

## Application on Nymphaea ‘Thai Lotus Species’ for Creates Awareness of Undergraduate Students

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### ABSTRACT

The objectives of this study were to 1) investigate the efficiency of Application on Nymphaea 'Thai Lotus Species' for creating awareness of Undergraduate Students, 2) compare students' achievements before and after learning through the Application on Nymphaea 'Thai Lotus Species' for Creates Awareness of Undergraduate Students, and 3) examine student satisfaction towards the Application on Nymphaea 'Thai Lotus Species' for Creates Awareness of Undergraduate Students. The sample comprised 30 Secondary 4 second semester at Faculty of Technical Education, Rajamangala University Thanyaburi Education Service Area Office Pathum Thani, derived through purposive sampling technique. Data was collected through an application called Nymphaea 'Thai Lotus Species' to create awareness among undergraduate students. The research used a pretest, a post-test, and a student satisfaction form. The data was analyzed using percentage, mean, standard deviation, and t-test for dependent samples. The findings showed that the Nymphaea 'Thai Lotus Species' application was adequate, with an E1/E2 score of 81.58/80.03. The study also revealed that students achieved better results after using the application to learn about creating awareness among undergraduate students. The mean and standard deviation before learning were 8.27 and 2.22, while the mean and standard deviation after education were 4.66 and .61. The t-test score used before and after schooling was 31.16 at a statistically significant level of .05. Moreover, the student satisfaction towards the Application of Nymphaea 'Thai Lotus Species' for Creates Awareness of Undergraduate Students was high.

**Keywords:** Application, Thai Lotus Species, Creates Awareness, Undergraduate Students

### INTRODUCTION

There has been a growing interest in fostering environmental awareness and biodiversity protection in recent years, particularly among younger people. This enthusiasm has been extreme among younger people in recent years. Undergraduate students are an essential group to target in this attempt because they are the future business and political leaders and the decision-makers who will determine the future of the planet's ability to remain habitable. One effective method for fostering environmental consciousness is introducing novel plant species with significant cultural meaning, such as the Nymphaea 'Thai Lotus Species,' a type of lotus. Students have a fantastic opportunity to get interested in biodiversity, ecological value, and cultural relevance by studying this fascinating aquatic plant, which is native to the tropical regions of Southeast Asia. This introduction intends to shed light on the Significance of utilizing Nymphaea 'Thai Lotus Species' as an instructional tool to develop awareness among undergraduate students. Specifically, this introduction will focus on the relevance of using Nymphaea as an educational tool. A magnificent flowering aquatic plant, the Nymphaea 'Thai Lotus Species,' more often referred to as the Thai Lotus, flourishes in the calm waters of ponds, lakes, and slow-moving rivers. Its common name is the Thai Lotus. Because of its unique bright pink or white petals and leaves that resemble lily pads, the lotus flower is an image of beauty and peace in Thai culture. In addition to its aesthetic appeal, this species plays an essential part in maintaining the biological harmony of aquatic environments by providing a habitat for various marine organisms and food for them. Using Nymphaea 'Thai Lotus Species' as a teaching tool gives several different educational perspectives to undergraduate students. In the first place, it shows students the fascinating world of aquatic botany. It gives them hands-on experience analyzing and comprehending this one-of-a-kind plant species' life cycle, growth patterns, and reproductive tactics. In addition, participating in this activity provides a realistic setting to learn about the more extensive ecological interactions that occur within aquatic ecosystems, such as the interdependence between flora and fauna. The attitudes and interests of students towards plant-related subjects, such as botany, ecology, evolution, and zoology, are influenced by their knowledge and attitudes towards plants.

Females generally exhibit better scores in plant knowledge and attitudes than males. However, both genders show similar levels of interest in plants. A factual understanding of botany is critical in cultivating positive attitudes towards plants. Besides, linking concepts between different fields can help to reduce plant blindness. (Kubiak, M., Fančovičová, J., & Prokop, P., 2021).

Asian traditional medicines, medicinal preparations, and herbal teas have included "Bau Luang" or *Nelumbo nucifera* Gaertn., an aquatic medicinal herb. These medicinal plants use *N. nucifera* stamens in dried and powdered form for herbal tea and traditional cures. Another water herb, "Bau Sai" (*Nymphaea lotus* L.), grows in similar areas. It's hard to tell the dried and powdered stamens of these two therapeutic aquatic species from their living plants. The high cost of Bau Luang stamen drives adulteration (Tungmannithum, D., Renouard, S., Drouet, S., Blondeau, J., & Hano, C., 2020). Furthermore, *Nymphaea* 'Thai Lotus Species' holds cultural Significance as it links environmental research with Thai heritage. In addition to being educated about the biological features of plants, students are provided with an understanding of the symbolic Significance of plants in Thai rituals, art, and folklore. The establishment of this cultural association nurtures a more profound recognition of the interdependence between nature and human communities, promoting a collective consciousness of global citizenship and the obligation to save our planet. Including *Nymphaea* 'Thai Lotus Species' in undergraduate courses is the overarching educational goal of fostering environmental care and promoting sustainability. This platform offers students a concrete opportunity to directly observe the effects of human activity on natural environments, hence strengthening the importance of conservation initiatives. In summary, the utilization of *Nymphaea* 'Thai Lotus Species' within the context of undergraduate education serves as a powerful instrument for generating consciousness and cultivating a more profound comprehension of environmental concerns. By integrating scientific inquiry, cultural understanding, and ecological consciousness, this pedagogical method enables students to engage in the worldwide endeavour toward a heightened level of sustainability. As we progress, we must persist in examining inventive and captivating approaches to motivate the forthcoming cohort of environmental leaders. Lotus root (*Nelumbo nucifera* G.) is a high-economic value crop worldwide. This study evaluated the storage characteristics of lotus root colour, sensory texture, and fatty acids at different harvest periods. The results of this study provide a reference for lotus root storage and a basis for the molecular breeding of long-term-storable lotus root (Min, T., Niu, L., Feng, X., Yi, Y., Wang, L., Zhao, Y., & Wang, H., 2021). Science education plays a crucial role in promoting social sustainability and understanding the importance of Planet Earth. Post-humanist ideologies emphasize the co-constitutive nature of the world, challenging anthropocentric and Western worldviews. By developing scientific literacy and literacies, students can contribute to a sustainable and peaceful world, addressing the interconnectedness of micro to macro-life and cultural and environmental ecologies (Jeong, S., Sherman, B., & Tippins, D., 2021).

Lotus and Waterlily Museum Rajamangala University of Technology Thanyaburi was an agency that presented guidelines consistent with the Plant Genetic Conservation Project Under the Royal Initiative of Her Royal Highness Princess Maha Chakri Sirindhorn. The objective is to enhance the knowledge and skills of personnel and organizations, introduce volunteers and companies to plant genetic conservation, foster connections between various organizations, including government agencies and private sectors, and establish a shared plant genetics database system across the country. The Sirindhorn Bua Museum is committed to preserving and advancing lotus genetics, a crucial aspect of the plant family. The museum is actively collecting and preserving various species of lotus, aiming to raise awareness and protect these endangered species while promoting their propagation and improvement—Bua Sirindhorn Museum, A collection source. Planting, maintaining, and using lotus species, including being a lotus species information centre, will benefit people. Lotus, the queen of dry aquatic plants, is famous worldwide. The following lotuses are available: royal, western, Jong Konni, Victoria, water lily, and sectional. Head or underground rhizome. The single leaves alternate. The oval, thick, rounded leaves measure 15-25 cm. Leaf edges are smooth or toothed. Leaf blades are wide. Bright green leaves have glossy tops. Soft hairs cover leaf and blossom stalks. White, yellow, pink, or brilliant crimson blossoms are usually fragranceless. Its rhizome produces one bloom. Round, fat flower stems. The species determines the smooth or hairy surface. Send water-floating flowers. Flowers are cup-shaped or circular. Layers conceal several petals. Flowers blossom afternoons and evenings. Full-blooming blossoms, 6-8 cm deposit/fruit, fleshy fruit. Oval to spherical, thick, black shell, many seeds. Flowers thrive in rainy weather. This "Bua Jongkonnee" resembles all lotus species. Aquatic roots are mud-buried. Peelable bark forms a web on this juvenile bloom stem. Smooth, thorny skin. Water-floating leaves. No jagged leaf edges. Lovely lotus leaves. They are flowering above water. They bloom midday. Thin, overlapping petals All flowers float and thrive—one kind. Pink blooms turn white and green before blooming. Black fruit/deposit seeds with meat Looks like clear jelly. Lotus-like "Victoria Lotus" leaves are prominent. The water lily is named for its spherical shape and raised shell-like borders—thorny leaf stalks. "Water lilies and water lilies" are aquatic perennials. A small underground tuber is the trunk—nearly spherical leaves. Margins have waves. The leaf base is deep—convex leaf veins. Single blooms and alternate leaves float in circles on the water—small, flowering above water, tall stem, 4 sepals.

The Thai Lotus, a species native to Southeast Asia's tropical waterways, is a captivating aquatic plant that has captivated botanists and horticulturists. This marine beauty teaches undergraduate students about aquatic botany, life cycle, and adaptive tactics. It also promotes cultural exchange, enhancing Thai heritage, and promoting global citizenship and environmental responsibility. By observing the complex web of life in aquatic areas, students learn about human impacts on vulnerable ecosystems and inspire conservation and preservation responsibilities. This approach effectively teaches environmental awareness and sustainability in a complex ecological context. The flowers have numerous hidden layers, stamens, and round fruit containing tiny seeds. Two types of lotus flowers are native to Thailand. The first is the water lotus, with white flowers with light indigo petals at the tips. The second type has pale purple flowers that turn pink over time. White lotus flowers can occasionally be found and used for ornamental purposes. The flower stalks are eaten as a vegetable. "Lotus" is in the lotus genus. The leaves are raised above the water. Grows by flowing and chewing beneath the ground. The varieties of lotus that are popularly planted at present include the types of Chat White, Chat Kaew, and Chat Red. Chat lotus or Sattabongkot are pink, white, and white with pink ends and pink with white spikes. Of all the lotuses, "Luang Lotus" is the most critical lotus economically, and farmers grow the most.

There are two essential purposes of planting: planting to cut flowers and buds, which are used to worship Buddha, and planting to collect seeds. The Thai Lotus, a species native to Southeast Asia's tropical waterways, is a captivating aquatic plant that has captivated botanists and horticulturists. This marine beauty teaches undergraduate students about aquatic botany, life cycle, and adaptive tactics. It also promotes cultural exchange, enhancing Thai heritage, and promoting global citizenship and environmental responsibility. By observing the complex web of life in aquatic areas, students learn about human impacts on vulnerable ecosystems and inspire conservation and preservation responsibilities. This strategy is an effective way to teach environmental awareness and sustainability in an increasingly complex ecological context. The problem situation calls for teaching Applications on Nymphaea 'Thai Lotus Species' to create awareness among Undergraduate Students to enhance efficiency and create knowledge. Thai lotus application at Rajamangala University enhances undergraduate students' learning experience, satisfaction, and achievement in Thai language and culture.

## LITERATURE REVIEW

The aquatic plant genus Nymphaea, known as water lilies, is renowned for its cultural value and exquisite beauty. A study was conducted to raise awareness of Nymphaea 'Thai Lotus Species' among undergraduate students. Among the many species, the Nymphaea 'Thai Lotus' stands out due to its brilliant colours and distinctive qualities. This literature study aims to investigate the use of Nymphaea 'Thai Lotus Species' in developing awareness among undergraduate students, emphasizing the possible benefits of this application for education and environmental awareness. Botanical Significance of the Nymphaea 'Thai Lotus Species' The water lily known as Nymphaea 'Thai Lotus Species' is native to Southeast Asia. It is famous for its remarkable look, distinguished by huge, round leaves and colourful, multi-petaled flowers. Its leaves and flowers both have a distinctive appearance. Due to the singularity of its botanical composition, it presents an exciting subject for investigation and admiration. Pupils interested in botany and ecology will find that understanding its life cycle, habitat requirements, and adaptation mechanisms can be a significant instructional resource for those pupils. The lotus flower has a significant cultural and symbolic importance in many cultures. The lotus flower represents spiritual enlightenment, purity, and progress. In Thai culture, the lotus is particularly revered and plays a prominent role in various rituals and ceremonies. By introducing Nymphaea 'Thai Lotus Species' to undergraduate students, educators can tap into this cultural Significance to foster an appreciation for diversity, spirituality, and interconnectedness with nature. Environmental Awareness and Conservation Studying Nymphaea 'Thai Lotus Species' can be a gateway to broader discussions about environmental conservation. It allows students to explore wetland ecosystems, biodiversity, and the importance of preserving natural habitats.

Understanding the threats these plants face, including habitat loss and pollution, can still create a sense of responsibility toward environmental stewardship. Educational Pedagogy and Experiential Learning, incorporating Nymphaea 'Thai Lotus Species' into undergraduate curricula can enhance the learning experience through hands-on, experiential activities. Establishing botanical gardens or aquaria with live specimens can give students direct access to observe and study these plants in controlled environments. Such interactive learning experiences can deepen their understanding of plant biology and ecology. Art and Aesthetic Appreciation The visual appeal of Nymphaea 'Thai Lotus Species' lends itself to artistic expression. Students can engage in activities like sketching, painting, or photography, drawing inspiration from the intricate patterns and vibrant colours of the lotus flowers. This artistic exploration encourages creativity and reinforces the idea of finding beauty in nature. Promoting Mindfulness and Well-being, engaging with natural environments, including those cultivated with Nymphaea 'Thai Lotus Species,' has been shown to affect mental well-being positively. These serene aquatic habitats can serve as a sanctuary for students to de-stress, practice mindfulness, and develop a deeper connection with the natural world. Applying Nymphaea 'Thai Lotus Species' in undergraduate education offers a multifaceted approach to fostering

awareness and appreciation among students. From its botanical Significance to its cultural and environmental relevance, this unique plant species provides a rich platform for interdisciplinary learning. Educators can inspire a new generation of environmentally conscious individuals who value and protect the natural world by incorporating Nymphaea 'Thai Lotus Species' into educational settings.

**METHODS**

**Population and sample group:**

The population includes first-year undergraduate students in the academic year 2022. Faculty of Industrial Education Rajamangala University of Technology Thanyaburi students 404 individuals selected the target group using the sampling method, including the sample group in this research: first-year undergraduate students, Faculty of Industrial Education. Educational Technology and Communication Department Rajamangala University of Technology Thanyaburi, 27 students. During the second semester of the academic year 2022, a specific sample was collected using "Purposive Sampling" for a class on rice.

**Instruments of Research:**

- (1) An Application on Nymphaea 'Thai Lotus Species' for Creates Awareness of Undergraduate Students.
- (2) Questionnaire for Upper Undergraduate Students seeking the opinions of industry professionals evaluating the quality of augmented reality media on Thai rice products., and (3) The pretest and the subsequent test., and (4) An evaluation form for students in Undergraduate Students the use of Application on Nymphaea 'Thai Lotus Species' for Creates Awareness of Undergraduate Students.

**Data collection:**

Collecting data includes researching many concepts, fundamentals, and theories associated with producing Applications on Nymphaea 'Thai Lotus Species' for creating awareness among Undergraduate Students. The increased reality material that the researchers generated should be brought to the professionals so that they can review it. To ensure consistency between content, language, questions, teaching activities, and creation aim, consult with measurement and evaluation specialists to determine tool usefulness. Then, make the necessary improvements and corrections to ensure that everything is accurate and comprehensive, just as the recommendations of the specialists suggest in every regard. After that, the augmented reality media was utilized three times with students from schools that were not part of the sample group, including measuring the effectiveness of the students on an individual level. After conducting an efficiency trial with small groups and field testing, the team adjusted and changed until the product reached an acceptable level of performance. As a result, media based on augmented reality was utilized with the sample population.

**Statistics used to analyze data:**

- (1) Determine whether using Application on Nymphaea 'Thai Lotus Species' to create awareness among Undergraduate Students is effective. By applying the equation for calculating efficiency  $E1/E2$  (2), Compare the pretest results with the post-test using a t-test for dependent samples with a significance level of .05 (3). Using the mean and standard deviation (SD.), investigate the contentment of Undergraduate Students with access to augmented reality media.

**FINDINGS**

**Table 1:** Report for Undergraduate Students totalling 30 people summarizes the findings of Application on Nymphaea 'Thai Lotus Species' for Creates Awareness of Undergraduate Students.

List	Full score	Average score	percentage	Benchmark	E1/ E2
Score during study	50	41.17	81.58	80	81.58
Posttest	20	16.33	80.03	80	81.03

Table 1 shows the results of using the Application on Nymphaea 'Thai Lotus Species' to create awareness among Undergraduate Students. Then, take the results of the scores from the test that 30 Undergraduate Students completed. The average percentage score was 81.58, while the average post-test score was 81.03. This indicates that the Nymphaea 'Thai Lotus Species' application effectively raises awareness among undergraduate students, as it satisfies the 80/80 requirements.

**Table 2.** This study aimed to compare the pretest and post-test performance of students who had learned about the Application of Nymphaea 'Thai Lotus Species' for creating awareness among Undergraduate Students.



	Full score	Average score	SD.	t	Sig.(2-tailed)
Pretest	96.03	8.77	2.22	31.16	.00
Posttest	68.47	16.33	1.45		

As shown in Table 2, the results of applying Application on Nymphaea 'Thai Lotus Species' for Creates Awareness of Undergraduate Students were as follows: The standard deviation for the pretest was equal to 2.22, and the average score was 8.27. The pupils learned about applying Nymphaea 'Thai Lotus Species' to create awareness among Undergraduate Students. After that, the pupils' overall performance on the post-test averaged a zero. The standard deviation is 8.77, the mean value is 16.33, and the t-test analysis before and after the study is 31.16, statistically significant at .05.

**Table 3.** The following are the findings from an investigation into how Undergraduate Students were satisfied with the Application of Nymphaea 'Thai Lotus Species' for Creates Awareness of Undergraduate Students.

Evaluation list		$\bar{x}$	SD.	Interpret results
<b>1. Media</b>				
1.1	Clear explanation of media usage	4.86	.43	The most
1.2	Beautiful and interesting media format	4.53	.72	The most
1.3	Easy to use and easy to learn	4.60	.76	The most
<b>Total average</b>		<b>4.69</b>	<b>.57</b>	<b>The most</b>
<b>2. Content</b>				
2.1	The content meets the learning objectives	4.50	.81	The most
2.2	The language used in the lessons is easy to understand	4.46	1.15	The most
2.3	Presentation of content is easy to understand	4.83	.37	The most
2.4	The amount of content in each story is appropriate	4.63	.77	The most
<b>Total average</b>		<b>4.60</b>	<b>.77</b>	<b>The most</b>
<b>3. Measurement and evaluation</b>				
3.1	Clarity of questions and answers	4.83	.50	The most
3.2	Appropriateness of the number of assessments	4.53	.47	The most
3.3	Alignment of assessments with content	4.30	1.07	The most
3.4	Promoting self-directed learning	4.56	.62	The most
<b>Total average</b>		<b>4.55</b>	<b>.69</b>	<b>The most</b>
<b>4. Instructional activity organization</b>				
4.1	Encouraging learner engagement in activities	4.96	.18	The most
4.2	Facilitating learning anywhere, anytime	4.80	.54	The most
4.3	Promoting self-directed learning	4.86	.34	The most
4.4	The media is easy to use and suitable for learners	4.53	.67	The most
<b>Total average</b>		<b>4.79</b>	<b>.43</b>	<b>The most</b>
<b>Total average</b>		<b>4.66</b>	<b>.61</b>	<b>The most</b>

According to Table 3, the findings of the evaluation of the level of satisfaction that Undergraduate Students have regarding the Application of Nymphaea 'Thai Lotus Species' for creating awareness Undergraduate Students reveal that a total of 27 students have, in general, expressed a high level of satisfaction, with an overall average score of 4.66 and a standard deviation of .61. The highest level, which was "Satisfied with Application on Nymphaea 'Thai Lotus Species' for Creates Awareness of Undergraduate Students," refers to the process of bringing awareness to undergraduate students.

### CONCLUSIONS AND EVALUATION

Application on Nymphaea 'Thai Lotus Species' for Creates Awareness of Undergraduate Students Improves Teaching Efficiency First-year the Rajamangala University of Technology Thanyaburi students. To achieve an efficiency of 80.80 KW-CAI, a study showed that the first-year undergraduate class management at the Rajamangala University of Technology Thanyaburi used an application on the Nymphaea 'Thai Lotus Species' to create awareness among students. Pretest instruction averaged 68.47, or 57.06 out of 27 students. Researchers taught Application on Nymphaea 'Thai Lotus Species' for Creates Awareness of Undergraduate Students first-year students the results of using the Application on Nymphaea 'Thai Lotus Species' to create awareness among Undergraduate Students. Then, take the results of the scores from the test that 30 Undergraduate Students completed. These scores were computed as an average percentage of 82.33, and the mean rate of post-test scores was 81.67. Demonstrates that the Application of Nymphaea 'Thai Lotus Species' for Creates Awareness of

Undergraduate Students is efficient according to the requirements 80/80, meaning that E1/E2 is equivalent to 82.33/81.67, which satisfies the assumptions. Applying Application on Nymphaea 'Thai Lotus Species' for Creates Awareness of Undergraduate Students were as follows: The standard deviation for the pretest was equal to 2.22, and the average score was 8.77.

The pupils learned about applying Nymphaea 'Thai Lotus Species' to create awareness among Undergraduate Students. After that, the pupils' overall performance on the post-test averaged a zero. The standard deviation is 1.45, the mean value is 16.33, and the t-test analysis before and after the study is 20.96, statistically significant at .05. The evaluation of the level of satisfaction that Undergraduate Students have regarding the Application of Nymphaea 'Thai Lotus Species' for creating awareness of Undergraduate Students reveal that a total of 27 students have, in general, expressed a high level of satisfaction, with an overall average score of 4.66 and a standard deviation of .61. The highest level, which was "Satisfied with Application on Nymphaea 'Thai Lotus Species' for Creates Awareness of Undergraduate Students," refers to the process of bringing awareness to undergraduate students, due to their acquisition of knowledge regarding the activities implemented inside the session. The application aims to cultivate student satisfaction and foster a desire for learning by providing educational content on the Application of Nymphaea 'Thai Lotus Species' to create awareness among Undergraduate Students. Teaching via the utilization of applications offers a comprehensive acquisition of knowledge. Assists in developing critical thinking skills. And progress systematically as the pupils have acquired the ability by the learners' progression. The objective is to present learning progress to enhance students' engagement periodically. The observations made while educating and learning about the Application of Nymphaea 'Thai Lotus Species' for creating awareness among Undergraduate Students resulted in rapid success. The pertains to the cohort of students in their initial year of undergraduate studies at Rajamangala University of Technology Thanyaburi. Students exhibit strong determination and enthusiasm towards their academic pursuits, facilitating rapid and efficient learning. Individuals are exposed to educational stimuli through various forms of media, reducing independent learning and enabling learners to cultivate their abilities by their inherent capacities. At Koi, educators collaborate with students to foster an environment that promotes intellectual stimulation, challenges individuals, provides encouragement and offers guidance in pursuing knowledge.

### ***Recommendations***

In this study, the researcher proposes recommendations for the practical use of the research findings in the following manner. The Application on Nymphaea 'Thai Lotus Species' is utilized to create awareness among Undergraduate Students for deposit purposes. The academic program is designed for incoming first-year undergraduate students at Rajamangala University of Technology Thanyaburi. Self-directed learning is a crucial endeavour that holds significant importance. More learner preparedness can benefit the arrangement of instructional and educational activities to attain predetermined objectives. Learners must be adequately prepared by providing instruction on using media to enhance teaching and learning in alignment with the acquired knowledge, including comprehensive approaches and procedures for incorporating media into the pedagogical process at each stage of preparing educational activities. Researchers are acquiring knowledge by utilizing the auspicious Application of Nymphaea 'Thai Lotus Species' to create awareness among Undergraduate Students. This academic program is designed for incoming undergraduate students at Rajamangala University of Technology Thanyaburi. This approach can be implemented in learning management across several subject groups and modify instructional tasks to align with the educational activities prescribed for a particular grade level or learning cohort.

### ***Suggestions for future research.***

The researcher posits the subsequent recommendations based on the synthesis and analyzed research data. It is essential for educators to actively participate in significant exchanges with their students, especially when disseminating information using instructional materials related to the Application of Nymphaea 'Thai Lotus Species' for Enhancing Awareness among Undergraduate Students. The academic curriculum has been tailored to cater to incoming undergraduate students at the Rajamangala University of Technology Thanyaburi. The study aims to evaluate the effect of media integration on student engagement and comprehension. Furthermore, this study aims to investigate the impact of media in resolving student uncertainties and facilitating the process of answering questions. This study will use a mixed-methods approach to examine the advantages and disadvantages of integrating media in educational environments. The results of this research will contribute to the current scholarly understanding of instructional techniques and offer valuable insights into the most effective ways to include media to enhance teaching and learning experiences. Students should develop a well-organized study timetable corresponding to the sequential subject phases specified in the Application on Nymphaea 'Thai Lotus Species' for Enhancing Awareness among Undergraduate Students. Corresponds to developing improved pedagogical approaches for online learning and instruction across various educational levels and subject areas, including adult education. This research examines the current state of the media and its prospects within the framework of educational practices and policies. In addition, it emphasizes the vital role television content plays

as an important source of good audiovisual educational material. This study evaluates the conditions in Cyprus and Greece by drawing on relevant literature resources, doing a detailed review of existing research, and examining the conclusions of several previous studies and research papers from credible web sources. The sources mentioned were used as reference material for the current investigation. In a preliminary analysis, individuals who were both adult learners and educators aged 18 and above implemented the methods outlined earlier. As a part of the research, the study incorporated historical components and used data from previous publications. The pilot case study discovered that television programs' content can impact adult learners' opinions about their knowledge and learning experiences in online environments, especially regarding their generational cohort. The findings also showed that the application of audiovisual media technologies and content in online education, also known as audiovisual media communications, can support technology-enhanced learning through non-verbal communication in the modern day and age of digital technology. One of the main findings of this article is the importance for education administrators and educators to continually address the international genealogical characteristics and habits, inherent and distinctive attributes, and socio-cultural identity of learners. This finding is one of the article's most important takeaways. In addition, it highlights how important it is to acknowledge the various international social phenomena that have occurred in the past and are occurring in the present, such as the media socio-phenomenon, the Internet phenomenon, the revival phenomenon, and others. This concern is essential for maintaining a high education standard and cultivating an environmentally sustainable future (Nicolaou, C., 2021). The academic curriculum has been tailored to cater to incoming undergraduate students at the Rajamangala University of Technology Thanyaburi. To raise awareness among undergraduate students, it is crucial to thoroughly examine the results obtained from implementing the learning model through the Application of *Nymphaea 'Thai Lotus Species.'* The academic program is designed to meet the specific requirements of first-year undergraduate students currently enrolled at Rajamangala University of Technology Thanyaburi. To cater to the varying requirements of different curricula, especially those that prioritize creative thinking skills, it is crucial to integrate instructional resources that encourage students' cognitive growth. Cultivating systematic thinking skills essential in academic and professional realms is imperative. These skills involve addressing problems and tasks by ensuring that all relevant elements are thoroughly analyzed and examined systematically. Developing critical thinking skills and associated cognitive processes is significant in academic environments. An empirical inquiry is necessary to examine the consequences that arise from the adoption of the self-directed learning strategy assisted by the Application of *Nymphaea 'Thai Lotus Species.'* for creating awareness among Undergraduate Students. The academic curriculum has been tailored to cater to incoming undergraduate students at the Rajamangala University of Technology Thanyaburi. Educators strive to foster fair improvement of students' skills by implementing tactics that accommodate the varied range of learning needs among pupils.

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