

# Supply Chain View of Tourism: A Special Reference to Education Tourism

Biranchi Prasad Panda, University of Petroleum and Energy Studies, India

## ABSTRACT

Tourism being observed as a supply chain, this article describes its practices under a conceptual research framework with a special reference to education tourism. The author projects the education tourism as a continuum where both service supply chains of education and tourism are integrated. The research implication is directed towards the cross-sectoral objectives of communities involving the tourists, students, and destination communities. The original thoughts and value propositions in this research are portrayed as a supply chain framework. Unlike goods supply chain management, the service supply chain of education tourism grows complex due to the coexistence of the overlapping service objectives for education and tourism. Education tourism deals with students and tourists frequently interchanging their roles, leveraging the services of the vendors and outsourced partners. The increasing complexity of education tourism demands smart technology applications to manage it as an integrated total supply chain.

## KEYWORDS

Chain, Continuum, Education, Framework, Integration, Service, Supply, Tourism

## INTRODUCTION

A traditional supply chain of goods links suppliers through procurement, fulfillment and distribution, until the end-users or customers. A supply chain framework is not easily visible and understood in a domain like education or tourism. McIntosh et al. (1995) approached with a system view to define tourism as the sum of phenomenon and relationships arising from the interaction of tourists, service providers, host governments, and host communities in the process of making the tourism products more attractive. This definition includes the potential impacts that tourists may have upon the host community including visitors such as students. The growing degree of intangibility and complexity in the tourism supply chain is attributed by the shared objectives among the interplays and services of multiple industries. Table-1 shows the graphical and descriptive illustration of the traditional supply chain for goods and services in tourism and education industry. The supply chain management framework of education system when viewed in combination with tourism should demonstrate a safe and smooth movements of educational travelers/tourists and their goods/materials in the forward direction (see Table 1, (A)) with money and information flowing reverse or backward as per the plan and schedule. In the traditional supply chain of any business, flow of goods is aligned to the market-pull with some amount of reverse flow. Usually the links of a supply chain framework become active when the host company operates its internal supply chain without substantial outsourcing. Such frameworks connect to their suppliers and customers at both ends viewing all other parties as either internal suppliers or internal customers. With the increasing competitors and needs, organizations started

DOI: 10.4018/IJAMTR.288504

This article published as an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>) which permits unrestricted use, distribution, and production in any medium, provided the author of the original work and original publication source are properly credited.

Table 1. Traditional supply chain framework for goods and services

	Graphical Framework	Description
(A) Supply Chain for Goods		<p>Raw materials and component parts are procured as per plan from supplier(s), stored, assembled, packed for the fulfillment of order(s) received from customers/ market through the channels of distribution at different locations. Appropriately, the stakeholders use the information and do the payments.</p>
(B) Tourism Supply Chain for Services		<p>Tourists (Individuals/ groups) plan themselves for a new experience along with travel/tour agents to execute the operation or facilitation of accommodation, food, transport and other services from single or multiple providers to reach out to various destinations. Appropriately, the stakeholders use the information and do the payments.</p>
(C) Education Supply Chain		<p>The education supply chain is as simple as the input-process-output model of operations management, which educates the students for graduating to the next higher level by adding suitable knowledge and skill. The value gets added by transforming the students to educated individuals through some knowledge enhancement processes.</p>

focusing on their core competency and outsourced the negotiable activities to third parties. Tourism being a service sector, offers convenient travel, food and accommodation desired by the tourists in a planned and scheduled manner at different destinations. Various categories of tourists originate their tours from various parts of a territory; travel by different modes, with different objectives; avail varied degree of hospitality services; travel to different destinations under different itinerary and tariff (see Table 1, (B)). However, the education supply chain is similar to a simple input-process-output model of operations management that adds suitable knowledge and skill, enabling the students to graduate to next higher level of education (see Table 1, (C)).

The modern dynamic world of business being largely driven by IT, ICT, IoT and web-based technologies, a substantial amount of transactions go crisscross. Thus the evolution of an integrated total supply chain became imperative to functions like advance payment, earning of interest and subsidy, customization of products, cancellation of order and return of damaged, inaccurately delivered or unsatisfactory goods. As the smart technologies like GPS (Global Positioning Service), GPRS (General Packet Radio Service), RFID (Radio Frequency Identification) provide a sustainable direction to the supply chains (Arora and Panda, 2018), the tourism sector need to take advantage

of fully integrating similar methods for tracking, tracing and other activities. Tourism, when viewed with a supply chain perspective, seems advantageous in its service operations. Service supply chains, unlike goods supply chains, deal with the capabilities of providing pure services often associated with some products and facilities, which constitute its quality, if provided timely and effectively.

The demand for efficient management of supply chains is gradually becoming mandatory due to increasing complexity and heterogeneity of the supply chain constitution i.e. the combination of core activities and outsourced business activities. The challenge is managed by strategically absorbing the right technologies (Panda and Panda, 2018). All businesses operating with traditional supply chains constitute and manage their procurement, production and distribution activities. Whereas large and complex businesses outsource some of their tasks like transportation, warehousing, channel management, and even contract manufacturing of standard components. The effect of demand is similarly observed in service sectors like tourism including education tourism (used in place of 'edu-tourism').

The current article focuses on the novelty of developing a review based conceptual framework. This attempts to address the perceived research problem of not having a clear understanding about the supply chain view of edu-tourism. The framework article attempted to capture the extended insights from valid general observations from various research literatures by following a segmented approach. The remaining sections of this article discuss the benefits that can be accrued from the integrated operations rendered by all communities involved in edu-tourism.

The article presents the integrated concepts of education, tourism and supply chain in a structured manner. In a traditional context, a society looks at tourism as a roaming without studies, therefore, education as a practice of studies without touring. However, the novelty of the article attempts to present the same as a continuum between pure form of education to pure form of tourism indicating the scope of success in isolation as well as in combination. The new approach identifies the stakeholders of edu-tourism with a supply chain view. The logical progress of discussion indicates the type of participation of three social segments 'Education First', 'Tourism First' and 'Education & Tourism' in edu-tourism. In absence of sharp lines of differentiation, an integrated supply chain management (SCM) is suggested to bring proven results in edu-tourism sector as it gives in the business of other products and services.

## **EDUCATION TOURISM**

Both tourism and education sectors witnessed the travel element in learning, which predates from several centuries. Smith and Jenner (1997) suggest that tourism broadens the mind, therefore, all forms of tourism to be educational.

Though tourism has started from primitive period of civilization, the Grand Tour is popularly referred to as the beginning of cultural and educational tourism, undertaken by the scholars and aristocratic British youth in the seventeenth and eighteenth centuries (French et al., 2000; CTC, 2001). The purpose of Grand Tours were to learn about various civilizations through a series of study tours lasting over few decades in the destination countries like France, Switzerland and Germany. Participants were learning foreign languages, fencing, riding, dancing, and foreign affairs. As per Hibbert (1987) and Theobald (1998), majority of the English, German and other scholars were in the first groups of travelers of the grand tours. Both conducting and participating the grand tours were costly, time-consuming at that time. Hence, the evolution of relatively cheaper, faster and shorter tours opened avenue to a larger audience (Gee et al., 1997; Steinecke, 1993), leading to more informal learnings through travel.

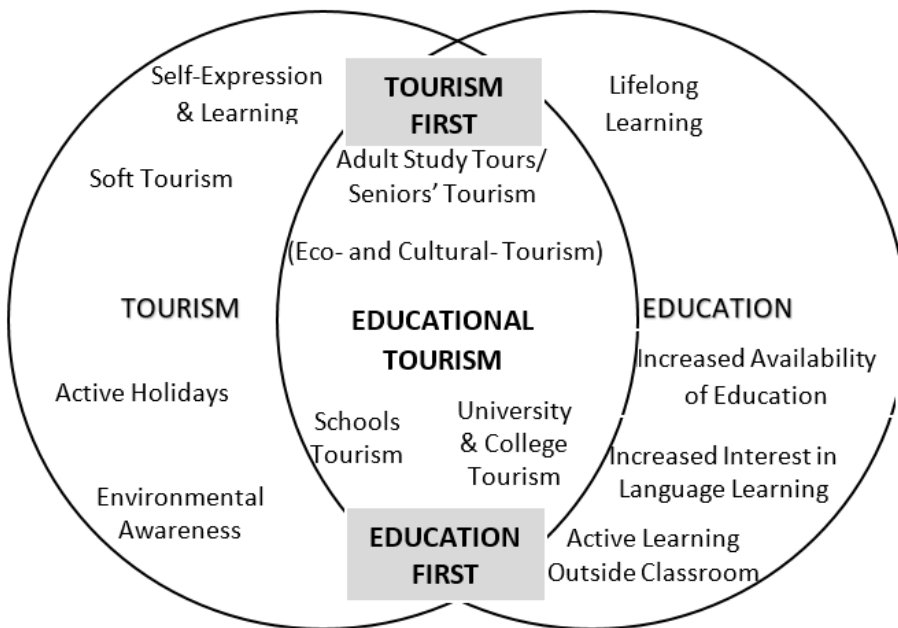
Educational tourism may be viewed as a combination of product, process and function. As a product, it emphasizes on the outcome of the learning experience such as university degree for students; whereas a process and functional view focuses on the means to an end (Kalinowski and Weiler, 1992). After formal learning, the experience assists one in mastering or improving the knowledge, which is

accomplished by going on study tours e.g. seeing a monument after studying it in History. Thus, the travel for education and tourism for experiential learning comprehensively become a lifelong activity undertaken by almost everybody. This helps realizing the scope and importance of edu-tourism, which is not fully exploited. However, the work of researchers like Kalinowski and Weiler (1992) and Wood (2001) are quite remarkable by primarily discussing the adult extension programs or adult study tours and cultural educational tourism. As the Canadian Tourism Commission (2001) notes, educational or learning forms of tourism can be viewed by a continuum ranging from ‘general interest of learning while travelling’ at one end to ‘purposeful learning and travel’ at the other. A ‘tourism first’ segment of educational tourism is primarily motivated to travel where the purposeful learning is secondary.

The entire discussion of this article is around knowing the extent of educational and tourism intensity; with a research question – What is the right constitution of educational tourism?

Figure 1 illustrates a model of segmentation in edu-tourism. It depicts the priority of two segments ‘education first’ and ‘tourism first’. The first group constitutes the students community from schools, colleges and universities with learning as the primary motive. Whereas, the second group constitutes the social community with their primary motive of excitement and experience. Tourism as a factor for economic development, a state develops sustainably when its social goals and business goals are achieved using collective capabilities (Erdoğan, 2015; Sezerel, 2019). Even the sports tourism provides a socio-economic learning to the host country through sports events (Das et al., 2010).

Figure 1. Segmentation of educational tourism



Business and social sectors associated with edu-tourism compatibly address each other socially, economically, demographically and psychologically to promote personal and professional learning through experience (Özoğul et al., 2020). Demographic and socio-economic segmentation of educational tourists are often important in determining the demand and supply that varies over

time. For example, older people have less participation in recreational activities (Manning, 1983; Devlin, 1993); younger travelers exhibit higher tolerance to all new experiences and adventures (Mill and Morrison, 1985); middle-aged people travel more in groups (McIntosh and Goeldner, 1986). Research also shows that old-aged people travel to pilgrim sites, in very small group, but for longer stay periods. On the other hand, kids and younger children of a couple affect the travel decisions. Even the travel decisions of elders get influenced by younger members of a family in a society or vice versa. In addition, the socio-economic indicators like income, gender, education influence tourism intensity unpredictably.

Geographic segmentation uses the basis of climate, location (hills, coastlines, rural, urban) and language. Psychological segmentation uses the basis of values, attitudes, personality and lifestyle characteristics. A segmentation approach to understand educational tourism and its sub-segments is not only useful for examining the demand side, but also the supply-side or the facilitators of tourism experiences.

Research in the field of educational tourism are contributed by Kalinowski & Weiler (1992); with special focus on international and domestic university studies by Chadee & Cutler (1996), Field (1999), Hsu & Sung (1996,1997); focus on school excursions in the UK by Cooper & Lathman (1985, 1988, 1989) and in Australia by Coughlan & Ritchie (1998), Coughlan & Wells (1999), Coughlan et al. (1999). Research pertaining to educational tourism with a focus on private schools by Coventry (1996), Moser & Kaspar (1990) and language schools by McCallen (2000), and Munoz Gonzales (2001).

Hardly any research is found in the area of integrated educational tourism due to the association of the challenges with the issues from marketing, managing and planning. Very little research is done to examine the relationship between education, learning and tourism.

A reduced polarity between work and leisure evolved which states that the people prefer to broaden their understanding about the nature and enhancing creativity and open-mindedness in everyday life (Ritchei, et al., 2010; Krippendorf, 1987; Hall, 1992). It is therefore commonly originating from a place of education and tourism.

Specialized tourism includes group or individual tours to develop specific interests in visiting sites. Special interest tourism is also known as serious leisure aimed at fulfilling personal interests, actualizations, enrichments with sense of belonging. This often require a special knowledge, skill or training to pursue the activity. While the motivation for tourism arises from special interests in physical, cultural, social, spiritual and fun; edu-tourism mostly arise from a co-curricular learning to relieve the stress from the regular study environment (Krippendorf, 1987).

Promotion of edu-tourism is possible by educating the visitors by entertainment through different interpretations of learning. Industry-visit and/or study-tours in higher and professional education need to aim at locations having potential for learning – like Science Parks, Botanical Gardens, and Industrial Park etc. This phenomena led to the evolution of a special category of tour operators. The insightful edu-tourism often leads to innovations during or after a tour. This became a way to build intellectual property lifelong.

Students are interested and encouraged to participate in inter-college, -university (national/international) seminars/conferences, sports and cultural events to enhance confidence and prove their competencies. Field study, project works, apprenticeship, internships have become common in educational tourism, especially in social studies, geology, language and cultural studies. Teachers also gain and share a lot from such experiences. As the higher education and professional education have gone expensive, people don't hesitate even pursuing their education abroad to gain a tourism experience in addition. For the mutual gain and brand building, institutes and universities also enter into collaborative education programs. Educational apex bodies (like AICTE, UGC in India) appreciate and encourage such initiatives. Rating and ranking agencies also make it a criterion. Historical evidences shows the way religious teachers travelled to various parts of the globe to discourse and disseminate the divine studies. Edu-tourism is, therefore, associated with all sorts of education.

The author of this article hails from a north-Indian edu-tourism destination. A series of short interviews were taken with the students and tourists at Bus Terminal, Railway Station, Airport, Shopping Malls, Market Square in the city. Based on the insights gained thereof the supply chain of edu-tourism is visualized broadly in three different forms or their suitable combinations or integration. These forms are based on the importance given to tourism or education or both in the continuum of tourism in association with education. Table-2 shows the classification of edu-tourism.

Table 2. Classification of education tourism

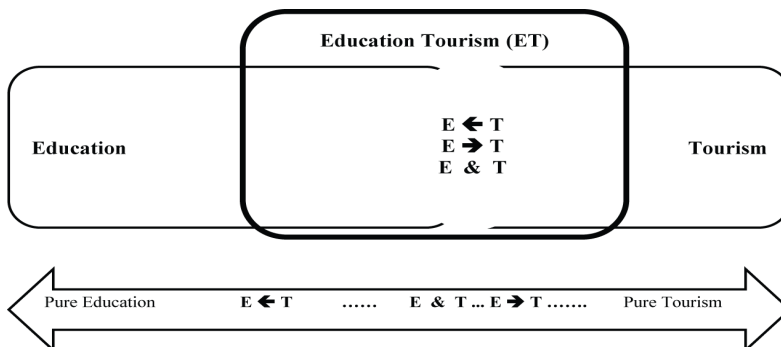
Sl. No.	Type of Education Tourism	Description
1	Tourism for education (T→E)	People do tourism to different education destinations.
		People do tourism to learn from tourism destinations.
2	Education for tourism (E→T)	People study tourism related courses to get tour opportunities.
3	Education with tourism (E & T)	People learn or acquire knowledge while doing tourism.
		People get tourism opportunities while learning

The initial study attached a uniform degree of importance to design and describe the conceptual classification of edu-tourism where the form was decided along with the factor of importance, without considering the degree of importance (Table 2).

Later, interactions with local tourists and students were conducted to develop a *Framework of Education Tourism Continuum* (Figure 2). The following section describes the concept of *Education Tourism Continuum* with shifting preferences of people towards education and tourism. Hence, the different degree of association calls for different forms of edu-tourism from pure education to pure tourism passing through a mix in between.

Some people pursue their educational goal rigorously, involving into tourism, only if essential. Some other people do tourism with a learning intention from destinations. In both cases, the prime importance is on learning. These people constitute the pure form of study-groups with minimum involvement in tourism. They feel tourism as a distraction to education, constituting the pure education group (E ← T) (see Figure 2).

Figure 2. The framework and continuum of education tourism



Some other people, pursue their desire for experiencing and enjoying with the nature, culture, heritage having the prime importance on tourism. These people are on the side of pure form of tourism with least intention of learning. They have a feeling that by mixing the studies with the leisure plans reduces the level of fun and enjoying spirit. However, during the course of tourism, if anything learnt, is seen as an additional benefit ( $E \leftarrow T$ ) (see Figure 2).

People, other than  $E \leftarrow T$  and  $E \rightarrow T$  categories, believe the pure forms to be monotonous. Hence, they consider some involvement of tourism in education as a booster. A right balance of proportions relate the trips and tours with field studies for enriching the knowledge of nature, history, culture, heritage, geography, climate etc. Tourists may view this as a value addition instead of purely going for fun. Thus, tourism and education goes in combination in 'E & T' form (see Figure 2). For example, an edu-tourism experience could consist of a 30-minute visit to a museum, or a 3-year degree having one semester study-abroad component in it. Motivation and intention may influence the level of preparation for an educational holiday, with greater amount of preparation that require assistance of a tour operator. This invites the related formalities within the experience. Educational travel, thus, satisfies the curiosity to know about the people, language, culture, art, music, architecture, nature, flora and fauna (Kalinowski and Weiler, 1992).

### Scoping of Education Tourism

The growth of tourism industry is triggered by the growing leisure; increased discretionary income; and desire to escape and engage in holidays both domestically and internationally (Ritchie et al., 2010). The tourism industry includes the hospitality and travel activities like planning detailed itinerary for destinations; mode of travel; admissible budget; preferred schedule; number of travelers; type of accommodation; type of food; shopping of local special products like handicrafts; other lifestyle activities, sports and cultural events etc. (Piboonrunroj and Disney, 2009). The education industry is no more limited to learning, skilling and knowledge acquiring within the four walls of institutes only, but extending to a practical exposure and experience from ground realities.

However, the combined efforts of education and tourism explored a larger scope of fulfilling greater objectives. Students as tourists, travel to a new location for either learning or touring or both. They do a lot of planning and preparation before and after starting the tour. It also need local short-distance travels, long- and short-stay accommodations and vehicle hiring. The scoping of edu-tourism include:

- Providing information relevant to tourist markets or education institutions.
- Leveraging the information and support for immigration or study abroad plans.
- Sharing information relevant to food, infrastructure, equipment, utility services, libraries, hostels, expert trainer/coach/instructor availability.
- Provision of services like lodging, communication network for new locations, hospitality, first-aid and health-care facility, luggage or baggage handling.
- Provision of safety, security, privacy or services towards any extended need etc.

Some of the interrelated factors in the edu-tourism are identified by researchers like Mathieson and Wall (1982), Mill and Morrison (1985), Murphy (1985), and Pearce (1989):

- The *demand side* consists of the tourist market and their characteristics (motives, perceptions, socio-demographics).
- The *supply side* consists of the tourism industry (transport, attractions, services, information forming a tourist destination).
- The *impact side* of the tourism can have both direct or indirect positive and negative consequences on destinations and the tourists.
- The interdependence of receiving destinations and transit destinations.

The framework of edu-tourism in a Venn Diagram (Figure 2) clearly shows the larger share of edu-tourism compared to the pure forms of either education or tourism. However, it is a mere a graphical representation, drawn to the interaction-based perception, not made to scale, needs further verification. As per CTC (2001), educational and learning experiences are increasing. This increasing trend (Roppolo, 1996), displays the potential of edu-tourism.

### Supply Chain of Education Tourism

The edu-tourism market (Ritchie et al. 2010) indicates the provisions for educational tourism experience by tourist demand and supply of tourism product and services, similar to a supply chain. The supply of learning vacations varies over a wide range of services and suppliers in various locations. Different organizations combine primarily to form the educational tourism experiences like:

- *Attractions and events* providing the venue for learning, experience (e.g. parks, historic sites, zoos, bird- and wildlife-sanctuaries and archeological monuments).
- *Resource specialists* responsibly delivering the learning components of vacations (e.g. employees, curators, interpreters, lecturers, storytellers, researchers).
- *Affinity travel planners* effectively planning and developing learning programs for travelers (e.g. special interest groups, universities and language schools).
- *Tour and receptive operators* packaging experiences for customers (B2C) and organizations (B2B) with destination expertise, local knowledge, and escort services.

However, secondary suppliers are also required for educational travelers including:

- *Transportation* such as cruise, bus and train transport as part of an independent trip or package tour to and from the departure point.
- *Hospitality services*, including catering, recreation, entertainment, social activities and accommodation options.
- *Destination marketing organizations* operating at a national, regional or local level to promote educational travel and tourism.

It is the combination of primary and secondary suppliers, which will create the educational tourist experiences. The continued development of innovative partnership and product development is critical to the future of the educational tourism industry (CTC, 2001).

The literature review and interactions with participants of edu-tourism (Table 2) enabled the authors to propose three basic forms in an integrated framework (Figure 3, 4 & 5).

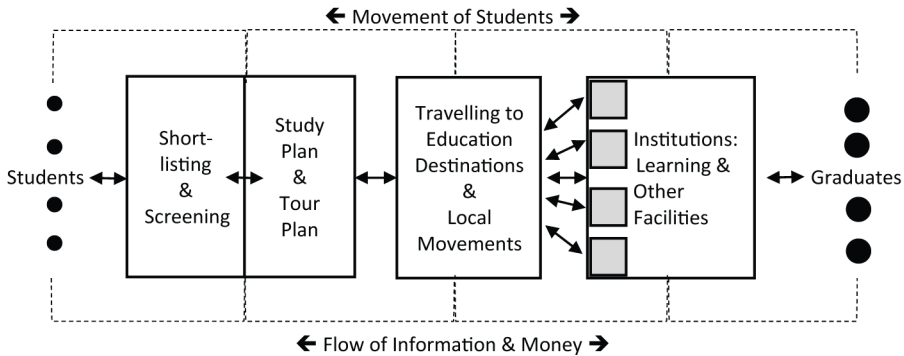
### *Tourism for Education (T → E)(See Figure 3)*

The higher education market is expanding rapidly in the developed world, drawing a greater interest of students from far locations involving tourism. Here the factor of importance is education, but involves some amount of tourism as the institutes of educational excellence are few in number and aspirants are coming from distributed geographical locations. Smith and Jenner (1997) categorize all types of tourisms as educational as the main objective is education; the study period is well defined; involving a lot of planning and execution of travel, stay, food and local conveyance activities for the education destination.

If we look at the edu-tourism with a supply chain view, it executes *Mixing* of students (like goods) coming from different locations (like sources or suppliers) to a university or institution (like a warehouse). The enrollment department, education consultant, the website (like purchase and procure department) informs different types of interest groups for suitable programs offered. Scheduled tests are sometimes conducted as the prequalifying criteria (like checking the goods).



Figure 3. A Framework of tourism for education



[Source: Own Source]

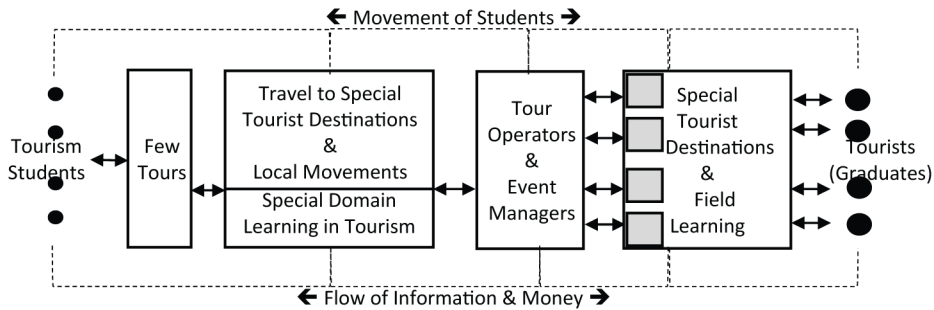
Institutions also try to attract better students (like sourcing) to improve their values. The tourism activities like travel planning (like route, mode, and carrier planning), ticketing (booking), food and accommodation (like storing, sorting, packaging, and order fulfillment) are done. The students do their tour plan themselves (like 1PL and 2PL) or take help of travel agencies and tour operators (like 3PL, 4PL) as per necessity and competency. In addition to this, there is a lot of information sharing, document exchange and monetary transactions take place too. The supply chain management of this framework is primarily aligned to the governance principles of the educational institutions. Either the students or the educational institutions perform most of the core activities barring a few support activities outsourced in this model.

#### *Education for Tourism (E → T) (See Figure 4)*

The interest towards tourism develops in the minds of people after participating in few tours. Then they prefer to study courses like History, Geography, Geology, Nature/Climate, Biodiversity, Marine, Aviation, Cultural Studies, Foreign Language, Tourism and Hospitality, which include substantial amount of tourism in the curriculum. Here the factor of importance is tourism, but in the name of learning, students get exposure to various people, places and events. In such case, people pursue different programs from different locations achieving their objectives through tourism. A well defined study period expects the students to cover maximum components through field visits and tours, finally summarizing in a report as per the curriculum. The growing provisions for foreign educational exchange programs in addition to school excursions and field trips are observed in education.

Under the supply chain view of this type of edu-tourism, students create interest groups (like a processing lot) for a program in a specialized institution (like a warehouse). The university department or vendors arrange the study tour related instruments, special tools and kits (like purchase and procurement). Sometime, all tools are available in a standard kit or package for tour of trekking, field tours, bio-diversity studies, marine studies, airline cruise, wildlife studies etc. Different on-site accommodations are required for different programs. The common tour requirements are camera; GPS enabled compass; tent, rope, bag, bottle, first aid for which the institutions often contact and contract with suppliers or vendors (like sourcing) for maintaining quality and timeliness. The tours include travel planning (like route, mode, carrier planning), booking of facilities like jeeps, buses, boats, horses, local food and accommodation (like storing, sorting, packaging, and order fulfillment). Assistance is available from tour planners, event managers, and special agencies (like 3PL and 4PL) as per necessity and competency. A lot of information sharing, documentation and other transactions

Figure 4. A framework of education for tourism



[Source: Own Source]

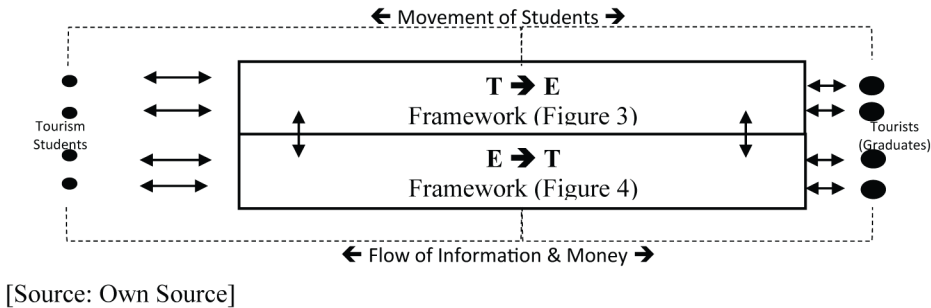
take place too. The supply chain management in this framework is primarily aligned to the specialized programs (like a customized order processing). The core activities are done by special agencies and experts like guide, coach, trainer, instructor; barring a few support activities done by local market in this model.

#### *Education With Tourism (E & T) (See Figure 5)*

Participants in this type of tourism constitute both students and non-students (tourists). As per this model, participants do tourism while learning to boost their energy level and refresh the mind by relating the tours to the areas of learning. Similarly, tourists pursue short-term courses at the destinations, if they like to spend more time at a location. Here the factor of importance is balanced between education and tourism where the framework recommends the involvement of tourists in some kind of learning at a destination, if it appeals to them. The participants enjoy a break for tourism without limiting to any particular geography or territory. The combined framework leads to engagements, collaborations, and co-creation of value, sometimes impulsive, and sometimes in a planned manner. The supply chain of this framework operates over a wide spectrum of education and tourism facilities. Both the prescheduled and dynamically scheduled activities are executed to suit different parties in different times. Available training, coaching and learning opportunities for a tourist; and leisure, accommodation, holiday, and tour package for participants are common here. The dynamic decisions under this framework are possible due to smart information and communication technologies. This framework is easily visualized by simply positioning the models side by side.

Progressive organizations conduct short-term courses with short-period tours for their employees to impart training, higher- and professional-education. This initiatives prompts to collaboration with various tourism agencies operating at various destinations. Then the education institution, tourism agency and the people together execute a psychological contract (Panda & Pradhan, 2014) accordingly, approving study leave partially fulfilling the desire for tourism. Academic breaks or vacations are often planned for tourism, either with a pure tourism prospective, or with a study tour focus or in a combined form. Sometimes the tours are curricular in nature linking with the approval of the tour destination authority, otherwise, work organizations grant paid leaves or duty leaves. It appears as a problem when associated with mass tourism or due to the lack of tour operators and their abilities at some destinations, affecting the host communities (Fennell, 1999). This threat leads to a shift towards soft sustainable alternatives of tourism.

Figure 5. A framework of education and tourism



### Excellence of Education Tourism

Based on the discussion of above three models of edu-tourism, the fundamental principles of high performing supply chains can be applied to generate maximum supply chain surplus by virtue of its efficiency (i.e. at least cost and time) and effectiveness (i.e. closer to the goals). Different stakeholders have different cultural backgrounds for which they need understanding and performing in coherence (Christiansen, 2019). Logistics support in the multi-faceted edu-tourism can excel with a systemic approach (Baporikar, 2020). The effective operation is possible when all the stakeholders identify each other's value propositions and try to convert them into collective advantage. Then arises a need to adopt technologies for shared services while adhering to the group strategy and ethics (Wang & Wang, 2015). The objectives of edu-tourism are then better fulfilled by:

- Inviting and attracting the people with unique sales propositions. [i.e. managing better relationships with the suppliers]
- Designing better curriculum; tourist products; and infrastructure. [i.e. by R&D and innovation for new products]
- Extending proper facilities, hospitality, comfort and conveyance. [i.e. by economic inventory/ accommodation, production/service, packaging/ hospitality]
- Helping the tour-operators, event-mangers, education consultancies in developing their plans as conducive as possible to the students and tourists. [i.e. by managing better relationship with the channel partners]
- Engaging operating channels with the students and tourists. [i.e. by managing better the relationship with customers]

Educational institutes need to incorporate international experience components in their curriculum in the light of growing interdependence of countries, providing benefits to the students, institutes and the tourism industry (Roppolo, 1996). Elements of edu-tourism gain importance with increasing alternatives of tourism experiences. In absence of a comprehensive knowledge of the inter-relationship between educational tourism of 'purposeful study' and 'travel intensive study', the supply chain view to the edu-tourism can provide a sustainable direction to the industry and economy.

### CONCLUSION

Intelligent information systems built around the student lifecycle can enable edu-tourism to track and trace their interest irrespective of location and movements similar to use of smart devices and technologies in supply chains. Such a system can exhibit flexibility by providing proper information and facilities as per the needs and preferences. Different types of access are provided to different

people over a widely dispersed geography. The efficient supply chain management (SCM) techniques, if applied in edu-tourism, can optimize the operations meaningfully. Educational institutions in tourist places can highlight the attractions to the students; and the tourist destinations can highlight the expertise of local educational institutions to create as a value-added program. Other than students, the people who consider the human life as a journey of continuous learning also easily get into such activities. This reduces the additional drive for marketing the education or tourism; thereby reducing the cost and time. All the stakeholders (students, tourists, tour operators, travel agencies, transporters, event managers, hotels and resorts, education institutions) of edu-tourism fulfill their respective goals of acquiring best education as well as tourism experience. As an effective operation generates higher supply chain surplus in a scheduled and budgeted manner every time. The edu-tourism sector which does not visualize the supply chain focus can still remain sustainable by following the integrated approach of SCM. The benefits of success can reach to all stakeholders and the economy at large. Service supply chain can mobilize the collective capabilities in edu-tourism for the overall success and satisfaction.

## REFERENCES

- Arora, M., & Panda, B. P. (2018). RFID – An Emerging Technology for Cold Chain Sustainability. *ZENITH International Journal of Business Economics & Management Research*, 8(5), 136–145.
- Baporikar, N. (2020). Logistics Effectiveness Through Systems Thinking. *International Journal of System Dynamics Applications*, 9(2), 64–79. doi:10.4018/IJSDA.2020040104
- Canadian Tourism Commission (CTC). (2001). Canadian Tourism Commission Research Report – 28 June. Canadian Tourism Commission.
- Chadee, D., & Cutler, J. (1996). Insights into international travel by students. *Journal of Travel Research*, 35(2), 75–80. doi:10.1177/004728759603500213
- Christiansen, B. (2019). Cultural Indoctrination and Management Education Curriculum. *International Journal of Applied Management Theory and Research*, 1(1), 1–15. doi:10.4018/IJAMTR.2019010101
- Cooper, C., & Latham, J. (1985). *The Market for Educational Visits to Tourist Attractions in England and Wales*. Dorset Institute of Higher Education.
- Cooper, C., & Latham, J. (1988). English Educational Tourism. *Leisure Studies*, 9(4), 331–334.
- Cooper, C., & Latham, J. (1989). School Trips: An Uncertain Future? *Leisure Management*, 9(8), 73–75.
- Coughlan, D., Ritchie, B., Tsang, A., & Wells, J. (1999). *Schools Educational Tourism Project Research*. Unpublished report commissioned by the Schools Educational Tourism Committee, Canberra, Australia.
- Coughlan, D., & Ritchie, B. W. (1998). *Educational Tourism: An insight into the motivations and perceptions of these special interest travelers*. Paper presented at the New Zealand Tourism and Hospitality Research Conference, Akaroa, New Zealand.
- Coughlan, D., & Wells, J. (1999). *Educational Tourism: the case of marketing to schools*. Paper presented at CAUTHE, 9th National Research Conference, Adelaide, Australia.
- Coventry, N. (1996). New Zealand lures Asian families. *PATA Travel News: Asia Pacific*, (July), 18–19.
- Das, B., Satpathy, I., Panda, B.P., & Panda, S.B. (2010). Sports Tourism: A Socio-Economic Prospect for India. *KIIT Research Journal*, 1(1), 489-502.
- Devlin, P. (1993). Outdoor recreation and environment: Towards an understanding of the use of outdoors in New Zealand. In H. Perkins & G. Cushman (Eds.), *Leisure, Recreation and Tourism* (pp. 84–98). Longman Paul.
- Erdogdu, M. M. (2015). Culture of Development and Developmental Capacity of States: The Korean Case. In B. Christiansen & J. Koeman (Eds.), *Nationalism, Cultural Indoctrination, and Economic Prosperity in the Digital Age* (pp. 1–51). IGI Global. doi:10.4018/978-1-4666-7492-9.ch001
- Field, A. (1999). The college student market segment: A comparative study of travel behaviours of international and domestic students at a southeastern university. *Journal of Travel Research*, 37(May), 375–381. doi:10.1177/004728759903700407
- French, C., Craig-Smith, S., & Collier, A. (2000). *Principles of Tourism*. French's Forest, Australia: Pearson Education.
- Gee, C., Makens, J. C., & Choy, D. J. L. (1997). *The Travel Industry* (3rd ed.). Van Nostrand Reinhold.
- Hall, C. M. (1992). *Hallmark tourist events: impacts, management and planning*. Belhaven Press.
- Hibbert, C. (1987). *The Grand Tour*. Methuen.
- Hsu, C., & Sung, S. (1997). Travel behaviours of international students at a midwestern university. *Journal of Travel Research*, 36(1), 59–65. doi:10.1177/004728759703600109
- Kalinowski, K., & Weiler, B. (1992). Educational Travel. In C. M. Hall & B. Weiler (Eds.), *Special Interest Tourism* (pp. 15–26). Belhaven.

- Krippendorf, J. (1987). *The Holiday Makers: Understanding the Impact of Leisure and Travel*. Heinemann Professional.
- Manning, R. (1983). *Studies in Outdoor Recreation: Search and Research for Satisfaction*. Oregon State University Press.
- Mathieson, A., & Wall, G. (1982). *Tourism: Economic, Physical and Social Impacts*. London: Harlow.
- McCallen, B. (2000). *ELT Competitor Analysis*. The British Council.
- McIntosh, R., Goeldner, C., & Ritchie, J. R. B. (1995). *Tourism: Principles, Practices, Philosophies* (7th ed.). John Wiley.
- McIntosh, R. W., & Goeldner, C. R. (1986). *Tourism principles, practices, philosophies*. John Wiley.
- Mill, R. C., & Morrison, A. M. (1985). *The Tourism System: An Introductory Text*. Prentice Hall.
- Moser, H., & Kaspar, C. (1990). Private Schools: Impact on the Swiss tourist economy. *St. Galler Beiträge zum Fremdenverkehr and zur Verkehrswirtschaft Reihe Fremdenverkehr*, 20, 39-46.
- Munoz Gonzalez, S. (2001). *The role of English language schools in Eastbourne's tourism industry and economy* (Unpublished BA (Hons) dissertation). International Tourism Management, School of Service Management, University of Brighton.
- Murphy, P. E. (1985). *Tourism: A Community Approach*. Methuen.
- Özoğul, T., Sezerel, H., Aktaş, S. G., & Adıgüzel, Ö. (2020, October). Learning through creative drama in vocational hospitality education: Efficiency, retention, and attitudes. *Tourism Management Perspectives*, 36, 100728. doi:10.1016/j.tmp.2020.100728
- Panda, B. P., & Panda, S. B. (2018, May). Role of Technology in Indian Tourism Supply Chain. *Asian Journal of Multidimensional Research*, 7(5), 158–172.
- Panda, B. P., & Pradhan, A. (2014). *Psychological Contract at Workplace: an Investment* (Vol. 10). Biz & Bytes – A Journal of Management & Technology.
- Pearce, P. L. (1989). *The Social Psychology of Tourist Behaviour*. Pergamon.
- Piboonrungraj, P., & Disney, S. M. (2009). *Tourism Supply Chains: A Conceptual Framework*. PhD Network Conference, Nottingham, UK.
- Ritchie, B.W., Carr, N. & Cooper, C. (2010). *Managing Educational Tourism*. New Delhi: Viva Books Private Limited.
- Roppolo, C. (1996). International education: What does this mean for universities and tourism. *Tourism and Cultural Change*, 191-201.
- Sezerel, H., & Kaymaz, C. (2019). Is Sustainable Tourism a Leverage FOR Economic Development?: A Critical Review. In B. Christiansen, I. Sysoeva, A. Udovikina, & A. Ketova (Eds.), *Emerging Economic Models for Global Sustainability and Social Development* (pp. 46–64). doi:10.4018/978-1-5225-5787-6.ch003
- Smith, C., & Jenner, P. (1997). Educational tourism. *Travel & Tourism Analyst*, 3, 60–75.
- Steinecke, A. (1993). The historical development of tourism in Europe. In W. Pompl & P. Lavery (Eds.), *Tourism in Europe: Structures and Developments* (pp. 3–12). CAB International.
- Sung, S., & Hsu, C. (1996). International students' travel characteristics: An exploratory study. *Journal of Travel & Tourism Marketing*, 5(3), 277–288. doi:10.1300/J073v05n03\_08
- Theobald, W. (1998). *Global Tourism: The Next Decade* (2nd ed.). Butterworth-Heinemann.
- Wang, S., & Wang, H. (2015). Shared Services Management: Critical Factors. *International Journal of Information Systems in the Service Sector*, 7(2), 37–53. doi:10.4018/ijiss.2015040103
- Wood, C. (2001). Educational Tourism. In N. Douglas, N. Douglas, & R. Derrett (Eds.), *Special Interest Tourism: Contexts and Cases* (pp. 188–211). John Wiley.

*Biranchi Prasad Panda is an Associate Professor in the School of Business at UPES, Dehradun (INDIA). He holds Bachelor degree in Production Engineering, Master degree in Operations Management and Doctorate degree in Design Technology Management. He has three decades of experience of which the first five years are spent in manufacturing/process industry and rest in academics. His area of teaching and research covers Operations Management, Technology Management, Supply Chain Management, Product Lifecycle Management. Being a strong believer of Design Thinking, he does research in interdisciplinary areas and provides industrial consultancy through cross-functional design audits. He enjoys most of his weekends by craft work i.e. preparing handicrafts from waste materials.*