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**Title: Teaching Mindfulness in the EFL Classroom.
The Benefits of Meditation and Mindful Breathing for
Adolescents.**

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Abstract

This didactic proposal's main aim is to introduce mindfulness techniques among students of secondary education in the EFL classroom as a response to the level of anxiety and stress of students. Additionally, thanks to mindfulness, sitting posture in class would be improved, motivation would be enhanced, a strong self-esteem would be built by the students, and the class atmosphere would be calmer and more suitable to learn. In the present paper, an extensive and detailed research on the available literature has been done. Such research includes articles dealing with mindfulness, the scientifically-proved benefits of yoga, pranayama, and meditation, mindfulness for teenagers, mindfulness in EFL classroom, mindfulness with students with learning disabilities, mindfulness for educators, mindfulness for university students, and yogic practices in class. Some mindfulness activities are included in this didactic proposal with the objective of combining mindfulness and English learning in order to show how students can clearly benefit from learning relaxation techniques in class. These activities range from guided meditations to mindful writing, among others.

Keywords: *mindfulness, pranayama, meditation, English as a Foreign Language, adolescents*

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1. INTRODUCTION

Since ancient times, meditation has been widely practised as a means “to enhance and optimize human potential and well-being” (Lutz, Dunne, and Davidson, 2007, p. 107). Meditation, which is “the study of deep concentration, calmness and tranquillity of the mind” (Tamil and Thangarajathi, 2010, p.11), was specifically thought to help humans understand the spiritual and deep aspects of life. According to Naht Hanh (2005), meditation involves “be[ing] aware of what is going on – in our bodies, in our feelings, in our minds, and in the world” (2005, p. 14).

Meditation practices are enormously varied. For example, chanting mantras, sitting meditation, body postures, and controlling the breath are commonly found in eastern traditions. Other forms of meditative practices include: the Gregorian chanting performed by Christian monks; the Jewish cantillation, that is, the reading of the Hebrew Bible at the synagogues; the Islamic Dhikr, which could be compared to the rosary recitation in the Catholic religion; the Sufi whirling, which consists of meditating through dancing; Qi Gong, which is a Chinese practice consisting of the combination of physical movements together with mind concentration in harmony with the breath, and many Chinese martial arts, which work on body awareness, such as Kung Fu and Wing Tsun, among many others.

The key aspect that all meditative practices share revolves around the requirement of being mindful when practising them. Therefore, when meditative traditions reached non-religious contexts, the core of meditation, that is mindfulness, was maintained. However, it had to be adapted, since the urban modern lifestyle did not allow citizens to spend hours sitting in Lotus position, or recite long mantras in a totally unknown language, such as Sanskrit. Thus, thanks to academics, such as Jon Kabat-Zinn, who combined Buddhist traditions with the occidental science, mindfulness became gradually known and practised in the western and in the secular context.

It is widely known that, through meditative practices, a blissful and calm state of mind can be achieved. However, it exists the misconception that this achievement can only happen after many years of experience, retreat, and effort. Nevertheless, many recent studies support the idea that the benefits of practising

mindfulness can be experienced after practising basic techniques for short periods of time.

As stated before, the benefits of mindfulness have been subject to numerous scientific studies in the last decades. For this reason, an extensive research has been conducted on the most relevant scientific and social studies discussing and proving the effectiveness of mindfulness in several environments, such as education, business, and medicine. Nowadays, meditation is often practised as a means to relax and reduce stress.

In the current dissertation, there are three key terms which will be constantly used: meditation, mindfulness, and pranayama. Since meditation has been previously described, a brief definition of the other two terms will be given in order to clarify the line of study of this paper.

As regards mindfulness, Kabat-Zinn (2017) described it as “awareness that arises through paying attention, on purpose, in the present moment, non-judgementally. It’s about knowing what is on your mind” (Mindful, 2017). However, he pointed out that “without awareness, we are seriously handicapped in our ability to recognize, understand, acknowledge, and accept the actuality of our situation, especially when it is not to our liking” (2005, “I don’t know what I would have done...,” para. 2). In other words, awareness is an essential part of mindfulness. Being aware helps us undergo life situations with a more peaceful state of mind even though such moments might involve sadness or tragedy.

As for pranayama, also referred to as mindful breathing, Gunaratana Mahathera, a Buddhist monk from Sri Lanka, provided three fundamental activities of mindfulness, “it reminds us of what we are supposed to be doing, it sees things as they really are, and it sees the deep nature of all phenomena” (1994, p. 39). Thich Nhat Hanh, a Vietnamese Buddhist monk known to be one of the main driving figures of Zen Buddhism in Occident, stated that the energy of mindfulness contains the energy of concentration, and concentration helps us concentrate in one unique thing (2017, p. 30). In addition, thanks to concentration, the energy of observation becomes stronger (2017, p. 30). He stated that mindful breathing is the base of mindfulness (2017, p. 49).

In its broadest description, pranayama would mean the control of the flow of life force (Tamil and Thangarajathi, 2010, p.11). In other words, pranayama is the voluntary practice of controlling the breath. Such control consists of inhaling,

holding, and exhaling air either fast or slowly. There are many pranayama techniques, such as three-step breathing and alternations in nostril breathing, among others.

Having considered the above-mentioned issues, this dissertation presents an innovative and appealing didactic proposal for secondary school students. The main goal of this proposal is to teach mindfulness to adolescents in the English as a Foreign Language classroom through meditation, mindfulness, and pranayama techniques. Such techniques will help students cope with the stress and anxiety caused by exams, projects, homework, and personal problems at home, at this stage of their academic lives. Another objective entails the readjustment of students' body posture and body language through the learning of mindfulness activities.

Additionally, since "mindfulness practices can assist in controlling and neutralizing the negative effects of wandering thoughts and inattention" (Riner and Tanase, 2014, p.17), this proposal also aims at helping teenager students deal with the endless stream of thoughts experienced in their minds. Thus, achieving a calmer state of mind with which they can use the complete potential they store within themselves.

As Riner and Tanase (2014) exposed, "many meditation masters of the Buddhist tradition advocate frequent, short duration, and informal meditative practices" (2014, p.17). For this reason, the activities here proposed are brief and affordable to do at any time and with teenagers from 12 to 18 years old. For example, some of the activities in this proposal involve mindful writing, body awareness, and guided visualisations, among others.

2. JUSTIFICATION

The reason for the choice of the topic of mindfulness revolves around a personal interest in the field of meditation and mindfulness. Some years of personal experience with meditation and mindfulness have proved the indisputable benefits in terms of concentration, tranquillity, self-esteem, and happiness. In other words, its benefits were more than clear on an individual scale. For this reason, the idea of combining mindfulness with teaching English to adolescents entailed a more than appealing challenge.

It was considered that this combination would be effective and feasible for many reasons. On the one hand, I strongly believe that students need to know

how to be present in the moment in order to improve their academic results and to reduce their levels of anxiety and stress. By learning how to meditate and breathe mindfully, students would gain techniques to know how to handle and deal with their anxious feelings and thoughts which can appear at any point if the mind is not calm and the breath is not mindful.

On the other hand, it was considered that adolescence is a convenient period to learn to be mindful because such learning could provide students with the proper techniques to live a better life after they finish their studies.

As Gunaratana Mahathera (1994) stated, “mindfulness changes your entire view of the universe” (1994, p. 38). For this reason, it was considered that teenage students would highly benefit from learning to be mindful in every moment of their lives, as well as being aware of their thoughts, feelings, and body.

3. OBJECTIVES

The main objective of this didactic proposal is to introduce the practice of mindfulness, meditation, and pranayama techniques among students of secondary education. Through these techniques, students would learn how to relax and to control their breath in stressful situations, for example, when exams are to come, when they realise they lack time to finish an assignment, or when the submission of several projects is close.

Techniques of mindful breathing and meditation can help students master stressful situations, in school or in their private lives, as well as help them reduce anxiety, stress or negative thought patterns or allow them to deal with them when they come up.

This didactic proposal also aims at showing students that the learning of the English Language is not reduced to grammar rules, lists of vocabulary, and writing formal compositions, yet it can be successfully used in many other contexts, in this case meditation, which are not related to the class.

Furthermore, another objective of teaching mindfulness to adolescents is to enhance their motivation to study in school. Since their levels of stress and anxiety would be considerably reduced due to the practice of mindfulness, pupils would find it easier to focus in class, work at home, and learn new concepts and ideas. Additionally, students would improve their sitting posture in class, and their body language in oral presentations, and mindfulness would help them to build a strong character and self-esteem.

Another aspect to consider is that, with the practice of mindfulness and meditation in class, the atmosphere changes for the better. It is well known that students learn better and easier in a calmer and more comfortable environment. Also, teachers would feel motivated to work in such a relaxed environment.

Finally, the ideal situation would be that the practice of mindfulness took place during several weeks throughout the course, so that students would benefit from mindfulness in both short and long terms.

4. LITERATURE REVIEW

4.1. Benefits of Meditation and Mindfulness

In recent years, several publications have appeared with the purpose of investigating the benefits of meditation and mindfulness from a scientific point of view. One area of interest for the researchers has been the study of the effect of Jon Kabat-Zinn's mindfulness-based stress reduction (MBSR), an 8-week programme in which mindfulness techniques are taught to deal with internal and personal issues, such as depression, anxiety, chronic sadness, etc. MBSR merges the practices from "science, medicine, and psychology, on the one hand, and that of Buddhist meditative traditions and their teachings and practices, known collectively as the Dharma, on the other" ("History of MBSR", 2017).

Various parameters, such as social anxiety disorder (SAD), brain activity, emotional competence, or performance in class, among others, have been considered in many studies (Goldin and Gross, 2010; Davidson et al., 2003; Saltzman, and Goldin, 2008; Barret et al., 2012; Miller, Fletcher, and Kabat-Zinn, 1995; Ramel, Goldin, Carmona, and McQuaid, 2004; Cebolla, and Miró, 2006; Tamil and Thangarajathi, 2010; Sass, Berenbaum, and Abrams, 2013; Krusche, Cyhlarova, and Williams, 2013).

In general terms, the benefits of meditation are many when practised in a regular basis. According to Tamil and Thangarajathi (2010), "meditation increases awareness of intuition, improves concentration and focus, reduces stress, anxiety and tension, increases creativity, brings about better relationships, increases self-awareness and self-acceptance thereby bringing a deeper sense of spirituality and meaning" (2010, p.11).

Miller, Fletcher, and Kabat-Zinn (1995) conducted a study with 44 medical subjects suffering from social anxiety disorder and 58 control subjects who enrolled in an MBSR course. The authors observed, after a follow-up of 3 years,

that there were parallel reductions in both anxiety and depression in the participants who suffered from SAD. In addition, they stated that “mindfulness appears to give the individual a practical way to disentangle from reflexive behaviours and reactions that often have their roots in past experience” (1995, p. 197).

Goldin and Gross (2010) also focused their study on social anxiety disorder. For this, 16 volunteers practised breath-focused attention exercises based on the MBSR course for 2 months. The findings of this study showed that there was a “reduction in symptoms of social anxiety, depression, rumination¹, state anxiety² and increased self-esteem in adults with SAD” (2010, p. 87). Furthermore, “patients with SAD reported reduced negative emotion experience when implementing breath-focused attention” (2010, p. 87).

Davidson et al. (2003) designed the first study which would prove the effect of meditation on the emotion-related brain activity. They recruited 48 subjects who were randomly assigned to a meditation group and to a control group (average age was 36 years). The data collected after this study suggested that “meditation can produce increases in relative left-sided anterior activation that are associated with reductions in anxiety and negative affect and increases in positive affect” (2003, p. 569) in meditators compared with non-meditators. The authors concluded that “a short training program in mindfulness meditation (MBSR) has demonstrable effects on brain and immune function” (2003, p. 569).

Saltzman and Goldin (2008) evaluated the impact of a parent-child version of the MBSR programme with primary school children and their respective parents. For this, twenty-four families enrolled in the MBSR course and eight families enrolled in a control group. The findings of this study concluded that “children and their parents may benefit from an eight-week curriculum in mindfulness-based stress reduction” (2008, p. 159). More importantly, the authors highlighted that there was “a profound difference both at home and in the classroom when a child is more able to control his or her attention and is less

¹ Rumination is defined as unproductive, repetitive thought processes. It is related to depression and anxiety (Murriss, Roelofs, Meesters, and Boomsma, 2004).

² State anxiety refers to “an empirical process or reaction which is taking place *now* at a given level of intensity” (Spielberger, 2013, p. 16). As opposed to trait anxiety, which refers to a “latent disposition for a reaction of a certain type to occur if it is triggered by appropriate (sufficiently stressful) stimuli (Spielberger, 2013, p. 16).

emotionally reactive. The impact on the social relations and learning environment cannot be underestimated” (2008, p. 159).

In a study by Barrett et al. (2012), the potential preventive effects of meditation or exercise on acute respiratory infection (ARI) were evaluated. The experiment entailed three groups (average age was 50 years): one group practised mindfulness meditation, another group did moderate-intensity exercise, and the third group was a control group. The training was delivered by Jon Kabat-Zinn, and the exercise programme was conducted by senior exercise physiology staff from a sports medicine centre. The results concluded that there were “substantive reductions in ARI illness among those randomized to exercise training, and even greater benefits among those receiving mindfulness meditation training” (2012, p. 342).

Ramel, Goldin, Carmona, and McQuaid (2004) analysed the possible modifications caused by mindfulness meditation on parameters such as depression, anxiety, dysfunctional attitudes, and rumination, through the MBSR programme. The results of this study suggested that “the more mindfulness meditation practiced, the less rumination was reported” in the participants (2004, p. 448). They added that these “changes in rumination account for reductions in maladaptive cognitive content and affective symptoms, specifically depressive and anxious symptoms and dysfunctional beliefs relating to need for approval” (2004, p. 448).

A study was carried out by Cebolla and Miró (2006) with two groups of adult people (69 participants in total) who suffered from depressive symptomatology in a public mental health hospital in Tenerife. The study included a study group which received a treatment based on the mindfulness-based cognitive therapy (MBCT)³ for 8 weeks, and a control group which received the established psychiatric treatment, which included pharmacologic treatment, relaxation, and psychologic support. Each session lasted two hours and a half and included mindfulness and yoga exercises as well as the exploration of what specific aspects bring one to suffering. It is for this reason that the authors of this

³ Mindfulness-based cognitive therapy (MBCT) “is based on the Mindfulness-Based Stress Reduction (MBSR) eight-week program, developed by Jon Kabat-Zinn. [...] Zindel Segal, Mark Williams and John Teasdale adapted the MBSR program so it could be used specifically for people who had suffered repeated bouts of depression in their lives (MBCT, 2018).

study emphasised that “mindfulness works to be aware of these automatic negative forms of functioning and to be able to change them.” (p.144)

After the study, they could prove that MBCT is a valid programme to work on the reduction of depression and stress symptoms. Also, the results of this study showed that the MBCT reduced rumination. According to Cebolla and Miró (2006), “nowadays [rumination] is considered as the main factor related to recurrent depression” [own translation] (2006, p.152).

The researchers Krusche, Cyhlarova, and Williams (2013) developed an innovative study to prove the feasibility and effectiveness of a 10-session online mindfulness course which had to be completed at a pace that suited each participant in a minimum of one month plus one-month follow-up. There were 273 participants and their average age was 47.7 years. The authors based most of the course activities on the MBSR and MBCT (2013, p.3) and focused their attention on parameters, such as stress, anxiety and depression. The results showed a decrease in these parameters in the participants after the course. The researchers pointed out that “when more practice was reported [by the participants], there was a larger change in pre to post outcome” (2013, p.6).

Sass, Berenbaum, and Abrams (2013) carried out a study with 24 participants (average age was 44 years) who completed “the Brief Symptom Inventory-18, BSI-18, an 18-item inventory designed to assess psychological distress in community and clinical samples” (2013, p. 25) before the first mindfulness session and after the last one. The intervention consisted of five 75-minute sessions held over almost 3 weeks; the authors followed the MBSR to create the mindful practice. The results of the BSI-18 showed that “those individuals reporting the most discomfort with emotion showed less reduction in distress after a mindfulness intervention” (2013, p. 26). However, the authors pointed out that, even though “this is the first study to show that discomfort with emotion moderates mindfulness treatment outcome” (2013, p. 26), they could not prove the reason justifying the results of their study.

Furthermore, some scientists and academics have studied the effects and benefits of meditation on long-term meditators (Kurth, MacKenzie-Graham, Toga, and Luders, 2015; Luders, et al., 2012; Tang, Lu, Hongbo, Tang, and Posner, 2015; Lutz, Dunne, and Davidson, 2007).

Kurth, MacKenzie-Graham, Toga, and Luders (2015) designed a study with 50 meditators (years of meditation practice ranged from 4 to 46 years) and 50 control subjects. The new aspect of this study was the focus on hemispheric differences caused by practising meditation for long periods of time. As a result, “we observed significant correlations between gray matter asymmetry and the number of meditation practice years” (2015, p. 57), in other words, the more years of meditation practice, the more gray matter in the left hemisphere. Additionally, the authors pointed out that “an increase of gray matter in a region that might be involved in watchfulness and that is linked to both external task regions and resting state regions may therefore be related to engagement in meditation” (2015, p. 59).

A study by Luders, et al. (2012) concluded that “cortical gyrification⁴ appears to increase as the number of meditation years increases” (2012, p. 3). In order to reach this conclusion, the authors examined the cortical gyrification of 50 long-term meditators and 50 control subjects who practised mindfulness. Moreover, they provided a possible reason for such increase, “the altered gyrification [...] in meditators might be linked to the ability to enhance unconditional, positive, emotional states of kindness and compassion” (2012, p. 5).

Tang, Lu, Hongbo, Tang, and Posner’s (2015) study entailed a group of 12 long-term meditators compared to normal controls who underwent 2.5h of IBMT or relaxation training weekly. IBMT involves body relaxation, mental imagery, and mindfulness training, guided by an IBMT coach and compact disk (2015, p.1). The results showed that “few hours of integrative body-mind training increases resting cerebral blood flow in specific brain areas often shown to be involved in attention and self-regulation” (2015, p. 3).

Zelazo, Moscovitsch, and Thompson (2007) also focused their study on long-term Buddhist practitioners of meditation. “After an overview of the mechanisms of neuroplasticity and mind-body interaction, we argued that mental training might have a long-term impact on the brain and body in a way that is beneficial for physical health, illness and possibly well-being” (2007, p.105). They also stated that “many of our core mental processes such as awareness and

⁴ Gyrification or cortical folding is the process by which the surface of the brain undergoes changes to create narrow furrows and folds called sulci and gyri (UCLA Newsroom, 2012).

attention and emotion regulation, including our very capacity for happiness and compassion, should best be conceptualized as trainable skills” (2007, p. 107).

4.2. Benefits of Pranayama

To understand the function and the benefits of pranayama, it is essential to understand where the term comes from. Pranayama refers to the breathing techniques learnt in yoga. It is the 4th limb of the 8 limbs described in the ancient Indian text *Yoga Sutras of Patanjali* written in the 3rd century BC. Pranayama is derived from 2 Sanskrit words, *prana*, which means ‘life force’ and *ayama*, which means ‘control, restrain’. In traditional vedantic or yoga sources, prana is considered as the universal energy which is found in all living objects, in the sun, and in the air. If prana exists and how it functions in the body should not be discussed in this dissertation.

Old vedantic books, like *The Patanjali Yoga Sutra* and *The Hatha Yoga Pradipika*, explained the connection between breathing and activities of the mind. Breathing is considered as a bridge connecting body and mind, which allows humans the quickest possibility to influence both; physical aspects, like rate of heart beat, concentration of adrenalin in the blood, and mental aspects, like anxiety. Also, panic reactions and ADHD might be influenced by the process of breathing in and out mindfully.

Several research studies have proved that pranayama, the yogic discipline which involves controlling the breath voluntarily, has accurate effects on the human respiratory system by an improvement in the pulmonary functions (Joshi, Joshi, and Gokhale, 1992; Panwar, Chourishi, and Makwana, 2012; Dinesh, et al., 2014; Karthik, Chandrasekhar, Ambareesha, and Nikhil, 2014; Benavides-Pinzón, and Torres, 2017; Sharma, et al., 2013; Pramanik, Pudasaini and Prajapati, 2010; Banstola, 2016; Dinesh, et a., 2013).

Joshi, L., Joshi, V., and Gokhale (1992) concluded that there is a strengthening of respiratory musculature thanks to pranayamic practice, since “the lungs and chest inflate and deflate to fullest possible extent and muscles are made to work to maximal extent” (1992, p. 107). Additionally, “practice of [...] pranayam, produces a wakeful hypometabolic state of the body characterised by decreased CO₂ production and decreased O₂ consumption, thus allowing breath holding for a longer time” (1992, p. 107).

Panwar, Chourishi, and Makwana (2012) conducted a study in which 75 young students practised pranayama techniques, such as bhastrika, kapalabhati, anuloma viloma, and ujjayi, from Monday to Saturday for three months. From the results, the authors concluded that “pranayama practice showed significant improvement in vital capacity and maximal ventilatory ventilation and peak expiratory flow rate”. They highlighted that the effective movement of the diaphragm while practising pranayama improved expiratory volumes and capacities (2012, p. 15).

The authors explained that techniques which involve deep breathing at slow rate, such as nadhi shodhana, cause decrease dead space and increase alveolar ventilation. Thus, increasing alveolar ventilation leads to increase maximum ventilation and vital capacity (2012, p. 15).

Banstola (2016) investigated the effects of yoga breathing exercises in 48 students (average age was 21 years). The author considered ventilatory parameters such as tidal volume (TV), inspiratory capacity (IC), inspiratory reserve volume (IRV), expiratory reserve volume (ERV), forced vital capacity (FVC) and timed vital capacity in one second (FEV1) (2016, p. 18). The yoga breathing exercises included a varied set of techniques, such as bhrastrika pranayama, kapalabhati pranayama, anuloma viloma pranayama, bahya pranayama, and udgeeth pranayama. The results yielded by this study provided evidence that yoga breathing exercises improve the efficacy of lung function (2016, p. 21).

Dinesh, et al.'s (2014) study aimed at comparing the effect of 12 weeks of slow and fast pranayama training on pulmonary functions in young participants. The results provided evidence to confirm that both fast and slow pranayama practices had beneficial effect on pulmonary function parameters (2014, p. 24). They concluded that “the improvement in the pulmonary functions tests parameters may be due to rise in thoracic – pulmonary compliances and broncho dilatation by training in Nadisodhana pranayama” (2014, p. 25).

Karthik, Chandrasekhar, Ambareesha, and Nikhil (2014) conducted a study on 50 university students who practised yoga daily for 30 minutes for 2 months. They measured aspects, such as Vital capacity (VC), Tidal volume (TV), Expiratory Reserve volume (ERV), Breath holding time (BHT), 40 mm endurance, and Peak expiratory flow rate (PEFR). They practised pranayama techniques

(nadisuddi, kapalbhati, bhastrika, bramhari, and pranava) and surya namaskar, which is a combination of “backward and forward bending postures [which] flex and stretch the spine” (2014, p. 5). As a result of the experiment, the authors concluded that “it can be said that pranayama improves respiratory breathing capacity by increasing chest wall expansion and forced expiratory lung volumes” (2014, p. 6).

A study on the effects of Kapalabhati, which is a pranayama technique that involves short and strong forceful exhalation (Dinesh, et al., 2013, p. 114) and is often practised by yogis, was conducted by Dinesh et al. (2013) in order to measure the peak expiratory flow rate in 60 healthy volunteers. After 6 weeks of study, the results revealed that kapalabhati had improved airway movement around the pulmonary system of the members of the study group. This is explained due to the fact that, through this pranayama technique, pulmonary muscles are stimulated and stretched. Hence, the larynx and the trachea bronchial tree are softened, and air can circulate better (2013, p. 114).

As stated by Benavides-Pinzón and Torres (2017), pranayama improves forced vital capacity (FVC) and forced expiratory volume in one second (FEV1), as well as it stimulates the blood oxygenation and glycolytic capacity in adults (2017, p. 470). Also, pranayama produces “an accumulation of lactate, equivalent to the results of work on a cycle ergometer for 45 minutes [...]. Thus, yoga practice with an emphasis on pranayama may be considered as useful for improving lung and cardiovascular function” (2017, p. 470).

Furthermore, Pramanik, Pudasaini, and Prajapati (2010) analysed the effect of the brahmari pranayama which involves slow pace breathing. For this study, there were 50 volunteers (aged 25 – 35 years) who practised brahmari for five minutes, after which the authors evaluated the heart rate and blood pressure. They concluded that there was a fairly significant decrease in diastolic pressure which consequently made the blood pressure also decrease (2010, p. 156).

According to Sharma, et al. (2013), fast and slow pranayama significantly reduces perceived stress scale (PSS), and only slow pranayama practice benefits cardiovascular parameters, such as heart rate (HR) and respiratory rate, systolic blood pressure and diastolic blood pressure (DBP), among others (2013, p. 107)

Particularly, there has been research on the effect of nadi shodhana, a pranayama technique included in this didactic proposal (Sivapriya, Suba, and Shyamala, 2010; Subbalakshmi, Saxena, Urmimala, and D'Souza, 2005).

It has been proved that the “practice of nadi shodhana enhances the respiratory function in school students”. Thanks to this technique, there is an improvement in the peak expiratory flow rate, in the forced vital capacity, and a decline in the respiratory rate (Sivapriya, Suba, and Shyamala, 2010, p. 38). According to Sivapriya, Suba, and Shyamala (2010), “yoga not only has physiological effects but also improves the well being of the child. Hence, the study strongly recommends that yoga and pranayama should be introduced as a compulsory discipline in all schools” (2010, p. 38).

Subbalakshmi, Saxena, Urmimala, and D'Souza (2005) also found that there was an improvement in peak respiratory flow rate, as well as better results in problem-solving ability which might be explained thanks to the adaptability for mental stress induced by nadi shodhana for 20 minutes (2005, p. 15). The authors concluded that the “results found in this study might apply to work places to improve work efficiency and to educational institutes to improve learning ability. A few minutes practice daily may help in setting the mind better on works and studies” (2005, p. 15). According to Sivapriya, Suba and Thirumeni (2010), nadi shodhana pranayama also “reduces stress, gives more relaxation, gives energy and vitality and improves overall health and wellbeing” (2010, p. 32).

As stated in *Das Große Hatha Yoga Buch* (2017), the physical benefits of nadhi shodhana are various. The deep breathing through the nostrils leads to a cleaning of the whole breathing apparatus, especially of the nose. This helps to minimize problems with allergic reactions, such as asthma. Deep breathing and holding the breath for a certain amount of time increases the lung capacity and cardiopulmonary circulation. Additionally, changing the nostrils while doing nadhi shodhana increases the interaction of the two brain hemispheres (2017, p. 218).

In addition, research to prove whether the practice of pranayama affected test anxiety and test performance was undertaken by Nemati and Habibi (2012). Their study lasted one semester and included 107 postgraduate Iranian students who were divided into 2 control and 2 experimental groups. Pranayama used in this study was a basic technique and had three steps: inhale slow, hold, and exhale slow. What the authors concluded was that “the students of experimental

group had lower test anxiety comparing the students of control group” (2012, p. 2648). In addition, to the question “what is the effect of practicing pranayama on foreign language test performance of experimental group in comparison to control group?”, the results gathered indicated that the practice of pranayama encouraged better results in test performance of the experimental group (2012, p. 2648). Also, the authors also highlighted that “the higher the test anxiety is the lower test performance” (2012, p. 2649).

Importantly, Nemati and Habibi (2012) concluded that “for students in anxious situations such as in-class tests standardized exams, final exams, oral presentations, etc. knowing this technique can be the difference between success and failure” (2012, p. 2649).

4.3. Mindfulness for Adolescents

In recent years, some studies have been published with the goal of demonstrating that mindfulness interventions with adolescents are also effective. They advocate the introduction of this meditation-based trainings in high schools in order to improve the quality of life and the academic results of teenagers (Huppert and Johnson, 2010; Schonert-Reichl and Stewart, 2010; Foody and Samara, 2018; Jennings and Jennings, 2013; Leland, 2015; Sibinga, Webb, Ghazarian, and Ellen, 2018).

In her paper, Leland (2015) conducted research on the field of incorporating mindfulness meditation into the curriculum of formal education to help students be more successful (2015, p.19). In addition, she concluded that “mindfulness education appears to have a positive impact on academic performance by helping students – even those with learning disabilities – focus, be more organized, plan ahead, perform better on exams, and think critically. Students trained in mindfulness are more likely to behave according to a school’s standards; schools have even seen dramatic behavior problems like bullying decrease with the implementation of mindfulness instruction” (2015, p.23).

Huppert and Johnson (2010) evaluated the effects of a brief mindfulness intervention based on the MBSR with 155 adolescents. They considered parameters like awareness, resilience and psychological well-being. The results of this study provided evidence that MBSR was “well accepted by adolescents and there is some evidence of improvement in their well-being related to how much they have practiced” (2010, p. 272).

In a study by Schonert-Reichl and Stewart (2010) the focus was on the effects of the Mindfulness Education (ME) programme which focuses on the development of social and emotional competence and positive emotions in kids and adolescents. The key components of this programme which students were working on for the period that the study lasted included: quieting the mind, mindful attention to thoughts and feelings, managing negative emotions and negative thinking, and acknowledgement of self and others (2010, p. 143). For this study, 246 pre- and early adolescents (average age was 12 years) were recruited from an urban school district in Canada. As a result of the study, the authors concluded that ME participants showed “significant and positive improvements in their positive emotions” (2010, p. 147). What is more, teachers participating in this study as ME instructors reported that they witnessed an “immediate change in students’ behaviours – and that students were able to focus and pay attention to their academic lessons more easily (2010, p. 148).

Foody and Samara (2018) outlined some of the current school anti-bullying initiatives and focus on considering mindfulness meditation techniques as effective in order to deal with both the prevention of bullying and cyberbullying as well as the consequences of suffering it. Furthermore, these two authors called for the addition of such techniques in as many school curriculums as possible. Foody and Samara stated the main benefits of mindfulness techniques in the classroom: “they are relatively easy and quick to administer and have implications for increased well-being and resilience among students of all ages” (2018, p.6). They pointed out that through mindfulness students “can also increase positive psychological functioning in young adults, training positive coping skills and leading to positive mental health in the future” (2018, p. 6). Also, they advocated the training of teachers, and even parents, in mindfulness techniques through workshops and the integration of this in the school curriculums for the well-being of the students and the whole school community.

A pilot study was done by Jennings and Jennings (2013) to provide indications that “brief mindfulness training can have a positive effect of reducing [cognitive, physiological, and social] anxiety in adolescents” (2013, p. 24). This study consisted of four 50-minute sessions within a three-week period, which were delivered by a peer facilitator to a small group of 8 high school seniors. Such facilitator received brief training on mindfulness meditation with an experienced

adult meditator to achieve basic competency using a mindfulness training manual designed for youth (2013, p. 23).

The results of this study showed that there was a 30% reduction in overall anxiety scores (2013, p. 24), thus demonstrating the efficacy of brief mindfulness training for teenagers. However, the authors pointed out that aspects such as the reduced size of the training group, the non-clinical setting, the already-known peer facilitator, and the limited level of competence of the peer facilitator, could have been limiting factors in this study and “it remains unknown whether outcomes could have been better, or worse, if the mindfulness training was delivered by an adult clinician or even by a peer facilitator who did not know his subjects” (2013, p. 25).

Sibinga, Webb, Ghazarian, and Ellen (2018) considered that “efforts to improve the circumstances in which urban youth live are essential and impactful” (2018, p. 5). For this reason, they conducted a 12-week study adapted from the MBSR in two Baltimore schools with 300 students from fifth and eighth grades. There was a group taught by MBSR experienced instructors, and a control group, which followed the Healthy Topic program. Data were collected through CDI (Children’s Depression Inventory), SCL (Symptom Checklist), and MASC (Multidimensional Anxiety Scale for Children, together with other scales to measure aggression, emotions, coping, etc. (2018, p. 3).

The results yielded from this study showed that “students who had participated in the MBSR program showed better psychological functioning and coping.” Also, participants of the MBSR reported “lower levels of depressive symptoms” as well as “significant lower levels of posttraumatic stress symptoms” (2018, p. 5).

Finally, the authors concluded that “this trial provides convincing evidence that high-quality school-based MBSR instruction for youth in urban public schools is feasible, acceptable, and leads to improvements in psychological symptoms, coping, and posttraumatic stress symptoms” (2018, p. 6).

4.4. Mindfulness in an EFL Lesson

The implementation of mindfulness techniques has also occurred in the context of learning English as a Foreign Language. Some scholars have focused their mindfulness studies on the anxiety that many students experience in situations

where they are expected to speak, read, follow a conversation, or write in a foreign language that they do not master (Wang and Liu, 2016; Önem, 2015).

Wang and Liu (2016) conducted a three-month study in a Chinese university EFL classroom with young adults (average age was 20 years). Their aim was to show whether the use of mindfulness affected the learning process of such group of college English students. The English teacher, Professor Liu, was in charge of the class and put into practice a combination of mindfulness meditation and English activities which had been created by Wang and Liu. These activities consisted of adapted texts, vocabulary exercises, cooperative learning, and mindful writing, which were all followed by brief guided meditation, at least once a week. At the beginning, guided meditations lasted one minute and then the time was lengthened when the students felt more comfortable with meditation (2016, p. 145).

The results yielded by this study provided strong evidence that “the students became aware of the process of learning English, they started to value their own learning process and became more motivated to learn and engaged in this process than before” (2016, p. 152). Hence, the authors demonstrated that the practice of mindfulness in the English class made students be more focused in class, aware of what they learnt, and motivated to learn. Furthermore, the authors pointed out that the teacher had a key role in the beginning phase of the mindfulness intervention and, as soon as the students had built a meditation routine and became familiar with mindful strategies, the leading teacher gave in his leadership encouraging the students’ involvement in their own learning process (2016, p. 152-153).

Önem’s (2015) four-week study aimed at proving the efficacy of mindfulness meditation and lavender scent with 61 intermediate-English-level students of a Turkish university. In this study, there was a control group and an experiment group, being the latter the one that trained mindfulness activities prior to a lesson where they were going to learn a set of target words in English. Through the Turkish version of State and Trait Anxiety Inventory by Öner & Le Compte (1985) to test the students’ vocabulary knowledge and anxiety, Önem found out that “both groups had parallel anxiety levels and knowledge of the words” (2015, p. 140). The findings from this study proved that, in learning English as a Foreign

Language classes, “meditation sessions and using scent can be effective in reducing anxiety and can be easily employed” (2015, p. 144).

4.5. Mindfulness for Students with Learning Disabilities

Apart from researching on the efficacy of mindfulness on students in general, research in the field of this same topic applied to students with various learning disabilities has been done. Such learning disabilities include mostly behavioural problems and attention deficit, which can be named as ADD or as ADHD depending on the author, as well as Autism Spectrum Disorder (ASD).

On the one hand, in students with ADHD, “aspects such as inattention, distractibility, generalized anxiety disorder, and depression are often found” (Riner and Tanase, 2014, p. 15). On the other hand, ASD is defined as “a life-long neurological disorder. It is characterised and diagnosed by differences in social communication and atypical patterns of behaviour” (Keenan-Mount, Albrecht, and Waters, 2016, p. 68).

ADHD is one of the most common syndromes in children, however, it is difficult to announce a specific figure due to the fact that many cases are not diagnosed. In Spain, there were between 5 and 7% of children and teenagers suffering from ADHD in 2013. Also, 1,8% of them received medical treatment (Quintero, 2013, p. 12).

Although not all of them, many families of these special students decide to bring their kids to a public ordinary school in order to make them grow and learn in a more natural environment. However, it is often claimed by teachers that they lack support from the administrators to reach all the needs these students have.

The available evidence seems to suggest that a parent-child mindfulness training with high school students suffering from Autism Disorder or ADHD is effective (Mallow and Austin, 2016; Beauchemin, Hutchins, and Patterson, 2008; Riner and Tanase, 2014; Keenan-Mount, Albrecht, and Waters, 2016; Van de Weijer-Bergsma, Formsma, de Bruin, and Bögels, 2012).

Malow and Austin (2016) developed a six-week informal mindfulness study following *Learning to breathe: A mindfulness curriculum for adolescents to cultivate emotion regulation, attention, and performance* (Broderick, 2013) which consisted of 5-10 minutes morning daily exercises in a summer school with students diagnosed with anxiety disorders, mood disorders, and ADHD. After the study, the authors concluded that there was “a significant increase in student’s

self-reported resilience, measured as optimism, self-efficacy and adaptability, as well as a decrease in student's vulnerability, measured as sensitivity, recovery, and impairment after only six weeks of implementation" (2016, p. 91). In addition, they promote the idea that mindfulness training should be implemented in schools for all students, since "the standard mindfulness program was observed to be beneficial in improving the focus of these students and, in so doing, helped to increase their perception of resilience" (Malow and Austin, 2016, p. 91).

In the Netherlands, Van de Weijer-Bergsma, Formsma, de Bruin, and Bögels (2012) conducted a very complete study in which they evaluated the "direct, middle-term and longer-term effects" of mindfulness training for adolescents with ADHD (average age was 13,4 years), as well as for their parents who attended a parallel Mindful Parenting training (2012, p. 783). The course consisted of 1,5h weekly sessions for 8 weeks in which regular mindfulness exercises were combined with specific exercises for adolescents with ADHD. As the authors explained, such exercises entailed "awareness of one's distractibility, impulsivity, and hyperactivity" (2012, p. 778).

In order to make students be aware of their distractibility, students had to practise breathing while being distracted by another participant. Another example was that students had to focus on a single point while someone else was blowing bubbles in the room (2012, p. 778). The results generated by this study showed a reduction in parental stress, as well as reductions in problem behaviours and improvements in executive functioning of the adolescents (2012, p. 783).

Furthermore, a five-week mindfulness meditation study with adolescents diagnosed with learning disabilities at the University of Vermont proved that mindfulness meditation lessened the levels of both trait and state anxiety, an improvement in social skills after the study, and improved students' academic achievement significantly (Beauchemin, Hutchins, and Patterson, 2008, p. 41). The intervention consisted of meditation sessions for 5 to 10 min at the beginning of each class by classroom teachers who had received a brief previous training in mindfulness meditation. In order to collect data, the authors used the SSRS (Social Skills Rating System), the STAI (State-Trait Anxiety Inventory), and anonymous attitudinal questions. Some of the comments made in the open-ended questions included that "100% [of the students] reported positive feelings about the meditation and expressed that the meditation led to feelings of calm,

quiet, relaxation, peacefulness, or better overall feelings” (Beauchemin, Hutchins, and Patterson, 2008, p. 41).

Some of the features of inattention stated by Riner and Tanase (2014) are “being easily distracted, missing details, forgetting things, and frequently switching from one activity to another, or in speech, from one topic to another,” “having difficulty focusing on one thing, or paradoxically, not being able to terminate focus (“hyperfocus”) on one thing and transition to the next topic or activity,” and “not appearing to listen when spoken to” (2014, p. 16). In other words, these features have a common point which is the lack of focus. However, Riner and Tanase (2014) explained that students with ADHD often hear, see, feel, and smell “perceptual channels” (2014, p. 16) that others do not perceive. That is, it can be understood that ADHD students are aware of many more things than students without this disorder, but such awareness lacks focus.

They suggested a series of mindfulness practices. Some examples of these are deep breathing, labelling negative thoughts, tracking attitudes, experimenting with thoughts, measuring and charting attitudes, imagery as meditation, and redirecting attention, among others (Riner, and Tanase, 2014, p. 19-22).

The scholars Keenan-Mount, Albrecht, and Waters (2016) focused their attention on the efficacy of mindfulness on students suffering from Autism Spectrum Disorder (ASD) and reviewed nine studies which dealt with this topic. They stated that “while the emotional impact of ASD on families is acknowledged, research into the various impacts for teachers who work to provide appropriate educational opportunities and meet the specific needs of students with ASD has received scant attention” (2016, p. 69). According to their research, ASD students might find difficulties in sitting still in sitting meditation as some mindfulness programmes suggest. Therefore, they suggested that ASD students practise deep breathing, mindful movement, or mantra, instead (2016, p.76).

Although they mentioned several studies which proved the efficacy of mindfulness on ASD students, they emphasised the need for further investigation in this field. They pointed out some limitations that they found in those nine studies, for example, samples tend to be small, the self-report surveys might not be too reliable, and the design of child-parent studies makes it difficult to separate the effects that mindfulness has on each participant.

4.6. Mindfulness for Teachers and Educators

Although teachers are one of the most important facets in an education system, they are often forgotten when it comes to research of the efficacy of mindfulness in the field of education. It has not been until recent years that research in the field of mindfulness for teachers has started. It is widely known that the profession of a teacher is fulfilling, exciting, and wonderful, as well as it is stressful, overwhelming, and time-consuming. In the daily life of a teacher at work, many situations, such as time pressure, the will to reach all the students' needs, and the fitting of the curriculum objectives into the lessons, among others, come up. This may conclude in depressive teachers with high levels of anxiety, and burnout teachers in the schools.

Bernay (2014), Rupprecht, Paulus, and Walach (2017), Benn, Akiva, Arel, Roeser, and Eccles (2012), Jennings et al. (2014) and Hepburn and McMahon (2017) have recently conducted studies in order to prove whether mindfulness meditation and pranayama intervention would improve the performance at work and the personal lives of teachers. Additionally, all the above-mentioned authors agreed to some extent with the importance of having less stressed teachers in the classrooms if there is a wish to have a better quality in the education systems.

Bernay's (2014) study was an attempt to prove the effects of mindfulness on the professional lives of a group of beginning teachers in New Zealand for three years. The mindfulness exercises included mindful eating, mindful walking, body scan, and sitting meditation, among others. The findings of this study showed that the teachers'

stress levels were reduced, they could focus their full attention on the lesson planning and on their students, and they were more authentic in their teaching. In addition, they found they were responding rather than reacting emotionally to the children in their classrooms. (2014, p. 65)

This highlights the efficacy of mindfulness on teachers in order to make their working lives better and more effective. Additionally, Bernay advocated the inclusion of mindfulness in the curriculums of teacher training programmes as a way to avoid the vast numbers of teachers who drop out of work after a few years.

Rupprecht, Paulus, and Walach (2017) conducted the first non-randomized controlled study in a professional teacher setting in Hamburg, Germany. Their aim was to investigate the efficacy of MBSR training on 32 school teachers' performance in class. There was an intervention group which completed a MBSR training, and a control group. The measures taken in this study included the FMI (Freiburg Mindfulness Inventory), the GHQ (General Health Questionnaire), the Irritation Scale (to measure strain), the AVEM (Occupation Stress and Coping Inventory), and the Scale for Emotional Competence, among others (2017, p. 569). The authors concluded that "teachers improved significantly on measures of stress and health, coping abilities, emotion regulation, and self-efficacy from the intervention. Additionally, the training effects stabilized or improved at the 3-months follow up" (2017, p. 577).

Benn, Akiva, Arel, Roeser, and Eccles' (2012) pilot study aimed at determining the efficacy of mindfulness intervention on 70 parents and educators of children with special learning needs. For this study, they used a programme called SMART (Stress Management and Relaxation Techniques), which is based on MSBR. The authors concluded that the mindfulness training had positive results in reducing the stress and anxiety, improving well-being, and facilitating hope and gratitude in parents and teachers.

Jennings, et al.'s (2014) study was conducted in a deprived area of the northeastern USA with a sample of 51 elementary school teachers. For this study, the authors used the CARE programme (Cultivating Awareness and Resilience in Education), which is "an intensive 30-hour program presented in four day-long sessions over 4–6 weeks, with intersession phone coaching" (2014, p. 2). This programme helps teachers acquire reducing-stress skills and improve their social and emotional aptitudes (2014, p. 2). The authors concluded that "the program may reduce burnout, alleviating school district personnel health care costs, absenteeism and early resignation" (2014, p. 4). Also, this programme worked well with acquiring a healthy classroom atmosphere which can affect positively students' academic achievement.

Hepburn and McMahon (2017) conducted a study with the purpose of finding out whether pranayama meditation (yoga breathing) could reduce the perceived stress level of a group of teachers and what benefits they could deduce from the practice. In this study, there were five full-time teachers with over five

years of teaching experience (mean age was 42.6 years) participating (2017, p. 147). The procedure of this study entailed weekly 60-minute pranayama meditation (yogic breathing) classes conducted by the researcher as well as 10 minutes of daily home practice. In each meditation and pranayama session, the participants learnt breath awareness (diaphragmatic breathing), seated and restorative poses, and guided relaxation sequences (body scan) (2017, p. 148).

The results from this study showed that “all of the participants in the course reported a decrease in their perceived stress scores” (2017, p. 150). In addition, “the participants found themselves more aware of their feelings and more able to focus their minds more easily. These findings support the notion that meditation improves cognitive functioning” (2017, p. 153).

Furthermore, the authors highlighted the professional and personal benefits that teachers gained. On the one hand, the professional gains involved the use of the learnt breathing techniques to calm students and reinforce the sense of routine at the start of the class “consequently playing a role in effective behaviour management, lesson structure and increasing student awareness of the techniques available for remaining calm” (2017, p. 151). On the other hand, personal benefits included increased awareness of the teachers’ stress levels and their breathing throughout the day or during periods of relaxation, stress and exercise (2017, p. 151).

4.7. Mindfulness for University Students

In order to demonstrate whether meditation training could increase working memory capacity, Mrazek, Franklin, Phillips, Baird, and Schooler (2013) designed a study where 48 undergraduate students (average age was 20,83 years) were assigned into a class of mindfulness and into a class of nutrition. The participants attending the mindfulness class, which emphasised physical posture and mental strategies of focused-attention meditation, had 45-minute lessons four times a week for 2 weeks. In each class, there was 10 to 20 minutes of mindfulness exercises. The study showed that a 2-week mindfulness course increased working memory capacity (2013, p. 5).

Rhoads and Healy (2013) conducted an experimental research study in order to prove whether meditation and exercise would enhance performance of a group of Business students before their exams in college. For this study, there were four groups of students. In the first group, students were exposed to

meditation techniques and asked to “sit quietly, close their eyes, breathe deeply, and envision getting an A on the exam, for 5 minutes prior to the test” (2013, p. 6). The second group did intense exercise for five minutes before the exam. The third group was asked to simply study for five minutes before the exam. Finally, the fourth group was not told to do anything different from what they usually did (2013, p. 6).

The results indicated that “the meditation group clearly did better than any of the other groups. The exercise group performed the most poorly. The study group performed about the same as the control group” (2013, p. 7). Therefore, the scholars concluded that “it is more beneficial to meditate and envision getting an “A” prior to the exam” (2013, p. 8).

A study conducted by Bellinger, DeCaro, and Ralston (2015) investigated whether mindfulness could reduce state anxiety in a high-pressure testing situation in the subject of maths in young adults at university (average age was 20 years). The results of this study suggested that “meditation reduced anxiety experienced in a high-stakes testing situation, freeing the working memory resources needed for optimal performance” (2015, p. 127).

Another study by Ritvo, et al. (2013) focused on young university students (17 years old or older) for a semester in order to analyse the impact of mindfulness on the reduction in negative automatic thoughts in these students. The intervention entailed mindfulness practice for 40 minutes which were followed by 20 minutes of brief talks about the practice. This intervention was led by other graduate students who had previous experience in practising mindfulness. Before the study, the academics used the ATQ (Automatic Thoughts Questionnaire) to measure the students’ levels of anxiety and depression, and the MAAS (Mindfulness Attention and Awareness Scale) to measure how they felt at that precise moment. Also, they used the PNAS (Positive and Negative Affect Scale) and the SWLS (Satisfaction with Life Scale) (2013, p. 277-278).

Lastly, the study proved that “attendance at a mindfulness meditation tutorial was associated with reductions in negative automatic thoughts that predicted increased satisfaction with life” (2013, p. 280). However, they could not prove whether the amount of attendance implied a higher reduction in negative thoughts.

4.8. Yoga Combined with Education and its Benefits

In addition to the practice of mindfulness meditation, there are certain scholars who promoted the introduction of yoga asanas – body postures often in harmony with mindful breathing – in primary and high schools. Owen and Kalavala's study in 2012, and Tamil and Thangarajathi's study in 2010 are two studies which enhance the practice of yoga in class. Some of the implications of yoga blended with education are the development of awareness on both physical and psychological level, the increment of brain activity which is associated with better performance, rise in self-esteem, and the result in an invigorating effect on both mental and physical energy and improved mood, among others (Tamil and Thangarajathi, 2010, p. 12).

In Tamil and Thangarajathi's (2010) analysis, youth with anxiety, depression, and ADHD are the groups of population who decline more for risky behaviours (2010, p.10). It is for this reason that they aimed at proving the effectiveness of blending education and yoga to prevent "negative risk-taking behaviours" (2010, p.8) in adolescents. Tamil and Thangarajathi justified that

yoga practice for at least 30–35 minutes per day including some asanas, pranayama and meditation will bring out tremendous positive effects on the youth. Each day schools and colleges should start with yoga. When yoga is brought into the curriculum of schools and colleges, youth risk behaviors will be minimized gradually and finally the youth can eradicate the risk behaviors. (2010, p. 11)

Owen and Kalavala's (2012) intervention took place in a high school in Arkansas where Kalavala demonstrated some basic yoga postures, such as surya namaskara, which is also known as sun salutation, and the students followed him. Also, he showed pranayama exercises and students imitated him. Kalavala reported that

yoga has helped me to overcome academic stresses in my own life. My own yoga practice, and the emotional balance it has provided me, encourages me to share these techniques with young people who likely experience similar challenges in American High School. (2012, p. 86)

In addition to these exercises, the intervention also included a brief drumming circle based on the "Mindfulness: HealthRHYTHMS Drumming to Relax" protocol (2012, p. 86). These authors cited Bensimon, Amir, and Wolf (2008) to justify that "drumming has been shown to reduce stress and increase feelings of connectedness among participants" (2012, p. 86). After the study, the authors highlighted the positive results of their study, "the vast majority of students showed interest, smiling as they drummed away their stress. Several confessed they enjoyed the drumming most of all" (2012, p. 86).

Based on the regular practice of asanas, pranayama, and meditation, Trisha Lamb (2004) published a compilation of the health benefits of yoga in three different categories – physiological benefits, psychological benefits, and biochemical effects. Some of the physiological benefits that Lamb mentioned entailed blood pressure decrease, cardiovascular and respiratory efficiency increase, excretory functions improvement, posture improvement, endurance and energy level increase, weight normalization, and sleep improvement (2004, para. 5).

Some of the psychological benefits stated were somatic and kinaesthetic awareness increase, anxiety and depression decrease, self-acceptance increase, mood improvement and subjective well-being increase (2004, para. 6). Within the psychological benefits, Lamb also mentioned the improvements in the cognitive function, such as in attention, concentration, memory, and learning efficacy (2004, para. 8).

Finally, as for the biochemical benefits, Lamb stated that "the biochemical profile improves, indicating an antistress and antioxidant effect, important in the prevention of degenerative diseases", LDL cholesterol decreases, haemoglobin increases, oxytocin increases and oxygen levels in the brain increase (2004, para. 10).

Yadav and Das (2001) conducted a study focusing on the effect of yoga on pulmonary functions in a group of 60 healthy young females. The experimental group had to practise 10 to 15 minutes of pranayama exercises, such as the deep breathing, inhalation-retention-exhalation at fixed intervals, abdominal (diaphragmatic) breathing and alternate nostril breathing, together with meditation, asanas, and prayer (2001, p. 494). The results showed that the pulmonary function tests reported positive results after the daily practice. The

scholars suggested some reasons by which these improvements could be explained: “increased power of respiratory muscles that is due to the work hypertrophy of the muscles during pranayama and other exercises”, “cleansing procedures cleans the infective nasal secretions”, “yogic breathing exercises train practitioners to use the diaphragmatic and abdominal muscles more efficiently” and “yoga, with its calming effect on the mind can reduce and release emotional stresses, thereby withdrawing the branchio-constrictor effect” (2001, p. 495). Therefore, research results seemed to confirm that “yogic exercises are beneficial for the better maintenance of body functions, particularly pulmonary functions” (2001, p. 496).

5. DEVELOPMENT OF DIDACTIC PROPOSAL

5.1. Teaching Context

As stated earlier in this dissertation, this didactic proposal is an attempt to introduce the practice of mindfulness, meditation, and pranayama techniques in the EFL classroom in secondary education, since, according to Tamil and Thangarajathi (2010), the combination of pranayama and meditation is a perfect way “to clean both physical and subtle body” (2010, p. 11). Other objectives of this proposal involve the combination of mindfulness with the teaching of English as a Foreign Language to adolescents, the improvement of students’ self-esteem, and, consequently, the motivation of students to study. Additionally, these exercises aim at improving students’ awareness of breathing and body posture.

The activities of this didactic project are varied, and some of them have been scientifically proved to be beneficial for human health, as previously explained in the literature review. These mindfulness exercises present diverse degree of difficulty, from more basic to more advanced, as well as various types of activities, in order to maintain students motivated to participate and to augment their curiosity.

The mindfulness exercises here proposed are thought to occur at the beginning of each English lesson, where 5 to 20 minutes would be devoted to the mindful practice depending on the activity. Notwithstanding, some of the techniques could take place at the end of the lesson too. To mention a few, mindful breathing, pranayama techniques, guided meditations, body awareness, stress management, relaxation, etc.

In order to make this didactic proposal as effective as it aims to be, the ideal context would be that the mindful sessions would occur between two to three times a week for a considerable long period of time, such as approximately 6 weeks, or, if the circumstances – time and curriculum – allow it, this proposal could be put into practice throughout the course with certain degree of consistency. In addition, there are techniques which can take place many times throughout the day as they only require a few minutes of mindful breathing.

It is important to mention that these activities are applicable to groups from 1st ESO to 2nd Bachiller. This wide range of levels is explained due to the fact that mindfulness has been proved to be effective in many periods of life, from kids in their early childhood to elderly people. However, before putting them into practice with any group, it is required to consider the degree of difficulty of the exercise as well as the language skills of the class. Therefore, some small changes might be necessary.

5.2. Selection of Activities

5.2.1. Introduction Activity

The first activity of this school-based proposal aims at introducing the topic of mindfulness and meditation as well as to practise speaking. Such introduction, which would last 15 minutes approximately, would be done through a PowerPoint presentation (see appendix 1) with 6 pictures of international athletes who practise meditation and yoga in their private lives. The decision of choosing these athletes revolves around the fact that students, mostly older ones, commonly think that “yoga is for girls” and “meditation is for crazy people”. For this reason, it might encourage them to try mindfulness if they see that internationally famous “tough” men also practise yoga and meditation. In other words, this introduction aims at demolishing preconceived ideas that students might have in order to engage them in the practice of mindfulness and meditation.

Additionally, while looking at the pictures, students would be asked questions such as “do you know this people?”, “do you know what sports they are playing?” and “do you know what they have in common?”, among others, to enhance speaking.

Finally, the PowerPoint presentation also includes screenshots from the interviews and articles from where the information about the athletes was taken.

In class, students would read the excerpts shown in order to learn about the opinions and experiences with yoga and meditation that the athletes explained.

5.2.2. 6 Minute English on Mindfulness by BBC

The next activity was taken from the “6 Minute English” section on the website BBC Learning English (2017). It is a listening task that shows a conversation among three people who talk about the topic of mindfulness from a very direct and appealing way. Together with the listening, students would get a worksheet (see appendix 2) additionally created to work in class with a set of questions which need to be answered with the information taken from the audio. It would take place for 15 minutes approximately at the beginning of the lesson.

Due to the fact that this listening is for intermediate level students, it is thought to be used with advanced groups. However, an adaptation could be done, so that lower groups also have access to this activity. For example, the script of the audio would be typed, and the level of such text adapted (see appendix 3).

The purpose of this activity is to practise the listening and reading skills. Also, students would learn basic vocabulary and expressions related to mindfulness and meditation which would help them understand the concepts and would help them follow the upcoming exercises.

The materials needed for this activity include: the audio file, which is to be found on website BBC Learning English, the worksheet with questions for more advanced groups, and the worksheet with the adapted script and a set of questions for lower groups.

5.2.3. I Know I Breathe in, I Know I Breathe out

Thich Nhat Hanh (1992) stated that “breathing and smiling can make us very happy, because when we breathe consciously we recover ourselves completely and encounter life in the present moment” (1992, p. 7). It is for this reason that the exercise “I know I breathe in, I know I breathe out”, which was called by Nhat Hanh as “deep relaxation” in his book *El Arte de Cuidar a Tu Niño Interior* (2017), was chosen to be the first mindful breathing technique taught in this proposal.

The purpose of this technique is to become aware of one’s own breathing as well as to calm down and focus one’s attention on the present moment. It is essential to learn to breathe mindfully and with all the capacity of the lungs, as Tamil and Thangarajathi (2010) explained,

very few people breathe correctly. Some use only the upper part of their lungs; others breathe with only the diaphragm (lower part) leaving the upper structures of the lungs inactive and partially collapsed. In those parts of the lung that are not used, slimy secretions accumulate, and the tissues become devitalized. [...] This habit of shallow breathing accounts in a good measure for the fact that one third of all deaths result from diseases of the lungs. (2010, p. 11)

The procedure of this technique is very simple and affordable to do at any time and by anybody. By sitting straight and with a relaxed body posture, one must think the sentence “breathing in, I know I breathe in”, when inhaling through the nose, and “breathing out, I know I breathe out”, when exhaling through the nose too. These sentences can be reduced to “in” and “out” (2017, p.52).

A recommendable moment to do this technique would be when students go back to class after a break. However, due to its brevity (4 to 5 minutes) and ease, it would be very effective at any moment when students are too nervous in class and need to calm down. Also, for example, before an exam or activity that requires to be focused.

5.2.4. Dirga Pranayama

The dirga pranayama or three-part breath is a very well-known exercise among yoga practitioners because it is incredibly relaxing and builds the necessary base before learning more difficult pranayama techniques. The purpose of this technique is to show students how to calm down by breathing deeply and to use their whole diaphragm for this. It involves breathing using the belly, the rib cage, and the upper chest.

First of all, students would be asked to sit down straight, with their feet on the ground and relaxed shoulders, and would be given the option of keeping eyes slightly open or calmly closed. Then, students would be asked to focus on their breathing without controlling it. Once students achieved this, the main activity could start taking place.

The first step entails the belly. On each inhale through the nose, students inflate their belly, and, on each exhale through the nose, they deflate it. To help them feel the movement, they could place one hand on the belly. The second step entails the rib cage, they inhale and exhale by filling only the ribs. The third

step entails the upper chest, and the same procedure as explained before is done with the upper chest.

After this, students inhale and exhale through the parts mentioned above as a wave, that is, breathing in inflating first their stomach, then the ribs, and, finally, the upper chest, and breathing out deflating their chest first, then ribs, and, finally, stomach, as explained on the website VeryWellFit (2018).

Each of the three steps that have just been explained can be repeated for a few times until students feel comfortable with it. It is important to consider that, although it is one of the easiest pranayama techniques, it could happen that students find difficult to breathe with any of the three parts above-mentioned. This can be explained due to muscle tensions they might have in those areas. For this reason, it is recommendable that the complete technique is practised several times until students can easily do it on their own.

Since this activity is energising as well as it helps focus the attention, it would be suitable to take place in a class that starts early in the morning. The explanation of this activity would take 15 minutes approximately; then, once students know it, 5 to 6 minutes would be enough. As a means to improve students' self-esteem, to practise speaking, and since it is a basic pranayama technique, it would be interesting that a volunteer student gave the instructions in front of the classroom in the following lessons when this exercise wants to be practised.

5.2.5. “Comma” Meditation

This is a very brief technique which can be used at any time during the day since it involves only paying attention to the breathing for a couple of minutes, and no extra material is required. The “comma” meditation is taken from the online course “Mindfulness for Wellbeing and Peak Performance” by Monash University on the website FutureLearn.

As its name indicates, the purpose of this meditation is to place a pause between the tasks that take place throughout the day. For example, after studying Biology and before moving on to English, or after having lunch and before starting to do homework.

It was decided to include this activity because it is essential to teach students to make a pause between activities in their stressful lives. This technique aims at slowing down the rhythm of the daily routine and reducing the stress

caused due to the rushing. Furthermore, students train mindful breathing and it increases the awareness of the amount of work to do in a day and the level of stress experienced. For this reason, thanks to this activity, the student can decide to reduce or rearrange tasks according to how they are feeling at that particular moment.

The procedure of this exercise is very basic and suitable for any level. In class, students would be asked to sit down straight on their chairs, with their feet firmly on the ground, and their shoulders relaxed. Their hands could be placed on their laps or on the table, but never crossed. They would be given the option of keeping eyes closed or slightly open. Then, students would be asked to focus on their inhalation and exhalation for approximately 2 to 4 minutes. This activity could be easily implemented in class, for example, between a reading and a writing task.

5.2.6. Body Scan

The body scan is a very well-known mindfulness meditation technique practised in many yoga lessons, mostly at the end, as a deep relaxation exercise. As stated on the website Mindful (2012), “the body scan alternates between a wide and narrow focus of attention [...]. The body scan trains your mind to be able to move from detailed attention to a wider and more spacious awareness from one moment to the next”. For this reason, it is a very suitable task for high school students, who deal with great amounts of input in a daily basis. With an actual guided verbal scan through different parts of the human body, the aim of this activity is to focus on the tensions of the body and to relax deeply.

Although in yoga lessons this technique is often done while in shavasana (see picture 1), the body scan can also be done while sitting on a chair. It would be required that students wear a cover over their shoulders and arms because the blood pressure decreases during deep relaxation.

Before starting the body scan, it would be recommendable that the vocabulary of the body parts is revised, for example, through a picture (see appendix 4). This is a good moment to revise basic vocabulary in a more relaxed atmosphere and with a clear purpose.

Once the vocabulary has been revised, students would be first asked to sit down straight, with their feet on the ground and relaxed shoulders, and would be given the option of keeping eyes slightly open or calmly closed. Then, students

would be asked to focus on their breathing and take three deep inhalations and exhalations. Once students achieved this, the body scan would start.

For this activity, a script (see appendix 5) of the body scan has been originally produced. In addition, it would be recommendable to play meditation music in the background while reading the script. The teacher must read the script slowly and with a calm soft voice. It is necessary to pause after mentioning each body part so that students can focus on them for several seconds before moving on to the following part.

The body scan is an activity suitable to do at any time. A great moment to practise it would be at the very beginning of the day, so that students achieve a focused state of mind. Also, it would be acceptable to do it at the end of the lesson before going home, so that students leave school in a calm state of mind.

The revision of the vocabulary and the body scan meditation would last approximately 10 minutes in total. However, once the revision has been done, the body scan would take 5 minutes. Finally, although this activity is totally suitable for both groups, it might be necessary to adapt the vocabulary for 1st ESO to make it easier to follow.



Picture 1. Shavasana.

5.2.7. Nadi Shodhana Pranayama

The nadi shodhana pranayama, also known as alternate nostril breathing, or anuloma viloma pranayama, is the most common variety of alternate nostril breathing and was first described in the *Hatha Yoga Pradipika* written by Swatmarama in the second half of the 14th century in India. Nadi shodhana means “the cleaning of the nadis, the energy channels,” described in the yoga systems. As Sivapriya, Suba, and Thirumeni (2010) said, “prana, the vital energy pervades the whole body, following flow pattern called nadis, which are

responsible for maintaining all individual cellular activity. The word “nadi” means ‘channel’ or flow of energy, and “shodhana” means ‘purification’” (2010, p. 32).

The reason why anuloma viloma is suitable for classroom use is because of its mental effects. It is widely regarded as a good preparation for meditation. The balancing qualities lead to an equation between activity and tranquillity. This again is caused by the alternation of the nostrils. The focusing on the breath and the demanding implementation also increases the ability to concentrate, for example, in class or while doing the homework. Since there are no reported risks of this technique, it is recommended for adolescents.

To carry out this exercise, the teacher would work as a role model that students would follow and imitate. First of all, it is important to consider the position of the hands. While the left hand forms chin mudhra (see Picture 2), the right hand forms vishnu mudhra (see Picture 3). The right hand is used to close the nostrils while alternating the breathing. Also, before and after the exercise, it would be suitable to deeply breathe in through the nose and out through the mouth twice.

As it is explained in *Das Große Hatha Yoga Buch* (2017), the technique to do nadi shodhana is the following (see appendix 6 for a visual explanation):

1. Direct the right hand with vishnu mudhra to your nose. Close the right nostril with the right thumb and breathe in through the left nostril for 4 seconds and softly.
2. Close the left nostril with the middle finger and hold the air for 16 seconds. The right elbow remains close to the body and the right shoulder is relaxed.
3. Open the right nostril and breathe out very slowly for 8 seconds.
4. Breathe in through the right nostril for 4 seconds.
5. Close the right nostril with the thumb and hold the air for 16 seconds.
6. Open the left nostril and breathe out through very slowly for 8 seconds.

These steps can be repeated as many times as necessary. However, it is important to bear in mind that nadi shodhana is a cycle, in other words, the left nostril must always be used for the first breath in and the last breath out. What is more, seconds should be adapted into 3:9:6, for example, since the combination 4:16:8 is for advanced practitioners.



Picture 2. Chin Mudra.



Picture 3. Vishnu Mudra.

5.2.8. Guided meditation: “Wild Horses Nature Meditation”

This is a visualisation exercise taken from an open-access video on YouTube (Stephenson, 2016). It narrates a brief story in which a person witnesses a wonderful nature event: a herd of wild horses running freely along a valley. Although the whole video lasts 22 minutes in total, only the actual story (from 06:42 to 18:21) would be played in the class. The purpose of this meditation is to make students aware of their strength, to motivate them, to enhance their imagination, and to promote a sense of calmness and power.

This guided meditation would be suitable for higher levels, since younger students might find difficult to understand the vocabulary and grammar used in the video. Nevertheless, it would be advisable to prepare the script of the video in advance as well. For this reason, the teacher would provide students with copies of the script (see appendix 7). Then, it would be read aloud in class in order to guarantee that every student understands the essence of the story and the main vocabulary.

After checking the text and solving doubts, students would be asked to sit down straight on their chairs, breathe deeply, and let their shoulders relax. Then, the video would be played, and students could then enjoy this powerful guided meditation.

5.2.9. Gratitude Jar

This task has been included in this proposal because being thankful is considered to be essential if one wants to live a positive and happy life. It consists of two parts: an introduction and a practical section. In order to introduce the topic of gratitude among the students, a quote by Cicero which revolves around this

theme would be read to the students: “a thankful heart is not only a virtue but the parent of all other virtues”. Then, students would be asked to consider what this quote makes them think for a couple of minutes. It would be interesting that a brief debate is created in class in order to practise the speaking skill, as well as the key competence that deals with critical thinking. This first part would last 10 minutes approximately, however, it will depend on the involvement of students in speaking in class.

The second part of the “gratitude jar” involves the writing of brief texts about what students feel grateful for. It is a wonderful way to make students write in English without minding grammar mistakes, since the aim of this activity is to use English communicatively and to enhance students’ awareness of what makes them happy and grateful around them. This task is based on a post on the website MindfulTeachers. Additionally, this activity would improve students’ self-esteem because they would realise that happiness and gratitude can be achieved by simply acknowledging the little nice details in daily life.

For this task, students would only need small sheets of paper where they would write or simply mention (in the case of younger students) what they feel grateful for, and then introduce them in a small-size jar placed on the teacher’s desk. It is optional to read the texts aloud. A possibility would be to ask for volunteers to read their papers, since this is a rather personal exercise.

Being suitable for any group, it would take place at the end of the lesson, since it is a good way to close the EFL class before moving on to the following lesson. It would be interesting to settle a routine with this activity, in other words, to establish that the Gratitude Jar would have its moment, for example, at every first lesson of the week. 5 to 6 minutes would be enough for students to write their texts.

5.2.10. Guided Meditation: “The Deserted Beach”

The first part of this guided meditation is based on an activity in the book *In Your Hands NPL* (1997, p. 23), whereas the second part was especially created for this proposal. The “Deserted Beach” is a visualisation technique that takes place at a mentally-constructed beach. Through imagination, it aims at working on the ability to be aware of the surroundings when being outdoors, yet it can be applied also to indoors. Furthermore, this guided meditation is a great tool for students when they feel anxious or stressed, since it can work as a mental safe place that

students can imagine on their own as many times as they wish as a way to escape stressful situations with the help of a few deep breaths.

In order to revise vocabulary and expressions, the script of this guided meditation (see appendix 8) would also be handed in in class. After this, students would start the meditation by sitting straight on their chairs and breathing mindfully for a couple of times. They should also relax their shoulders, and their face. Opposite to the “Wild Horses” guided meditation in which a video on YouTube was used to narrate the story, in the “Deserted Beach” the teacher is the responsible for reading the script aloud. It is recommendable that the teacher uses a soft voice in order to promote a calm atmosphere in class.

Additionally, in order to practise mindful writing, an original follow-up of this activity was created. Students would be asked to write an anonymous letter in class in which they would tell how they felt during the meditation, what they saw, what they smelt, etc. Then, the teacher would collect all the letters, mix them, and give them back to the students (nobody should get their own letter). It would be optional to read a few letters aloud in order to share points of view and feelings.

During this meditation, an option would be to play a track of a calm sea to help students focus on the scenario narrated by the teacher. The narration of the story would take 3 to 4 minutes and the writing of the letter would last 15 minutes approximately. Since students tend to be quite active and unfocused after a break, this activity would be suitable for this moment and it would help them redirect their focus and energy into the new lesson.

5.2.11. Body Awareness

This is an original activity created especially for this didactic proposal, since body awareness is strongly connected to mindfulness. Authors, such as Alexander Lowen and his *Bioenergetics* (1975), treated the inevitable link between body and mind, and advocated the possibility of curing the mind through dealing with physical aspects first. According to Lowen (1975), “bioenergetics is the study of the human character in terms of the energetic processes of the body” (1975, p. 33).

The activity here explained is fairly simple, no extra material is required, and it entails two parts. First, students would be asked to stand up and acquire a body posture as follows: shoulders down, arms loose, legs slightly flexed, head down, eyes vaguely open, and lazy voice, in other words, a weak position. Then,

they should say aloud the sentence “I am strong”. Second, the students would be asked to acquire a firm position, as follows: shoulders back, head up, arms on their hips, chest open, straight but relaxed legs, and a smile on their face. Then, they should say the same sentence as earlier.

The purpose of this activity is to enhance body awareness among students and improve their self-esteem. With this task, students can rearrange their body posture in situations like oral presentations or even in a written exam.

5.2.12. Other Pranayama Activities: Gorilla and Brahmari

Gorilla

This is a special pranayama technique, which is taken from *Das Grosse Hatha Yoga Buch* (2017) and is usually done while standing up. Since it has got energizing effects, it would be suitable to use in class only if the lesson is going to be dynamic and active. Also, it could be practised, for example, before an excursion or as a warm up programme before a Physical Education lesson. The Gorilla is a technique that kids usually enjoy because it involves imitating a gorilla, as it can be deduced from its name.

The physical benefits of Gorilla entail the cleaning of the lungs, due to the intermittent breathing and by the use of the chest to breath. It leads to a general increase of energy and a better saturation of the blood with oxygen. In addition, the mental effects are mostly caused by this saturation of the blood, a feeling of power and strength is developed (2016, p. 214).

To carry out this practice, students would be asked to stand with their feet slightly apart and their spine straight. Through breathing a couple of times, students need to focus on their belly. This technique entails three rounds (2017, p. 215):

1. First round:

Step 1: Breath in deeply and put your chest out and hold the breath.

Step 2: Hit (or bang or drum) with your fingers on your chest and the back and the ribs.

Step 3: Put your lips out (like a gorilla) and breath out in deep and strong pushes through your mouth.

Step 4: Support your weight with your hands on the legs and bent down while breathing out.

Step 5: Pull the belly in with empty lungs (only short time).

Step 6: Put the belly out, stand up and breath in deeply.

2. Second round

The steps are repeated in the same order, however, step 2 involves the hands.

3. Third round

The steps are repeated in the same order, however, step 2 involves the fists.

Brahmari Pranayama

Brahmari or the bee breath is suitable for teenagers, since it is very easy to do and very appealing due to its peculiarity, which is to produce the sound of a bee. As well as nadhi shodhana, brahmari pranayama was already mentioned in the *Hatha Yoga Pradipika* in the 14th century.

The vibration caused in the throat cleans the throat, and the voice becomes deeper and more expressive. Breathing against the resistance created in the breathing apparatus also strengthens the airway tissues. What is more, this technique works on calming the nerves and soothes them especially around the brain and forehead. The humming sound vibrations have a natural calming effect. Also, it helps mitigate migraines and improves concentration and memory (2017, p. 221). Additionally, the bee breath relieves anxiety and lowers the general stress level. Closing ears and eyes leads to a retreat of the senses and helps focus on inner aspects (2017, p. 221).

On the website ArtofLiving (2018), the instructions of brahmari are the following (see appendix 9 for visual example):

1. Sit up straight in a quiet, well ventilated corner with your eyes closed. Keep a gentle smile on your face
2. Keep your eyes closed for some time. Observe the sensations in the body and the quietness within
3. Place your index fingers on your ears. There is a cartilage between your cheek and ear. Place your index fingers on the cartilage. Ensure that you are not putting your finger inside the ear but on the cartilage. Don't press the cartilage too hard. Gently press and release with the finger
4. Take a deep breath in and as you breathe out, gently press the cartilage. You can keep the cartilage pressed or press it in and out with your

fingers, while making a loud humming sound like a bee. While making the humming sound, keep your mouth closed.

5. You can also make a low-pitched sound, but it is a good idea to make a high-pitched one for better results
6. Breathe in again and continue the same pattern 3-4 times. Do not exceed the recommended repetitions.
7. It is important to remain in silence for a little while afterwards, so the difference between outer sound and inner sound is experienced.

5.2.13. Affirmations

The aim of this activity is to promote a sense of confidence in the students, as well as to teach them to focus on one single aspect. This activity is suitable to do at any time during the lesson. For example, it could be done the day before an exam or before a class that requires extra concentration. This task is based on the repetition of affirmations, such as “I am strong” and “there is beauty around me”, combined with calm inhaling and exhaling through the nose.

A PowerPoint presentation (see appendix 10) was originally created for this task. It would be screened in class and each student would decide which one they would like to repeat, they would not need to share their options. Once each student has their own affirmation, they would inhale through the nose, and as they exhale through the nose, they would pronounce the sentence in their mind.

5.2.14. Mindful writing

This is a task which has been especially developed for this didactic proposal. It was inspired in Virginia Woolf’s *Mrs Dalloway* (1925) which is one of the greatest examples of the particular narrative style known as stream of consciousness in the history of English literature. This style is characterised by the fact that the author writes the text as the ideas come to their mind. Other authors who wrote using this method were James Joyce, Marcel Proust, and Henry James.

As stated before in this dissertation, the human mind is often characterised by endless, repetitive, overlapping, and very often negative thoughts occurring apparently always. For this reason, the goal of this task is to make students aware of their thoughts from a non-judgementally perspective. This avoidance of judgement is one of the key aspects of mindfulness. This writing exercise is an attempt to show students how to simply be aware of what they think without putting pressure on themselves depending on the essence of those thoughts.

This task is divided into two parts which would last 15 minutes approximately. First of all, in order to implement this activity with students, a brief introduction would be made. For this, a worksheet with a brief fragment of the novel *Mrs Dalloway* (1925) would be given to the students who would be sitting in groups of three. It is important to mention that the fragment needs to clearly represent the style of stream of consciousness. In addition, it might need to be adapted to the level of the students in order to facilitate its comprehension. Then, one volunteer group would go to the front of the class and read the text aloud in turns. After this, students would be asked to consider what is especial about the text. Once the prose style is explained to the students, the second part of the activity would follow.

The second part entails the writing of a free and open text by students themselves. They will be asked to write down the thoughts they realise in their minds. It is relevant to remind students that grammar aspects, spelling mistakes will not be considered as a matter of failure in this activity. Instead, what is important in this task is that students become aware of their thoughts without judging them.

5.2.15. My Treasure

“My treasure” is a guided visualisation specially created for this proposal. This task was inspired in a childhood story which was personally heard many times. The story dealt with a character who, after wandering in the forest and undergoing many experiences with animals and other people on the way, entered a cave and found a treasure with gold and jewellery.

For this activity, the story of the treasure was used as a base, however, some changes were made in order to meet mindfulness aspects. The main change involves the fact that this story is an open-ended story. In other words, students would draw a treasure and write their own final version of the story.

The main purpose of this activity is that, by drawing their treasure, students highlight the most valuable and positive things they have in their life; it might refer to material things, people, or spiritual things, such as their virtues and abilities. The aim of this activity is to promote imagination among students as well as to improve their self-esteem and well-being. By adding their own final to the story, students feel useful and can use their ideas freely in order to finish the story.

This activity is suitable for any level of secondary education, since the story can be adapted depending on the needs and level of the students. The procedure is very basic and is divided into three parts: first, a brief relaxation to achieve a focused and calm state of mind; second, the narration of the story in a calm and appealing voice by the teacher, and, finally, students would draw their treasure and write down a brief text of what they found in it. An example of the story was created for this proposal (see appendix 11).

5.2.16. Visualise a 10 in The Exam

The last activity of this proposal was inspired by Rhoads and Healy's (2013) article "Prior-to-exam. What activities enhance performance?", which has been previously mentioned in the literature review. In this study, they measured the efficacy of visualising "an A" among students before an exam and proved that meditating before an exam clearly improved the test results (2018, p.8).

Although the idea of discarding numerical marks in school is increasing among teachers and scholars, this activity does not focus merely on the achievement of a 10 in an exam, however, it focuses on motivating students to give their best and use all their potential when preparing an exam. For this reason, since the current education system still marks exams and projects with a number from 0 to 10, it was decided that "visualising a 10 in the exam" would be a suitable title for this activity.

The aim of this task is to enhance students' motivation to study for an exam. Also, it is a very suitable task for those students whose self-esteem is low and need a boost of confidence on themselves. Additionally, this task helps students be aware of how they feel before, during, and after an exam, so that they can apply the necessary relaxation techniques.

In order to carry out this task, it would be suitable to play relaxing music in the background to establish a calm atmosphere. Then, students would be asked to sit down straight on their chairs, relaxed shoulders, and hands on the table or on the laps. At this point of the proposal, students would be asked to remember the activity "breathing in, I know I breathe in; breathing out, I know I breathe out" in order to slow down their breathing and enter a calm state. After this, the teacher would guide students in the visualisation of a 10 in the exam.

The procedure has two parts. First, the visualisation would start with the description of how they normally feel before and during an exam, and then how they could achieve to feel thanks to being mindful and calm.

The following guided visualisation was originally created for this proposal: “First of all, visualise yourself waiting at the corridor, you feel impatient and anxious to enter the class. Now, you get a seat, and take the exam in your hands. You feel totally nervous when reading the questions. You take your pen and start writing in a rush because there is little time. You hand in the exam and you leave totally insecure because you don’t know what mark you will get”.

At this point, the teacher would stop and play calm music in the background and start the second part of the visualisation: “Now, try to swap this nervousness into calmness. You are waiting outside the class and chatting with your classmates losing some tensions and excitement; you enter the class in silence, you only hear the steps of your classmates walking to their chairs. You get a seat and breathe in and out deeply for three times; you feel your feet firmly on the floor. Then, you take the exam in your hands. You feel focused. You read the questions and breathe deeply once more. You start writing the answers. You feel happy because you are calm and focused, the answers are popping up in your mind as you go through the exam. You are creative. After handing in the exam, you leave the classroom in silence, totally happy because you know you have done a great job. The following day, the teacher gives back the exams corrected. You see a 10 at the top of the sheet and enjoy the great feeling of getting the exam back and seeing a great mark on the exam. You know it went so well because you had studied a lot, but also because you were totally focused, relaxed, to the point”.

It is important to remind students that it is alright to feel a bit nervous before the exam, but not so much that concentration is impossible, and anxiety arises. This activity would take 10 to 15 minutes approximately. It would take place the class before the exam and students would be reminded to do this briefly on their own the night before the exam.

6. CONCLUSION

Mindfulness has been scientifically proved to be effective in reducing symptoms of social anxiety disorder, stress, depression, and anxiety. Also, it helps reduce the constant stream of thoughts in the mind and promotes a calmer and blissful

state of mind. It has also been proved to engage emotion-related brain regions, to slightly change the structure of the human brain in long-term meditators, and to improve working memory capacity. Mindful breathing also shows to be beneficial for the body, since it improves pulmonary functions, strengthens the respiratory musculature, and benefits cardiovascular parameters, such as heart rate and blood pressure.

What is more, many scientific studies have shown that mindfulness improves concentration, the ability to focus on one single aspect, and lowers test anxiety, as well as it is beneficial for students with learning difficulties, such as ADHD and ASD. Also, mindfulness has profitable results on teachers as well. With relaxed teachers, a calmer atmosphere in class is promoted and students' needs can be reached more easily.

In this proposal, many mindful breathing techniques have been presented since, as Nematy and Habibi (2012) exposed, "the knowledge that something as simple as breathing differently can produce a different physical and mental response is quite powerful" (2012, p. 2649). In other words, by simply breathing mindfully, students can experience many positive effects. In addition, it is not necessary to devote many hours to practise mindfulness, since a few hours, or even minutes, have been shown to be effective, and any group of population, from kids to elder adults, might benefit from it.

The group of population that has been subject of attention in this dissertation, that is, adolescents, lives with stress and anxiety in a daily basis due to the highly demanding rate regarding their academic lives. Not only they have to handle the stress caused by studies, this specific group also has to face many psychological, physiological, and biological changes common in their life stage.

In addition, it is often claimed by the current generation of middle-aged adults that there is a feeling of disconnection towards their inner selves. As Eliuk and Chorney (2018) pointed out, "this constant rush and push that we have make us fail to connect with others, and it is this connection which is vital to understand one another" (2018, p. 5). Many times, such disconnection is caused by the rush and stress of the everyday modern urban life, which in some cases derives into symptoms of depression and anxiety. If society maintains its evolution as up until now, it is understood that future generations of adults will continue experiencing such disconnection.

Consequently, the combination of these issues can be challenging and difficult for many teenagers. Therefore, it is strongly believed, and scientifically proved in some contexts, that mindfulness can make a difference in how adolescents might go through their teenage period, as Nhat Hanh (2017) stated, “breathing is a wonderful vehicle to bring us back to our body, feelings, and mind [own translation]” (2017, p. 49). In addition, it is firmly believed that teaching mindfulness techniques to teenage students can highly modify the way in which they reach adulthood and the way in which they face the problems in their lives if they have been practising mindfulness for years. As Gunaratana Mahathera (1994) stated, “meditation properly performed prepares you to meet the ups and down of existence. It reduces your tension, your fear, and your worry” (1994, p. 5).

As mentioned before, the purpose of this didactic proposal entailed the introduction of mindfulness training in high schools as a response to the problems of anxiety and stress often experienced by high school students. For this reason, it is worth mentioning that this proposal was partially put into practice in the high school IES Joan Alcover, in Palma, with students of 2nd Bachiller and 1st ESO.

A selection of the above-mentioned activities was taught to the students: the introduction activity, dirga pranayama, the body scan, comma meditation, and the visualisation of a 10 in the exam. These activities were chosen as they were representative of the proposal. What is more, throughout the practice, the pupils were reminded that the participation was voluntary and that they could skip participation if they were to feel uncomfortable at any session.

To gather information and feedback during the practice of these tasks, in-class behavioural observations were made, and students were asked to contribute with their opinion about the activities. On the one hand, the observations in class highlighted the great involvement of 2nd Bachiller students in the activities, their interest in learning relaxation techniques, and the fact that some of them practised what they learnt on their own. As for 1st ESO students, it is important to point out that the students' involvement in the sessions varied depending on their mood. Interestingly, the students with learning disabilities (ADHD and ASD) in this group showed a good reaction to mindfulness.

On the other hand, at the end of each activity, students were asked to share their feelings or opinions regarding the activity. In both groups, they

reported feeling calmer and more focused after breathing deeply for a few minutes, and that they enjoyed the activities and wished they had time to learn more (see appendix 12 for students' personal comments).

Although throughout the implementation, most of the students enjoyed the activities done in the sessions and seemed to benefit from them, it is of interest to mention that there were some limitations. For example, most of 1st ESO students did not seem to engage in the activities, since they felt "weird" sometimes. They also found difficult to concentrate, probably, due to the lack of mental self-discipline of some of the students. Also, even though the explanations and guided meditation were adapted to their level, the language was sometimes a barrier with younger students. Another limitation was the time, which was scarce for the proper implementation of mindfulness techniques with adolescents.

Despite the above-mentioned feedback, it is essential to highlight that no ascertainable results were deduced out of this implementation. This is explained due to three main aspects: the reduced size of the sample, the scarcity of time to implement the whole set of activities proposed, and the handicap of implementing the activities only in one high school. Therefore, these reasons would make the study not enough representative for secondary education students in general.

To sum up, since many of the benefits of meditative practices and mindful breathing have been demonstrated in the last decades, there is no place for hesitation to implement mindfulness techniques in secondary education. This didactic proposal is an example that introducing mindfulness in the class can be done from an appealing perspective, by adjusting the level of the techniques to the students' age. Devoting only a few times in a lesson can lead to an hour of class, or more, filled with concentration and clarity. Thus, improving academic results and, most importantly, providing students with basic techniques to live happy. For all the above-mentioned, it is believed to be time to introduce mindfulness in the secondary education curriculum and to teach it to students as part of their learning years in school. After all, what they learn in those years will accompany them forever.

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APPENDICES

Appendix 1. PowerPoint presentation. Introduction activity.

*What do these athletes
have in common?*



Ryan Giggs. Manchester United FC player



Shaquille O'Neal. Former NBA player



Lebron James, Cleveland player



Ray Lewis, rugby player in Baltimore Ravens



Victor Cruz. Rugby player in New York Giants



New Zealand All Blacks rugby team

Ryan Giggs: Yoga is key to prolonging my Manchester United career

- 38-year-old says yoga 'has definitely helped' him
- Winger admits managing United would be difficult

"The yoga has definitely helped me," the 38-year-old said. "It helps me train every day because it gives me the flexibility and the strength not only to play the game but to train as well.

<https://www.theguardian.com/football/2012/mar/27/ryan-giggs-yoga-manchester-united>

When you are the best basketball player on the planet, there is an awful lot of stress on your shoulders. LeBron James is a huge fan of yoga and claims it has a big impact on his success. For LeBron, regular yoga has helped him to strengthen his muscles and avoid injury (he rarely misses a game), but as he correctly states "yoga isn't just about the body, it's also about the mind," and it helps him to stay focused throughout the season and in the playoffs. Judging by his recent mammoth performances, perhaps we should all follow suit.

<https://www.thesportster.com/entertainment/top-15-athletes-who-do-yoga/>

> HALF-MOON

HOW: Hang forward with your left hand on the floor (or on a basketball) about 12 inches ahead of your right foot. Lift your left leg parallel to the floor, keeping your hips even. Twist to the right, reaching your right arm to the sky. Face the floor until you are ready to look up. Hold for two minutes.

WHY: Develops your concentration, stretches the hamstrings, opens the hips, and strengthens the back muscles.



<https://www.thesportster.com/entertainment/top-15-athletes-who-do-yoga/>

> DOWN DOG

HOW: Keeping your feet hip-width apart, bend down and place your hands shoulder-width apart. Step your feet away from your hands to form an upside-down V. Lengthen through the shoulders. Hold for at least one minute. Repeat five times.

WHY: Helps stretch the hamstrings, back, and shoulder muscles, while also building upper-body strength.



<https://www.thesportster.com/entertainment/top-15-athletes-who-do-yoga/>

Appendix 2. Worksheet for listening activity with questions for high groups.

What is mindfulness?

• You are going to hear a conversation among three people talking about mindfulness and meditation. Sit down comfortably on your chair, relax your shoulders, and listen carefully to the audio. Try and find out the answers to the following questions. Remember this is not an exam, so don't feel pressure to get all the answers. Enjoy!

Questions:

1. What is the meaning of "being mindful"?

.....
.....

2. What do you have to do to practise mindfulness?

.....
.....

3. Where does mindfulness come from? Where is it commonly practise now?

.....
.....

4. Complete the following sentence according to the text. "Learning happens so much more easily if _____"

5. What is the difference between meditation and mindfulness?

.....
.....



Appendix 3. Worksheet with adapted script and questions for lower groups.

What is mindfulness?

• You are going to read a conversation among three people about mindfulness. Pay attention to the words in bold and answer the questions at the bottom of this worksheet.

Neil

OK, I want you to close your eyes. Focus... on your breathing.

Catherine

Neil? Can we do this later? We've only got six minutes.

Neil

Ok, Catherine. Welcome to a **mindful** edition of 6 Minute English, where we're exploring the rise of **mindfulness** – particularly in schools.

Catherine

And we'll be teaching six items of vocabulary along the way. So, I think we should start with **mindfulness** itself.

Neil

Being **mindful**, as an adjective, means 'being calmly aware of everything in your body and mind'. You only focus on 'now'.

Catherine

People practise **mindfulness**, the noun, by focusing only on their breath, and not allowing themselves to be distracted by passing thoughts.

Neil

Indeed. It's traditionally associated with Buddhism and has become incredibly popular in the **secular** world – in workplaces, in private classes and even in schools.

Catherine

Secular means 'non-religious' by the way.

Neil

Now let's hear from one teacher who's been practising **mindfulness** with students for many years. Alison Mayo, Head of Early Years at Dharma Primary School, thinks it's particularly suited to young children. Why?

Alison Mayo, Head of Early Years, Dharma Primary School

That's very natural for children - to be **in the present**. And we really kind of celebrate that because that is a place where they are learning. So, if they feel **grounded**, then they can really develop their concentration and their focus, and relax. Learning happens so much more easily if you're relaxed and happy.

Neil

Alison said it was natural for children to be **in the present**.

Catherine

The present – means 'now'. You'll know it from the 'present tense' in grammar. And people who practise **mindfulness** use this phrase a lot – to be **in the present**, or **in the present moment**.

Neil

It sounds simple, but actually it's very hard to achieve.

Catherine

Well, Neil, it might be for an old chap like you, but for young people, Miss Mayo thinks it's very natural.

Neil

Fair enough. Being **grounded**, as she says, helps students concentrate and learn in a relaxed way.

Catherine

Grounded is another good adjective there – it means 'rational, sensible, clear thinking'.

Neil

So, she's a fan of **mindfulness**. And there's growing evidence behind its benefits.

Catherine

Yes. The UK's national health advisory body has recommended it to help treat conditions like depression and anxiety.

Neil

Studies have shown it reduces levels of the stress hormone, cortisol.

Catherine

And a new study has claimed that eating **mindfully** can actually help people to lose weight.

Neil

You mean eating slowly?

Catherine

Yeah, slowly and really experiencing and tasting the food. Not being distracted and not eating too much too fast!

Neil

What seems certain is that **mindfulness** has entered into many aspects of modern life, at least here in the UK.

Catherine

So before we finish up, here's another question that might be useful for our listeners – what's the difference between **mindfulness** and **meditation**?

Neil

Aha – that's not so easy to define. **Meditation** is the broader term. When you **meditate** you spend time quietly – focusing your mind - often for relaxation or spiritual purposes. **Mindfulness** is a particular a kind of **meditation** – when you try to empty your mind of thought. Does that make sense?

Catherine

Yeah, more or less. So we'll let our listeners **meditate** on that answer. And before we empty our minds, let's look back at today's words. We had **mindfulness**, **mindful** and **mindfully** – they all relate to the particular practice of being only focused of what's happening now.

Neil

What's happening now, or we could say – what's happening **in the present**. People often focus on the past – thinking back about mistakes or happy memories...

Catherine

Or on the future – which can be full of worries. But by being **in the present** – you overcome these thoughts and fears. Next, we had **secular**. It contrasts with 'religious'. So, while a church is a religious building, we also have **secular** buildings – like factories and shops and hospitals...

Neil

All non-religious buildings, in other words!

Catherine

Exactly. Now, tell me Neil, are you feeling **grounded** right now?

Neil

You're asking if I'm thinking clearly and feeling connected to the world? Do you even have to ask, Catherine – I'm a very **grounded** person.

Catherine

You are, most of the time. Most of the time you're naturally **grounded**, every now and again you get a bit panicked, but some of us need to remember to slow down, chill out and **meditate** once in a while.

Neil

Yes, that would be it! **Meditation** means to take quiet time to focus deeply on something. OK, this is all for today!

Both

Bye!

Questions:

1. What is the meaning of “being mindful”?

.....
.....

2. What do you have to do to practise mindfulness?

.....
.....

3. Where does mindfulness come from?

.....
.....

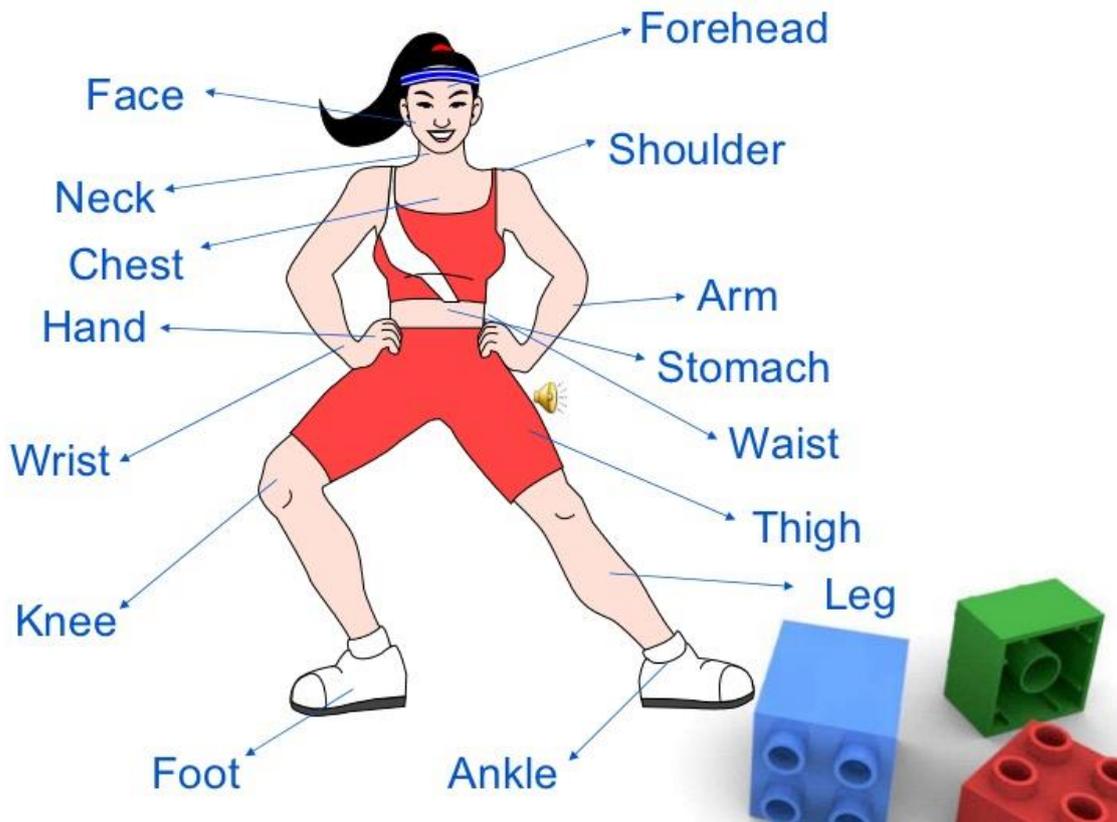
4. Complete the following sentence according to the text. “Learning happens so much more easily if.....”

5. What is meditation?

.....
.....



Appendix 4. Body Scan. Picture to revise body parts.



Appendix 5. Body scan script.

As we begin this practice, focus your attention on your breathing. Don't try to control it, just be aware of it. We are going to do a body scan meditation, which will start at our toes, go through our entire body, and finish at our head. If you feel distracted by any thoughts, don't judge them, and come back to my voice or your breathing.

Now, start by sitting straight, feel your spine long, feel comfortable on your chair. Very gently, close your eyes. Relax your shoulders, neck, and jaw. Place your hands somewhere comfortable for you, on your laps, for example. Now, pay attention to your breathing. Feel how you breathe in and out. Take three deep breaths. As you breathe in, feel the fresh air energising your body. As you breathe out, feel all the problems and tension leave your body. We will start now the body scan meditation. Enjoy. Let's bring your awareness to your feet. Feel your toes, your heels. Feel how they touch the floor. You are grounded to the Earth.

Let the awareness come up to your legs, your knees, how they connect both parts of your legs. Feel your tights and your hips.

Softly move your focus to your back. Feel first your lower back, relax it. Feel your spine how long it is, how it goes from bottom to top, little by little. Remember to breathe in and out with awareness.

Bring your attention to your shoulders now. Relax your right shoulder, right arm, and right hand. Also, the fingers. And now your left shoulder, left arm, and left hand. The fingers. Feel how they are relaxed, there is no tension in your hands. You can stretch your fingers slightly if that feels comfortable to you.

Let the awareness rise to your neck. It holds your head straight, strong but relaxed. Feel your throat. Remember how powerful your voice can be.

Don't forget to breathe mindfully. With every breath in, you feel more energised. With every breath out, you feel more relaxed. Now, move the focus to your head, how it is more relaxed with every breath. Feel your face, your eyes which are calm and relaxed. Your jaw is not cramped, your tongue is resting softly in your mouth. Without tension. Focus the attention on your belly. Feel how it fills in with every breath in and how it empties with every breath out. Feel how relaxed it is, Feel all your body once more. It is relaxed now. You are calm, and confident.

Now we are coming to an end. So please take three more breaths and when u finish and feel comfortable, gently open your eyes.

Appendix 6. Steps for nadi shodhana pranayama.



1

Close the right nostril. Exhale through the left, and inhale to a count of 4.



2

Close the left nostril as well, and retain the breath to a count of 16



3

Release the right nostril, and exhale fully through it to a count of 8.



4

Keeping the left nostril closed, inhale through the right to a count of 4.



5

Close both nostrils and retain the breath to a count of 16.



6

Release the left nostril, and exhale to a count of 8 to complete one round.

Appendix 7. Guided meditation: Wild Horses Nature script.

Breath in and feel the beat of your heart. Steady and strong. Feel the powerful flow of your life force pulsing through you.

Find yourself now standing on the side of a hill surrounded by wild flowers. The sky is a soft blue. Clouds move gently by, changing shape as they roll past. The air is comfortably cool; a soft breeze caresses your skin. Feel a blow through your hair.

Take a look around and begin walking up the hill. The ground and grass feel soft beneath your bare feet.

As you crest the hill, you see a vast landscape of more rolling hills covered with an array of green grasses and fields of flowers. Some fields are shades of rich red and pink. Others are a vivid vibrant lavender colour.

But what makes your heart skip a beat are the hundreds of wild horses grazing in the fields. They are far off in the distance, but you can make out their manes and tails blowing in the breeze. Some of them are playing and you can hear the faint sound as they chase each other from field to field. You have never seen so many horses in the wild. And seeing so many of them together, so joyful and content lifts your spirit and brings a smile to your face. Sit down on the grass and peacefully watch them as they graze and play. Observe how beautiful they are.

Looking over to the left you see a white horse through the field of lavender, following close behind is a painted coat of brown and white. Could it be a mother and her foal?

You see three pale beige horses chasing each other up and down a field of orange flowers. They look like teenagers playing.

Over to your right you see a chestnut horse standing with a beautiful horse rubbing their necks together gently.

Your eyes are drawn to a large black stallion with a very long mane and tail slightly higher up the hill. Looking over the rest of the herd. You sense this could be the dominant male. Protecting his family from any danger that may threaten them.

Fascinated by the magnificence of these animals. It puts you into a meditative state as your eyes see the herd. Focusing on individual horses as they move gracefully through the fields.

Feel the soft breeze in your hair and against your skin. The smell of flowers changes as the direction of the breeze shifts.

Your gaze drifts from the horses to other fields to your side and behind you.

Off in the distance behind you is a forest of trees and beyond that a mountain range with snow covered peaks. As you admire its beauty you notice a rumbling beneath your feet. You turn your head to the rolling hills. Before you see the horses. Hundreds of horses are galloping in your direction. You jump to your feet. Your heart begins to race. And you think perhaps you should run. But you feel a sense of safety knowing that these incredible creatures are going to instinctively run past by you.

Your heart beats faster as your excitement builds and your adrenalin pumps. The horses are quickly approaching. You know in every cell of your being that if you don't move they will run to either side of you. Not touching you. So, you continue to stand still and take in this magnificent sight, sounds and vibrations before you. Surrounding you and passing through you. Allow the power to permeate your body. The energy building with intensity every moment the horses grow closer to you.

A black horse runs past you to the right. You feel he strengthens his power as the air blows past you and bits of the earth lift off the ground. The others follow him. Some to your right; some to your left. You stand motionless allowing your body to absorb every second of this awesome "once in a lifetime" experience.

Your body feels charged with pure joy and aesthetic energy as the herd roars past you. You try to look at everyone you can. The herd begins to thin, and the last horses run past you. You turn and watch as they run over rolling hills and fields in the distance towards the forest.

Take in a deep breath and let it out slowly.

Your body is tingling with the energy you have absorbed. It is nothing like anything you have ever felt before. You feel like you can harness this power, the strength, these horses have gifted you to do anything your heart desires. Over to the right one horse, a black stallion, walks back over the hill and up to you. He stands several feet away and looks into your eyes. Look back into his. You feel safe, powerful...at ease.

He walks toward you, reached out your hand and brings his head towards it. You gently touch his muzzle and face. He whinnies gently at your touch. Your breath as well as his slows down as you stroke his soft face and muscular form.

He whinnies again and turns away. He walks a few steps and turns back towards you. Again, you look into each other's eyes. What you see there is his soul and you know with all that you are that he can see yours. You are forever connected.

He turns once again and gallops off to join the (herd?). You breathe in again deeply. You can't believe what just happened. You feel a smile grow on your face from ear to ear. Facing the landscape of rolling hills, forests and mountains. You see the black stallion disappear into the treeline. You feel overwhelmed by the connection of this black stallion. Throw your arms in the air and yell "yes!".

Sitting back on the grass. Starring for a few more moments. You lay back and look at the pale blue sky. Watching the clouds slowly drifting past. Breathing in...holding the breath...and letting it all go.

Bringing your breath now back to a normal natural rhythm. Begin to feel a sense of calmness to washed throughout your entire body. Ground and grass beneath you begin to fade and you start to feel the soft bed or chair that you have been sitting on during this meditation. The sounds and smells of the hillside fade.

As you start to become aware of the sounds and smells in your room. Breath in...hold it for a moment....and breath out. You have returned to start your day. A day in which you carry the power and bonds you made with nature. A day you can do and achieve anything you can imagine. Welcome to a brand-new day.

Appendix 8. Guided meditation: The Deserted Beach script.

Guided fantasy: The deserted beach

Make sure you're sitting in an upright position with both feet flat on the floor, hands resting comfortably on your thighs. Take a deep breath, and relax.

Close your eyes for a moment, and imagine that you are walking alone along a deserted beach. You are very safe and will not be disturbed.

Make a clear picture in your mind's eye. Look around you as you walk. What can you see? Notice the colours. Look out to sea as far as the horizon. Is the sea calm? Is it rough? Are there any boats? Or birds? What kind of day is it? Sunny? Cloudy?

Hear the sound of the waves. Hear the sound of your footsteps in the sand or on the pebbles. What other sounds are you aware of? Can you hear seagulls?

Feel the air against your skin. Breathe it in. How does it smell? How does it taste? Feel the movement of your body as you walk. Feel the beach under your feet.

Go right up to the water's edge and put your hand into the water. How does that feel? Put your wet hand against your face. Is it cold? Can you smell the sea? Can you taste the salt?

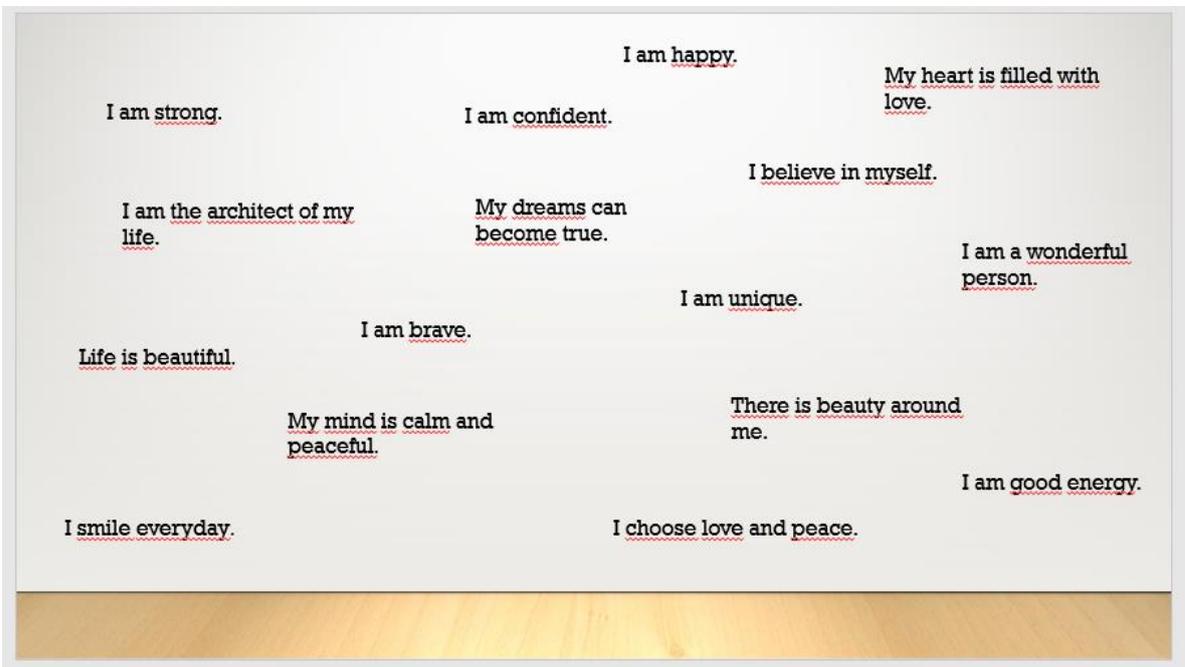
You may feel like taking off your shoes and socks to have a paddle. Or you may feel like taking off the rest of your clothes to have a swim. Or you may feel like sitting for a while and gazing out to sea. Or you may feel like continuing your walk along the beach. Do whatever you feel like doing. You will have half a minute of real time which is all the time you need. And, whatever you do, be very aware of everything that you see and hear and feel. And be glad to have this chance to be alone in such a beautiful place ...

And now prepare to leave, knowing you can revisit this place any time you choose. When you're ready, take a deep breath, and, with a sense of gladness, come back to the room.

Appendix 9. Visual example of brahmari pranayama.



Appendix 10. PowerPoint presentation with affirmations.



Appendix 11. “My Treasure” story.

“Once upon a time, there was a kid who lived in the mountains with her mother and her grandfather in a wooden house. She enjoyed very much going for a long walk in the forest with her big brown dog. One day, she woke up very early, the sun was already shining, and some warm rays entered her room. She went to the kitchen and prepared a small breakfast: a green apple, a toast, and a bottle of fresh water; she packed it in her bag and left home. When she opened the door, a fine breeze touched her face and made her smile. It smelled like fresh grass and the sky was totally blue. She called her dog, Mike, and started to walk towards the forest.

After a little while walking along a valley, she entered the forest and felt very happy. There were mushrooms on the ground, birds singing on the trees, many beautiful flowers... At some point, she saw a strange big stone next to a hill and decided to get closer to have a look. Mike, the dog, started barking and jumping around. With a lot of effort, she moved the stone and discovered that it was the entry to a hidden cave. She found it curious that there was some soft light inside.

As she was very brave, she decided to go in and investigate a bit. It could be a cool story to tell her friends. Suddenly, she saw a human figure at the very end of the cave. This human figure made a sign calling her, so she approached the figure. This figure looked like a witch, but not the typical witches as we know them in other books, this witch was special. She had blue eyes, soft white skin, long dark curly hair, and a beautiful long green dress. Also, she was holding a magic stick which had many beads and decorations. Next to her, there was a big wooden box.

The witch said to the girl, “tell me, little girl, what is your most valuable thing?” To what the kid answered, “hmm, I don’t know, my dog!” The witch continued, “I can understand. He seems a good friend for you. He is sweet. What about you? What is your most valuable thing you have inside?” The girl hesitated and then added, “I am always smiling!” The witch laughed and nodded. Then, she continued, “Now, what would you tell me if the most valuable things you have in your life are kept in this big trunk?”

The girl kneeled down and took a big metal key which was laying down on the ground, it was a bit muddy, so she cleaned it. The trunk smelled like old wood and had very nice engravings on it. She opened it. She smiled and felt happy when she saw what the trunk had inside”.

Appendix 12. Students’ feedback related to the activities practised in class.

- When stressed, some of the common symptoms reported included:
(2nd Bachiller) “I am in a bad mood”, “I am nervous”, “I am angry”, “I cry and I am sad”, “I detach from my friends and family”, “I don’t study so much”, “I am blocked and unconcentrated”, and physical reactions, such as “I feel sick”, “I lose appetite”, “I eat too much”, “I vomit”, “I have headache/stomachache”, “I suffer insomnia”, and “a weird feeling that goes all over my body”.

(1st ESO) “I want to hit something” “I get nervous”, “I get angry”, “I shout”, “I am in a bad mood”, as well as physical reactions, such as “I feel hot”, and “I have headache and stomachache”.

- After all the activities had been taught, students reported personal comments on their participation:
(2nd Bachiller) “Listening to some relaxing music in the background would be nice”, “I really liked that after every mindfulness practice I felt more relaxed and more invested in anything we were about to do in the class”, “in my case it worked with stress but not with the insomnia”, “we have learned a lot with you!!!”, “I’m very grateful to know some new techniques for manage the stress. I try to do some of them, but sometimes I feel that I lose the time, but I hope it’s not true”, “I would like to learn some techniques to face fear when I go down street at night or similar situations. Thanks!”, “I think it would be more useful for us activities like guided meditations or so, that we can learn and be introduced in different ways which are not the typical ones (just to breath in and out for example). What I mean is that you "taught" us very common exercises (which are more or less useful) and I think you have the opportunity to be more specific with lesser-known activities”.

(1st ESO) “I enjoyed it”, “I feel good”, “I have learnt a lot”, “I wanted calm music”, and “I am happy I learnt techniques to relax”, “I felt weird sometimes”.