untuk Satuan Pendidikan Dasar dan Menengah.

Depdiknas. (2008). *Peraturan Menteri Pendidikan Naional Republik Indonesia Nomor 40 Tahun 2008,* tentang Standar Sarana dan Prasarana Sekolah Menengah Kejuruan/Madrasah Aliyah Kejuruan (SMK/MAK).

Harmer, J. (2007). The practice of English language teaching (4th ed). London: Pearson Education, Inc.

Himpun, P. (2015). Problematic approach to English learning and teaching: A case in Indonesia. *English Language Teaching*, 8(3), 35–45. http://dx.doi.org/10.5539/elt.v8n3p35

Hutchinson, T., & Waters, A. (1989). *English for specific purposes: A learning-centred approach.* Cambridge University Press: Great Britain.

Irambona, A., & Kumaidi. (2015). The effectiveness of English teaching program in senior high school: A case study. *Research and evaluation in education,* 1(2), 114-128. https://journal.uny.ac.id/index.php/reid/article/view/6666/6592

Johnson, B., & Christensen, L. (2008). *Educational research* (3rd ed). Thousand Oaks. Sage Publications.

Lauder, A. (2008). The status and function of English in Indonesia: A review of key factors. *Makara Social Humaniora,* 12(1), 9-20. https://doi.org/10.7454/mssh.v12i1.128

Leung, C., & Teadale, A. (1998). ESL teacher competence: professionalism in a social market. *Prospect,* 13(1), 4-23. https://search.informit.org/doi/10.3316/aeipt.89591

Liu, J. (1999). Nonnative-English-Speaking Professionals in TESOL. *TESOL Quarterly*, 33(1), 85-102. https://doi.org/10.2307/3588192

OECD (2015). *Innovating to Learn, Learning to Innovate*. OECD: Paris, France.

Serdyukov, P. (2017). Innovation in education: what works, what doesn't, and what to do about it?. *Journal of Research in Innovative Teaching & Learning,* 10(1), 4-33. https://doi.org/10.1108/JRIT-10-2016-0007

Simatupang, M. (1999). Bahasa Inggris: Variasi yang mana? suatu tinjauan ulang tentang status Bahasa Inggris di Indonesia. In B.K. Purwo (Ed). *PELLBA 12 (Pertemuan Lembaga Bahasa Atma Jaya: Kedua Belas)*, 63-84. Jakarta: Pusat Kajian dan Budaya Unika Atmajaya.

Stronge, J. H. (2007). *Qualities of effective teachers* (2nd ed). Alexandria: ASCD Publishers.

Stufflebeam, D. L., & Shinkfield, A. J. (1985). *Systematic evaluation*. New York: Kluwer Academic Publishers.

Wati, H. (2011). The effectiveness of Indonesian English teachers training programs in improving confidence and motivation. *International Journal of Instruction,* 4(1),79-104. https://dergipark.org.tr/en/download/article-file/59780

Yurekli, A. (2012). An analysis of curriculum renewal in EAP context. *International journal of instruction,* 5 (1), 50-68. https://dergipark.org.tr/en/download/article-file/59751