

The Relationship between Green Education and the Sustainability of Students' Skills in the Tourism Higher Institutes

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Abstract

Green Education plays a central role in shaping the transformation students' skills towards sustainability. Education for sustainable development is an educational vision to balance human and economic well-being with cultural traditions and reverence for the Earth's natural resources. So, this research aimed to reflect the principles of sustainability into educational practices, guiding the choices of the appropriate learning objectives, updated teaching content, and learning methods which highlights the importance of green education for tourism students. This paper aimed also to study the benefits and challengers of green education in tourism higher institutes.

It is increasingly clear that education & skills, attitudes and behaviour are crucial for sustainable & inclusive growth in developing countries. So this research determined that there are 3 types of students' skills to go green; the first is general sustainability knowledge, mainly in the soft skills, awareness and action competence. The second skill includes occupation skills specifically in social science, computer technology..... and so on, while the third skill includes leadership and management skills aimed at green transition. Many of these skills exist and are transferable, but need to be further strengthened and supplemented with green notions and practices.

Quantitative data were accumulated through online questionnaire formed in multiple choice survey questions which analysed to report descriptive statistics about the research sample. The research results indicated that there is a positive relationship between green education and the sustainability of students' skills. On the other hand, this paper showed that the conventional education is no longer suitable for nowadays, so inculcating education in graduates for building their professions as better decision makers in Green education will be more beneficial in future.

Keywords: *Green Education – Sustainability – Learning Objectives –Sustainable Development – Cultural Traditions – Educational Practices – Green Transition*

Introduction

Tourism education (TE) play an important role in equipping students with the skills required for employment, decent work, entrepreneurship and lifelong learning. In the present development context, TE can equip students with the skills required to access the world of work, including skills for self-employment. (Alshuwaikhat & Abubakar, 2018)

TE can also improve responsiveness to changing skill demands by tourism enterprises and communities, increase productivity and increase wage levels. TE can lower barriers that limit access to the world of work in tourism industry.(Shannaq. et. al., 2022)

Implementing sustainable development strategy (green education) in tourism education can serve as an enabler of transformation in tourism higher educational institutions (THEIs) by enhancing the sustainability scope of an institutional vision and increasing opportunities to build the capacities of the community and stakeholders in it.(Putnam, 2020)

In effect, green education provides an enhanced tool to equip students in THEIs with the skills needed in the changing world of work, including the knowledge, skills and competencies requirements to make the transition to green economies and societies. Therefore, green education is essential for THEIs to educate students on these requirements. (Aithal & Rao, 2019)

Although many studies have focused on single aspects of green education in tourism higher education, not many have widened the scope to account for a comprehensive understanding of the practices involved in a campus-wide green effort or the processes involved in achieving this goal.(Bacon, C. M., 2021)

In order to approach green education in tourism higher education settings in a comprehensive fashion, nearly every major aspect of study curriculum, design, planning, maintenance, and operations needs to be addressed, as played out through the activities of administrators, faculty, staff and students. Environmental criteria such as energy, emissions, waste, water, and transportation must be considered alongside human dimensions such as learning, behaviour, attitude, and activism.(Bardaglio & Putnam., 2019)

However, few studies have focused on the process of change in tourism higher education that allows for the transition to green. Although we may know what green education looks like, it is not clear that higher education leaders know how to get there. The need for tourism institutions of higher education to transition to green has been well demonstrated, both from a moral perspective as well as from a pragmatic standpoint.(Boumedyen & Haynes, 2021)

The implementation of green education in THEIs faces various challenges stemming from the lack of funding hinders the implementation of practical initiatives. Furthermore, many educators lack sufficient training in environmental education methodologies and may feel ill prepared to integrate green education into their teaching.

the absence of a standardized and structured curriculum limits the uniform implementation of green education at all educational levels. In addition, the absence of specific assessment methods for green education poses challenges for evaluating tourism student understanding.

Thus, it is critical that tourism higher education institutions (THEIs) adopt to effectively implement comprehensive green education initiatives. This study sought to build a deeper understanding of how tourism higher institutions implemented a comprehensive green education initiative. The teaching-learning process must include eco-friendly buildings and equipment as well as tools and methodologies since students might draw inspiration from nature, art, culture, or other sources of innovation (Rao & Aithal, 2019).

Moreover, lecturers in Tourism Higher institutions also have an equal responsibility to update knowledge and transfer knowledge through Green innovations and experiments. For that, the methodology should be learning oriented and pedagogy is needed to join with practical learning experiences. (Aithal, 2018)

Literature Review

Nowadays, Jobs in green tourism are in more demand. As there is a great need to create a sustainable future, tourism graduates who are environmentally conscious have emerged as a valuable resource in the tourism industry. When facing environmental concerns like climate change and environmental degradation, green initiatives help tourism students gain the knowledge, abilities, and attitudes they need (Aithal & Rao, 2019).

In addition to considering the path toward sustainable development, green education reflects the current global economic development trend. It gives students greater access to knowledge and opportunities to develop their knowledge, values, attitudes, commitment, and anticipatory skills.(youcopov, 2021)

Table no. (1) Differentiation between conventional education with green education

S.No	Conventional Education	Green/Sustainable Education
1	Only profit orientation	People, profit and planet orientation
2	Out dated pedagogy	Modern pedagogy
3	Demand for formal graduates decreasing	Demand for green jobs are high
4	Traditional approach	Contemporary approach
5	Usage of technology which is outdated	Green technology is being adopted
6	Environment gets degraded	Environment is upgraded

Source:- (Germany, 2019)

Table no. (2) Features of Traditional Educational and Green Education

Traditional Education	Green Education For sustainability
Principles	
Only profit orientation Outdated pedagogy Demand for formal graduates decreasing. Traditional approach Usage of technology which is outdated. Environment gets degraded	People, profit, and planet orientation Modern pedagogy Demand for green jobs are high Contemporary approach Green technology is being adopted. Environment is upgraded
Goals	
-Accumulation of Knowledge -Driven by short term needs of current	-Capacity building and self-development -Driven by long term human and

economic system -Extrinsic values -Cognitive outcomes dominate	environmental well-being -Intrinsic values -Cognitive, affective and skills outcomes in balance
Teaching Methods	
-Lecturer cantered -One/few lecturer -Transmission of facts -Single “objective” perspective -Focus on theory	-learner cantered -Multiple participants learning together -Discovery of meaning -Multiple, relative, critical perspectives -Focus on practice and action
Institutional systems	
-Curriculum and structure organized by disciplines and content -Intellectual analysis of issues -Western models of education -Ignore informal learning	-Curriculum and structure organized by problems and skills -Analysis to support action -Distinctive cultural approaches -structure and use of informal learning

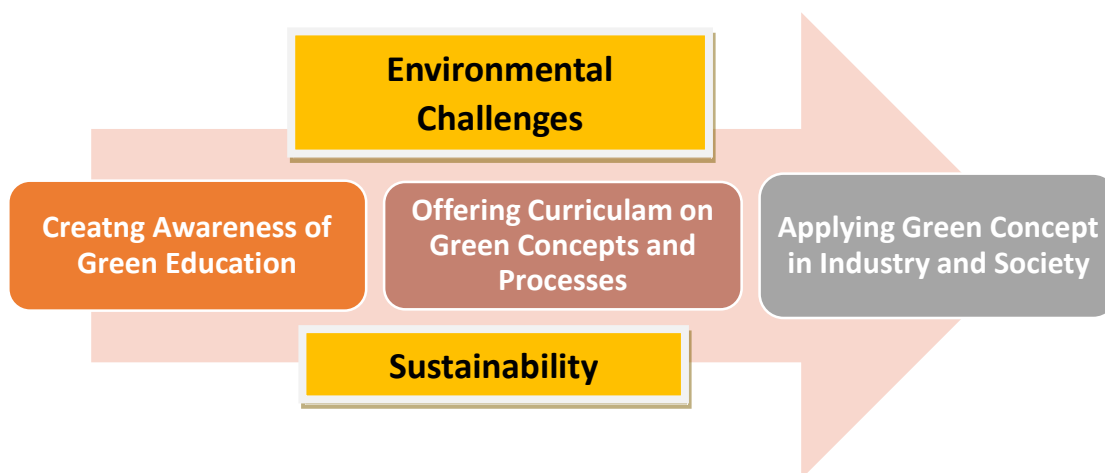
Source:- (Louw, W., 2019)

Green Education has three essential components (ILO, 2022);

- Creating awareness amongst the THEIs students to achieve sustainability development and results if we fail to do so.
- Concentrating on curriculum of green education in THEIs by including the current knowledge and skills required in tourism industry.
- Applying the green concept in every process in tourism industry and society for maintaining sustainability.

According to the green education paradigm, knowledge enables students to address and identify solutions to issues that endanger sustainability (Rao & Aithal, 2019).

Figure no. (1) Green Model in Higher Education



Source:- (Mc-Kenzie., 2021)

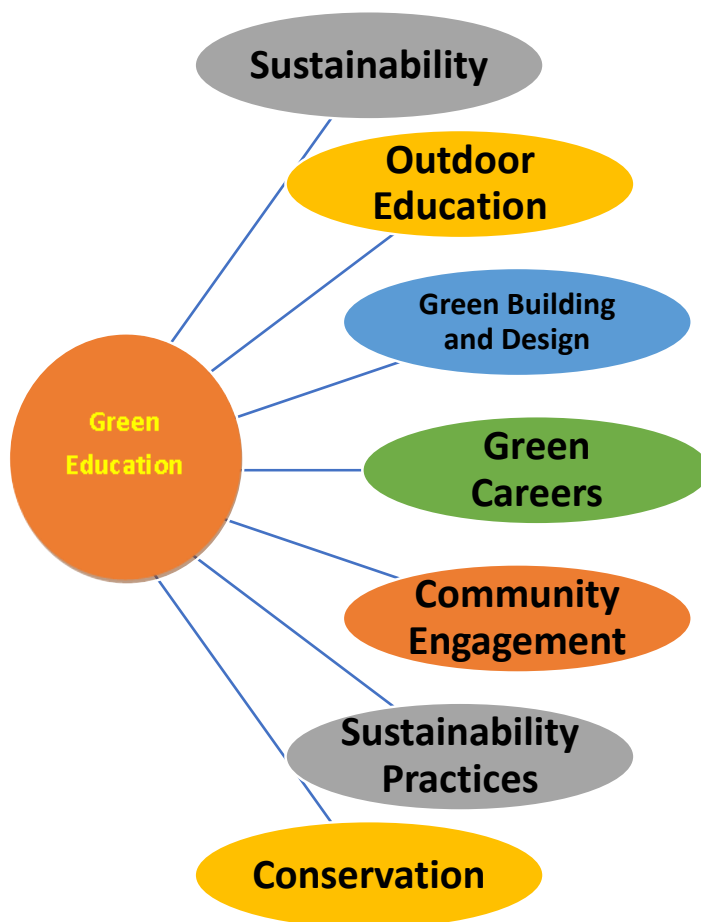
Thus, educational efforts and programs that emphasize ecological awareness, environmental sustainability, and sustainable activities are referred to as "green education." It covers a wide range of subjects and methodologies designed to promote a better awareness of environmental challenges and motivate people to adopt environmentally friendly decisions. (Brundt-land Report. 2017)

Sustainability and the advantages to the environment are key components of green education. Therefore, the objective is to provide people with the information and instruments they need to make educated, sustainable decisions and to contribute to a better world. These are a few crucial components of green education (Campbell, J. L., 2017):-

kkkkkkkkSustainability: The idea of sustainability, which entails managing resources in a way that satisfies current demands without affecting the capacity of future generations to satiate their needs, is promoted through green education. This covers concerns like responsible consumerism, sustainable agriculture, and use of water and energy resources.

1. Outdoor Education: To encourage students to have direct interactions with environment, several green education programs include outdoor activities and field trips. Camping, hiking, and outdoor experience learning is a few examples of this.
2. Green Building and Design: Environmental impact reduction and energy efficiency are given priority in green design concepts and sustainable building practices in the architectural and engineering industries.
3. Green Careers: Additionally, a green education can educate students for professions in disciplines connected to sustainability, environmental science, conservation, renewable energy, and others. It offers the expertise required to contribute to a more sustainable future.
4. Community Engagement: The value of community engagement and cooperation in tackling environmental concerns is frequently emphasized in green education. It motivates people to support environmentally friendly legislation and take part in regional sustainability activities.
5. Sustainability Practices: Students are taught about realistic steps they may take to improve via green education. Lectures, exercises, seminars, internships, excursions, study groups, project work, international exchange, individual study, and excursions are all included in this.
6. Conservation: Environmental preservationists frequently stress the value of maintaining biodiversity, natural resources, and endangered species.

Figure no. (2) Green Education Components



Source:- Research Authors

Initiatives for green education also take into account social and economic problems. Additionally, there are several laws, rules, and policies pertaining to green education that must be followed. Development, adoption, and implementation of green education programs in the tourist industry are difficult tasks since there are so many variables to take into account. (Bacon, C. M., 2021)

The Importance of Green Education

The advantages of a green higher education may be emphasized in a number of ways. One of them is an eco-friendly approach and a sustainable lifestyle (McKibben, 2017). Eco-Friendly Approach places a strong emphasis on using green practices. This word describes goods that support environmentally friendly behaviors that preserve resources like water and electricity. Eco-friendly goods help avoid contamination of the air, water, and land. Through green education, students who are aware of the environmental effects of their lifestyle choices will continue to live sustainably (Aithal & Rao, 2019).

Another advantage of a green higher education may be emphasized is innovative thinking in the corporate sphere. Therefore, creative thinking may integrate green education with the business line. The phrase "Futuristic in nature" can be used to describe another advantage (Aithal, 2018). It alludes to extremely contemporary design and technology in relation to nature. With modern architecture and technology that is inspired by nature, the academic atmosphere is more cozy, enjoyable, and relaxing. Therefore, utilizing their theoretical understanding, students would be able to assist the upkeep of various implementations in their academic environment. (Campbell, J. L., 2017)

Additionally, because it includes a variety of Green elements and viewpoints, green education may be described as a complex curriculum (Aithal, 2018). Students are exposed to a variety of Green characteristics and views, which exposes them to varied skills in a variety of Green sectors and subject areas. Aithal and Rao (2019) identified a number of additional advantages of green higher education, including modified pedagogy, economic viability, conventional education losing its significance in favor of green higher education, convenience for both teaching and learning, simple accessibility for students, strategic market differentiation, and a healthy and just future.

Green Education Strategies

A company or individual can use one of five different types of strategies, including: ethically dubious strategies (Red ocean strategies), monopolistic strategies (Blue ocean strategies) (Kim et al., 2008), sustainable strategies (Green ocean strategies), and combinations of blue and green strategies (Purple ocean strategies) (CEDEFOP, 2018).

With regards to the strategies to be used in Green education in THEIs, those can be discussed as follows. (P. Kokorin , et al., 2019)

❖ Incorporating sustainable principles into coursework

Interdisciplinary academic courses, subject specific courses, distance learning programs, training in hands-on approach, faculty who are energy experts to main the art of developing tailor made energy systems, skills certificate program, and lab setting and testing ground for green resources

❖ Introducing Green Service-Learning Requirements

This strategy teaches the benefits of sustainability to students. This spreads awareness and teaches practical skills for greening the tourism educational institutions.

❖ Solving Problems through the Green Concept

This strategy provides opportunity to students to develop problem solving thinking skills using internships, research programs, collaborative assignments and out of the classroom teaching.

❖ Connecting higher education with future careers

This strategy set students skill has to be aligned with the current tourism industry demands.

❖ **Leaning best practices from other tourism institutions**

Co-operation amongst tourism higher education institutions helps in achieving knowledge sharing and management.

❖ **Using Green technology in education**

Technology will help in designing interactive workshops, collaborations between THEIs, consulting projects and for promotion of vision of green tourism higher education.

The Sustainability of Student Skills in THEIs

As for the tourism industry, student skills are the standards, methods, attitudes, and aptitudes that incoming college graduates pick up along the way in order to carry out their professional duties effectively (Glenn, 2019). Through a focus on the following competencies—communication and collaboration skills, problem-solving skills and critical thinking, creativity and innovation, information and media skills, intercultural and social competencies, and everyday life skills—these students need to understand the associations and links between the environment, energy conservation, ecology, and economy. (Arenda, Mena-Rodriguez, and Rubio, 2022)

One of the core tenets of green education is teaching students sustainable skills in the tourist industry. Since higher tourist education institutions (THEIs) play a crucial role in assisting tourism students in developing these skills, these skills relate to a variety of personal, social, and cognitive talents essential for success in the modern world. Therefore, during their educational journey, tourism students can build a wide range of talents, and these skills are crucial for their personal and professional growth. (Macleod & Hayden, 2019)

These abilities are important for future employment options as well as personal development and academic performance. These abilities are frequently acquired by tourism students through a combination of academic study, extracurricular involvement, internships, and practical application (Rao, P., 2019). The notion of sustainability was investigated as a threshold concept for tourist education (TE), and the teaching and learning methodologies for sustainability in an undergraduate tourism module were detailed. Sustainability is therefore integral, transformational, and irreversible. It claimed that throughout the last two decades, the promotion of sustainability education in tourism curricula has occurred (Sukumar R, 2019).

Green education enhances students' skills, including environmental literacy, critical thinking, problem-solving, communication, teamwork, research, ethics, sustainable practices, leadership, resilience, global perspective, cultural competence, empathy, and a commitment to environmental stewardship. These skills empower students to address environmental challenges and promote sustainability (Macleod, Jagannathan and Panth, 2020).

Depending on the degree of interest, background, and resources of the learner, green education and learning in tourism higher educational institutions

(THEIs) can take many different shapes (Suardani, Astawa, and Armoni, 2023). For instance;

- Students can enrol in classes or workshops that impart knowledge and skills related to green creation.
- Students in THEIs can also create or join a group of classmates, mentors, or green inventors to exchange ideas.
- Students in THEIs can also take part in green innovation challenges, contests, or other activities to foster their creativity.
- Students in THEIs may also create, test, or enhance his green creations using online or offline tools and platforms.

Green Education and Sustainable Skills of Tourism Students

Understanding how Green Education, which emphasizes environmental sustainability and ethical actions, relates to student skills is crucial since it has a big influence on how students develop their abilities. Green education helps to increase THEI's understanding of and sense of obligation to. (CICan, 2016)

Their feeling of social and ethical obligation is aided by this understanding. Because it encourages students to think systematically, apply what they have learned, envision a more positive future, and question and clarify values, green education is closely related to an active, participatory learning process for tourism students. It also encourages students to explore the connections between traditions and innovations. (Cohen et. al., 2017)

Green education is not just about students in tourism institutions acquiring values and knowledge pertaining to sustainable skills; it also involves the lecturers' dedication to these skills and the use of teaching strategies that not only impart knowledge but also permit social learning for a sustainable in tourism institutions. (Ferreira, Ryan, and Tilbury, 2021)

These techniques are derived from the concept of student-cantered instruction. When appropriate management support is provided to sustain problem-based learning by educating instructors and students in its educational ideas and practices for the tourist industry, problem-based learning is most successful (Shannaq, 2022). A problem-based learning curriculum that is centered on the needs of the students can address earlier issues with problem-oriented learning and modify the subject's content and assessments to their needs and potential. Additionally, it can boost kids' interest in studying and enhance their academic performance. (Gagnon, Lavesseur, and Telesford, 2022)

In addition to assisting students in achieving targeted learning outcomes, this method also gets them ready for lucrative professions in tourism. The holistic development of tourism workers is also aided by the promotion of cultural competency, sustainability awareness, and reflective practice (Wood & Breyer, 2017).

Research Methodology & Data Collection

The research is based on a qualitative approach, 420 online questionnaires (E-mails, Whats App and Facebook Messenger) was with tourism professors and lecturers from different faculties of tourism and hotels as well tourism higher institutions and the graduates that had completed their studies in 3 various departments (tourism studies, tourism guidance and hotel management).

345 completed questionnaires were returned after a survey link. Although this sample is not statistically significant because of the difficulty in determining the actual size of the total population, it is considered sufficient to provide broad indications. The survey was carried out from 10 July to 18 August, 2023.

Online surveys offer the benefit of allowing respondents from various geographic locations to be included in the target demographic, allowing respondents to complete them at their own convenience while maintaining their anonymity, and allowing respondents to move between questions based on their responses. The correct questions are asked depending on the prior replies thanks to built-in data validation algorithms (Narayan, 2019). Given the geographic spread of graduates of tourism guidance in all provisions of Egypt, this was helpful. Additionally, online surveys enable the immediate transfer of research responses into a database and minimize translation errors (Andrews, 2019).

The objectives of the online surveys are to profile tourism higher institutions (THIs) and tourism faculties (TFs) to identify the relevance of green education in mastering the sustainability of students' skills. (Richardson & Wood, 2019)

Data Analysis

Table no. (3) Population Samples (Academic Staff / Graduates)

Staff			Graduates		
Dep.	Freq.	Per. (%)	Dep.	Freq.	Per. (%)
Tourism Studies	25	33%	Tourism Studies	146	48.7%
Hotels	12	47%	Hotels	49	16.3%
Tourist Guidance	8	20%	Tourist Guidance	105	35%
Total	45	100	Total	300	100%

Data tabulated in table (3) refers that the majority of the staff sample (56%) are specialized in tourism studies department, while (27%) of staff sample in tourism guidance department and (17%) in hotels department. As for graduates sample, the majority from the tourism studies departments (48.7%), while (35%) of them in tourism guidance department and (16.3%) in hotels department.

Table no. (4) The graduates Responses about Awareness of Green Education

	Freq.	Per. (%)
Yes	234	78%
No	66	22%
Total	300	100%

The perfect way to spread and raise awareness of green concept is by education (Tomayess, et al., 2019). According to the responses, (78%) of the graduates sample stated that they are aware of the term of green education, while (22%) of the graduates sample mentioned that they do not.

Table no. (5) The graduates Responses about studying courses within Green Concept

	Freq.	Per. (%)
Yes	166	56%
No	105	34.7%
Maybe	29	9.3%

Because of the growing importance of green concept & climate change worldwide, there is a need to prepare students to deal with the requirements of green education within the tourism industry (Boley, 2011). From table (5) it is apparent that (56%) of the graduates sample stated that they studied subjects related to it, while (34.7%) believed that they did not study any subjects related to it and finally (9.3%) of the graduates sample mentioned maybe.

Table no. (6) The Staff Responds about the Syllabus Topics should be included

Syllabus Topics	Freq.	Per. (%)
The ABC of Sustainability	6	13.3%
The Age of Sustainable Development	5	11.1%
From Climate Science to Action	13	28.9%
Principles of Sustainable Finance	5	11.1%
Business Models for Sustainability	11	24.4%
Environmental Public Health	1	2.2%
Strategy and Sustainability	16	35.6%
Energy and Environment	6	13.3%
Environmental Management and Ethics	3	6.7%
Business Sustainability in the Circular Economy	6	13.3%
ESG and Climate Change	6	13.3%
Creativity, Innovation and Transformation	18	40%

Data tabulated in table (6) refers that there are many important topics included in the syllabus which are: Creativity, Innovation and Transformation (40%), Strategy and Sustainability (35.6%), From Climate Science to Action (28.9%), Business Models for Sustainability (24.4%), ESG and Climate

Change, Business Sustainability in the Circular Economy and The ABC of Sustainability (13.3%), Principles of Sustainable Finance and The Age of Sustainable Development (11.1%), Environmental Management and Ethics (6.7%) and finally Environmental Public Health (2.2%).

Table no. (7) Teaching Methods should be adopted

Teaching Methods	Staff Responds		Graduates Responds	
	Freq.	Per. (%)	Freq.	Per. (%)
Problem Based Learning	18	40%	37	12.3%
Group Discussion	13	28.8%	129	43%
Critical Thinking	23	51.1%	103	34.3%
Role Play	25	55.6%	67	22.3%
Fish Bowling	9	20%	89	29.7%
Project Based Learning	8	17.8%	93	31%
Self Learning	9	20%	38	12.7%
Simulation	4	8.9%	36	13%

Fish Bowling model is one of the teaching methods Fishbowl is a strategy for organizing medium- to large-group discussions. Students are separated into an inner and outer circle. In the inner circle or fishbowl, students have a discussion; students in the outer circle listen to the discussion and take notes. (Jeronen, et al., 2017). According to the findings, there are many methods used in the educational process such as: Role Play (55.6%), Critical Thinking (51.1%%), Problem Based Learning (40%), Group Discussion (28.9%), Self Learning and Fish Bowling (20%), Project Based Learning (17.8%) and Simulation (8.9%).

The graduates responds about teaching methods should be included in education, it referes to there are a lot of methods should be in the educational process as : group discussion (43%), critical thinking (34.3%), project based learning (31%), fish bowling (29.7%), role play (22.3%) , self-learning (12.7%), problem based learning (12.3%) and finally simulation (12%).

Table no. (8) The need of Transformation to Green Education

	Freq.	Per. (%)
Yes	39	86.7%
No	--	--
Maybe	6	13.3%

According to the responses in table no. (8), (86.7%) of the sample believe that it is important to transform to sustainability into tourism and hospitality education (green education), while (13.3%) of the sample claim that it may be important to integrate sustainability into tourism and hospitality education. Consequently, there is a need to Transformation to Green Education can enhance students' skills for the future of society, environment and economy (The Sustainability of Students' Skills).

Table no. (9) The advancement of Students' Skills through Green Education

Skills	Freq.	Per. (%)
Communication Skills	24	53.3%
Leadership skills	17	37.8%
Creativity and Innovation	27	60%
Team-Work Skills	25	55.6%
Research Writing Skills	20	44.4%
Decision-Making Skills	18	40%
Problem-Solving Skills	20	44.4%
Entrepreneurial Skills	21	46.7%
Negotiation Skills	14	31.1%

Many researchers indicate that university graduates lack problem solving skills and communication skills (Nold, 2017). Table 6 refers to that It is apparent that the transformation to green education play an important role to enhance students' skills; (60%) of the sample mentioned creativity and innovation skills, (55.6%) stressed on team-work skills, (53.3%) pointed to communication skills. (46.7%) of the sample mentioned entrepreneurial Skills, (44.4%) focused on research writing skills and problem-solving skills, (40%) indicated decision-making skills, (37.8%) pointed to leadership skills, finally (31.1%) considered negotiation skills as a remarkable skills of the implication of green education.

Hence, the research resulted as following:-

- Green education is still in its initial stages at the Faculties of Tourism and Hotels and it is limited to individual initiatives and efforts of faculty members.
- The methods of teaching are mainly based on traditional methods (i.e. lectures, researches ...) with some individual attempts of faculty members based on: interaction and integration with the society, debates, discussions, dialogues, outdoor activities, role play ...
- The green education initiatives can be integrated into the criteria of tourism studies, hotels and tourism guidance programs. Also topics like Creativity, Innovation and Transformation, Strategy and Sustainability, From Climate Science to Action, Business Models for Sustainability, ESG and Climate Change, Business Sustainability in the Circular Economy and The ABC of Sustainability, Principles of Sustainable Finance and The Age of Sustainable Development, Environmental Management and Ethics and Environmental Public Health...could be included in the syllabus.
- The majority of faculties' staff believe that it is important to transform into green education in tourism industry to enhance students' skills and make it sustainable.

- The majority of graduates are interested in knowing more about “Green Education”.

Conclusion and Discussion

The knowledge receiving from higher education will not be applicable sometimes for the business development in tourism. Moreover, there are limited course structures and fewer colleges can be identified for the Green higher education.

Therefore, it must be a well-designed course structures which are key to produce better experts in the field of tourism green education who will pave the way for generating more and more specialists and professionals in the field.

Also, more tourism faculties and tourism high institution should be supported for the betterment of Green higher education, where undefined themes of Green education are another challenge which should come up with appropriate solutions. As well green awareness is very low among people and it should be increased through tourism education, awareness programs, and various types of knowledge sharing activities, otherwise it will be a huge lag in Green higher education.

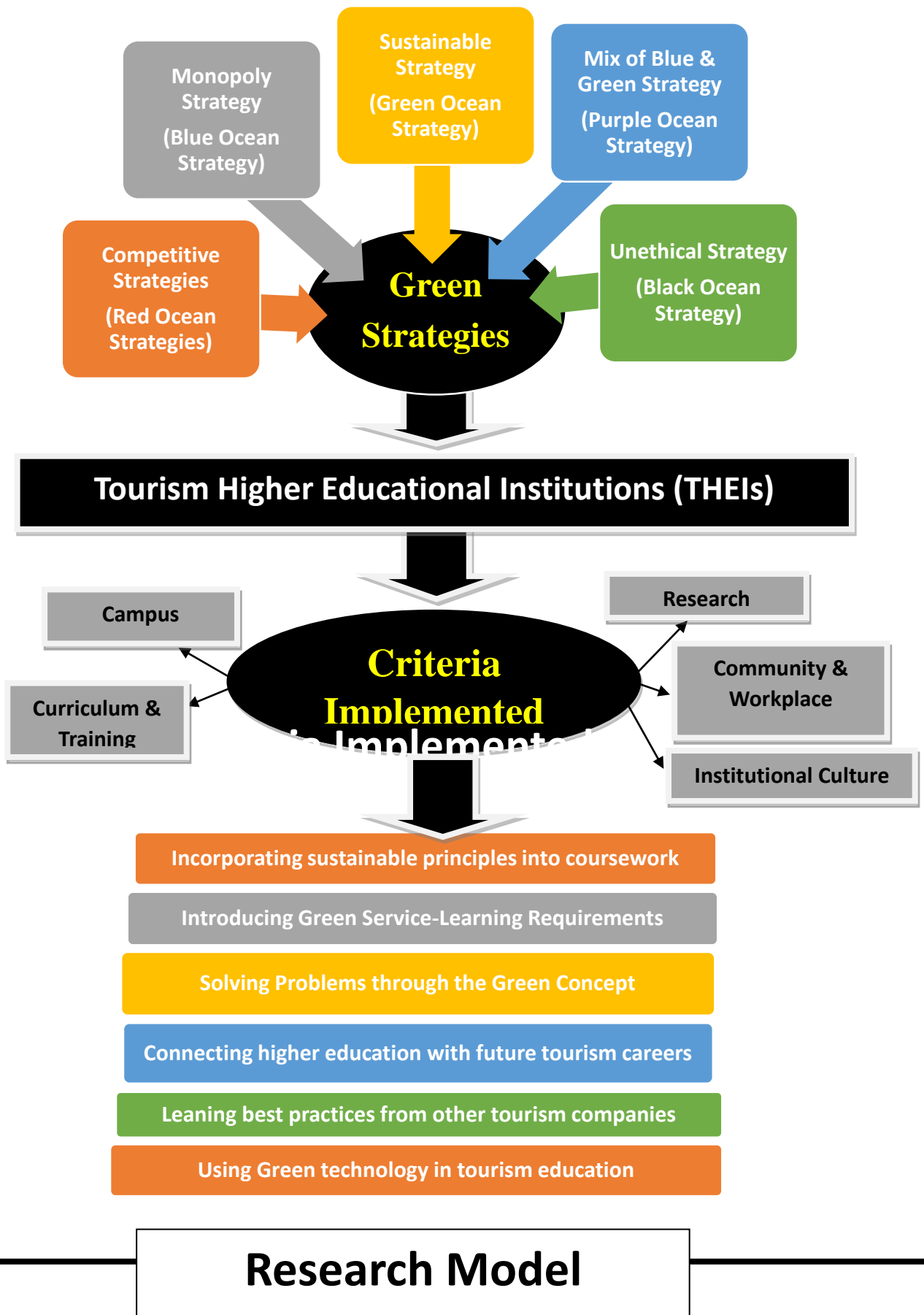
Consequently, Research is one main aspect of updating new findings and new directions for Green initiatives in tourism education. Therefore, more weight should be kept on Green related researching by relevant scholars. Apart from that, over dependence on technology and lack of conceptual framework for Green higher education can be shown as the other challenges.

So, this research presents the criteria of green education which can implement into tourism faculties and tourism higher institutions as follow:-

- ❖ Adopt the green education criteria into different academic departments (tourism, hospitality and tourism guidance) courses among through an interdisciplinary approach. It shows a holistic agreement regarding chances, principles, tasks, and awareness to green practices. Today, Green has become one essential part in various fields like marketing, finance, operations, or human resources. If there are interactive web-based syllabuses, it paves the way for interdisciplinary communication between experts, scholars and the members of the society with vast knowledge regarding green business practices and shared with the government, expertise and research etc. This collaboration would be more beneficial for students to realize the present demand of the education. The subject green education deals with cleaner productions and green building technology which creates distinguished career opportunities in developing counties.
- ❖ Using service learning as a productive strategy in THEIs, tourism firms and non-business organizations. Both service receiver and provider will be benefited through it. The advantages that could be received from green education are teaching in universities and colleges

nowadays so that the knowledge can be incorporated with their future working environment.

- ❖ Tourism students improve problem solving skills through the experiences relating to Green. Students tend to convert their theoretical knowledge of Green into applied way with the intention of providing better solutions for sustainability issues.
- ❖ Green education is hoped to transformed tourism education sector and connected with the world economy development. There are two main characteristics of Green education such as, environmental benefits and sustainability. Considering the Green education model, service is increased as the service creation process, the way of transferring services to the tourism students, and the way of capturing benefits. One goal of education service is to achieve environmental consciousness. Therefore, academicians, scholars, administrators should environmentally friendly and environmentally conscious practices in the process of learning. One integral part of the tourism curriculum can be identified as “culture of conservation” nowadays and the concept of eco-friendly building should be incorporated in the teaching learning process. In other words, some techniques and equipment related to green buildings must be utilized in the process of teaching and learning.
- ❖ Best Green practices can be learnt from other tourism Higher institutions and other tourism countries world widely and this strategy will help organizations to achieve green education. Learning through other subject areas like climate change, environmental science, and business will help incorporate multidisciplinary approach regarding the Green concept. Thus, co-operation with tourism higher education institutes would be the best solution for sharing and managing knowledge. The effectiveness of Green education course work can be measured by developing a metrics and it will help making some improvements in curriculum. These kinds of advanced curriculum plans would help people for making better decisions in their professional life.
- ❖ Technology acts as one prominent aspect in greening universities. There are different streams in tourism higher education like learning, researching, and operations. Thus, the technology can be connected into the green education strategy throughout those streams. Technology helps greening higher education in many ways like interactive sessions (e.g. workshops), institutional integrations, project consultation and research programs. Therefore, the tourism curriculum development should be done with environmental technology education. For instance, Green technology in tourism education provide better platform in energy technology and conservation.



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العلاقة بين التعليم الأخضر واستدامة مهارات الطلاب في مؤسسات التعليم السياحي العليا

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مستخلص

يلعب التعليم الأخضر دوراً رئيسياً في تشكيل مهارات طلاب كليات السياحة والفنادق والمعاهد العليا للسياحة، واتجاهاتها نحو الاستدامة. كما يعد التعليم من أجل التنمية المستدامة رؤية تعليمية لتحقيق التوازن بين الرفاهية البشرية والاقتصادية مع التقاليد الثقافية والاستخدام المتوازن للموارد الطبيعية. لهذا يهدف البحث إلى تطبيق مبادئ الاستدامة في الممارسات التعليمية، واختيار أنسب الطرق من وسائل التعلم المناسبة لأهداف التعليم، وتحديث محتوى المقررات الدراسية، التي تبرز أهمية التعليم الأخضر للطلاب. وتهدف هذه الورقة أيضاً إلى دراسة فوائد وعقبات التعليم الأخضر في المؤسسات التعليمية العليا للسياحة. فضلاً عن أن التعليم والمهارات/المواقف/السلوك أمور ضرورية للنمو المستدام والشامل في البلدان النامية. لذا أفاد البحث أن هناك 3 أنواع من مهارات الطلاب للوصول إلى التعليم الأخضر؛ الأول هو المعرفة العامة بمفهوم الاستدامة، وخاصة في المهارات الناعمة والوعي وكفاءة العمل. كما تتضمن المهارة الثانية تداخل وتشابك المهارات على مستوى العلوم الاجتماعية أو في علوم الحاسب الآلي، وما إلى ذلك، في حين أن المهارة الثالثة تشمل مهارات القيادة والإدارة التي تهدف إلى الانتقال إلى التعليم الأخضر. وبالتالي يؤكد البحث على وجود هذه المهارات، ولكن يجب تعزيزها بالمفاهيم والممارسات الخضراء. وتم استخدام المنهج الكمي من خلال استبيان عبر الإنترنت تم إعداده على هيئة أسئلة استقصائية متعددة الاختيارات والتي تم تحليلها لتقديم إحصائيات وصفية حول عينة البحث. وقد أشارت النتائج إلى وجود علاقة إيجابية بين التعليم الأخضر استدامة مهارات الطلاب. من ناحية أخرى، أظهرت هذه الورقة أن التعليم التقليدي لم يعد مناسباً في الوقت الحاضر، وبالتالي فإن ترسيخ نهج التعليم الأخضر في خريجين المؤسسات السياحية لإعدادهم ككوادر بشرية وصناع قرار في التعليم الأخضر سيؤدي إلى فائدة عظيمة في المستقبل.

الكلمات الدالة:- التعليم الأخضر - الاستدامة - أهداف التعليم - التنمية المستدامة - التحول الأخضر