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Global Understanding-Expanding Expectations

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Abstract: The concept of 'Distance Education' is a promising and important point shaping both the national and international educational standards. In this respect, there seems to be an urgent need to have a look at the past experiences and to re-structure the future applications. The expanding costs of face-to-face education, the lodging and transfer bills on the side of the students as well as teachers, the personal and institutional costs add too much to face-to-face education. Also the new education policies and social policies on the way to internationalization have a huge impact on distance education putting it into a more promising position. Istanbul University is a partner institution of the Project of "Global Understanding" run by the East Carolina University of the United States of America. Within the Project, university students are in communication with 40 universities in about 20 countries. The Project involves access to the universities of countries such as America, Brazil, Algeria, China, Ecuador, Ethiopia, Morocco, Gambia, India, Netherlands, Iraq, England, Japan, Lebanon, Malaysia, Mexico, Egypt, Moldova, Nigeria, Pakistan, Peru, Poland, Russia, Taiwan, and Turkey. The project provides a platform to more than 1500 students each year to meet with each other, communicate, and share with each other. In this respect especially the ones coming from more disadvantaged parts of the country would find an opportunity of intellectual mobility rather than physical, social, cultural, and emotional mobility. The participants are also provided an atmosphere to understand the culture of the others living in different societies. The courses provide intellectual, social, and virtual mobility chances for those who live in the disadvantaged areas of the world. These new type virtual classroom applications diminish the problems stemming from the socio-cultural environment or economic conditions. The project is one of the best examples of "Distance Learning in Higher Education Institutions". This paper attempts to explore the process of the project from the very beginning how the different decisions made during the applications, how careful steps improved the project, and how the courses are evaluated, assessed as well as how the participants were put in follow up activities. The concentration would be on the expanding period and its reflections on national and international level understanding. The paper is mainly dwelling on the qualitative and quantitative responses of the participants to evaluate not only the project itself but also the participants from various cultures and disciplines.

Keywords: Distance Education, Intercultural Communication, Awareness Rising, University Education, Future Expectations

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1. INTRODUCTION

In modern times, almost all students live in the Global World which has different kinds of cultures and customs introduced mainly through the mainstream media and technology. Today's students live in a global society of diverse cultures and customs. Mainly, their understanding of the other cultures is often limited to 30-second news-clips they see on television. Although students realize the importance of understanding other cultures, few of them actually study abroad.

The scientists of San Diego University proved that the normal human being is exposed to 100.500 new words and concepts per day that is equivalent to 2.3 words per second. Within such a hurry most of them have no time to decipher and classify what they really know and what they do not know. All the images and concepts mix with each other having no opportunity of proving themselves about their real meaning in real world. Thus, people, should think over and over when it comes to the prejudices, a priori information, and values to help them understand and judge the world.

Our age is characterized by the interconnection of peoples, cultures, technologies, markets, problems, and politics on a world scale. Understanding the world, people from other countries and their cultures, lives, and etc. is not a luxury or dream but it requires thinking everything deeply. To be a global citizen, one must try to understand what people are doing all over in the world. While doing that, first, one should not forget what we know about people, in other words, we have to eliminate our prejudices and stereotype ideas.

People just do not have enough time about the origin of these thoughts and values: They never think of who shaped them or what made them think or behave in such a particular way. They do not improve much of their mathematical skills such as compare and contrast, reasoning, identifying the objects, or making judgments. The decision making processes are usually headed by the second hand information, yet, we all know that nothing compares the importance of the firsthand experience.

Although students understand the meaning of other cultures just a few students have the opportunity of studying in abroad. 'Global Understanding Project' is an opportunity for students to raise their awareness on cultural issues and understand other cultures without traveling to other countries.

1.1. IT IN THE CLASS

Education all over the world is becoming more and more important, but also expensive. Especially, face-to-face interaction facilities are becoming rare, specifically in the more developed countries. Along with the development of the technical devices and communication technologies, the substructure of the education systems is changing. The changes and new applications in the education systems force the education centers to find new ways to make education more enjoyable and interactive.

In modern schools, the classroom setting where the lecturer is involved in face-to-face communication with his/her students has changed format even at the elementary level. Regarding the impact of multiculturalism and internationalization they have higher awareness, better standards, and more possibilities of meeting with the strangers or enlarging their social circles. Thus, the students attending to the university have higher expectations and deserve deeper experiences to enrich their philosophy, intellectual capacity, and cultural sensibility. They also need to understand themselves and the culture they live in. This understanding is much more different from the level of elementary or high school levels where they were with their families and got nothing more than studying for their classes.

Regarding the current numbers in computer and internet ownership in Turkey, the participants could be placed as the lucky ones.[1]

[1] http://www.tuik.gov.tr/VeriBilgi.do?alt_id=60

	Computer %		Internet %	
Age Group	**Men**	**Women**	**Men**	**Women**
16-24	81,1	56,4	80,6	55,4
25-34	70,0	48,1	69,6	47,2
35-44	54,3	32,7	53,3	31,8
45-54	36,3	17,0	34,8	16,2
55-64	19,1	6,1	18,5	5,6
65-74	6,9	1,3	6,4	1,3
TOTAL	59,0	38,5	58,1	37,0

When the percentages of Europe based countries are considered it is not that much different from Turkey, except Finland and Norway reaching to almost 100 percent. Anyhow, the videoconferencing event is not that common even in the European universities. Distant Education, among all the other education methodologies, is not a new method. That format can be re-created in videoconferencing as well. Video conferencing has its advantages and own limitations in the educational context. However, an innovative technology copes with the expectations of the 21st century. 21st century education is not limited to the classical classroom settings where the lecturer usually engages in a monologue. From the monologue period, the lecturers turn into an interactive course pattern where the education becomes more student centered, rather than teacher centered. That interactive discourse pattern allows dialogue and participation of students on a voluntary setting in the classroom environment. There are, however, responsibilities of the lecturer. From the monologue to the dialogue and later comes the empowered student. The student reaches information by himself/herself via Internet. S/he is overwhelmed with information, performs the judgments based on that information, in addition to the former knowledge or perceptions s/he has regarding various topics.

The advantages of videoconferencing are that it could communicate with people who may not physically be there or together. Videoconferencing is a tool that could be used in education. It may have various formats where, for example, the lecturer can make himself/herself visible independent of where s/he lives. Or video conferencing in education can be the whole program or if one course is offered, or it is just a part of the course within the curriculum. The videoconference may be synchronic or diachronic.

One other benefit of videoconferencing, is that, it allows you to stay where you are and still be accessible to information or filtered information in the newly designed classroom setting.

1.2. ISTANBUL UNIVERSITY

Istanbul University, as one of the oldest educational institutions, not only of Turkey, but also of the world, was founded when Mehmet the Conqueror conquered Istanbul. One of the main characteristics of Istanbul University is its leadership in higher education for centuries. It has played a guiding and influential role in the social and cultural life of our country. We can clearly see this when we trace the line of historical development of the University.

Today, Istanbul University provides a rich educational atmosphere with its 17 faculties, 5 departments, 13 schools, 15 institutes, and 26 centers situated in many districts of Istanbul. In the first years of its establishment, the university was based in Beyazıt, the historic area, but now many new campuses have been established throughout the city (Beyazıt, Avcılar, Çapa, Cerrahpaşa, Bahçeköy, and Kadıköy). Today, the University has 6 campuses scattered along the city. The university is unique for having two Faculties of Medicine. Istanbul University, as one of the leading education institutions both in the country and the world, is developing new applications and strategies to cope up with the expectations of the 21st century and leading innovative technologies.

In the past years, the evening or part time students were accepted to provide chances to those who are already at work but would like to continue their education. The university also provided opportunities of having a minor branch or another major to the graduate ones or to those who are still continuing their career at the university. Apart from this, the university also provides distance learning courses in many branches and disciplines. The online courses are conducted through live courses on internet and the participants have an equal diploma upon graduation.

1.3. GLOBAL UNDERSTANDING PROJECT

Istanbul University is one of the oldest universities in Europe. It has over 90 thousand students and approved its quality for distance learning

during the past five years. Global Understanding project was the first distance learning project of Istanbul University. Since it is a state university and a big one in numbers, initiating new projects are always a challenge and it takes time. The initiation of the Global Understanding project took relatively less time than expected. The project has been briefly presented at an informal setting to the first coordinator of the project by the Embassy of the USA in Istanbul. Just after that, the coordinator of the project from East Carolina has communicated to Istanbul University Faculty of Communications Coordinator. It has been discovered that the collaboration at this point, as the initiative of the coordinator, has to be presented not only to the department and to the Dean's Office, but also to the University.

The partner institutions are diverse, worldwide, and communicate through live video conferencing and Chat technology. The Global Understanding Project was first launched by East Carolina University, North Carolina, US in 2003. At the beginning, 21 universities from 17 countries carried out with the project headed by East Carolina University. (Czech Public, Pakistan, India, Chine, Peru, Taiwan, Morocco, Russia, Algeria, Malaysia, Mexico, Venezuela, Namibia, Moldova, Gambia, and Turkey). Students in each university are matched with other college students chatting on the net and using video chat in the universities' technical classrooms. In each session, students talked about campus life, family life, culture, art, science, values, beliefs, and other topics. Global Understanding is a course offered through videoconferencing. At the moment, the project is expanded to 48 universities from 25 countries (Algeria, Brazil, China, Colombia, Ecuador, Egypt, Ethiopia, Gambia, India, Iraq, Japan, Lebanon, Macedonia, Malaysia, Mexico, Netherlands, Nigeria, Pakistan, Peru, Poland, Russia, Taiwan, Turkey, UK, and USA).

In her article, Fisher states that "The course provides a format for students to learn about other cultures without traveling. Just 1% of East Carolina University undergraduates study in abroad. However, thanks to a pair of enterprising faculty members, a growing number of students are having international experiences without ever leaving the Greenville, N.C. campus. The university's Global Understanding program uses inexpensive and relatively unsophisticated technology — a low-bandwidth video link

and e-mail chat — to connect East Carolina students with counterparts at 23 institutions in 17 countries and five continents." [2]

> While other colleges have made use of computer hookups to bring a global perspective into the classroom, the East Carolina model is distinctive in that it links each participating class with partners at several foreign universities, exposing students to multiple points of view. Its low-cost, low-tech approach has allowed the university to build relationships with institutions in less-well-off countries like Namibia and Moldova and to sustain such partnerships even as budget constraints have forced many institutions to curtail their travel, both overseas and out- of-state.
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> In just five years, the program has gone from a one-time pilot, hatched over a coffee break, to a mainstay of the university's general-education curriculum. Freshman-level Global Understanding course sections consistently fill up during the first hours of registration, says Rosina C. Chia, Assistant Vice Chancellor for Global Academic Efforts, and other faculty members are adapting the model for use in their own teaching.

"It's really powerful," says Marilyn Sheerer, East Carolina's provost. "It's not a stretch to see how students' perspectives have changed." As Fisher states, "The program got its start during a casual conversation between Ms. Chia, then a professor of psychology, and interim Dean of Communications and Computer Science, and Elmer Poe, who was then interim Dean of Technology. It would be nice, the two agreed, if there was a way to leverage East Carolina's strength in online and distance education to expand international opportunities for its students."

> Within months, in July 2003, the first class, which connected students in North Carolina and at Soochow University in China, was under way. Although the initial course was part of an intensive summer session, it established the basic model for future Global Understanding offerings: Classes of 15 to 20 students are split in half, and each group is given a series of questions meant to guide conversation. One half discusses the queries, which tend to focus on cultural practices like college life and family structure, as a group via videoconferencing, while the other students engage in one-on-one discussions on the same topics with overseas partners through e-mail. Halfway through the class meeting, the groups switch.
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> The two approaches give students insights into societal norms and expose them to individual perspectives on topics that are sometimes sensitive, says Mr. Poe, who is now associate vice chancellor for academic outreach. Students are

[2] *Fischer, Karin, 2009,* East Carolina U. Uses Simple Technology to Link Its Students With Peers Overseas

required to write papers with their foreign partners, and the in-class discussions are supplemented by outside readings that provide an academic foundation. For example, students might read anthropological texts and learn about how different societies view the role of the family.

After the success of the initial class, Mr. Poe and Ms. Chia, with the backing of East Carolina administrators, took time to formally outline the course structure and to enlist instructors and technical-support staff. They also set out to recruit additional foreign universities. The pilot partner, Soochow University, came about through the connections of Ms. Chia, who is originally from China. But Ms. Chia and Mr. Poe wanted to be more strategic about forming relationships. They reached out to the U.S. Department of State and to foreign governments for guidance and sought to attract institutions from countries and regions that "will be important on the world stage for the next 15, 20, 30 years," Mr. Poe says.

As Fisher stated "Early on, they decided against organizing the course around a single, bilateral relationship. Instead, each section of it includes East Carolina and three foreign partners. The four institutions are paired for five weeks at a time and then change partners, so that all students get the benefit of learning about three different cultures during the semester. There has been consensus to hold the courses in English, which tends to be the common language among all the partners, Ms. Chia says. But scheduling class times hasn't always come as easily."

2. THE COLLABORATION

The most important of all is not the substructure or the technical part of the projects. Mainly, the bilateral agreements provide the best setting for the collaboration. However, the institutions clearly explain what the main action would be and how the parts would take part in it, the coordinators and the objectives are stated as well. In such a mutual understanding atmosphere, the parts could clearly modify the needs and requirements depending upon their circumstances, potentials and expectations. The units and modules could always been added to the preplanned motives and the number of the students or the staff could also be increased or decreased regarding the deficiencies.

The project has been introduced to the International Relations office and the Vice Rector of the University. Two representatives from the East Carolina University had a site-visit to Istanbul University. Later, an Agreement titled 'The Establishment of Collaborative Relationship Between Istanbul University, Turkey and East Carolina University, USA" has been signed.

The main reason for the site-visit is to assess the level of technological infrastructure and support. Often, it is minimal, and so, while East Carolina holds its classes in an up-to-date "global classroom," Mr. Poe says he and Ms. Chia deliberately use the most basic equipment. The camera and software for videoconferencing cost around $350. Video is transmitted over a simple Internet connection, and East Carolina handles additional technical support. (The university often helps the partner look for outside sources of funds to cover the costs.) Beyond that, each partner needs eight computers so students can chat by e-mail, Mr. Poe says, "they can be old and decrepit as long as they can get on the Internet." Still, sufficient bandwidth remains one of the program's biggest challenges, he says.

The agreement items related with Global Understanding states that

> Beginning Fall semester, 2006, the universities will jointly offer a course in Global Understanding using videoconferencing and other Internet based tools. English will be used in teaching this course. Participation in this course will require each university to maintain internet connectivity that supports H.323 videoconferencing and IRC based chat. This course will provide partnerships between the students and faculty at Istanbul University and East Carolina University for the duration of the course. [3]

Once the agreement has been signed, the action to promote the project has started. It was then through hanging posters related with recruiting, participation, and description of the project. The second major task was the establishment of the technical room. The East Carolina University provided the infrastructure and necessary equipment for it at the beginning, but there had to be some technical people on our side as well. Two research assistants were appointed as responsible staff for the technical side of the project, connections and solving issues related with technical aspects. In

[3] From Agreement The Establishment of Collaborative Relationship between Istanbul University, Turkey and East Carolina University, USA

addition to the coordinator/lead teacher of the project a second academic is recruited for the project. They were either in the classroom together or they have rotated. Their collaboration helped the project to report the pros and cons, to give enough feedback about the Project, and to establish a better way for future.

Regarding the criteria for participation in the project, knowledge of English was a prerequisite and also interest in the project and different cultures was inevitable. For some participants, the certificates provided after each connection was a good motivation as well. Since Global Understanding was not offered as a course at that time, the students of the Faculty were selected on the basis of their motivation for the course and their language abilities. Usually, it was easy to find motivated students, but usually with not enough knowledge of English, and sometimes, even if they are motivated, that motivation may went down. Sometimes the group dynamics of the newly formed group each term affected the pattern and flow of the course. The participants would also develop ways to help to each other such as translation during the course, or helping the others with poor skills such as writing. Sometimes, the chat groups would have two Turkish participants and a foreign participant that the two would help each other to overcome the difficulties.

2.1. DEVELOPMENT OF COLLABORATION

The first year, the course has been offered only to the registered students of faculty of communication, undergraduate. The impression of the lead lecturer at first offering was that, the whole atmosphere was nice, but a bit complicated for the unmotivated students or for those who do not have enough English. Also, the number of the participants was always less than the partner institution students. That means each participant should have two or more colleagues from other countries. For those who have high level of language skills and motivation, it was not a problem, but for those from the lower levels, sometimes, it could become a serious problem. Later on, the course was put into the curriculum and the students enrolled to the course as a real student, rather than just on voluntary basis.

This paper discusses the opportunities that every student is lucky to be involved in such a wonderful program. Moreover, it gives a guideline to interested parties about safe participation on how to proceed with this videoconferencing which is a collaboration of academics from each related institutions as well. Global Understanding project has been awarded by and has been included into the evaluation of the Institute of International Education 7. Andrew Heiskell and the project lead by the East Carolina University covering 20 universities from 18 countries won the award of 'Honour' for "Innovation in International Education" branch.

One other purpose of this paper is to share the challenges of the Global Understanding project that was initiated in 2006 Fall semester between two universities, Istanbul University – Faculty of Communication Sciences and East Carolina University. The idea was the connection of the two institutions and their members, specifically the students. The blurred images of the different cultures could only then become more realistic and scientific. The connection should be stable and continuous, that's why there needs to be a floor for the permanent participants to meet and share the themes, questions, and answers.

Initially, Global Understanding was not a mandatory course, just an optional/ elective one for the students of Faculty of Communications of Istanbul University, but it has become a mandatory one after its proven success. The next year "Global Understanding" became a mandatory course in the curriculum offered as videoconferencing. If the students want to join that course, they must communicate with the coordinator of the course and thus get into touch with the other relevant participants of the course, to communicate with other university's participants.

The criteria of choice may only depend upon the language level, interest, and participation. Firstly, the teacher makes a meeting with participating students to explain how the course would work. S/he distributes documents that have course topics and ways to prepare them for the live meeting. The classroom was still in Faculty of Communication and now there were more computers in the classroom to help the participants to chat during the live connections. Students mainly discuss about the agreed topics with each other and then they start face-to-face communications with the other

country by videoconferencing. The advantages of videoconferencing were that, the participants could communicate with people as a whole, as a class, and in an individual way. Especially in the first meetings the partners would like to see each other in screen and feel very happy to meet in person after some chatting. Videoconferencing is a tool that could be used in education and it provides more motivation and self-confidence. Students talk about their cultures one by one and each presentation is compatible with the previous one. The pre or post questions about the topics help the participants to explore the topic more and exemplify things more in detail. It helps to create and provides an enjoyable, understandable, and shared atmosphere. Sometimes it can be funny because of having a different sense of humor.

By 2010, the course is offered to all the faculties of the university on a voluntary basis and the students, again, registered for the course. The paper discusses the establishment of that project within the Faculty and from the first coordinator and initiator of the project, discusses the opportunities and challenges related with it. Moreover, it gives a guideline to interested parties about safe participation on how to proceed with this videoconferencing which is a collaboration of academics from each related institutions as well.

3. FINDINGS AND INTERPRETATIONS

Global Understanding project was the first distance education learning project of Istanbul University. Istanbul University is one of oldest universities in Europe. It is a state university and a big one in numbers. Initiating new projects are always useful for students to understand world and know other cultures, lives, peoples... If the number of new projects remains, students will know more things about world therefore the country is going to be more developed than past.

The leading education institutions both in the country and the world is developing new applications and strategies to cope up with the expectations of the 21st century and leading innovative technologies. Moreover, it gives a guideline to interested parties about safe participation on how to proceed with this videoconferencing, which is a collaboration of academics from

each related institution as well. The reflections of the participating students reaching to hundreds are all very positive.

4. CONCLUSION

Istanbul University is a modern, well equipped, and well-organized education center. It was a leading institution in the past and it will be an updated, well oriented, and well-qualified education institution in the future. With its more than hundred thousand students and around five thousand dignified academics the substructure of the education will provide its best throughout the upcoming years.

Regarding the opportunities and challenges of the Project, one must admit that it is a well-established international project and it helps the participating institution to promote themselves and to be involved in more interactive scale and interesting projects as a side benefits. Even if the services and substructures of the universities may not be compatible with each other sometimes, it provides a tolerant atmosphere to help each other and create new ways to continue communication.

Within the first few semesters, the participating partners were not know very clearly and their objectives were not clarified either. However, the Project developed its own ways to assess and evaluate the participants' feedback through the pre and posttests, and enriched the valid data to prove that the courses really provide some platform for the participants to develop a better understanding of the other.

Regarding the academic's load of work, it was difficult to continue teaching just for ideals. Especially in circumstances of Istanbul, sometimes it was requiring work outside of working hours since the live links should be arranged depending upon the GMT and local time of all participants. Once the relevant hours fitting were decided, it was a full occupation for about six weeks every Monday and Wednesday. Thus, teaching an hour live connection could cost more than few hours in reality. The goals were not gaining money through the course, so neither the assistants nor the teacher or the coordinators were paid any kind of fee for the courses. That's why only one classroom is provided for such an experience. Opposite to the

Turkish case, in Greenville, East Carolina officials are seeking to expand the number of introductory Global Understanding courses. One challenge, Ms. Sheerer, university provost says, is that class size must be small, which means additional instructors are needed.

As Fisher puts out, "To accommodate partners in parts of the world as disparate as Gambia, Malaysia, and Russia, classes sometimes have to be held early in the morning or well into the evening for some institutions." One group of Chinese students, Ms. Chia recalls, came to class in winter coats because the heat in their building had been turned off after dark. The complex, multipartner model has meant that the Global Understanding program has expanded slowly, Mr. Poe and Ms. Chia acknowledge. The university had a sufficient number of partners to offer seven sections of the course this semester, which means just a fraction of East Carolina's 4,000 freshmen could enroll. They hope to add an additional section this fall." But Mr. Poe and Ms. Chia say they want to be choosy. Only about one of three possible partners is a good fit; some don't want to make the time commitment, while others are not comfortable with the student-driven style of the course.

Although the course is taught remotely, teams of East Carolina faculty members and technological experts visit each foreign campus to train instructors and to gauge the enthusiasm of university leaders. East Carolina typically signs two-year agreements with the partner institutions and won't go forward unless the project has backing from top administrators, Ms. Chia says.

Without the support of the top management, the course would be impossible to manage since the course was not on papers, placing the course was a bit difficult. For example, the classroom could be occupied by some other classes having more priority or maintaining a sustained program could be difficult since at each change of partners the class hours would also be changing. Thus, the program requires a large tolerance scale regarding all the participants in it involving not only the students, but also the teachers, the technical staff, and etc.

Some relationships, nevertheless, stumble. After political unrest broke out in Kyrgyzstan in 2005, the government stopped paying faculty members

at Osh State University, East Carolina's partner there. Two students took over and led the class until the end of the semester, but the partnership was not continued.

The course was a bit blurred when it first started and was not that much successful in maintaining the students' goals. When the poor visibility and unclear sound is added to the other shortages, the students were rather demotivated instead of being motivated through the course. The pronunciation problems, the difficulty of meaning the self in front of all the others, and deciphering the cultural issues were all difficult things for them and it was difficult to see the outcomes at the very beginning. Yet, with the better screening facilities, stronger infra-structure, and the developing language level of the participants helped the program to improve. The betterment of the courses helped the participants to overcome their prejudices and clarify their perceptions.

The students' participation was somewhat vital for the course and their level of attention, interactivity have a lot to do with their individual success as well as the success of the program. The economy of the program mainly dwell upon the university sources, having the place, equipment, and infrastructure. The students in some other countries pay a great sum of money for their university fees, yet, having the status of a state university, the Turkish students feel very much lucky to learn that they have it all free. Regarding the quality and equality issues, the rising consciousness of, for example about the meals provided (breakfast, lunch and dinner) for 1 TL is not something common in other countries. Thus, looking at the others, the participants explore themselves and position themselves into a more prestigious point within their own circumstances. The courses help the participants to learn more about themselves, to re-position, and re-structure themselves; evaluating their own circumstances from a different perspective.

The course content and function help to establish a real International Classroom in its widest sense. The project is also encouraging faculty members to use the Global Understanding model to internationalize their own upper-level courses. In such a case, there could be more chances than mere understanding but also developing interdisciplinary research between

and among the universities. For example, in East Carolina, US, Ms. Chia and Mr. Poe help lead workshops each semester, and several professors have begun connecting with overseas institutions as part of their course design. For example, students in a computer-science course are working in multinational teams on a software-design project, while a Spanish class holds weekly language practice with an English class in Peru.

As Fisher pointed out in Patricia (Patch) Clark's theater education course, students swapped folklore and indigenous children's tales with their counterparts in Peru and Russia. They then adapted some of the foreign stories into short plays that they performed as part of a children's theater troop that visits schools throughout Eastern North Carolina.

Sloane Burke's health-education majors have held discussions with students in Germany and Moldova on issues such as health disparities, infectious disease, and maternal and child health. Ms. Burke, an assistant professor, said coordinating lectures overseas means more work; still, she will use a grant to travel this summer to China, where she hopes to establish a new partnership. The global nature of the courses creates "a richer learning environment," she says. And while the Global Understanding project was established to bring an international experience to the East Carolina campus, it has also spurred students who complete the course to go overseas; now about 10 percent of those students subsequently study abroad. Within the last decade a 10 percent increase may not seem to be too much but, it is a lot when the total number of students is 10 thousands.

Through the global understanding project, among the triangle of information management, relationship management and management of self a kind of social network site is provided and established. The wikipedia pages related to each university, forums, and chats allocating the live connections introduced a collaborative workspace for each participating institution. [4]

[4] A comparison of privacy issues in collaborative workspaces and social networks: Functional triangle of social software according to (Richter& Koch 2007)

Figure 1: Functional triangle of social software according to (Richter& Koch 2007)

In such a confidential area, the students discuss topics ranging from college life, family, meaning of life, and from stereotypes to prejudices. Each class session includes discussion in both small groups and one-to-one chat with reflective journaling afterwards. Local sessions are also held to integrate and synthesize information gained in the global sessions. This intimate, small group setting provides undergraduates with a graduate seminar type experience not often found in undergraduate classes.

The students are partnered for the duration of the two-country link providing for continuity and allowing an atmosphere of trust to develop. This comfortable atmosphere engages students to share information, opinions, values, attitudes, and emotions. Partners email each other on a daily basis to create open discussions, to help them to evaluate their values, and to share their traditions. These one-to-one discussions lead to friendship. Partners read each other's newspapers to learn what is current, timely, and to get real exposure to what is going on in their partner's culture. Partners also write a joint paper. This joint project teaches them how to collaborate effectively. Through one-to-one partnering, students begin to see similarities among themselves, see positives in others, and to de-emphasize the negative differences. This realization is the key to changing

negative stereotypes and understanding other cultures. Through learning about other cultures, students begin to understand their own culture and gain a broader perspective on life.

As a result of cross-cultural communication students learn to express themselves effectively. Slang, clichés, or words without translations in other languages cannot be used to express a thought or feeling. This causes students to think carefully about not only what they say, but how they say it. On the other hand, students also learn how to improve their listening sub skills such as critical listening. During the course they even practice their songs, few key words in the other language, so they not only they understand the meanings of the words but also the attitudes and emotions associated with those words.

Last semester around 30 participants from English language department, American Culture and Literature department, College of Economics and College of Communication as well as International Relations department and even, Math and Physics departments gathered.

Throughout our experience we've first positioned the Global Understanding course as a freshmen course. However, it's been figured out that it could also be a course for sophomore, junior, and even senior students. This course is recommended for any major where communicating with diverse populations is key to a successful career in the field.

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The Efficacy of Blended Learning in Courses on Intellectual Property Rights and Patents

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Abstract: The study reported in this paper compared the effects of two approaches of blended learning on students' learning outcomes in courses on intellectual property rights and patents. One group of students followed three weeks of online graduate courses and underwent peer assessment. In a second group of students, the online work and peer assessment were combined with active face-to-face experience-based learning. Pre and post-tests were used to measure the students' knowledge about intellectual property rights and patents. In addition, a questionnaire was used to gather data on the students' opinions regarding course arrangement and implementation, digital learning, the learning environment, and their knowledge, understanding, and implementation of intellectual property rights and patents. The data were quantitatively analyzed to determine whether the two blended learning approaches differed in terms of the effects measured. The findings show that the students approved of the online courses and also the face-to-face learning. These findings may reflect approval of the decrease in costs and time. The implication is that active face-to-face experience-based learning should supplement online courses with peer assessment, as this combination led to more successful learning outcomes among students taking courses on intellectual property rights and patents.

Keywords: blended learning, online learning, peer assessment, face-to-face learning, active learning, intellectual property rights, patents

Purpose Statement

The study reported here had two purposes. The first was to identify the relationship between blended learning strategies and graduate students' acquisition of knowledge and skills related to intellectual property rights and patents; and the second was to ascertain whether one blended learning approach was better than the other in terms of learning outcomes.

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Introduction

Technologies such as online courses, discussion boards, YouTube, and Facebook have improved both the accessibility and the affordability of education. Although such technologies enable interaction and collaboration (McCarthy, 2010) in learning coded knowledge (Collins, 2010), they are insufficient for promoting the acquisition of tacit knowledge (Collins, 2010), such as that related to the implementation of intellectual property rights and patents. Online courses offer flexibility, affordability, and accessibility to users, but face-to-face methods of sharing knowledge and discussing material also remain effective; particularly when it comes to acquiring tacit knowledge. The interaction that takes place in both face-to-face and online discussions among peers has been shown to improve markedly the acquisition of learning and skills (Moore & Iida, 2010). The future of blended learning, particularly for coded knowledge, may rest in a combination of online learning and participant interactions. Tacit learning, however, appears to require more communication and interaction than is presently possible within the online environment, as it is assisted by discussing, learning, and interacting with others.

Literature review

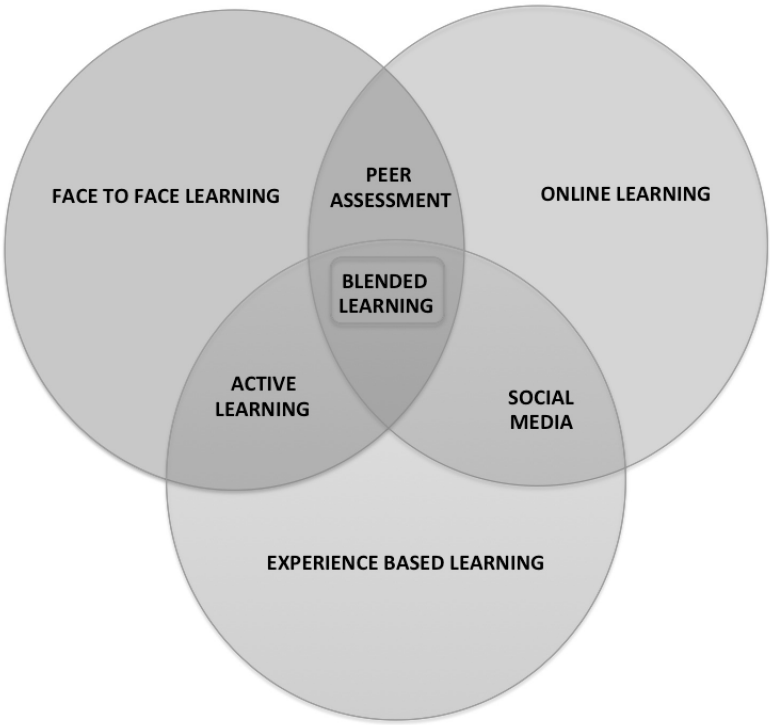
Social perspectives on learning have played a crucial role in education, particularly in adult learning. A number of studies have shown that theories of online learning, particularly those allowing for interaction and communication, are supported within the realm of constructivist and social learning theories (Hrastinski, 2009). Hence, constructivism has come to play an important role in accounting for learning and teaching, particularly in terms of instructional technology (Woo & Reeves, 2007). As stated by Uzunboylu, Cavus, and Ercag (2009), "social constructivist theory assumes that students act and reflect within an environment, and this is then followed by reflecting, abstracting, and increasing experiential knowledge" (p. 382). Since Vygotsky's (1978) research on the effects of social interaction, language, and culture on learning, studies that aim to determine the effect of strategic and meaningful interactions on learning have gained importance. As Woo and Reeves (2007) have

clarified, meaningful interactions in a learning environment are designed to enhance learning, by allowing participants to share their perspectives and experiences in communities of practice. Hence, as Birch and Volkov (2007) mentioned, "learner-centered learning has gained importance for the learners who can interact and share their knowledge, skills, experiences, and perspectives with each other" (p. 295). In such learning environments, learners become active participants in conversations and general communication with other learners in their physical environment, with help from the instructor as a facilitator (Kearsley, 2011). According to Wang (2008), this kind of learning environment can also be developed in virtual forms, allowing learners a far greater range of opportunities to access and share knowledge, experiences, and resources. For this reason, the last decade has seen digital-based technologies creating various technology enhanced learning environments in which learners can actively participate and benefit by acquiring a range of knowledge and skills in a relatively short period of time and within a relatively small budget (Lee & Woods, 2010). As a result, the affordability and accessibility of knowledge and skills have significantly improved (Gray, Thompson, Sheard, Clerehan, & Hamilton, 2010). Furthermore, technology-based learning helps learners in sharing their ideas, thoughts, knowledge, and experiences, and also in providing feedback and assessment. Thus, it appears that the effort involved in learning has decreased, whereas the efficacy of learning has improved substantially (Shih, 2010).

The findings of a number of recent studies have shown that online courses help students to learn a range of different subjects, especially those involving coded knowledge (Collins, 2010). However, in terms of tacit knowledge, a more interactive environment is required. Therefore, under the influence of tacit knowledge based learning models, virtual learning environments aim to support online learning by allowing more active interaction, participation, and communication in order to improve learning outcomes. However, it appears that, in the case of most online courses, the inclusion of active online interaction is insufficient as a part of blended learning (Graham, 2006). Learners appear to require active face-to-face interaction and experience-based learning for blended learning to be successful (Lou, Guyo, Zhu, Shih & Dzan, 2011). Furthermore, recent

research has shown that team-based or project-based learning activities can also be effective in terms of learning outcomes (Lou, Shih, Diez & Tseng, 2010; Neo, Neo & Kwok, 2009). Hence, as Shih (2010) pointed out, blended learning of the type reflected in Figure 1, where online and face-to-face instruction are integrated with experience-based learning, may be the most effective and efficient in achieving learning outcomes.

Figure 1: The effects of blended learning approaches on learning outcomes (Graham, 2006)



In blended learning approaches, learners can actively participate in the learning process, not only by taking online courses and communicating through the mutual and virtual environments, but also by participating in face-to-face experience-based learning. Such an approach has been shown to lead to significantly improved learner motivation (Derntl & Motschnig-

Pitrik, 2005). In terms of face-to-face learning, Ashman and Gillies (2013) pointed out that cooperative learning models help learners to think, analyze, evaluate, and improve their work, especially if the cooperation takes place in a physical environment. Furthermore, learners then benefit from better opportunities to create and innovate new products and services (Van Gennip, Segers & Tillema, 2010). It appears that online learning and peer assessment can create an effective learning environment; but this may not be sufficient. For the effective and efficient achievement of learning outcomes, active participation in face-to-face experience-based learning should be integrated with other methods of blended learning, such as online learning and peer assessment. With this in mind, the present study is set out to evaluate the efficacy of two different blended learning approaches among students following courses in intellectual property rights and patents.

Methodology

In order to investigate the effects of two blended learning approaches on the learning outcomes following courses on intellectual property rights and patents, this study focused on online courses offered by the European Patent Office in Istanbul. In the following sections, the research questions and hypotheses are set out, followed by information on the participants, research instruments, and research procedures.

Research Questions

The present study aimed to address a number of research questions, given in (1) to (3) below.

(1) Is a blended learning approach appropriate for graduate courses on intellectual property rights and patents?

(2) Is a blended learning approach that includes active face-to-face experience-based learning more effective in graduate courses on intellectual property rights and patents than one that does not?

(3) Which particular aspects of a blended learning approach are favored by students taking courses in intellectual property rights and patents?

Hypotheses

On the basis of the research questions stated above, the hypotheses in (4) to (6) below were set for the present study.

(4) A blended learning approach will be appropriate for graduate courses on intellectual property rights and patents.

(5) A blended learning approach that includes active face-to-face experience-based learning will be more effective in graduate courses on intellectual property rights and patents than one that does not.

(6) Particular aspects of a blended learning approach that are favored by students taking courses in intellectual property rights and patents will be identifiable by means of a survey.

Participants

The participants in this study were 110 randomly selected graduate students (62 male and 48 female) studying different majors at five universities in Istanbul. The participants were divided into two groups with 31 males and 24 females in each. All the participants studied three different online courses offered by the European Patent Office. Participants in Group 1 studied the online courses individually and participated in peer review of their assignments. Participants in the Group 2 studied the courses together, actively sharing their experiences, assignments, and ideas. The aim of the grouping was to investigate the effect of blended learning on students' level of understanding, where blended learning involved online courses and peer assessment, with or without active face-to-face experience-based learning. Each group had a team leader who was responsible for the group activities throughout the study, making the peer review of assignments less difficult and time consuming. All participants were asked to submit their assignments via group emails. The assignments of all group members were thus seen by their peers, who could then provide comments and feedback. Participants were assigned a total of six assignments. All these assignments were reviewed and commented upon by the remaining group members at the end of the study.

Instruments and Research Procedures

This study adopted a quantitative approach. All participants completed pre and post-tests focusing on their knowledge of intellectual property rights and patents. The pre-test was completed at the beginning of the study (before the coursework began), and the post-test in the last week of the study (after the courses had been completed). The tests contained both closed and open-ended questions related to intellectual property rights and patents, and were scored according to the answer sheet provided by the European Patent Office. In addition to the pre and post-tests, participants were required to complete a survey questionnaire at the end of the study. The questionnaire contained a number of 5-point Likert scale items targeting their opinions regarding (i) course arrangement and implementation, (ii) the digital learning involved in the courses, (iii) the learning environment, (iv) their knowledge of intellectual property rights and patents, and (v) their success in the implementation of intellectual property rights and patents. The questionnaire data were analyzed by SPSS to obtain descriptive statistics.

Implementation of the Two Blended Learning Strategies

The main purpose of this study was to compare the outcomes of the two blended learning approaches in terms of students' knowledge of intellectual property rights and patents. The outcomes following the online courses with peer assessment were compared to those following the online courses and peer assessment integrated with active face-to-face experience-based learning. The aim was to determine which of the two strategies was more effective. The effects of the two strategies on learning outcomes were measured by comparing the performance of students from the two groups on the pre and post-tests.

The participants in Group 1 followed the online course individually for a total of 36 hours, without any active face-to-face learning interactions, as reflected in Figure 2. The participants in Group 2 followed the online course for 36 hours together within the group, where they had the opportunity for 12 hours of active face-to-face experience-based learning, as reflected in Figure 3.

Figure 2: The procedure followed by Group 1

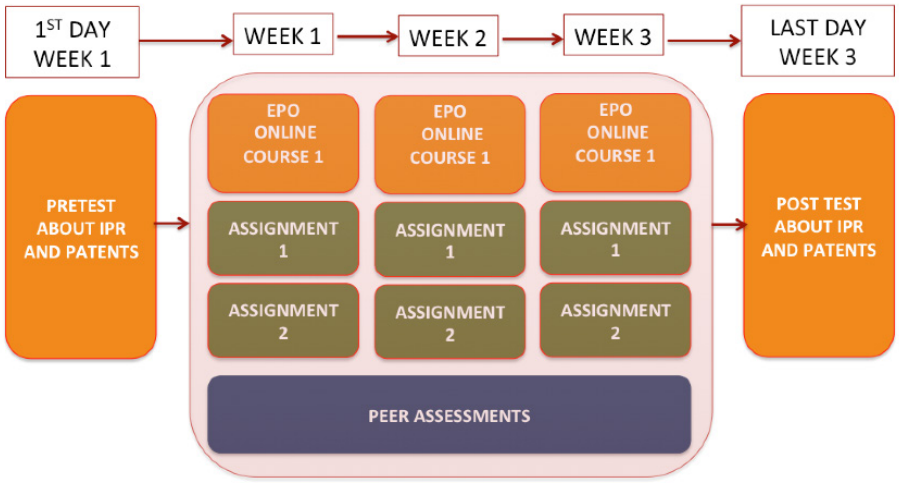
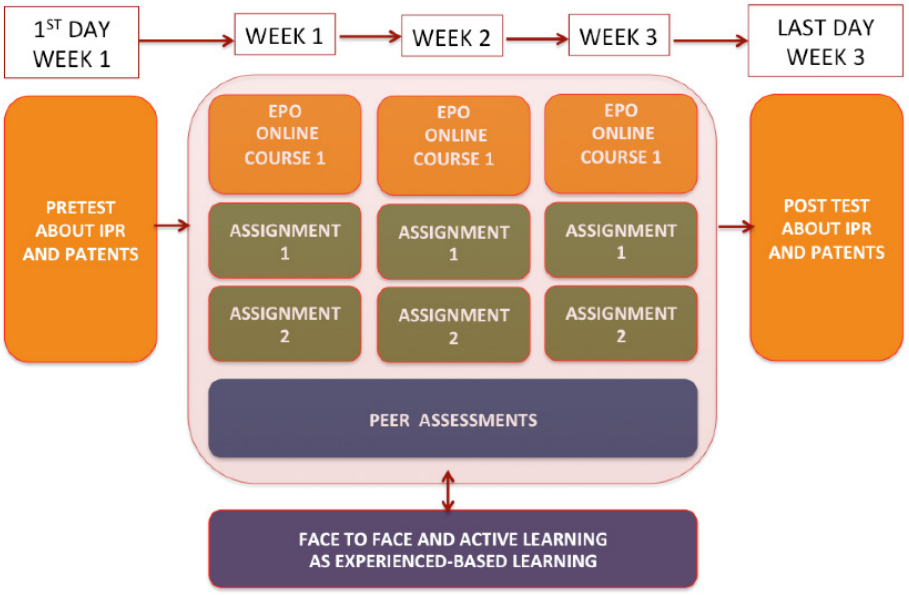


Figure 3: The procedure followed by Group 2



Recalling that all the participants submitted each of their six written assignments to the entire group, and each was commented upon by the

other participants; the group leaders motivated the participants to share their thoughts on the assignments, and to analyze, discuss, interact, and criticize freely. The participants of Group 2 were furthermore motivated to talk about their thoughts, feelings, awareness, and experiences.

Results

The results of the pre and post-tests on intellectual property rights and patents are given in Tables 1 and 2. Table 1 shows the results of the participants who took the online course individually and participated in peer assessment via email. Table 2 shows the results of the participants who took the online course in their group, participated in peer assessment via email, and had face-to-face contact with other members of the group during active experience-based learning. The questionnaire results for both groups, reflecting their opinions on the course, its delivery, and its outcomes, are also given in Tables 1 and 2.

As can be seen in Table 1, the participants in Group 1 scored 11 points out of 100 in terms of their knowledge about intellectual property rights and patents. After taking the course, this score increased to 40.5. This difference between pre and post-test scores was statistically significant ($p < .05$) according a paired t-test of total scores. In terms of students' opinions on the five aspects of the learning method, significant differences were also observed. In terms of course arrangement and implementation, the participants' average score improved from 3 to 10, and in terms of digital learning capacity, from 4 to 9. The scores for the learning environment rose from 3 to 8.5. The scores reflecting the students' understanding of intellectual property rights and patents improved from 1 to 8, and those reflecting their ability to implement intellectual property rights and patents from 0 to 5. These results suggest that the blended learning approach, which included individual online learning and peer assessment via email, led to significant gains in terms of learner outcomes in the course on intellectual property rights and patents.

Aspects of Learning Methods	Pre-test Scores (Week 1)	Post-test Scores (Week 3)	Difference in Scores
Course arrangement and implementation	3	10	7
Digital learning	4	9	5
Learning environment	3	8.5	5.5
Intellectual property rights and patent learning	1	8	7
Success in the implications of the intellectual property rights and patents	0	5	5
TOTAL	11	40.5	29.5
Paired t-test (* $p < .05$)	.010*	.034*	

Table 1: Results for Group 1 (n=12)

The results in Table 2 indicate an even more drastic improvement in students' knowledge of intellectual property rights and patents for Group 2, with an increase in total score 11 to 63. This increase was found by t-test to be statistically significant ($p < .05$). In this group, participants had the benefit of active face-to-face experience-based learning. In terms of course arrangement and implementation, the scores improved from 2 to 14, and for digital learning capacity from 4 to 11. The scores for the learning environment rose from 4 to 13. Finally, the scores reflecting students' understanding of intellectual property rights and patents rose from 1 to 14, and for their implementation from 0 to 11. The results suggest that this method of blended learning, which included online learning, peer assessment, and active face-to-face experience-based learning, had a greater positive impact on learning outcomes than did the method used for Group 1, as the scores improved more than they did for Group 1. In other

words, the blended learning approach that included face-to-face contact time was more beneficial than that without for the learning outcomes of this course on intellectual property rights and patents.

Aspects of Learning Methods	Pre-test Scores (Week 1)	Post-test Scores (Week 3)	Difference in Scores
Course arrangement and implementation	2	14	12
Digital learning	4	11	7
Learning environment	4	13	9
Intellectual property rights and patent learning	1	14	13
Success in the implications of the intellectual property rights and patents	0	11	11
TOTAL	11	63	52
Paired t-test (* p < .05)	.010*	.034*	

Table 2: Results for Group 2 (n=12)

The post-test scores of Groups 1 and 2 are compared in Table 3. These results show that the learning outcomes were better in Group 2, where the students participated in active face-to-face experience-based learning in addition to the online coursework and peer assessment. In terms of course arrangement and implementation, Group 2 scored 40% better than Group 1. In terms of the digital learning, experience, the scores of Group 2 were 22% better than those of Group 1. In terms of the learning environment,

Group 2 had 53% better scores than Group 1, and in their knowledge of intellectual property rights and patents, 75% better. Finally, the most dramatic difference between the two groups was in their implementation of intellectual property rights and patents, where Group 2 scored 120% better than Group 1.

Aspects of Learning Methods	Post-test Scores (Week 3) For Group 1 (n=12)	Post-test Scores (Week 3) For Group 2 (n=12)	Difference in Scores
Course arrangement and implementation	10	14	4
Digital learning	9	11	2
Learning environment	8.5	13	4.5
Intellectual property rights and patent learning	8	14	6
Success in the implications of the intellectual property rights and patents	5	11	6
TOTAL	40.5	63	22.5

Table 3: Post-test scores of the two groups

The quantitative results of this study have shown that the answer to the research question in (1) is affirmative: the blended learning approach using online learning and peer assessment was successful in the students' achievement of positive learning outcomes following their course on intellectual property rights and patents. This lends support to the hypothesis in (4). The results also show that the answer to the research question in (2) is affirmative, lending support to the hypothesis in (5): the learning outcomes of the students who participated in active face-to-face experience-based learning were better than those of students who lacked the face-to-face aspect. Finally, in terms of the research question in (3) and the hypothesis

in (6), the results show that students favored certain aspects of the blended learning experience.

Conclusion

This study investigated the effects of two blended learning strategies among graduate students who studied three-week online courses on intellectual property rights and patents offered by the European Patent Office, and participated in peer assessment. The findings clearly showed that the transfer of knowledge was efficient with both blended learning approaches. In one group of students, the blended learning strategy was enriched by means of active face-to-face experience-based learning. The purpose of the study was to determine which of the two blended instructional approaches was more effective. The results of the second group, who participated in face-to-face learning, were better than those of the first group. By taking the online courses, all participants effectively gained knowledge in a relatively short time, but this knowledge was insufficient on its own – when it came to understanding the implications and implementation of intellectual property rights and patents, the group with face-to-face learning achieved better scores. The opportunity to express their own ideas, ask questions, and implement intellectual property rights and patents as part of the active face-to-face experience-based learning allowed the students to achieve greater success in creating and developing new patents while protecting their intellectual property rights.

This study illustrates that, although an online course with peer assessment may be effective in terms of costs and time, student understanding and performance is enhanced by the opportunity for active face-to-face experience-based learning. The findings of this study offer support for the social constructivist theory (Birch & Volkov, 2007; Wilson & Stacey, 2004; Vygotsky, 1978), which claims that students learn from each other, through experiencing the application of meaningful knowledge and skills, and through active learning and interaction (Uzunboylu, Cavus & Ercag, 2009). Such students can actively implement their knowledge in terms of tangible goods and services. A limitation of this study was the relatively small number of participants (n = 110), and further studies with larger

numbers of participants are required in order that the findings may be generalized. Such research is essential as digital technologies continue to develop and blended learning strategies play a greater role in connecting people more closely and making knowledge more accessible within a limited time and budget. The results of this study suggest that, particularly in the case of creativity-based outcomes, such as the implementation of intellectual property rights and patents, technology developers and managers need to utilize the most effective strategies, including active face-to-face experience-based learning.

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