

AVIATION CADETS' PERCEPTION ON CONTENT-BASED LANGUAGE TRAINING AND SELF-ASSESSMENT

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Abstract: This research is aimed to find out the effects of content-based language training on cadets speaking skills and to find out the effects of self-assessment on cadets speaking skills. The method employed in this research is survey. The research was done in semester six cadets at Indonesia Aviation Polytechnic in Curug and Makassar. Data was collected by administering an oral test (5 items), a content-based language training questionnaire (5 items), and a self-assessment questionnaire (30 items), in March until June 2021. The result of the research showed that (1) there are significant effects of Content-Based Language Training and Self-Assessment upon Cadets Speaking Skills. These have been proved by Sig score = 0.000 less than 0.05 and F count = 46.781 and the multiple contribution of Content-Based Language Training and Self-Assessment simultaneously gives 62.1% contribution on variable Cadets Speaking Skills; (2) there are significant effects of Content-Based Language Training upon Cadets Speaking Skills. These have been proved by Sig score = 0.000 less than 0.05 and t count = 7.226 and the partial contribution of Content-Based Language Training on Cadets Speaking Skills is 57.85%; (3) there are no effects of Self-Assessment on Cadets Speaking Skills. These have been proved by Sig score = 0.423 more than 0.05 and t count = 0.806 and the partial contribution of Self-Assessment on Cadets Speaking Skills is only 4.30%.

Key Words: Content-Based Language; Self-Assessment; Speaking Skills; Aviation English

Introduction

When we talk about the tool of communication in aviation industry, Alderson (2009, pp.168-187) stated that the language that is used for communication in International Aviation definitely English. This has made all professionals who involve in aviation industry particularly for people who work on the front line of operations, such as air traffic controllers and pilots must be able to speak fluently in English. Furthermore, their professional knowledge and skills are really important on determining flight safety, because the communication between air traffic controllers and pilots plays an important role in flight safety. Huang and Wu (2005, pp.45-48) also mentioned that according to ICAO, which is a specialized agency of the United Nations, one of the main reasons for many incidents and accidents in aviation industry was the ineffectiveness and insufficient communication or miscommunication between air traffic controllers and pilots. Many air-crashed happened because of the language barriers between air traffic controllers and pilots.

The ICAO has designed and proposed aviation safety standards and practices which demand air traffic controllers and pilots to be able to communicate fluently by using both ICAO phraseology and plain English. Based on the requirements, all air traffic controllers and pilots must take English Proficiency assessments and they also have to achieve at least level 4 which is operational level to receive their license. This has shown that the ICAO language proficiency requirements are extremely significant for air traffic controllers and pilots, in order to be accepted into the aviation industry.

Therefore, the big question is how Indonesian air traffic controllers and pilots get the license? And how do they get the English proficiency training and certificate for the license? The institution in Indonesia that has authorization to administer the assessment to get the license for International Aviation Language Proficiency Requirements, is through Indonesia Aviation Polytechnic (IAP), which is in Curug (Tangerang) and Makassar. The English proficiency test called IELP (ICAO English Language Proficiency) test. IAP particularly Air Traffic Controller Course has designed IELP as one of the subjects that must be taught in the 5th semester to enhance the cadets' English proficiency in IELP test. However, the implementation of the course has a limited time which is only 16 meetings with total hours only 48 hours.

Meanwhile, the time for aviation English training programs that suggested by ICAO indicate a minimum of 100 - 200 hours. With this length of time, it is expected that the learners will achieve a progress from a mid-to-high Pre-Operational Level 3 to the Operational Level 4. So, it means the time that is implemented in Indonesia Aviation Polytechnic is less than 100 – 200 hours. Having limited time to improve cadets' speaking skills is the most challenging thing to be solved. Speaking is considered as the most important skills of all the four language skills because people who study a language are concerned to as the speakers of the targeted language. According to Davies and Pearse (2000, p.4) the main purpose of English language teaching is to give the learners the skill to communicate effectively and correctly in English. Speaking in English is not an easy task, especially for EFL learners.

In finding a solution to help the cadets fulfill the requirements effectively with a limited time, the researcher proposes an interesting way namely content-based Language training and self-assessment. The researcher decides to apply content-based language training and self-assessment as the effective way to face the time constraint. Based on the ICAO guidance manual (Document 9835). Therefore, by developing a content-based course training, this will help the air traffic controllers to pass the IELP test, and the crucial point is they will be able to communicate naturally at work and able to have an effective communication. Brown (2004) also stated that Content-based classrooms have the potential of increasing intrinsic motivation and empowerment, since students are focus on subject matter that is important to their lives. That is why intrinsic aspects play a crucial role to be successful to achieve the goal.

The intrinsic aspect that is suitable to be applied effectively in a limited time is the learners' willingness to learn autonomously. Learning autonomously is another point to succeed in IELP test. Gardner (2000, pp.49-60) stated the main characteristic of an autonomous language learner is the skill to self-assess. By applying self-assessment can help learners to measure their readiness, experience, and background of their knowledge. Self-assessment also will enhance learners' motivation and interest for the subject that is prepared to increase the learning activities to support their performance to be better and also to enhance their skill to analyze their work (Sharma, et al., 2016, pp.226-229).

Both of content-based language training and self-assessment have their benefit to increase effectively cadets' speaking skills in a limited time that provided by PPI. Based on the background above, the researcher wants to conduct a research with the title: "The Effects of Content-Based Language Training and Self-Assessment on Cadets' Speaking Skills".

Method

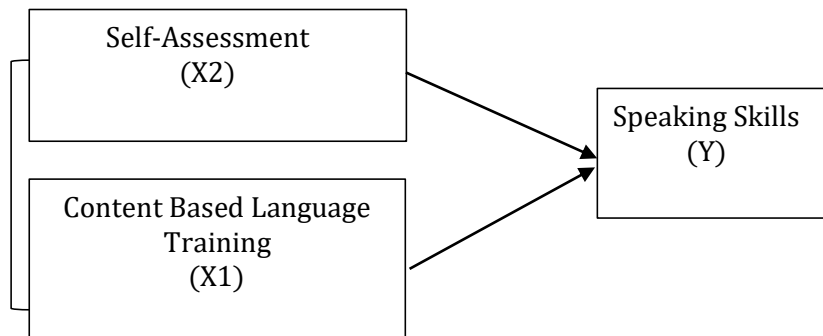
The method used in this research is a descriptive survey method with a double linear regression by giving an online questionnaire and a test to the object of the research. The research used samples, which mean half of the subject will represent the whole population.

In the process of collecting data, the research used an instrument that will be tested the validity level. Whilst the form of the research is an analytical study by giving a direct survey by using Google form. The instrument validity was applied to know the quality of its instrument which purposed to measure function. On the other hand, the reliability was also needed to measure the exactness and the accuracy that showed by the instrument.

The data collection in this research was collected by doing an online survey through a platform of Google Form. The research instruments consisted of online teaching emphasizing on IELP test questions, content-based language training questionnaire and self-assessment questionnaire, and oral proficiency test.

These instruments were given to 60 cadets of the sixth semester cadets of Air Traffic Controllers Course. The constellation model of the effects between the three variables as follow:

Figure 3.1



Results and Discussion

A. Description of Research Data

In chapter IV elaborates the statistical description from the result of the calculating and testing which have been done by SPSS versions 20.0 for windows program with its analysis and interpretation.

1. The Data Analysis of Content-Based Language Training (X₁)

Table 4.1. Description of Research Data

		Statistics		
		Content-Based Language Training	Self-Assessment	Cadets Speaking Skills
N	Valid	60	60	60
	Missing	0	0	0
Mean		16.92	83.97	19.90
Median		17.00	83.00	20.00
Mode		17	82 ^a	18
Std. Deviation		1.889	8.487	2.735
Minimum		13	60	14
Maximum		20	103	25
a. Multiple modes exist. The smallest value is shown				

The scores of content-based language training from the respondents have the mean score 16,92 with the standard of deviation score 1,889, the median score 17,00, the minimum score 13 and the maximum score 20. From its description shows that between the mean score and median score are nearly similar, which are 16,92 and 17,00. These have shown that the data score of content-based language training in this research is representatively sufficient. The histogram of its data as follows:

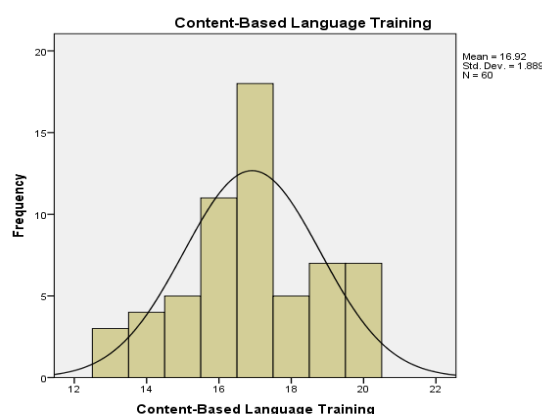


Figure 4.1. Histogram Data of Content-Based Language Training Scores

2. The Data Analysis of Self-Assessment (X_2)

The scores of self-assessments from the respondents have the mean score 83,97 with the standard of deviation score 8,847, the median score 83,00, the minimum score 60 and the maximum score 103. From its description shows that between the mean score and median score are nearly similar, which are 83,97 and 83,00. These have shown that the data score of Self-Assessment in this research is representatively sufficient. The histogram of its data as follows:

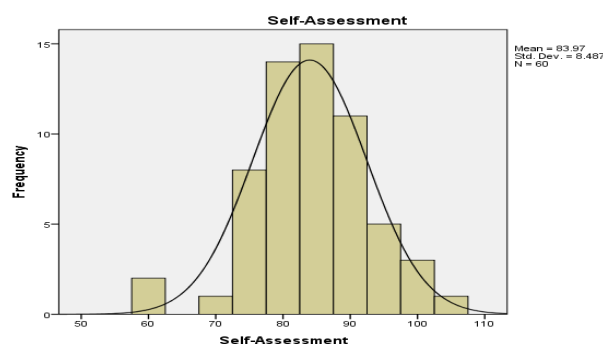


Figure 4.2. Histogram Data of Self-Assessment Scores

3. The Data Analysis of Cadets Speaking Skills (Y)

The scores of cadets speaking skills from the respondents have the mean score 19,90 with the standard of deviation score 2,735, the median score 20,00, the minimum score 14 and the maximum score 25. From its description shows that between the mean score and median score are nearly similar, which are 19,90 and 20,00. These have shown that the data score of Cadets Speaking Skills in this research is representatively sufficient. The histogram of its data as follows:

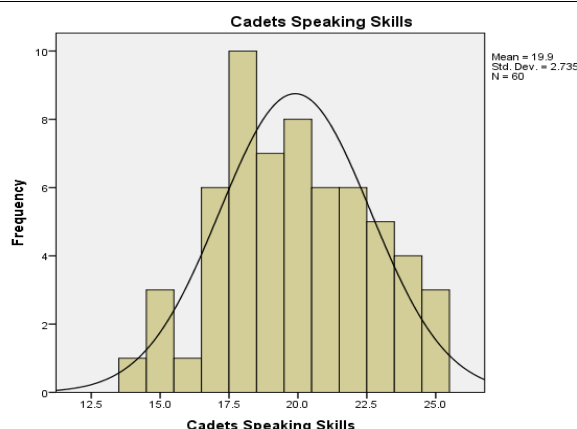


Figure 4.3. Histogram Data of Cadets Speaking Skills

B. Prerequisite Tests for the Data Analysis

The prerequisite tests for the data analysis which have been conducted in this research are normality test and linearity partial regression line test between the independent variables and dependent variable.

1. Normality Data Test

The normality data test from each variable is tested by the following hypothesis:

H_0 : the sample data has a normal distribution

H_1 : the sample data has a non-normal distribution

The calculation has been done by SPSS 20.0 for Windows program. Based on the regulation of the program, the criteria of normality data is “if p value (sig) > 0.05 means H_0 accepted”, which means the data of the sample has a normal distribution.

The p value (sig) scores are numbers which are shown on sig column from the output calculation of normality test by the SPSS program, which called as Kolmogorov-Smirnov method. The calculation result as follows:

Table 4.2. The Recapitulation of Normality Test

One-Sample Kolmogorov-Smirnov Test				
		Content-Based Language Training	Self-Assessment	Cadets Speaking Skills
N		60	60	60
Normal Parameters ^{a,b}	Mean	16.92	83.97	19.90
	Std. Deviation	1.889	8.487	2.735
	Absolute	.166	.115	.106
Most Extreme Differences	Positive	.166	.115	.106
	Negative	-.134	-.092	-.079
Kolmogorov-Smirnov Z		1.284	.892	.824
Asymp. Sig. (2-tailed)		.074	.404	.506

a. Test distribution is Normal.

b. Calculated from data.

On the table above, it shows that the scores on the Sig column of the Kolmogorov-Smirnov method for all the samples results are more than 0,05. This means H_0 is accepted, in other words the data of the samples has a normal distribution.

2. Linearity Data Test

The linearity data test on this research is applying the following hypothesis:

H_0 : the correlation and linear regression between X variable and Y variable is linear

H_1 : the correlation and linear regression between X variable and Y variable is not linear

The calculation has been done by SPSS 20.0 for Windows program. Based on the regulation of the program, the criteria of linearity data are “if p value (sig) > 0.05 (sig line Deviation from linearity) or sig on linearity < 0.05 means H_0 accepted”, which means the regression line is linear.

The p value (sig) scores are numbers which are shown on sig line Deviation from Linearity of ANOVA table which is the result from the calculation of linear regression test by the SPSS program.

a. The Correlation and linear regression between variable X_1 towards variable Y

The calculation result of the correlation and linear regression between variable X_1 towards variable Y, is shown on table 4.3.

Table 4.3. The Recapitulation of The Correlation and Linear Regression between Variable X_1 towards Variable Y

ANOVA Table		Sum of Squares	df	Mean Square	F	Sig.
Cadets Speaking Skills * Content-Based Language Training	(Combined)	283.081	7	40.440		13.283.000
	Between Groups	272.387	1	272.387		89.466.000
	Linearity	10.694	6	1.782		.585
	Deviation from Linearity	158.319	523.045			.740
	Within Groups	441.400	59			
Total						

From the table, it shows that the score on Sig column on the Deviation from Linearity line = 0.740 > 0.05, it means H_0 accepted. In other words, the regression line between the effect of variable X_1 towards variable Y is linear.

b. The Correlation and linear regression between variable X_2 towards variable Y

The calculation result of the correlation and linear regression between variable X_2 towards variable Y, is shown on table 4.4.

Table 4.4. The Recapitulation of The Correlation and Linear Regression between Variable X_2 towards Variable Y

ANOVA Table		Sum of Squares	df	Mean Square	F	Sig.
Cadets Speaking Skills * Self-Assessment	(Combined)	283.067	2610.887	2.269		.014
	Between Groups	121.234	1	121.234		25.268.000
	Linearity	161.833	256.473	1.349		.208
	Deviation from Linearity	158.333	334.798			
	Within Groups	441.400	59			
Total						

From the table, it shows that the score on Sig column on the Deviation from Linearity line = 0.208 > 0.05, it means H_0 accepted. In other words, the regression line between the effect of variable X_2 towards variable Y is linear.

3. Multicollinearity Data Test

The Multicollinearity Data Test is done by applying some criteria, as follows:

- a. The Tolerance score.
 - 1) If the tolerance score > 0.10 means there is no multicollinearity.
 - 2) If the tolerance score $\leq$ 0.10 means there is multicollinearity.
- b. The VIF (Varian Inflation Factor) score.
 - 1) If VIF score > 10 means there is multicollinearity.
 - 2) If VIF score < 10 means there is multicollinearity.

Table 4.5. The Recapitulation of Multicollinearity Data Test Result

Coefficients ^a										
Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error				Zero-order	Partial	Part	Tolerance	VIF
(Constant)	-.355	2.370		-.150	.881					
1 Content-Based Language Training	1.066	.148	.736	7.226	.000	.786	.691	.589	.640	1.563
Self-Assessment	.026	.033	.082	.806	.423	.524	.106	.066	.640	1.563

a. Dependent Variable: Cadets Speaking Skills

From the table, it shows that the tolerance score on the multikolinierity data test table is $0.640 > 0.10$ and the VIF score is $1.563 < 10$. As a result, in this experiment there is no multicollinearity.

C. Testing of Hypothesis

The Testing of Hypothesis that has been conducted, can be seen on Table 4.6, Table 4.7., and Table 4.8., as follows:

Table 4.6. The Calculation Result of Coefficient Correlation Analysis on The Effects of Variables X_1 and X_2 towards Variable Y

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.788 ^a	.621	.608	1.712

a. Predictors: (Constant), Self-Assessment, Content-Based Language Training

Table 4.7. The Calculation Result of Regression Analysis on The Effects of Variables X_1 and X_2 towards Variable Y

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	274.294	2	137.147	46.781	.000 ^b
	Residual	167.106	57	2.932		
	Total	441.400	59			

a. Dependent Variable: Cadets Speaking Skills

b. Predictors: (Constant), Self-Assessment, Content-Based Language Training

Table 4.8. The Calculation Result of Significant Coefficient Regression Analysis on The Effects of Variables X_1 and X_2 towards Variable Y

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	-.355	2.370		-.150	.881
1 Content-Based Language Training	1.066	.148	.736	7.226	.000
Self-Assessment	.026	.033	.082	.806	.423

a. Dependent Variable: Cadets Speaking Skills

1. The Effects of Content-Based Language Training (X_1) and Self-Assessment (X_2) on Cadets Speaking Skills (Y)

The hypothesis of this effects, as follow:

$$H_0 : \beta_1 = 0 \text{ or } \beta_2 = 0$$

$$H_1 : \beta_1 \neq 0 \text{ or } \beta_2 \neq 0$$

Meaning:

H_0 = there are no significant effects of content-based language training and self-assessment on the cadets speaking skills.

H_1 = there are significant effects of of content-based language training and self-assessment on the cadets speaking skills.

From the table 4.6. shows that the coefficient correlation analysis on the effects of independent variables of content-based language training (X_1) and self-assessment (X_2) on cadets speaking skills (Y) is 0.788. The significant effects of independent variables of content-based language training (X_1) and self-assessment (X_2) on cadets speaking skills (Y) is 0.621.

While the determination coefficient of 0.621 shows that the contribution of independent variables of content-based language training (X_1) and self-assessment (X_2) on cadets speaking skills (Y) is 62.1% and the rest is 37.9% due to other factors which were not studied by the researcher.

For the testing of hypothesis through the regression analysis can be seen on table 4.7. and table 4.8. From the table 4.7. it shows that Sig score = 0.000 < 0.05, this shows H_0 is not accepted meaning that there are significant effects of content-based language training (X_1) and self-assessment (X_2) on cadets speaking skills (Y).

From the table 4.8. the result of the coefficients represents the effects of variables X_1 and X_2 towards variable Y with the regression equation is $\hat{Y} = - 0.355 + 1.066 (X_1) + 0.026 (X_2)$

2. The Effects of Content-Based Language Training (X_1) on Cadets Speaking Skills (Y)

The hypothesis for these effects, as follows:

$$H_0 : \beta_1 = 0$$

$$H_1 : \beta_1 \neq 0$$

Meaning:

H_0 = there are no significant effects of content-based language training on the cadets speaking skills.

H_1 = there are significant effects of content-based language training on the cadets speaking skills.

To prove the hypothesis is by paying attention to the t score column and Sig column score of Content based-language trainng (Variable X_1) on table 4.8. Based on the criteria of significant regression is that "if $t_{\text{count}} > t_{\text{table}}$ means H_0 is not accepted" or "if Sig < 0.05 means H_0 is not accepted" which means there are significant effects from the idependent variable X_1 toward variable Y . From table 4.8. shows that Sig score = 0.000 and $t_{\text{count}} = 7.226$. Becuse Sig score < 0.05 and $t_{\text{count}} > t_{\text{table}}$ then H_0 is not accepted meaning there are significant effects of ontent-based language training on cadets speaking skills.

As for the variable contribution of ontent-based language training on cadets speaking skills on table 4.5., the formula as follows:

$$KD = \text{Beta score} \times \text{Zero-Order score} \times 100\%$$

$$KD = 0.736 \times 0.786 \times 100\% = 57.85\%$$

From the calculation above, we can conclude that the variable contribution of ontent-based language training on cadets speaking skills is 57.85%.

3. The Effects of Self-Assessment (X_2) on Cadets Speaking Skills (Y)

The hypothesis for these effects, as follows:

$$H_0 : \beta_2 = 0$$

$$H_1 : \beta_2 \neq 0$$

Meaning:

H_0 = there are no significant effects of self-assessment on the cadets speaking skills.

H_1 = there are significant effects of self-assessment on the cadets speaking skills.

To prove the hypothesis is by paying attention to the t score column and Sig column score of Self-assessment (Variable X_2) on table 4.8. Based on the criteria of significant regression is that "if $t_{count} > t_{table}$ means H_0 is not accepted" or "if $Sig < 0.05$ means H_0 is not accepted' which means there are significant effects from the independent variable X_2 toward variable Y. From table 4.8. shows that Sig score = 0.423 and $t_{count} = 0.806$. Because Sig score > 0.05 and $t_{count} < t_{table}$ then H_0 is accepted meaning there are no significant effects of Self-assessment on cadets speaking skills.

As for the variable contribution of self-assessment on cadets speaking skills on table 4.5., the formula as follows:

$KD = \text{Beta score} \times \text{Zero-Order score} \times 100\%$

$KD = 0.082 \times 0.524 \times 100\% = 4.30\%$

From the calculation above, we can conclude that the variable contribution of self-assessment on cadets speaking skills is only 4.30%.

D. Discussion on Research Findings

1. The Effects of Content-Based Language Training and Self-Assessment on Cadets Speaking Skills

From the calculation result of coefficient correlation analysis shows a correlation between content-based language training and self-assessment on cadets speaking skills with a score 0.788. The SPSS program has proved that the coefficient correlation between variables is significant. This means that there are significant effects of independent variable X_1 (Content-Based Language Training) and X_2 (Self-assessment) on dependent variable Y (Cadets Speaking Skills).

From the result of the coefficients represents the effects of variables X_1 and X_2 towards variable Y with the regression equation is $\hat{Y} = -0.355 + 1.066(X_1) + 0.026(X_2)$. The constant score is -0.355 shows a negative value which means if the variables scores of content-based language training and self-assessment do not exist or equal to zero, then the cadets speaking skills scores will also decrease. The coefficient regression X_1 is 1.066 shows a positive value which means the effect of content-based language training on the cadets speaking skills has a positive value which means if the score of content-based language training increases, therefore the cadets speaking skills will be higher. And the coefficient regression for X_2 is 0.026 shows a positive value which means the effect of self-assessment on the cadets speaking skills has a positive value therefore the cadets speaking skills will be higher.

From the regression analysis which has been calculated by the SPSS program resulted that the coefficient regression is significant and that is showed by the Sig score = $0.000 < 0.05$ and $F_{count} = 46.781$. These mean H_0 is not accepted which means there are significant effects of content-based language training and self-assessment on the cadets speaking skills.

The cadets speaking skills scores were obtained from the speaking test which has been conducted while doing the research. Where the test was used to measure the cadets speaking skills after they got the learning process which emphasized on content-based language training and self-assessment, both as the important aspects to enhance their speaking skills.

This research also has brought new insight and enrich the research on how effective are the combination of the content-based language training and self-assessment to enhance learners' speaking skills.

2. The Effects of Content-Based Language Training on Cadets Speaking Skills

There are effects of content-based language training on cadets speaking skills which showed by Sig score = $0.000 < 0.05$ and $t_{count} = 7.226$ then H_0 is not accepted which means there are significant effects of content-based language training on cadets speaking skills.

Content-based language training is a teaching method which emphasizing on the purposes, the needs, and the specific activities for which English will be needed. For example, for air traffic

controllers' cadets, they do not have to develop great writing skills, but rather an effective reading skill, a high comprehension level of listening skill, and a sufficient speaking proficiency.

The result of the research has proven that content-based language training is effective to enhance cadets speaking skills which is in line with the ICAO document 9835 which stated that manual on the implementation of ICAO language proficiency requirements recommends content-based language training as a way to economize and to maximize the effectiveness of an aviation English program.

By conducting the useful and interesting content, and intriguing activities, these all integrated to gain an effective interaction amongst the cadets. As a result, the cadets speaking skill was significantly improved. Based on Robinson and Ellis (2008), state that an effective interaction can give students many chances, this requires an effective integrated content and language learning which can lead students to generate language through spoken discourse.

Moreover, based on the findings of the research showed that the cadets' communicative skills have improved. This is a prove that by conducting content-based language training could enhance the cadets' language skills rather than just conducting general English. The correlation between content and language are meaningful, which permits for achievement of higher proficiency level than in traditional language classrooms (Dale & Tanner, 2012). By these beneficial of Content-Based Language Teaching explain why this approach has gained a worldwide recognition in language classrooms (Lyster & Ballinger, 2011, pp.279-288).

Therefore, by developing a content-based course training, this will help the air traffic controller cadets to enhance their speaking skills in order to pass the IELP test, and the crucial point is they will be able to communicate naturally at work and able to have an effective communication.

3. The Effects of Self-Assessment on Cadets Speaking Skills

There are no effects of self-assessment on cadets speaking skills which showed by Sig score = 0.423 > 0.05 and $t_{\text{count}} = 0.806$ then H_0 is accepted which means there are no significant effects of self-assessment on cadets speaking skills.

In this research, self-assessment shows that there are no effects to enhance cadets speaking skills. The potential explanation for this finding is that the cadets' lack of previous experience in self-assessment and their inability to measure their own skills made self-assessment. It was found that some cadets with low skill were overestimated themselves while the advanced cadets were underestimated themselves. These findings are in line with Mort and Hansen (2010, p.78) research. Their research findings on the first-year pharmacy student. The students' difficulties to perform an accurate self-assessment of counseling skills with the largest percentage of students overestimating their performance. Their research found that the pharmacy students in the lower quartiles tended to overestimate themselves, while those in the upper quartile underestimated their skills. Spiller (2012, p.4) also proposes that self-assessment has a risk of being perceived as a subjective grade and being unreliable and even the learners feel incompetent to undertake self-assessment.

As other skill, cadets were in need to practice self-assessment under the teacher's supervision to become proficient and comfortable enough to integrate well it into their own learning process. The researcher observed that when cadets were asked to assess their own skills in each part, most of them did not know how to assess. Because the researcher did not assist the cadets all the time, this might lead many of them not to take self-assessment seriously. Spiller (2012, p.4) also proposes some disadvantages of self-assessment. The first one is that the increasing teachers' workload which means the needs to brief learners on the process as well as guidance on promoting self-assessment must be done which cannot be done by the researcher because of the implementation by online, so the interaction was minimal.

Therefore, to gain a successful self-assessment the researcher or the teacher must promote the self-assessment in advanced and frequently conduct it whether as alternative assessment or even as formative assessment. This also in line with Mort and Hansen (2010, p.78) research, they state that teachers or in this case the researchers should provide students with frequent self-assessment opportunities along with feedback on skill development and self-assessment accuracy.

Conclusions

In conclusion, researcher briefly elaborates the findings of the research which has been conducted. Based on the results of the analysis and discussion in chapter IV about “The Effects of Content-Based Language Learning and Self-Assessment on Cadets Speaking Skills”, it can be concluded as follows: There are significant effects of content-based language training and self-assessment on cadets speaking skills. These have been proved by Sig score = 0.000 less than 0.05 and $F_{count} = 46.781$. from the table 4.6. shows that variable content-based language training and self-assessment simultaneously gives 62.1% contribution on variable cadets speaking skills. There are significant effects of content-based language training on cadets speaking skills. These have been proved by Sig score = 0.000 less than 0.05 and $t_{count} = 7.226$. From the previous calculation shows that the contribution of content-based language training on cadets speaking skills is 57.85%. There are no effects of self-assessment on cadets speaking skills. These have been proved by Sig score = 0.423 more than 0.05 and $t_{count} = 0.806$. From the previous calculation shows that the contribution of self-assessment on cadets speaking skills is only 4.30%.

The content-based language training has been proved that it will double the value of required language learning time by pairing language lessons with important safety content. The authenticity must be also in consideration regarding the content learning. The various forms of the content, either audios, videos, pictures, or newspapers, must be made for real communication purposes. Further, the teaching materials should engage students participating in the classroom. The most important is to encourage the students to speak as much as possible in content-based language training classroom activities.

For the self-assessment implementation, higher-education teachers or instructors should not expect students to demonstrate expert assessment skills without support. In other words, it is unwise to assume that the students can measure or assess their own knowledge or performance, particularly if they still lack the experience in carrying out the assessment process. Without the teachers or instructor’s assistance, self-assessment does not improve student’s achievement or thinking skills. It is suggested that students must not be afraid to speak in English. Despite the students know their level of English ability no matter low or advanced their skills. They can hand in hand to seek assistance from the advanced peers or to the teachers. The students at advanced levels can be paired with those at low levels. In this way, the high proficiency group can scaffold the low to improve their English speaking while the low proficiency group can learn from the high.

By doing a self-assessment, students are asked to be more objective in their own work. They must honestly do the assessment, and if there is something unclear from the statements, they should not hesitate to ask for any assistance. The content-based language training and self-assessment are interesting combination approach. Although the researcher has tried to do the best in conducting the research, because of the corona pandemic, the implementation of the research must be done by online which made unnecessary constraints happened such as the bad connection, the limited interaction between the cadets and the researcher, and all mechanical things which happened during the research.

The result of this research is not perfect; therefore, the researcher hopes that the other researchers could help to maximize the positive results and eliminate the weaknesses which were found in this research. Therefore, the research on content-based language training and self-assessment or in general teaching-learning English for foreign language learners particularly in English for aviation must be updated continuously to get better and relevant methods, technique, and model in order to support and strengthen the cadets to be ready to enter the aviation industry.

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