

# Language Attitudes of Aeronautical Students Towards English for Aviation: Implications for the Design of an English for Aviation Course

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**Abstract**— This study determined the language attitudes and motivation of the freshmen and graduating Bachelor of Science in Air Transportation students of PATTS College of Aeronautics towards Aviation English to obtain implications for effective Aviation English teaching. A survey questionnaire, which was pilot-tested, was administered to the student-respondents for the S.Y. 2022-2023. It was found that the respondents have a highly positive attitude towards Aviation English. As Togor and Tegi (2017) point out, having an affirmative attitude toward language makes learners more interested in language acquisition. The study's findings could provide a basis for a design of a possible offering of an Aviation English course to aspiring air transportation professionals.

**Keywords**— Language attitudes, air transportation, Aviation English, aeronautical students, language motivation.

## I. INTRODUCTION

Students are the primary stakeholders of an educational institution. Along with this, is to provide them with the knowledge and skills to prepare them for their future profession. One way to determine if the course they are taking is helpful is to find out their language attitude towards it. Togor and Tegi (2017) point out that having an affirmative attitude toward language makes learners more interested in language acquisition. Ruiz-Jimenez et al. (2022) also affirmed that when students have positive attitudes toward learning, they will have an improved perception of learning, resulting in better academic performance.

Gardner and Lambert (1959) were also the first to show the connection between language attitude and motivation. Accordingly, the Attitude Motivation Test Battery (AMTB), which consists of five salient elements; language anxiety, motivation, learning situation, integrativeness, and instrumentality determines the important relationship between one's attitude towards "something" and their motivation to accomplish that "something". Motivation is one's interest in learning and included in it is learning intensity in language learning and the attitude towards it. Hence, one way to show the connection between attitude and motivation is by measuring motivation through language learners' language. Togor and Tegi (2017) mention that doing this will provide insights into how effective the measures implemented at school. The advantages and disadvantages of these rules can also be obtained after getting the language attitude.

Aviation English is an important component in achieving global competitiveness by aspiring aviation professionals;

ergo, this variety of English should be taught in any aviation institution. However, it is also equally important that students of the program are motivated to learn this variety with a positive attitude.

Emery (2015) forecasts growth in the aviation industry that has attracted students to obtain a degree in flight schools and get training as Air Traffic Control (ATC) officers and pilots. In the demonstration and performance of tasks in the simulation and actual training among flight and air traffic controllers, the indispensability in the utilization of the English language as a tool in communication is a prevalent norm despite the reality that a significant number of learners are secondary speakers of the English language. He said that although the International Civil Aviation Organization (ICAO) Language Proficiency Requirements (LPRs) mandated the strict use of English and language proficiency in the aviation industry, those who are undergoing flight and ATC training are not fluent enough to handle the professional language use as ICAO LPR implements. He then suggests and recommends having a Common European Framework of Reference for entry-level English-medium aviation training.

The proponent of this study contends that for the students to be prepared for the demands of their profession in the aviation industry, they need to have a customized English course, that is Aviation English, that uses the standard aviation language, communication patterns, and communication situations where they can use the aviation jargons they learned in grammatically and syntactically accurate sentences.

PATTS College of Aeronautics is a premiere aviation school in the Philippines. Its primary mission is to provide quality Aeronautics Engineering education ([www.patts.edu.ph](http://www.patts.edu.ph)). Among the English subjects, it offers Purposive English to the first-year students, which teaches them to communicate responsibly and effectively in a multicultural and professional environment. The students can use their communicative competence in various fields in aviation including in their future careers as it teaches them oral, written, audio-visual, and web-based outputs.

It is indubitable that the course Purposive English is vital in the improvement of the higher-order thinking skills of the learners as they provide elucidation to work-related scenarios and contextualized problems. Hence, the sufficient application of English language communication is expedient among aviation professionals. It has, for example, speech clarity and

communication activities. The only thing lacking is phonology in the aviation industry. Meanwhile, the graduating students take the Speech Laboratory (SPLB). This is a 16-hour course that provides students with practical English skills for communicating with other people in the workplace, businesses, schools, and other institutions, where effective and appropriate professional interaction in English is required. This subject enhances and evaluates reading and speaking skills. Students in SPLB are helpful to the graduating students since they will be taught to identify, formulate, and solve air transportation problems. However, the 16-hour program is too short to acquire mastery of the language of the skies.

According to Emery (2015), airline safety can be achieved through accurate communication using Aviation English. He even relates some aviation accidents that could have been prevented with clear communication. As an illustration of this unfortunate incident involving two passenger aircraft, a Boeing 747 figured in a collision at an airport on the island of Tenerife, Spain. This accident unfolded due to a miscommunication using a non-standard, aviation English medium. Moreover, a similar situation occurred in 1998 when Saudi Arabian Airlines Flight 763 and Kazakhstan Airlines Flight 1907 collided causing the death of 349 people.

The English proficiencies in oral and comprehension aspects are the competencies that they need to acquire to qualify for ICAO's Aviation English Language Test Services (AELTS) to meet the aviation Language Proficiency

Requirements. Despite the move to promote Aviation English, communication problems still persist in the aviation industry.

Emery (2015) points out that communication problems including pronunciation, stress, rhythm, and intonation can affect understanding among aviation workers leading to miscommunication. Vocabulary range and accuracy may also limit the work-related expression of ideas. He also observed that when speaking complications occur, speakers or work on board a plane cannot express their ideas fluently. They may also have difficulty handling unexpected events and may have slower comprehension and require more clarification to achieve understanding.

For now, PATTS College of Aeronautics does not offer Aviation English. However, it offers the Purposive English and Speech Laboratory (SPLB) course for the technical students. Purposive English is a general English proficiency course that does not train the students in handling international flights such as the exchange of tower to tower communication before takeoff or landing. On the other hand, SPLB can provide limited communications training in the aviation industry. Both of these subjects may also not prepare them for ICAO's Aviation English Language Test Services (AELTS). For these reasons, this study determined the language attitudes and motivation of first-year and fourth-year technical students toward Aviation English. The implications to be obtained in this study is helpful in designing an effective Aviation English course that addresses the needs of the aspiring aviation professionals of PATTS.

#### *Language Attitudes*

Gardner's socio-educational model that deals with attitudes and their effect of learning motivation started in 1960 and the model was presented in 1979. More revisions were done in 1985 and 2001. Gardner also developed the aptitudes fundamental model of language learning which proposes that ability and motivation differentiate language learning. Meaning, having a higher learning attitude leads to greater learning success. Less intelligent learners may not be able to learn the language that easily. Moreover, motivated students will learn a language more easily because they will push themselves harder to learn and enjoy learning more. They tend to try to achieve their learning goals and can appreciate learning materials. Nonetheless, ability and motivation are related to both formal and informal language learning. Formal context language learning means learning in the classroom. Meanwhile, informal learning experiences occur while listening to the radio, watching movies and conversing on the streets. In both contexts, motivation is a factor in language acquisition. The model also shows the effect of language setting and culture on language learning (Taie and Afshari, 2015).

There are four variables in Gardner's socio-educational which influence language acquisition. These include four interrelated namely: variables namely: social milieu, individual differences, second language acquisition contexts, and outcomes. The first variable is the social milieu which revolves around the cultural beliefs of a person. It can also refer to the environment that both affect the affective and cognitive aspects of language learners. Individual differences in the second variable and included herein is the intelligence which shows the rate of learning a language; language aptitude which shows oral and written cognitive abilities; motivation which shows the interest of learning; and situational anxiety which shows the factors that prevent the learner from learning.

Learning acquisition contexts shows where language learning occurs, whether it is formally (classroom) or informally (streets, radio, Internet) done. The fourth variable pertains to language learning outcomes that involve language skills as manifested in vocabulary, grammar, fluency, and pronunciation. Part of this is the non-linguistic skills that may refer to individual attitudes of learners regarding the beliefs and culture of the language community where the target language is spoken.

Gardner (1985) later introduced integrative motive within individual differences as a new variable that pertains to attitudes toward the learning situation and integrativeness. Attitudes in language situations can be associated with school set-up, textbook reactions, and teacher and language evaluation. In 1959, Gardner and Lambert developed the Attitude Motivation Test Battery (AMTB) as a means of measuring the aspects that come with the socio-educational model of second language acquisition. Attitudes refers to the affective reactions of the learning with factors such as the classroom, learning materials or the absence of it, the curriculum, or the teachers. Motivation in learning can be assessed through language attitudes. The five constructs of AMTB are learning situation, integrativeness, motivation, language anxiety, and instrumentality. However, in this study,

teaching technique is added as it views that this could also affect language attitude and acquisition.

Gardner (1985) believes that the language set-up can affect language motivation. This means that the teacher, the class atmosphere, the course content, materials and facilities may have a direct relationship to learning motivation. Getie (2018) further explained that language attitudes may be a factor that can drive the students to learn or de-motivate them in learning English as a Foreign Language (EFL). EFL, according to him, can be associated with educational, social, learner personality factors or any other factors that affect learning. He tried to find out the language attitudes of EFL students among grade 10 students at Debremarkos Comprehensive Secondary School in Debre Markos town, Ethiopia and discovered that they have a positive attitude towards it. Among those that affect the learners positively are social factors that involve English native speakers, peer groups, and learners' parents. On the other hand, those that affect the students negatively are the educational context factors like English language teachers and the classroom. This means that a physical learning environment like classrooms and seat arrangements negatively affects the students' attitude. However, the grade 10 learners showed a positive attitude towards grade 10 English textbooks. Getie (2018) explained that affective filters should be reduced and further suggested that the physical environments of learners must be improved to increase the positive language attitude of EFL learners.

Gardner and Lambert (1972) posit that people learn a language faster if they want to get to know more about the speakers of the language they want to learn. For this reason, they introduced the integrativeness concept. Integrativeness means that the learners appreciate the culture of the language community and they can relate to the lifestyle of the native speakers (Gardner, 1985; Gardner and MacIntyre, 1991). An example of integrativeness is when Asians are interested in how people live and try to imitate the way they speak and try to live as they do through the way they dress up or act. Kwok and Carson (2018) found out that the 84 beginner learners of Japanese learning the language in a university language center evening program and found that only integrativeness motivates them in learning.

Gardner's (1985) expounded that integrativeness intensifies learning because the learners strive to include themselves in the language situation. If they can relate to the people, they can also relate to the language they speak including their values and cultural issues. While observing the Canadian English speakers learning French, he found out that integrativeness is measured by Integrative Orientation, Attitude towards French Canadians, and Interest in Foreign Languages.

Meanwhile, Al-Daher and Al-Abed Al-Haq (2020) explained the findings of Gardner in 1985. He tried to look at the integrative motivation of the ESL Saudi students enrolled in the Intensive English Program (IEP) at the University of Manitoba in Canada. They posit that living in Canada in the normative structure where the learners are exposed to the culture, people (Canadians), and language can enhance integrative motivation and language acquisition. Seventeen

students were part of this study who showed favorable attitudes towards Canadians and Canadian culture. And because of their positive attitude towards the language community, they also showed not just integrative but also instrumental motivation to learn the target language. Furthermore, language attitudes show how the learners react to the language they are learning and how they evaluate it (Dragojevic, 2017). Their attitude may draw positive and negative attitude assessments but show the reality of how the language is being taught. Describing a language as being beautiful is an example of language attitude (Dragojevic et al., 2020). Additionally, Togor and Tegi (2017) also drew the connection between language attitude and motivation and affirm that higher motivation leads to learning success. They further explained that language attitude needs to be evaluated to find out what the students consider as efficient and the factors that can be advantageous or disadvantageous towards their learning. Meanwhile, Seven (2020) asserts that motivation gives hope in learning. He even cites that teachers primarily need to encourage the students as they understand new information more easily if they are motivated. In matters of learning a language, he affirms that motivation can significantly help in language acquisition and observes that students use it as a "device" in learning a language.

Language anxiety is the negative emotional feelings that come with learning a language (Gardner and MacIntyre, 1983). Baykara and Aksu Atac (2021) enumerated the different factors that affect language learning. These include the learning situation (classroom setup or cultural differences), language proficiency, cultural differences, teacher-learner harmony, difficulty of the language, exam stress, and students' language attitude. He analyzed the attitudes of Turkish and foreign students' attitudes toward the English language, and their English-speaking anxiety. And found out that Turkish students with negative attitudes toward English are more anxious while foreign students with more positive attitudes toward English are less anxious. He also found a significant relationship between the attitudes of students toward English and their English-speaking anxiety. Zheng and Cheng (2018) explain that being a learner in a foreign language classroom naturally forms anxiety. To find out the effects of anxiety in learning a language, they distributed a questionnaire to 921 Chinese university students. They found out that anxiety factors in taking a test is a factor in language achievement. Interestingly, the majority of the students revealed that they are not anxious in their usual university setting but they feel nervous while speaking English in the classroom. They further suggest that students and teachers need to understand language anxiety in classrooms to improve language teaching and practice.

Gardner and MacIntyre (1983) defined instrumentality as the practical use of the language with instrumental (external) or integrative (internal) reasons for learning a language. Speaking one's mother tongue can express cultural identity while speaking other languages may help one to communicate with others or establish relationships with them. Instrumental reasons for Gardner (2001) means that a person can use the language to get a job, can be instrumental in one's future

career, or can be a means to sound more educated. Thus, instrumental motivation shows the benefits of the language. In the study of Marrone (2018), the instrumentality of English among 171 Greek and Italian teenagers, aged 16 and 17 were revealed. The respondents consider that studying English is necessary for international travel when they get a job in the future. With this result, it was suggested that more stimulating lessons must be given to students, classrooms need to be improved and extra-curricular activities must be adapted to the learning culture.

#### *Aviation English*

In 1951, ICAO chose the English language as the official language of aviation. On the other hand, the United Nations (UN) agency is responsible for air navigation in areas (Borowska, 2018). Rahmati & Izadpanah (2021) mentioned in their study ICAO by International requires that air traffic controllers should have level 4. ICAO also tests the controllers for English Language Proficiency (IELP) every three or six years to qualify for controller positions.

Rahmati and Izadpanah (2021) said that this strict requirement among air traffic controllers is done because they must not make mistakes when communicating with pilots and other air transport in this way, there will be no mishaps or airplane collisions. They need to be competent in English to meet international aviation standards. Among the difficulties that they observed is the listening skills especially among the non-native English speakers. There are times when they do not respond promptly to the orders of the pilot due to poor listening comprehension that which be attributed to their low score on the IELP test. Among those that affect the air traffic controller's IELP test are aviation knowledge and listening comprehension.

Despite the strict requirements in English as the language of aviation, Rahmati and Izadpanah (2021) observed that there are still communication problems among and between pilots and air transportation officers that lead to accidents. Thus, even the most experienced air transportation officers and pilots have difficulty prevailing the challenge of communication during international operation leading to accidents. Thus, they suggest further improvement in Aviation English training.

To Trippe (2018), Aviation English is the lingua franca for pilots and air traffic controllers. ICAO required aviation professionals to gain expertise in Aviation English proficiency. As a result, Aviation English programs were developed and tests were administered to ensure language proficiency. In Aviation English, there are standard phraseology and codes to be followed and there is a limited use of plain English language. Non-native speakers use colloquial English. Hence, ICAO further required international pilots and controllers to have conversational English proficiency. In addition, he examined Aviation English the differences in listening performance among pilot and non-pilot native English speakers and non-native English speakers. As expected, pilots who are non-native English speakers scored lower in conversational English but scored in higher Aviation English than native English speakers. With this result, it was

concluded that if an air transportation officer is good at Conversational English this will not mean that he will be good at Aviation English. He further found out that Aviation English language training should focus on Aviation English and not on Conversational English because of the several differences between Aviation English and Conversational English like the phraseology, vocabulary as dictated by interactional rules, finite grammar, and phonology which, will save time and money. This will save money in training and reduce miscommunication and confusion during the flight and more importantly, this will save lives. Trippe and Baese-Berk (2019) further presented the difference between Aviation English and standard American English referred to here as the native English. They studied prosody, meaning, the stress intonation between the two languages and found a difference in pitch range, articulation rate, uniform vowel intervals, and variable consonant intervals. These prosodic differences have led to miscommunications. For example, Clark (2017) cites the miscommunications between UK controllers and the non - UK speakers. He elaborated that miscommunications occur in almost all aspects of the flight meaning, it can happen mid-air, during climb, cruise, and circuit patterns. Specifically, he said that flight instructions are not followed and there can be infringement of airspace because of different English accents that were perceived differently. He said there were reports of such a problem in Bangkok, Paris - CDG, Paris - Orly, Toulouse Blagnac, Delhi, Cairo, and Barcelona.

Aviation English (AE) is a distinct register of English and does not include dialogues. Words are abbreviated and come with a required code and are full of special terms using numbers. There are also descriptors to transfer important information in summary form. Air transport controllers use Radiotelephony (RTF) to communicate with pilots and other relevant air transportation officers.

ICAO's differentiated the Aviation English phraseology and "plain English language" to ensure the safety of flights and the life of travelers (ICAO, 2018).

#### *Synthesis*

A number of researchers found out that the language attitudes of various learners could become the bases in evaluating language courses. The students are not only the primary stakeholders but they are also the principal sources of valuable feedback regarding the courses being implemented in schools. Since 1979, Gardner has been investigating language attitudes which he said could affect language acquisition. Gardner and Lambert (1959), developed the Attitude Motivation Test Battery (AMTB) can show the effectiveness. In order to obtain the language attitudes of the respondents, the researcher designed her own-made Likert scale questionnaire. Several questions pertaining to the respondents' language attitudes were given for which they answered strongly "Strongly Agree, Agree, Strongly Disagree, and Disagree." The questionnaire bears a statement seeking student participation in the study and the purpose of which was already stated so they understand that their collective participation will help meet the objectives of the study. The

questionnaire does not also ask for names. It only has course and year levels.

The study sought to find out the student’s attitude regarding Aviation English with only 22 items of four-point Likert scale questions based on Baker’s (1992) Language Attitude. The data were interpreted as a whole per year level. The student’s individual responses were tabulated for analysis. The

The data will be kept in multiple copies saved through Google Drive, desktop, and saved into PDF to ensure that they will be secured. The Languages Department of PATTS College of Aeronautics has a copy of the study because they require regular updates on the developments of materials, the curriculum, and the teaching methodology. Learning situation, integrativeness, motivation, language anxiety, and instrumentality are AMTB’s four constructs.

Rahmati and Izadpanah (2021) mentioned in their study that the English language ICAO imposed that English be used in the skies while the United Nations oversee the navigation areas. The air transportation officers strive to reach ICAO’s level 4 proficiency rating as this is a major work requirement.

### III. METHODOLOGY

#### A. Research Design

The descriptive method was used in this study to determine the perception and language attitudes of the Engineering and Technological programs of PATTS College of Aeronautics enrolled for the SY 2022-2023. The Cochran’s Formula was used to obtain the appropriate number of respondents while the Likert Scale was used to measure respondents’ attitudes by asking the extent to which they agree or disagree with a particular question or statement.

The significant difference was analyzed with a t-test while the hypothesis was used with Kruskal Wallis.

#### B. Respondents

The respondents of this study were the technical students of PATTS College of Aeronautics coming from the Engineering and Technological programs currently enrolled at PATTS College of Aeronautics for SY 2022-2023 involving, 4,386 Engineering and Technological students currently enrolled at PATTS College of Aeronautics SY 2022-2023. These technical courses were divided into year levels. The BS Aeronautical Engineering first year included 356 students, the second-year, 198; the third-year, 191; and the fourth-year students, 259, for a total of 996. The BS Air Transportation first-year students included 191; the second-year, 261; the third-year, 238; and the fourth-year students, 354, for a total of 1,044. The Aircraft Maintenance Technology, first-year students included 355; the second-year, 591; the third-year and fourth-year students, 500, for a total of 1,947. The BS Avionics Technology first-year students included 54; the second-year, 54; the third-year, 86, and the fourth-year students, 101 for a total of 335. Lastly, the BS Industrial Engineering first-year students included 32; the second-year, 32; the third-year, 18, and the fourth-year students, 10, for a total of 61 students. These respondents were included because they were all enrolled in a pilot course.

#### C. Research Instrument

In order to obtain the language attitudes of the respondents, the researcher designed her own-made Likert scale questionnaire. Several questions pertaining to the respondents’ language attitudes were given for which they answered strongly “Strongly Agree, Agree, Strongly Disagree, and Disagree.” The questionnaire bears a statement seeking student participation in the study and the purpose of which was already stated so they understand that their collective participation will help meet the objectives of the study. The questionnaire does not also ask for names. It only has course and year levels.

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### IV. RESULTS AND DISCUSSION

The results and findings of the study and their interpretations according to the order in which they were presented in the Statement of the Problem.

The ranges and interpretations are the following:

- 4.99 - 4.00 Highly Positive
- 3.99 - 3.00 Positive
- 2.99 - 2.00 Moderately Positive
- 1.99 - 1.00 Not Positive (Negative)

TABLE 1. Language Attitudes of the BS Aeronautical Engineering Students

Year Level	$\bar{x}$	Verbal Interpretation
1 <sup>st</sup> Year	3.62	Positive
2 <sup>nd</sup> Year	3.68	Positive
3 <sup>rd</sup> Year	3.44	Positive
4 <sup>th</sup> Year	3.52	Positive
<b>General Weighted Mean</b>	<b>3.57</b>	<b>Positive</b>

Table 1 shows the language attitudes of the BS Aeronautical Engineering students. It reveals that they have a positive attitude toward Aviation English with a general weighted mean of 3.57, verbally interpreted as positive. The second-year students that obtained a mean of 3.68 had the highest mean and verbally interpreted as positive while the lowest mean at 3.52 and verbally interpreted as positive can be observed among the fourth-year students.

Gardner (1985) posits that attitudes show the affective reactions of the learners that can be affected by the classroom, learning materials or the absence of it, the curriculum, or the teachers. Motivation in learning a language can be assessed through language attitudes. Meanwhile, Getie (2018) further explained that language attitudes may be a factor that can drive students to learn or de-motivate them in learning a language.

Table 2 shows the language attitudes of the BS Air Transportation students. It reveals that they have a positive

attitude towards Aviation English with a general weighted mean of 3.54, verbally interpreted as positive. The first year students that obtained a mean of 3.62 had the highest mean and verbally interpreted as positive while the lowest mean at 3.52 and verbally interpreted as positive can be observed among the fourth year students.

TABLE 2. Language Attitudes of the BS Air Transportation Students

Year Level	$\bar{X}$	Verbal Interpretation
1 <sup>st</sup> Year	3.62	Positive
2 <sup>nd</sup> Year	3.47	Positive
3 <sup>rd</sup> Year	3.55	Positive
4 <sup>th</sup> Year	3.52	Positive
<b>General Weighted Mean</b>	<b>3.54</b>	<b>Positive</b>

Gardner (1985) also posited that having a higher learning attitude leads to greater learning success. Quinto (2017) supports Gardner’s concept of language attitude as he stresses that when a language user is driven, the attitude is favorable and will consider the language useful for a specific purpose like career or personal achievement.

TABLE 3. Language Attitudes of the BS Aircraft Maintenance Technology Students

Year Level	$\bar{X}$	Verbal Interpretation
1 <sup>st</sup> Year	3.59	Positive
2 <sup>nd</sup> Year	3.64	Positive
3 <sup>rd</sup> Year	3.55	Positive
4 <sup>th</sup> Year	3.65	Positive
<b>General Weighted Mean</b>	<b>3.61</b>	<b>Positive</b>

Table 3 shows the language attitudes of the BS Aircraft Maintenance Technology students. It reveals that they have a positive attitude towards Aviation English with a general weighted mean of 3.61, verbally interpreted as positive. The fourth year students that obtained a mean of 3.65 had the highest mean and verbally interpreted as positive while the lowest mean at 3.55 and verbally interpreted as positive can be observed among the third-year students.

Getie (2018) also tried to establish the value of language attitudes in language acquisition. To do this, he analyzed the language attitudes of EFL students among grade 10 secondary students in Ethiopia and discovered that they have a positive attitude towards it. Learners’ positive attitudes are affected by social factors such as English native speakers, peer groups, and learners’ parents. On the other hand, those that affect the students negatively are the educational context factors like English language teachers and the classroom. He concluded that a physical learning environment like classrooms and seat arrangements negatively affects the students’ attitude so he recommended that the physical environments of learners must be improved to increase the positive language attitude of EFL learners.

TABLE 4. Language Attitudes of the BS Avionics Technology Students

Year Level	$\bar{X}$	Verbal Interpretation
1 <sup>st</sup> Year	3.69	Positive
2 <sup>nd</sup> Year	3.67	Positive
3 <sup>rd</sup> Year	3.74	Positive
4 <sup>th</sup> Year	3.54	Positive
<b>General Weighted Mean</b>	<b>3.66</b>	<b>Positive</b>

Table 4 shows the language attitudes of the BS Avionics Technology students. It reveals that they have a positive attitude towards Aviation English with a general weighted mean of 3.66, verbally interpreted as positive. The first-year students that obtained a mean of 3.69 had the highest mean and verbally interpreted as positive while the lowest mean at 3.54 and verbally interpreted as positive can be observed among the fourth-year students.

Ruiz-Jimenez et al. (2022) also affirmed that when students have positive attitudes toward learning, they will have an improved perception of learning that will result in better academic performance.

TABLE 5. Language Attitudes of the BS Industrial Engineering Students

Year Level	$\bar{X}$	Verbal Interpretation
1 <sup>st</sup> Year	0.00	Highly Negative
2 <sup>nd</sup> Year	3.61	Positive
3 <sup>rd</sup> Year	3.69	Positive
4 <sup>th</sup> Year	3.75	Positive
<b>General Weighted Mean</b>	<b>3.01</b>	<b>Positive</b>

Table 5. It reveals that they have a negative attitude towards Aviation English with a general weighted mean of 3.01, verbally interpreted as positive. The fourth year students that obtained a mean of 3.75 had the highest mean and verbally interpreted as positive while the lowest mean at 0.00 and verbally interpreted as highly can be observed among the first year students.

Baykara and Aksu Atac (2021) stress that learning situations affect language attitude and acquisition. These language situations include classroom setup, cultural differences, language proficiency, cultural differences, teacher-learner harmony, difficulty of the language, and exam stress. He analyzed the attitudes of Turkish and foreign students’ attitudes towards English language, and their English speaking anxiety. And found out that Turkish students with negative attitudes towards English are more anxious while foreign students with more positive attitudes towards English are less anxious.

TABLE 6. Comparison of the Students’ Language Attitudes Per Course

Course (I)	Course (J)	Mean Difference (I-J)	Std. Error	p-value	Sig.	Verbal Interpretation
BS in Aeronautical Engineering	BS AT	.06315	.02912	.192	p > 0.05	There is no Significant Difference
	BS AMT	-.09229	.04560	.255	p > 0.05	There is no Significant Difference
	BS AvTech	-.07480	.03420	.185	p > 0.05	There is no Significant Difference
	BS IE	-.21923	.12551	.406	p > 0.05	There is no Significant Difference

Course (I)	Course (J)	Mean Difference (I-J)	Std. Error	p-value	Sig.	Verbal Interpretation
BS in Air Transportation	BS AMT	-.15543*	.04422	.004	$p < 0.05$	There is no Significant Difference
	BS AvTech	-.13795*	.03234	.000	$p < 0.05$	There is a Significant Difference
	BS IE	-.28238	.12502	.159	$p > 0.05$	There is a Significant Difference

when the language attitudes of the BS in Avionics Technology are compared with the language attitudes of BS Industrial Engineering, there is no significant difference because the p-value was greater than .05. Therefore, the null hypothesis is rejected at 5% level of confidence. This means that the language attitudes of the respondents in BS Aircraft Maintenance Technology, BS in Avionics Technology, and BS in Industrial Engineering are the same.

Togor and Tegi (2017) established the connection between language attitude and motivation and considered that higher motivation leads to learning success.

TABLE 7. Comparison of the Students' Language Attitudes Per Year Level

Year Level	$\bar{x}$	Verbal Interpretation
1st Year	3.44	Positive
2nd Year	3.50	Positive
3rd Year	3.53	Positive
4th Year	3.45	Positive
<b>OVERALL MEAN</b>	<b>3.48</b>	<b>Positive</b>

Table 7 shows that the levels of language attitude of the respondents have an overall mean of 3.48 verbally interpreted as "Positive". The first year has a mean of 3.44, verbally interpreted as "Positive" while the second year has the obtained mean of 3.50, "Positive". Meanwhile, the 3rd year has a mean of 3.53 verbally interpreted as "Positive". The fourth year has a mean of 3.45 is and verbally interpreted as "Positive".

Togor and Tegi (2017) explained that language attitude needs to be evaluated to find out what the students consider as efficient and the factors that can be advantageous or disadvantageous to their learning. Dragojevic (2017) emphasized that language attitudes show how the learners react to the language they are learning and how they evaluate it and their attitude may draw positive and negative attitude assessments.

V. CONCLUSION

The following conclusions can be drawn based on the findings:

1. Attitudes per Course

Language attitudes of the BS Aeronautical Engineering, Maintenance Technology, BS Avionics Technology, and BS Industrial Engineering are positive. Hence, they are interested in learning more about Aviation English.

2. Attitudes per Year Level

The language attitudes per level is also positive. Thus, all of the respondents in every year level are interested to have additional knowledge about the language of the skies.

3. Comparison of Attitudes per Course and Year Level?

Overall, the PATTS aeronautics students have a positive attitude towards Aviation English which means that they will be willing to learn.

4. Implications for the Design of an Aviation English Course

Based on the results and findings of the study, the language attitude and motivation of aviation students across

Table 6 shows the comparison of the language attitudes of the respondents when grouped according to their year level. It shows that when the languages attitudes of the BS Aeronautical Engineering are compared with BS Air Transportation, BS Aircraft Maintenance Technology, BS Avionics Technology, and BS Industrial Engineering, there is no significant difference as generally, the p-value obtained was greater than .05. Therefore, the null hypothesis is rejected at 5% level of confidence. This means that the language attitudes of BS Aeronautical Engineering are the same as the other courses.

Meanwhile, when the language attitudes of BS Air Transportation respondents are compared with the language attitudes of the BS in Avionics Technology students with a p-value of .000, it shows that there is a significant difference because .000 is less than 0.05. The same result can be seen when the language attitudes of the BS in Industrial Engineering respondents are compared with that of BS in Avionics Technology, there is no significant difference because the p-value of .159 is less than .05. But when the language attitudes of BS Air Transportation are compared with that of the BS in Aircraft Maintenance

Technology language attitudes, there is no significance because the p-value of .004 is less than .05. This means that the language attitudes of the BS Air Transportation students differ only in BS in Avionics Technology and BS in Industrial Engineering.

And when the languages attitudes of the BS Aircraft Maintenance Technology respondents and the language attitudes of BS in Avionics Technology and BS in Industrial Engineering are compared, there is no significant difference as generally, the p-values obtained were greater than .05. And

year levels have shown a significant increase in interest in studying the language of the skies. Thus, they have to be given more training to enhance their communication skills to become more effective aviation professionals.

## VI. RECOMMENDATIONS

Based on the findings and conclusions, the researcher recommends the following:

### The PATTS Administration

- Include Aviation English in the curriculum as a separate course to prepare the students further for the aviation industry.
- Upgrade the speech laboratory for the practice of the language of the skies with proper prosody.

### The Language Department

- Post posters, tarpaulins, and signages on the FB page of the Language and Research Department regarding the significance of language proficiency in aviation and the language of the skies.
- Strengthen the Communication Society (student-based organization) of PATTS College of Aeronautics in terms of programs, training, and memberships.
- Attend seminars and training about language teaching and learning strategies in Aviation English.

### The English Teachers

- Create more language and communication activities with the inclusion of language of the skies for more practice.
- Play short video clips for the actual conversations between the tower controller and the pilot.
- Benchmark with other aviation schools in the creation of language activities using the language of the skies.

### The PATTS Students

- Participate actively in the communication courses of the institution to further improve their communication skills in general.
- Learn the language of the skies seriously through Aviation English.
- Strive to meet the standards of the aviation industry by learning the language of the skies to be qualified in reputable aviation companies.

### Future researchers

Conduct future research on the effectiveness of the Aviation English curriculum to be implemented at PATTS College of Aeronautics.

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