

Anxiety Could be a Good Sign: Understanding Challenges in Developing Engineering Graduates' Technical Oral Presentation Competencies

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ABSTRACT – High levels of anxiety during oral presentation and public speaking, can take two forms: facilitating anxiety, which drives preparation efforts, and debilitating anxiety, which hinders performance. Proficiency in oral communication is recognized as vital for ESL learners in both academic and professional contexts, with extensive research on public speaking and strategies to manage speech-related anxiety. In engineering education, effective communication skills are essential, aligning with industry expectations and the demands of professional engineering work, making oral presentations a fundamental component of assessment and curriculum development. Oral presentations are a significant component of the assessment process in engineering education, with various forms of assessments and varying levels of emphasis on oral communication skills among universities. Limited training in oral presentation skills is provided to engineering students, leading to challenges in assessment and feedback, and time constraints often favor written assessments. Peer assessment can enhance students' critical skills and reduce speaking anxiety, but ensuring the reliability of peer assessments remains a concern in engineering education. Anxiety associated with oral presentations is a common challenge among students, and it can be categorized into different types, including state anxiety, trait anxiety, and situation-specific anxiety, which can impact performance in educational and professional settings. Educators can assist students in developing an awareness of employing communication techniques to enhance their competence and self-assurance when delivering technical oral presentations. A framework known as the Oral Presentation-Multimodal Competence (OP-MM Competence) Framework is introduced, providing a structured approach for understanding and evaluating the essential components contributing to successful oral presentations.

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INTRODUCTION

Public speaking or oral presentations often induce high levels of anxiety among students, including those in engineering programs (Al-Issa & Al-Qubtan, 2010; Bankowski, 2010; Ho et al., 2023; Kovač & Sirković, 2012; Radzuan & Kaur, 2011; Riaz & Riaz, 2023; Rojo-Laurilla, 2007; Tong, 2009; Zulkflee et al., 2023). This anxiety can manifest in two distinct forms. The first is facilitating anxiety, which motivates students to invest more effort (MacIntyre, 2002) and engage in comprehensive preparation to alleviate their anxiety when delivering oral presentations. The second is debilitating anxiety, the more commonly encountered type, which has detrimental effects on one's ability to perform well in oral presentations (MacIntyre & Gardner, 1989).

Identifying students' issues in becoming effective speakers and presenters, including their anxiety levels and the factors contributing to it, can aid both engineering faculties and the language and communication departments in enhancing their oral communication courses. This heightened awareness, coupled with collaborative efforts across academic disciplines and departments, can foster intra faculties academic cooperation and could lead to more effective instructional strategies, ultimately producing highly competitive engineers equipped for the demanding global job market of today.

In Malaysia, numerous research studies have been undertaken to explore the expectations of Malaysian employers concerning Malaysian graduates, and these investigations consistently reveal a strong emphasis on the significance of oral communication skills (Ab Rahman, et.al, 2019; Ayiesah Ramli et al., 2010; Azami Zaharim, et al., 2009; Masduki & Zakaria, 2020; Mohd Yusof Husain et al., 2010; Suzana Ab. Rahim & Farina Tazijan, 2011; Wahi, 2014; Yuzainee Md Yusoff et al., 2011; Zainuddin et al, 2019). For instance, a decade ago, a research investigation delving into employability skills within Malaysia's engineering sector was conducted by Yuzainee Md Yusoff and his colleagues in (2011). This study sought to obtain perspectives from employers working in the engineering domain regarding the fundamental qualities outlined in the recently introduced Malaysian Engineering Employability Skills (MEES) framework. Their analysis of 300 questionnaires revealed that employers prioritize communication skills as the most crucial quality when hiring entry-level engineers, closely followed by teamwork skills (Yuzainee Md Yusoff et al., 2011). Specifically, within communication skills, employers highly valued specific abilities such as clear and confident verbal articulation, effective presentation of ideas, and active listening paired with adept questioning. This underscores the paramount importance of

engineering graduates possessing advanced oral communication competence, given its high regard among engineering employers.

In a similar vein, Mohd Yusof Husain et al. (2010), who conducted a study involving employers in the engineering sector, identified several employability skills perceived as indispensable for engineering graduates. While their findings did not explicitly highlight the significance of oral communication skills, it is noteworthy that effective interpersonal skills, a key emphasis in their research, inherently require a foundation of strong communication competence, underlining the overarching importance of oral communication skills in the employability landscape. Employers' emphasis on graduates to possess workplace ready communication skills continue to be prevalent trend as recent studies reported the similar notion as the previous decade where employers' expectation of graduates' mastery of communication skills remain critical and most demanded abilities (Bhattacharyya & NtowOfei, 2018; Kenayathulla et al., 2019; Krishnan et al., 2019; Ramamurthy et al., 2021; Wu et al., 2023; Zainuddin et al., 2019).

IMPORTANCE OF ORAL COMMUNICATION IN ENGINEERING EDUCATION

In a wider context, the proficiency to communicate fluently and effectively in a target language is widely recognized as crucial for English as a second language (ESL) learners, both in their academic pursuits and professional endeavours. Extensive research has been conducted on oral communication within ESL speaking classrooms, with a particular focus on public speaking in fundamental communication courses. These studies delve into various aspects, including teaching methodologies for public speaking (Hartati et al., 2022), strategies to manage speech-related anxiety (Finn et al., 2009; Kostić-Bobanović & Bobanović, 2007; Woodrow, 2006), and the factors contributing to speech anxiety (Elliot & Chong, 2004) among others.

Additionally, some research endeavours have concentrated on the development of oral presentation skills, with a primary emphasis on analysing the specific competencies where ESL speakers must master to meet the demands of the workplace (Ab Rahman, et.al, 2019; Almeda et al., 2021; Masduki & Zakaria 2020; Crosling & Ward, 2002). More recently, there has been a shift in research focus towards assessing the oral performance of ESL speakers in formal settings, such as academic and seminar presentations (Chou, 2011; Morton, 2009) and in job interviews (Amutan Krishnan et al., 2021; Ramalingan et al., 2020; Turiman et al., 2018).

ASSESSING ORAL COMMUNICATION IN ENGINEERING EDUCATION

Possessing effective communication skills has been demonstrated to offer significant advantages to individuals in both academic and professional environments (Barrow et al., 2010; Chan, 2011; Emanuel, 2005). In the engineering field, for instance, there is a universal expectation that all engineering graduates excel in both written and verbal communication. The criteria for being proficient communicators have been clearly outlined in the learning outcomes of engineering education curricula, as stipulated by accrediting bodies such as the Washington Accord, the Accreditation Board of Engineering and Technology (ABET) (2010), and the Malaysian Engineering Accreditation Council (Board of Engineers Malaysia (BEM), 2020). This requirement aligns with the demands of professional engineering work, where a substantial portion of engineers' time is dedicated to written and oral communication (Dannels, 2003; Kassim & Ali, 2009; Mihret Dessie, et al. 2022; Tenopir & King, 2004; Zolkepli Buang et al., 2003). For instance, in their day-to-day responsibilities, practicing engineers must effectively convey ideas and concepts to various audiences through both formal and informal oral presentations (Tenopir & King, 2004; Darling & Dannels, 2003; Crosling & Ward, 2002).

Within engineering education, oral presentations constitute a fundamental component of assessment and evaluation practices, and they will continue to play a crucial role in oral communication within the engineering workplace. Dannels (2002) emphasized that “the teaching and learning of oral presentations are closely tied to the norms, values, and ideologies of the engineering discipline” (p. 265). Moreover, industry expectations underscore the importance of incorporating oral presentations into engineering curricula to produce highly skilled professional engineers who are also adept presenters. These expectations underscore the significance of cultivating students' self-confidence in various communication contexts, particularly in oral presentation settings and its assessment.

Joughin (2007) defined oral assessment as any evaluation method that involves spoken communication. This type of assessment encompasses various key elements such as the primary content type (knowledge), interaction (with the audience), authenticity, structure (organization), examiners (the audience) and the oral nature of the assessment (Joughin, 1998). Joughin and Collom (2003) further classified oral assessments into assessments that could stand alone independently, coexist with other evaluation methods within a course, or even be combined with other forms of assessments like written papers. Additionally, it can be administered to individuals or groups, with assessors ranging from the presenters themselves to their peers, course instructors, or industry experts.

In the development of oral assessments, a crucial connection to the course's learning objectives must be maintained. For example, in Australia, the teaching of skills is deemed as important as the transmission of content, which includes the assessment of oral presentation skills. Assessment tasks should be aligned with learning objectives since students tend to focus on tasks that will be evaluated later (Cooper, 2005).

The primary goal of oral assessment in professional fields is to gauge candidates' grasp of facts, concepts, principles, and procedures underpinning professional practice (Joughin, 1998). When evaluating oral performance in professional courses like business and medicine, typical components assessed encompass content knowledge and oral communication skills, including language fluency in both verbal and non-verbal aspects. Yang (2010) and Zappa-Hollman (2007) both contend that a high level of English proficiency and understanding of discipline-specific systems and regulations

contribute to successful oral performance. Research studies have found that some learners encounter challenges in English for Specific Purposes (ESP) courses due to their low English proficiency (Aiguo, 2007; Tsao, 2011).

It is essential to adjust the curriculum and syllabus to address the deficiencies in oral communication skills, particularly in oral presentation skills, among undergraduate students. This adjustment is crucial because higher education institutions bear a substantial responsibility for nurturing graduates who excel in oral communication (Zainuddin et al. 2019). Therefore, it becomes imperative to integrate oral communication skills into a specific course such as an ESP with the learning outcomes of courses focusing on professional skills development (Winberg et al, 2020), allowing for ample opportunities and provisions for practicing oral communication. This includes incorporating specific course content related to oral presentations and embedding relevant activities within both technical and non-technical courses within the comprehensive engineering curriculum.

THE CHALLENGES OF ASSESSING ORAL COMMUNICATION IN AN ENGINEERING COURSE

Oral presentations have evolved into a crucial component of the assessment process for graduating students, encompassing those in the engineering field. For instance, oral presentations have consistently been included in the evaluation of engineering thesis examinations, even though they represent a relatively minor portion of the assessment (Díaz-Vázquez et al., 2012; Ku & Goh, 2010; Liow, 2008). Ku and Goh (2010), in their analysis of assessment types in final-year engineering research projects across seven Australian universities and three European universities, found that all these institutions incorporated oral presentations as part of the final year engineering research project assessment, often referred to as a capstone project. These oral assessments take various forms, including standard oral presentations, poster presentations, seminar presentations, and public defenses. The weightage assigned to oral assessments varies significantly among universities. Some universities prioritize oral communication skills in their learning outcomes and require students to deliver multiple oral presentations, while others emphasize them to a lesser extent. For instance, at Victoria University, Australia, engineering students are expected to deliver four oral presentations during the 2-semester capstone project course, with two assessments conducted in the middle and two at the end of each semester (Ku & Goh, 2010).

The requirement for team-based or individual capstone projects also influences the format of the oral assessments, with individual projects necessitating individual presentations. Engineering programs typically provide limited training in oral presentation skills to students throughout their academic journey. For example, at the University of Western Australia, students only receive one lecture session on presentation techniques during the entire 2-semester final project engineering course (Ku & Goh, 2010). A similar scenario is observed at John Cook University in Australia, where final-year engineering students receive just one hour of formal instruction on presentation skills early in the first semester (Liow, 2008). The situation becomes more challenging when oral presentation activities are treated as isolated events, potentially resulting in minimal feedback for students on their performance during the oral presentation assessment (Liow, 2008).

Oral presentations represent a demanding form of assessment that necessitates significant human resources, places additional burden on instructors for data management, and consumes considerable time (Liow, 2008). Campbell et al. (2001) also noted that time constraints contribute to the dislike of oral assessments. Furthermore, they suggested that most courses tend to prioritize written assessments over oral assessments, leading to course instructors receiving formal training in written assessment rather than oral assessment. Liow (2008) proposed the development of a more reliable and valid set of criteria for assessing oral presentations in engineering courses, based on a more robust oral assessment framework. Typically, oral presentation assessment in classrooms employs a general marking scheme with broad criteria. In engineering education, similar criteria are applied to oral assessments, whether for oral presentations, seminar presentations, or poster presentations, which include content and organization, delivery, and the use of visual aids.

ORAL PRESENTATION: MULTIMODAL COMPETENCE FRAMEWORK

We put forth a framework for effective oral presentations namely Oral Presentation-Multimodal Competence (OP-MM Competence) (see Figure 1), which was proposed by Radzuan et al. (2023). This comprehensive framework provides a structured approach to understanding and evaluating the key variables that contribute to successful oral presentations. This framework draws upon elements from De Grez's (2009) and Morell's (2018) work on oral presentation competency and multimodal competency, respectively.

Within this framework, "Knowledge" pertains to the presentation content, specifically focusing on aspects such as context and content quality, including correctness, completeness, and conciseness. In the field of engineering for instance, the students are required to present their final year projects. The content of the presentation reflects the background of the project, the methodology, results or findings and the conclusion. From the study conducted by Grieve et al (2021) with University of West of England's (UWE) undergraduate and postgraduate students, it was found that lack of knowledge in the topic contributed to the anxious feeling experienced by the students in public speaking including oral presentations. This finding illustrates the students' awareness of the importance of mastering the topic and the fact that it is one of the assessment criteria in oral presentation assessments.

"Attitude" which is another key variable in the framework, encompasses professionalism-related elements, including appearance and time management. The other key variable is "Skills". It comprises two important components: "Linguistics" or "Verbal" skills, which involve language competence such as accuracy and fluency essential for effectively conveying presentation content. Research has shown that deficiency in language skills is found to positively

correlate with anxiety experienced by EFL learners (Hadi, Izzah & Masae, 2020) and that may affect the oral performance of the students.



Figure 1. Oral Presentation-Multimodal Competence (OP-MM Competence) Framework (Radzuan et al., 2023).

The second component of "Skills" involves "Non-Linguistics" or "Non-Verbal" skills, which encompasses aspects of multimodal competence. This includes considerations such as eye contact, voice projection, the effective use of visual aids, gestures, posture, and interaction with the audience—all of which collectively enhance the effectiveness of oral presentations (Idrus, 2016).

Oral presentation assessment is normally conducted in a classroom environment and its effectiveness is assessed by the class instructors. However, peer assessment is now becoming more popular as it benefits students as well as increases students' engagement in the classroom.

PEER ASSESSMENT EXECISES IN ORAL PRESENTATIONS

Peer evaluation constitutes a valuable component of the learning process, delivering substantial advantages to both students and instructors. Kovač and Sirković (2012) emphasized that engineering students generally exhibit favorable attitudes towards peer assessment in the evaluation of oral presentations. Involving students in peer review activities, especially when critiquing their peers' presentations, enhances critical skills such as offering and receiving feedback (Benraghda et al., 2022; Marin-Garcia et al., 2008). Consequently, students are reported to experience reduced levels of speaking anxiety and an enhancement in self-confidence (Kovač & Sirković, 2012).

Peer assessment within higher education often proves to be a reliable method for grading their peers' oral presentations (Garcia-Ros, 2011; Marin-Garcia et al., 2008). Results indicate that the grades assigned by students closely align with those given by their instructors. However, in research studies conducted by Liow (2008) and Margin and Helmore (2001), engineering students tended to assign higher scores to their colleagues' presentations, leading to lower reliability in peer assessment. Liow suggested the need to improve the reliability of peer assessments for oral presentations. Marin-Garcia et al. (2008) recommended involving engineering students in the development of oral assessment criteria and providing formal training to familiarize them with these criteria. Additionally, students tasked with assessing their peers' oral presentations should have prior experience with oral presentation assessments. Margin and Helmore (2001) proposed that combining teacher-assigned marks with averaged marks derived from multiple peer assessments can enhance the reliability of oral assessment.

Despite the limited attention given to oral presentation training and evaluation for engineering students, oral presentations have consistently served as one of the means to assess students' proficiency in the target language. They also represent a crucial professional competence, not only in engineering but also in other professional domains such as medicine, management, and education. Furthermore, individuals possessing effective presentation skills often enjoy enhanced prospects for career advancement.

WHAT IS ORAL PRESENTATION ANXIETY

Considering the growing significance of oral presentations in the realm of professional skills, graduates are increasingly anticipated to possess proficient oral presentation abilities. Nevertheless, this expectation is not consistently met, as one of the major challenges faced by students is the anxiety associated with delivering oral presentations. Research on anxiety began in the early twentieth century, but the limited progress was hindered by the absence of adequate measurement tools and ethical concerns related to inducing anxiety in controlled laboratory environments (Spielberger & Sydeman, 1994). It was not until after 1950 that substantial research on anxiety emerged, primarily driven by two factors:

a theoretical understanding of anxiety as a concept and the development of various scales for measuring this construct. Consequently, there has been a notable increase in anxiety-related studies published in psychological literature, with the 1960s reporting a volume eight times higher than that of three decades earlier. The growing interest in anxiety research can be attributed to a multitude of experimental and empirical investigations into anxiety.

When it comes to defining anxiety as a construct, several interpretations have been offered. In the early years, Spielberger (1966) characterized anxiety as "a complex reaction or response – a temporary state or condition of the organism that varies in intensity and fluctuates over time" (p. 12). Spielberger et al. (1972) identified anxiety as the most common response to stress. In more recent times, Derakshan and Eysenck (2009) have conceptualized anxiety as "an aversive motivational state that occurs in situations where the perceived threat level to the individual is high" (p. 168). Broadly speaking, anxiety gives rise to negative emotional responses such as unease and self-doubt in circumstances perceived as threatening or perilous. Nonetheless, the experience of anxiety can vary over time in response to the situational stimulus. In general, the existing body of literature categorizes anxiety into three main types: state anxiety, trait anxiety, and situation-specific anxiety.

CLASSIFICATIONS OF ANXIETY

State Anxiety and Trait Anxiety

O'Neil et al. (1969) proposed that state anxiety (referred to as A-State) encompasses "the sensation of apprehension and increased autonomic nervous system activity, which can vary in intensity and change over time" (p. 34). They argued that it is crucial to identify the specific triggers for the experienced anxiety, and the magnitude of the response depends on an individual's past encounters with such stimuli (Spielberger, 1966). However, not all situations that involve stimuli lead to anxiety.

Trait anxiety (referred to as T-State) pertains to "individual differences in predisposition to experience anxiety, indicating varying tendencies among individuals to respond with different levels of A-State in situations perceived as threatening" (O'Neil et al., 1969, p. 343). Individuals with pronounced trait anxiety tend to perceive most situations as threatening or perilous (Spielberger, 1966). Additionally, there is a proclivity for these individuals to exhibit a state anxiety response. According to Spielberger (1966), there is an analogy between state anxiety and trait anxiety in terms of physical concepts of kinetic and potential energy. State anxiety signifies "the reaction occurring in the present moment at a given level of intensity," while trait anxiety indicates "a latent inclination for a particular type of reaction to occur if triggered by suitable (sufficiently stressful) stimuli" (Spielberger, 1966, p. 16).

The State-Trait Anxiety Inventory (STAI), developed by Spielberger, Gorsuch, and Lushene in 1970, is a concise scale designed to measure both state and trait anxiety in research and clinical contexts (Spielberger & Sydeman, 1994). STAI comprises two subscales: the State Anxiety Scale and the Trait Anxiety Scale, each consisting of 20 items that require respondents to indicate their level of agreement or disagreement using a four-point Likert-scale format.

An updated version of STAI in 1983, known as STAI-Y, brought greater clarity to the differentiation between state and trait anxiety. For the State Anxiety Scale, response options range from "1 = not at all" to "4 = very much," where "1 = not at all" represents the lowest degree of state anxiety and "4 = very much" signifies the highest level of state anxiety. Examples of STAI-Y1 items include:

Item 1: *I feel calm.*

Item 15: *I am relaxed.* (Novy, Nelson, Goodwin, & Rowzee, 1993, p. 346).

The Trait Anxiety Scale offers response options from "1 = almost never" to "4 = almost always," with "1 = almost never" denoting the lowest degree of trait anxiety and "4 = almost always" indicating the highest degree of trait anxiety. Examples of items for the Trait Anxiety scale (STAI-Y2) are:

Item 27: *I am calm, cool, and collected.*

Item 38: *I take disappointment so intensely that I can't put them out of my mind.* (Novy et al., 1993, p. 346).

STAI yields scores ranging from 20 to 80, where higher scores signify higher levels of anxiety.

Situation-Specific Anxiety

MacIntyre and Gardner (1994a) observed that situation-specific anxiety refers to the likelihood of experiencing anxiety in particular types of situations, such as during examinations (referred to as test anxiety), when tackling math problems (math anxiety), or when conversing in a second language (language anxiety)". It represents the feeling of unease that arises in response to specific situations or events. One form of situation-specific anxiety relates to second or foreign language learning (Onwuegbuzie & Bailey, 2000). For example, delivering an oral presentation before an audience, which also induces anxiety among speakers, falls under the category of situation-specific anxiety (Baralt & Gurzynski-Weiss, 2011). Specific measurement tools have been developed to assess the degree of anxiety, its dimensions, and the key variables that influence test anxiety. Here are examples of situations and events considered as situation-specific anxiety:

Test Anxiety

Test anxiety qualifies as a situation-specific anxiety when the individual becomes highly self-conscious during an evaluative situation, resulting in an impact on the student's performance (e.g., when being videotaped) (Cassady & Johnson, 2002). Research on anxiety during testing situations commenced in the early 1950s. Sarason et al., (1952) described test anxiety as "a tendency to exhibit personalized task-irrelevant reactions when individuals perceive that their

performance is under evaluation" (p. 410). Anxiety responses under stressful circumstances manifest through physiological indicators such as a rapid heart rate and sweaty palms, as well as self-deprecating thoughts like "I can't pass this test" or "I wonder how the other students are doing" (Sarason, 1961, p. 202). The Test Anxiety Questionnaire, developed by Sarason and Mandler in 1952 (Sarason & Mandler, 1952) includes items aimed at gathering specific information about one's attitudes and experiences in testing situations. Early studies focused on students' cognitive performance and found that test anxiety had a detrimental impact (Sarason, 1963; Sarason, 1961). Anxiety was perceived as "a learned drive" that elicited two different responses. The first was task-irrelevant anxiety, driven by a feeling of incompetence leading to task avoidance and poor performance. The other, task-relevant response, generated less anxiety and encouraged individuals to complete the task, thus improving their performance (Sarason et al., 1972).

Another tool developed to measure test anxiety is the Test Anxiety Inventory (TAI) by Spielberger (1980). This instrument assesses the impact of test anxiety on academic achievement, revealing a negative correlation between test anxiety and academic success. McCarthy and Goffin (2004) proposed that test-taking anxiety comprises two primary components: performance anxiety, which involves fear regarding one's test performance, and behavioral anxiety, representing physiological arousal after completing the test.

Language Anxiety

Language anxiety is defined as "the feeling of tension and unease specifically associated with second language contexts, including speaking, listening, and learning" (MacIntyre & Gardner, 1994b, p. 284). Foreign language (FL) anxiety falls under the category of situation-specific anxiety as it is unique to the FL classroom (Kunt & Tüm, 2010). Numerous studies have explored the effects of anxiety on language learning processes. The Foreign Language Classroom Anxiety Scale (FLCAS), developed by Horwitz et al. (1986), is a widely used instrument to measure FL anxiety and its relationship with language proficiency. It encompasses communication apprehension, test anxiety, and fear of negative evaluation. This instrument has been employed in FL research to examine variables such as age, gender, self-perceived FL proficiency, and self-worth. For instance, Park and Lee (2005) studied the link between FL learners' anxiety, self-confidence, and oral performance among 132 Korean college students in an English conversation class. They found that self-confidence positively correlated with oral performance, while anxiety hindered performance, aligning with Horwitz et al.'s (1986) Foreign Language Anxiety Framework. In another study with ESL engineering students, Benraghda et al (2018) reported that presenting in English language was one of the impediments to giving a good presentation performance.

Facilitating and Debilitating Anxiety

In addition to distinguishing between state, trait, and situation-specific anxiety, researchers have explored another dimension in anxiety studies: the differentiation between facilitating and debilitating anxiety. Alpert and Haber (1960) introduced this distinction by examining the impact of anxiety on academic performance. Facilitating anxiety is considered an asset to performance (MacIntyre & Gardner, 1989) as it motivates learners to combat anxiety with extra effort, ultimately leading to improved achievement. In contrast, debilitating anxiety is perceived as detrimental to performance (Derakshan & Eysenck, 2009). Learners experiencing debilitating anxiety tend to avoid sources of anxiety and task completion, resulting in poor performance.

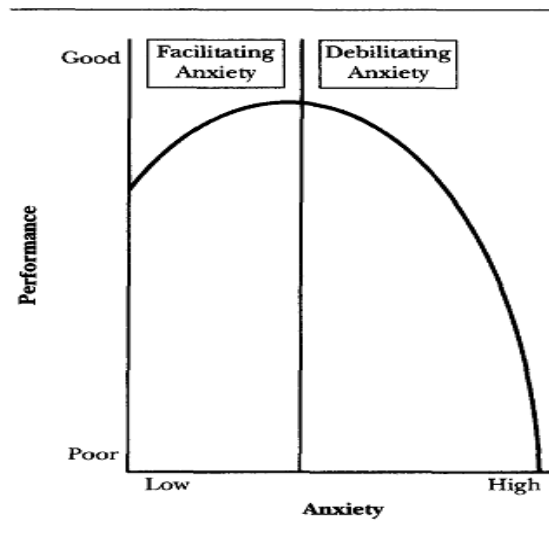


Figure 2. Inverted "U" relation between anxiety and performance (MacIntyre, 1995, p. 92).

Figure 2 (MacIntyre, 1995, p. 92), depicts the curvilinear relationship proposed by MacIntyre (1995) between anxiety and performance. According to MacIntyre, when a relatively simple task is assigned, the anxiety experienced by an individual may have a minimal negative impact on their performance. In such cases, individuals often increase their effort, resulting in improved performance. This form of anxiety is termed facilitating anxiety. However, if the task is highly

complex and requires extensive cognitive processing, anxiety may negatively affect performance. El-Anzi (2005) suggested that while a certain level of anxiety may enhance academic achievement, exceeding that level could yield opposite results.

One study examining debilitating anxiety was conducted by Chapell et al. (2005), which explored the influence of test anxiety on academic performance, specifically Grade Point Average (GPA). The study involved 4000 undergraduates and 1414 graduate students and employed Spielberger's (1980) Test Anxiety Inventory. Findings indicated a stronger relationship between test anxiety and undergraduates' GPA compared to that of graduate students. The study concluded that higher levels of test anxiety were associated with lower GPA scores. Another study administered the Alpert and Haber Achievement Anxiety Test (1960) to identify anxiety types among 41 volunteers from an American public university (Moyer, 2008). Results indicated that most respondents experienced debilitating anxiety, which hindered their performance. Moyer suggested that factors like skills and competitive situations might also significantly contribute to determining anxiety types alongside self-perception questionnaires.

In measuring facilitating and debilitating anxiety, the Achievement Anxiety Test (AAT) was developed by Alpert and Haber in 1960. The questionnaire, designed to assess students' academic performance, consists of two sections distinguishing between facilitating and debilitating anxiety. The Facilitating Anxiety Scale comprises nine items, constructed based on the prototype item "Anxiety helps me do better during examinations and tests." The Debilitating Anxiety Scale includes ten items, developed based on the prototype item "Anxiety interferes with my performance during examinations and tests." The test-retest reliability coefficients over a ten-week period were reported as .83 for the Facilitating Anxiety Scale and .87 for the Debilitating Anxiety Scale. Both scales use a five-point Likert Scale to rate all items.

Sample items from the Facilitating Anxiety Scale include:

2. *I work most effectively under pressure, such as when the task is very important.*

11. *Nervousness during a test helps me perform better.*

14. *In courses where the overall grade depends mainly on one exam, I tend to outperform others (Alpert & Haber, 1960, p. 213).*

Sample items from the Debilitating Anxiety Scale include:

1. *Nervousness during an exam or test hinders my performance.*

6. *The more significant the examination, the worse I seem to perform.*

17. *I become so fatigued from worrying about an exam that I almost stop caring about my performance when I begin the test. (Alpert & Haber, 1960, p. 214).*

Alpert and Haber's (1960) study results demonstrated that using specific anxiety scales like the AAT can provide more accurate predictions of academic achievement. MacIntyre and Gardner (1991) argued that the situation-specific approach offers deeper insights into anxiety since respondents are questioned about various aspects of the situation. This approach can yield more meaningful and consistent results in the study of academic oral presentations (MacIntyre & Gardner, 1991).

IMPLICATIONS AND CONCLUSION

To further assist students who have high anxiety levels, instructors may opt for several techniques to help students to become more competent in their TOP delivery. By delivering timely and tailored corrective feedback, instructors can effectively contribute to the development of oral presentation skills in high-anxiety students. This is particularly crucial because these students perceive their learning as more effective when they receive frequent corrections from their instructors (Zhang & Rahimi, 2014).

Instructors may help guide students to be aware of the use of communication strategies to improve their proficiency and self-confidence in their technical oral presentations. Among the strategies are instructors encourage the students to use non verbal cues, 'negotiation for meaning' as in searching for alternatives vocabulary, attempt to think in 'English' strategies as well as instructors' emphasis on fluency-oriented strategies where students are trained to pay attention to rhythm, intonation, pronunciation and speaking clarity to improve listeners' understanding of their utterances (Nakatani, 2006; Su, 2021). Even simple strategies such as promoting students' own anxiety reduction through relaxing and regulating their breathing techniques to make them become calmer are among the affective strategies approach which may be applicable in the classroom (Pertiwi & Hidayanti, 2022). Although it may affect fluency, to some extent, instructors may also expose students to use fillers whenever they struggle searching for the next line of idea expression in oral presentation (Hassan & Normah, 2022). Furthermore, as an initial strategy to enhance the oral presentation competencies of highly anxious and introverted students identified by instructors, encouraging them to engage in online presentations can be a valuable approach. Mishu et al (2023) discovered that online presentations significantly alleviate anxiety and stress among introverted students as online presentations offer them a means to communicate with reduced anxiety compared to addressing the entire class directly.

Furthermore, instructors can consistently serve as motivators, encouraging these students and emphasizing the significance of additional practice as a crucial step in their ongoing journey towards continuous improvement. Experiencing anxiety when delivering verbal presentations is a common experience for many students. While they may possess proficiency in written English, they often lack the confidence to vocalize their thoughts. Through increased exposure to oral presentations, they incrementally conquer their apprehensions and cultivate self-assurance. Nevertheless, certain learners innately grapple with anxiety and may be hesitant to address the entire class directly. For such individuals,

it is beneficial to have opportunities to practice speaking. They find solace in engaging with the teacher one-on-one or speaking from behind the shield of their computer screens.

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