# Creative city, creative university: Creative discourses and activities at Istanbul Technical University

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**Abstract:**
The change and transformation that cities are going through have added new dimensions to the city-creativity relations. Cities began to contribute and direct the development of a knowledge economy depending on their openness to change, the possibilities and opportunities they bring for sharing ideas, as well as being an attraction for a well-qualified labor force and consumers. The aim of this paper is to explore the creative city and creative university relations by focusing on Istanbul Technical University as a case.

The creative city/region supports innovative and dynamic types of industries through general and specialized infrastructure systems. The creative city, with its environment and infrastructure, offers several layers, by creating opportunities for people to develop new ideas, establish relations and realize innovative projects. As an independent and active component, a knowledge-based infrastructure is comprised of a well-organized system of education and research taking place within higher education institutes and research centers. In such a system, universities and research centers as knowledge intensive institutions and organizations have strategic importance and potential for accelerating the city in the creative sense.

*Keywords: Creativity, creative city/region, creative university.*

## Introduction

Today more than half of the world's population lives in cities and the growth rate continues to increase rapidly. Compounded by physical, social and cultural problems, dramatic changes are continuously occurring in cities. This dynamic process requires a dynamic, independent, flexible, innovative and "creative" point-of-view in thinking, producing, acting and planning in the existing urban structure. From past to present in cities, creativity has always been needed as a phenomenon vitalizing and fostering the features of the city, a trade and production center. As Landry asserts, it is important to create environments where we can think, plan and act with imagination (Landry, 2000). Seen from this aspect, as their components are inevitably in continuous change and transformation, cities present creative environments and media of various features for diverse actors.

The change and transformation that cities are experiencing have added new dimensions to the relations between city and creativity. Whereas the main interest areas of the nineteenth and twentieth centuries were focused on science, technology and industry, in the twenty-first century, these areas are increasingly shifting to "creativity", "innovation" and "generation of knowledge". Cities have started to assume active roles in the configuration of the knowledge economy as being places open to change and offering potential for sharing different ideas, and as places for different organizations to reach well-qualified labor and consumers (Gertler and Vinodrai, 2004). These features bring forth the production of new concepts regarding the city. For example, the term "ideopolis" is a concept created in the sense of a city/region of information/knowledge. Ideopolis has a university that has a mutually beneficial relationship with the city, leading to industries built upon research strengths, transfer of knowledge to businesses and the retention of graduates. This term expresses a transition in an urban environment, from an economy based on land, labor and capital to an economy based on production of information and knowledge (Jones et al., 2006).

Creative city, with the environment and infrastructure it offers on several layers, opens up opportunities for people to develop new ideas, establish relations and turn these into reality. In such a system, universities and research centers as knowledge intensive establishments have strategic importance and potential for accelerating the city in the creative sense. The aim of this study is to explore the creative city and creative university relations by exemplifying Istanbul Technical University as a case and is based on the outcome of the first phase of an EUA research project [1]. In the study, first of all the concepts of creativity, creative university and creative city are examined, and then the potentials of universities as creative environments by their internal and external relations and outcome of these connections with the stakeholders are evaluated.

**Creativity, creative university, creative city**
Creativity is a mental process involving the generation of new ideas or concepts or new associations between existing ones. There is no single definition of creativity; various definitions show the various perspectives of different disciplines. Creativity can be simply defined as an inventive and experimental act which is about taking risks and making mistakes. According to Johnson (1972), creativity can be assessed on several dimensions, such as intellectual leadership, sensitivity to problems, originality, ingenuity, unusualness, usefulness, and appropriateness.

Creativity –'the ability to create meaningful new forms', as Webster's dictionary puts it –is the decisive force of competitive advantage. In every industry, from automobiles to fashion, food products and information technology itself, the winners in the long run are those who can create and keep creating (Donald and Morrow, 2003).

As Florida (2000) points out, "creativity" means more than technical innovation, knowledge or information. Its economic role goes beyond concepts, such as the information age or knowledge economy. Since creativity is multi-dimensional and composed of three inter-related and mutually reinforcing types: technological creativity, economic creativity and cultural creativity.

Within context of creativity, one of the main roles of the university can be described as a 'knowledge factory' that produces knowledge and technology, then transfers it to the public and private sector through technology-transfer centers, incubators, R&D partnerships, university-industry alliances, commercialization programs and spin-off firms. These local interactions between firms and other institutions contribute to a lively environment for economic competitiveness as they put forward commercially viable products and/or processes of the market (Gertler and Vinodrai, 2004).

The universities have come under increasing pressure in recent years to expand their traditionally dominant role in the conduct of basic research and to supplement with more applied research activities, frequently based on university-industry partnerships. The changes impacting on the university system are characterized by three trends: 1) the linking of government funding for academic research and economic policy; 2) the development of more long term relationships between firms and academic researchers; and 3) the increasing direct participation of universities in commercializing research (Etkowitz and Webster 1998). Universities are now expected to generate more applied knowledge of greater relevance to industry, to diffuse knowledge and to provide technical support to industry.

In this sense, "creative university" plays a number of inter-related roles, and acts to generate, attract and retain highly skilled talent. Universities reinforce quality of place by fostering tolerance and diversity and creating human capital (Wolfe, 2006). Additionally the university has a much wider role to play in the community that reaches well beyond simple technology transfer. Gertler and Vinodrai (2004) outline the following priorities of a university;

- The university plays an important role in shaping the quality of place and fostering openness and tolerance in the community.  It has the ability to create a social environment that is open to dialogue and debate, tolerant of different viewpoints, and accessible to many different social, ethnic and cultural groups (locally, nationally, and internationally).  In other words, the university has a role in reducing 'barriers to entry' and working towards social inclusion.
- The university acts as a talent magnet by making places attractive to highly skilled research talent. A university setting where there is a diverse range of research activities also provides the opportunity for cross-disciplinary learning through interaction with researchers in other fields, often leading to unexpected synergies and outcomes.
- Strong research-intensive universities educate well-qualified individuals. The university contributes to the fostering of a creative urban environment by nurturing these individuals. When the extensive discussions and thoughts produced for the components of the creative university are overviewed, some important features can be summarized below. The university:  embraces the role of a pioneer institution, taking risks in the areas of innovation and creativity,
- offers a flexible environment for attracting and retaining academics with talented/creative production, while at the same time serving students and staff to reflect their talents, ideas, dreams, passions and ingenuities,
- creates a social environment open to discussion and dialogue, tolerant of diverse views and open to the reach of different social, cultural and ethnic groups,

- supports interdisciplinary and collaborative work by gathering different viewpoints,
- enables academia to come together with business and public in a different, dynamic and productive way,
- supports studies which will trigger creativity in education,
- feels responsible for the change and current / future needs of the public and the business world and introduces solutions.

Recent studies (Gertler and Vinodrai, 2004; Florida, 2002, 2004, 2005; Wu, 2005; Landry, 2000) focusing on different aspects of relations between creativity and university and/or city emphasize that knowledge production is city based. Creative industries tend to cluster in large cities and regions that offer a variety of economic opportunities, a stimulating environment and amenities for different lifestyles (Wu, 2005). In fact, as in the example of Silicon Valley near San Francisco, many regions, where creative industries have developed, have prospered around cities offering these opportunities.

A creative environment requires openness to diversity, in order to attract creative people of all types and stimulate creative interplay. A creative habitat has "low entry barriers for people" and enables different types of creativity to take root and flourish. The successful regions are places where creative people gravitate and gather, to generate and implement a constant flow of new ideas, new products and services, new firms, new and better ways of doing things within existing firms (Florida, 2002).

Creative cities/regions are areas where sharing of knowledge and experience takes place relatively free of limitations. Some of the main features of creative city/region can be seen as follows. Creative city/region:

- enables and promotes interaction and openness at all levels,
- promotes innovative cluster interactions that might lead to unexpected synergies and outcomes,
- encourages creative universities and their partnerships with other innovative clusters (Ozsoy, et al., 2006).

Creative city/region supports innovative and dynamic types of industries by general and specialized infrastructure systems. As an independent and active component, this knowledge-based infrastructure is also comprised of a well-organized system of education and research taking place within higher education institutes and research centers.

Landry (2000) indicates a number of predictions for a city to be truly creative. Creative city involves various personal and collective factors, such as a stimulating environment along with security and freedom from disturbance and anxiety. Landry distinguishes between concrete factors such as the presence of educational institutions, and the more intangible factors of value systems, lifestyles and people's identification with their city. Some of these factors for describing a city/region to be creative are: "personal qualities", "will and leadership", "human diversity and access to varied talent", "organizational culture", "local identity", "urban spaces and facilities" and "networking dynamics" (Landry, 2000). The first four of these factors are concerned with human resources and human characteristics in general. Other factors are mostly related to the physical quality of the environment.

In order to benefit from the knowledge economy, the most important creative capital of the creative city/region is its human resources. The challenge is to build environments where people can develop their talents and apply them to their work and life. This may require new approaches to the future design of the knowledge society and the role of public policy. It implies a wide array of strategies, varying from education to economic policy, from urban development to cultural policy, and from technology to intellectual property (Van den Steenhoven, J. et.al, 2005).

Besides factors related to human resources and human characteristics, physical quality and characteristics related to the built environment and organizational culture are important for creative capital to flourish. In this context the improvement of the physical quality of university campus and urban environment can be considered essential for creative capital, creative university and creative city/region. This improvement has a double-sided positive effect on both the university and the city/region.

Landry (2000) mentions the necessity of a shift in the understanding of "organizational culture" for the success of these factors. Creativity has changed the ways in which organizations produce. These shifts can be from centralism to devolution, from isolation to partnership, from control to influence, from leading to enabling, from information to participation, from a single quality to requisite qualities, from uniformity to diversity, from low risk to high risk (Landry, 2000).

Keywords mentioned above related to creativity, creative city/region and creative university are summarized in Figure 1.
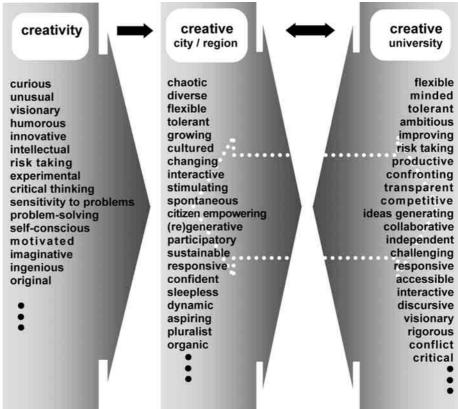


**Figure 1.** *Keywords related to creativity, creative city/region and creative university*

**A tool for reading the relationship between university and city**

How can the potentials proposed by the university in terms of creativity be identified? How can the contribution of the university to the city by its human resources, physical structure, knowledge and experience be revealed? With which components is the city directing and enriching universities? How can mutual relations, productions put forward, actors taking role in these productions be concretized? In this part of the study, in order to find answers to these questions and discuss relations between city and university, a tool is developed for reading these issues.

More than ever, creativity and centers of innovation display a common relational structure. All actors of the city, such as the society, business, local and central governments and NGOs must work together to support centers of creativity which improve economic productivity and development (Fig. 2, Fig. 3).

The products/outcomes that the university puts forward can be viewed within a multi-dimensional setting that involves partnerships with the public, the local and central governments and the business world. Included within this structure are operational areas established through public and private initiatives, expansions of education and research on different scales, collaborations established with non-governmental organizations, information and experience-based supports provided to the public and the business world and some applications formed in the academic and operational sense. In these projects, the role of the university is sometimes being a leader, sometimes a partner and sometimes only a contributor to the procedure with academic and technical support. But in order to contribute to the development of creative settings, universities should come together with broader creative industries, supporting institutions and a varied and lively labor market.

With this study focusing on the ITU case, the aim is to map collaborations in different layers of the city in terms of "creativity" and to evaluate the ITU projects, identifying the potentials of possible developments.
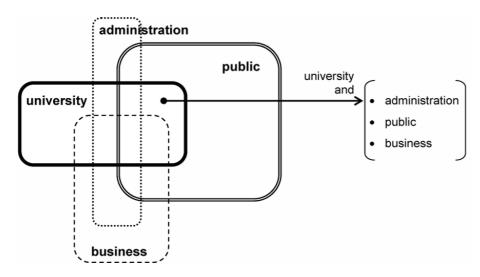


**Figure 2.** *Multi-dimensional/multi-layered relationships between university and business/ public/ administration.*
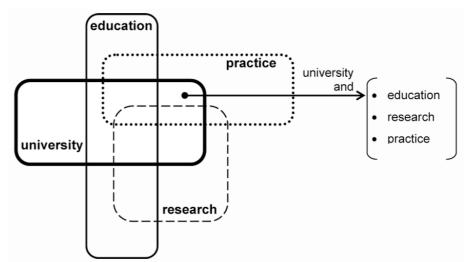
***Figure 3.*** *Multi-dimensional/multi-layered activities of university in research/ education/ practice.*

University and city will be considered with their components and layers that are stated below, and their mutual relations will be diagrammed through the university projects compiled in this study:

1. Activity areas of the university: education-research-practice
2. Stakeholders: public, business/industry, local and central administrations.

While displaying the existing potentials of the university for creativity, such a reading is considered to lay the groundwork for new formations and partnerships open to development.

**ITU: A case for discussing relations of creative city and creative university**

Istanbul Technical University is one of the 22 universities located in Istanbul. With a history stretching back over 227 years, it is a deeply rooted and prestigious higher education and research institution. ITU's characteristics mainly take their roots from its various and quality education programs and qualified human resources. In this sense, the university forms a "creative core" (McAuliff, et al., 2005) in the city with its departments, programs, courses and activities ranging from architecture to fashion design, from visual arts to industrial design and music education.

ITU can also be defined as a "research university" focusing on producing creative projects which can reach other stakeholders and on structuring creative processes in education in addition to its relations with the public and the business world (Sağlamer, Karakullukçu, 2005; Self Evaluation Report, 2004).

One of the factors supporting the creative environment is the interaction that universities build with their urban environment. ITU, with its location in Istanbul, a creative city not only in the national but also in the international arena, intersects industry, history and culture. This unique placement enlarges the scope of potential projects of the university, ranging from expert consultation for private and state institutions to educative supports at various levels, to industry partnership projects, and to scientific works of cultural and historical assets.

Furthermore, ITU is not located on one spot, but is spread out over five different points in the city, three of them in the city center. The varying locations of these campuses have given rise to opportunities for the university to create an effective interaction with the city.

Istanbul, with its vast resources, forms a unique setting for the university, and ITU derives benefits from this privilege by means of linking its research and teaching. As the university is nourished from this creative city, at the same time the city is enriched by the dynamics that the university creates.

Through the diagram, exemplified activities of the university related to education, research and practice can be considered "creative projects" while being comparatively evaluated. Projects conducted in the university are first shown with their dominance in relation to the activity areas of education, research and practice. In addition, each project is expressed visually through its degrees of relation with the chosen stakeholders as public, business, and the local /central administration. Some of the activities given in Figure 4 are: programs, research activities and outputs (patents etc.), national and international organizations, social and cultural centres, partnerships and consultancies, exhibitions, student organizations, e-library, science and technology demonstration parks…

General characteristics of these projects can be summarized as follows:
- shaped on different scales,
- comprised of various disciplines,
- cover different applications of creativity,
- involve different actors (students, academics, industry, etc.).

Regarding the creative capacity on different scales and relations, some projects have been chosen and evaluated in detail.

**Project 1: ITU-ISO project**
The aims of the ITU-ISO (Istanbul Chamber of Industry) Project were, to enable new ITU design graduates to "infiltrate" effectively into the SME (small and medium-sized enterprises) sector in the Turkish economy, to market successfully their design knowledge and skills, to show the advantages to SMEs for hiring or employing industrial design graduates, to improve the industrial design education program at ITU addressing the design needs of SMEs more properly and to help the preparation of an ISO booklet for SMEs–A Short Guide to Industrial Design.

The brief of the project was, by taking the opportunities and threats faced by participant SMEs into consideration, to design a new product that could be produced, marketed and sold by these companies. SMEs operating in the fields of metallurgy, plastics, glass, ceramics, wood and electronic product manufacturing were preferred due to perceived opportunities in new product development.

By taking the marketing and production capabilities of the companies into consideration, students were asked to develop design concepts in order to increase the profit and/or market share of their assigned companies. The design proposals were expected to be useful for users, innovative for companies, manufacturable by the technology that SMEs had or could obtain and to have marketing potential domestically and/or internationally.

The ITU-ISO joint initiative achieved two objectives in an educational project. First of all, it helped final year design students to become familiar with

design problems of SMEs in real life settings before their graduation. Secondly, it gave SMEs with no previous experience of industrial design the opportunity of using design service in their projects (recognizing the value of design). ITU design students gained first-hand experience of SMEs, while SMEs learned about industrial design and benefited from the involvement of design in their commercial projects (http://www.tasarim.itu.edu.tr/).



**Figure 4.** *Reading relations between ITU projects and stakeholders.*

**Project 2: ITU-ARI tecnocity**

ITU-ARI Technocity serves multiple purposes, such as bringing the university and industry together for collaborative research in priority fields, opening new frontiers to academic staff for establishing their own businesses and providing easy and economic access to industry, using the human and technological resources of the university. This new interface between the university and industry will be instrumental in overcoming some of the financial constraints faced by ITU. ITU-ARI Technocity project aims to provide a medium for technology-based entrepreneurial firms, to develop them and to contribute their success.

ITU-ARI Technocity, as one of the most important projects of the university acting as a bridge between the university and industry, is comprised of a wide range of sectors from information technology to defense industry, biomedical, etc.

ITU-ARI Technocity is currently cooperating with different stakeholders (faculty, students, corporations, TTDF-Turkish Technology Development Foundation, foreign universities, municipalities, the Turkish military, and Chambers of Commerce and Industry) that are integral parts of the technology generation process with its vision and strategy ensuring that all participants are affiliated with the overall effort.

During the 1996-2004 period, ITU also initiated targeted educational projects to support ITU-ARI Technocity. The graduate programs in Advanced Technologies in Engineering initiative that began in 2001 is a unique effort that aims to train a new generation of researchers in targeted technology areas who are able and willing to commercialize their research.

**Project 3: MIAM**

ITU, MIAM (Centre of Music in Advanced Studies) was initiated in 1999 with the objective of giving high quality and advanced music education in Turkey with the contributions of alumni. The centre mainly aims to educate musicians and technical staff working in music related fields and also contributes to music culture in Turkey.

Music graduate and PhD programs within MIAM are carried out by Turkish and American academics at the modern physical environment of the MIAM building. The high quality facilities of MIAM contribute to the education quality. Sound studios and a music library provide the only education of sound engineers and professional tonmeisters and also offer education, research and application opportunities. The centre has public funding but also has income from its studios, private courses and research and application projects.

MIAM plays a pioneering role in the education of a high quality staff and researchers in the field of music and also is a major model for implementing and redefining the limits and the standards in the music field. Art activities (concerts, panel discussions, seminars) and a high quality infrastructure (sound studio, library, research and study facilities) make a great contribution to city culture and to the art world. With these activities and facilities, MIAM becomes a creativity node where professional and amateur musicians meet and produce work and exchange ideas and projects. This interaction between musicians and the public is one of the major impacts of MIAM (http://www.miam.itu.edu.tr/).

**Project 4: Opportunity for a better life for girls**

This is a vocational training project for high school graduate girls coming from poor families and unable to afford preparation for the university exam and/or for the university education, and who want to have training in order to get a job. The project started in March 2005 and continued for 10 months. It was carried collaboratively by ITU Continuous Education Centre (ITU SEM) and an NGO- Foundation of Support for Contemporary Life (CYDD). Courses were on two major subjects: bureau management and tourism management. The training was for ten months including lectures, training on site, including opportunities to meet professionals from these two sectors. By May 2006, 82 of these 100 girls were employed full-time. Both ITU SEM and CYDD continue to follow them and give support. 80% of the project had been funded by the EU, with CYDD 20%. ITU lent support by providing course space and lecturers for the seminars within these training modules. EU funding was a grant.

A major impact is the empowerment of girls and the provision of an opportunity to work and have input into their lives where the normal option would be to get married. This project's success is, the reaching out to a group who are greatly in need and combining an NGO's strength of supporting this part of the community and defining its needs with a university's accumulated knowledge and experience resources. Success of the project was ensured with an after-support and follow-up process. Working with the girls and increasing their involvement in the business sector is also an important outcome for these poor communities ensuring higher education for their children.

**Project 5: Sleep[less]**

Sleep[less] group was initiated in December 2003 by a group of young researchers and students from five departments of ITU Faculty of Architecture. The primary aims of this alternative group have been to extend the usage hours of the ITU Faculty of Architecture, to increase interaction within the different departments and to enable knowledge transfer within community. This informal group was established to make a vibrant environment through seminars, workshops and screenings, while responding to a need for an alternative platform. With a non-hierarchical and open structure, sleep[less] is a creativity node located within the university but having close relations to the city on the individual level. This relationship works in two ways: first where the audience gains new approaches and enriches its own practice; second where production and interaction space is offered for new alternative projects.

From the outset, sleep[less] has contributed to the ongoing activities within Faculty of Architecture and has appeared as an alternative platform by means of organizations and events, creating a noticeable difference in the Faculty of Architecture. Sleep[less] seminars provide a chance to the audience and the presenter to meet in an informal environment and discuss and generate ideas. This new way of interaction has had probable positive impacts on students'/participants' mindsets, which is the most valuable effect that the group would expect (http://uykusuztaskisla.blogspot.com).

In summary, chosen ITU projects expose varying forms of creativity in relations with different stakeholders. **ITU-ISO** Project is an outstanding case in terms of university-private sector collaborations. The project has creative relations between activity areas of the university (education, research,

practice) and different actors of both society and business. **ITU ARI Technocity** assembles a creative crucial point for city and region with cooperation between the university's research and practice activities and business. **MIAM** constitutes relations among university and different actors from society and business in different levels. **Opportunity for a Better Life for Girls** Project has a particular importance acquired by working as a creative bridge for solving an important social problem in Turkey. Among alternative activities, the **sleep[less]** project creates an informal milieu to bring people from the university and from the public via some activities on education, research and practice.

When selected ITU Projects are evaluated in the context of creativity, it can be seen that relations between all activity areas and society are stronger than other relations such as those between business and local/central administration. In the projects connected to business, a stronger relation to research and practice can be observed. In the projects connected to local/central administration, a stronger relation to education and practice can be observed in comparison to that of the research activities of the university (Figure 5).
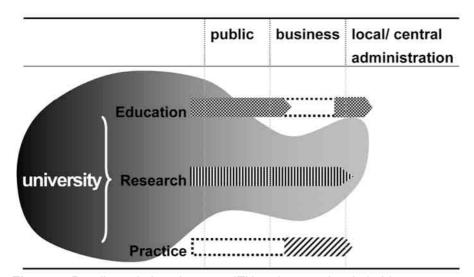


***Figure 5.*** *Reading relations between ITU projects and stakeholders*

## Conclusion

Cities interact with universities in an independent, innovative, flexible, transparent, pluralist, knowledge-intensive environment as platforms integrating different actors, sectors and experiences. Cities nourish and enrich universities, and universities do the same. The synergy evolving from this interaction prepares the way for social, economic and cultural development. With the social, financial and technological infrastructure they provide, creative cities are environments open to interactions that enable the coming together of people to produce new ideas, exchange information and experience, and contribute to the realization of those produced

In this sense, the role of the "creative university" should be the sharing of its knowledge, creative process and products of its various units, explicitly with the public and business world. In other words, the university should experience a continuous change and renewal process both in itself and also in its relations with other stakeholders. The university should be transparent

to interaction in its structure, and appreciate partnerships and partner productions when creating and developing innovation and technology. It should work as a "knowledge factory" and aim to be a center for excellence. Universities can act directly as 'engines of innovation' (Wolfe, 2000), generating new ideas to spur the creation of commercial products, and indirectly, as the spark for regional industrial clusters.

The projects of ITU subject to this article should be seen as initiatives on various scales that aim for such a share, change and renewal process. The common points in these projects are the attempts to bring out original ideas, build partnerships and execute production by creatively bringing together various disciplines, people and experiences. We believe that this point of view is essential for the usage of creativity as a tool in all the projects of universities for developing the university milieu and also for the change, transformation and development of the city.

When we look at the given ITU projects, we can deduce that practices in the business sector and the local/national administration sector have a limited possibility for innovation. Under competitive pressures to introduce new products, processes and services, more collaboration has to be re/structured with the business and administration sectors. These collaborations also assist linking more research programs, product development processes and knowledge achievement for the society.

As the above features are examined carefully, it can be concluded that universities are in need of new structuring in the age of the knowledge society and its economy. Nowadays, the role of universities, besides sustaining a creative and productive integration of education, research and practice, is to create an independent atmosphere for the development of creative thought and to put forward opportunities and an infrastructure to nourish creative thinking.

**References**

Donald, B. & Morrow, D. (2003), **Competing for Talent: Implications for social and cultural policy in Canadian City – Regions**, (with research assistance from Andrew Athanasiu), Department of Canadian Heritage, Report (SRA-674).

Er, H. A.& Er, Ö. (2003),  Two Birds with One Stone: A Joint Project of Design Education and Design Promotion for Small and Medium-Sized Enterprises (SMEs) in Turkey, in S. Becker and K. Luz (ed.) **ICSID 2nd Educational Conference: Critical Motivations and New Dimensions.** Hannover: IF International Forum Design GmbH.

Etkowitz, H. & Webster, A. (1998), **Entrepreneurial Science: The Second Academic Revolution, in Capitalizing Knowledge: New Intersections in Industry and Academia**, (Eds.) Henry Etkowitz, Andrew Webster and Peter Healey. New York: SUNY Press.

EUA, (2007), **Creativity in Higher Education**, Report on the EUA Creativity Project 2006-2007.

Florida, R. (2002), **Rebuilding Lower Manhattan for The Creative Age: Implications for the Greater New York Region**, (Prepared for the regional plan association and the civic alliance).

Florida, R. (2005), **Cities and the Creative Class**, Routledge.

Florida, R. & Tinagli, I. (2004), **Europe in the Creative Age**, Demos.

Gertler, M.S. & Vinodrai, T. (2004), Anchors Of Creativity: How Do Public Universities Create Competitive and Cohesive Communities? Paper presented at "**Building Excellence: Graduate Education and Research**", A conference sponsored by the University of Toronto, 4 December 2004, http://www.utoronto.ca/progris/pdf_files/Anchors of creativity - Dec 4 2004.doc

Jones, A., Williams, L., Lee, N., Coats, D. & Cowling, M. (2006), **Ideopolis: Knowledge City-Regions**, The Work Foundation, London.

Johnson, D. M. (1972), **A Systematic Introduction to Psychology of Thinking**, Harper & Row, New York.

Landry, C. (2000), **The Creative City, A Toolkit for Urban Innovators**, Comedia & Earthscan Publications Ltd., London.

McAuliff, A. C., Fischer, D. J., Bowles, J. (Eds.), (2005), **Creative New York**, report prepared by the Center for an Urban Future in partnership with Mt. Auburn Associates, New York.

Özsoy, A, Erkök, F., Uz Sönmez, F., Uzer, E., Paker, N., Aksoy, M. & Dursun, P. (2007), Can Creativity Be a Generative Tool? Creativity or Conformity? **Building Cultures of Creativity in Higher Education**, A Conference organised by the University of Wales Institute, Cardiff in collaboration with the Higher Education Academy, http://www.creativityconference.org/tabled_papers.php#session3

Özsoy, A., Aksoy, M., Dursun, P., Paker, N., Erkök, F., Uz Sönmez, F., & Uzer, E. (2006), **Creativity in Higher Education: Sub Project Creative Universities and Their Creative City: Regions**, ITU Institutional Report on the EUA Creativity Project 2006-2007.

Powell, J., Reichert, S., Matei, L., Saerheim, I., Wainwright, C., Khyrkov, Y., Druzhin, G., Rzezuchowski, T., Ozsoy, A. & Lawrence, K. (2006), **Final Report to the EUA in its Socrates funded Creativity in Higher Education Programme** undertaken by the Creative Universities for Creative City Regions Thematic Network.

Sağlamer, G. & Karakullukçu, M. (2005), OECD/IMHE meeting, "**1996-2004: Crafting a Design for Permanency at the Forefront of Knowledge Creation**", Paris.

Self Evaluation Report, (2004), **Istanbul Technical University, European University Association Institutional Evaluation Program**, Istanbul, Turkey.

Van den Steenhoven, J., Stikker, M., Schwarz, M., Groeneveld, S., Keller, P. & de Lange, M. (2005), **Creative Capital Conference Final Report**, March 17-18, 2005, Felix Meritis, Amsterdam.

Wolfe, D.A. (2006), **Innovation and Creativity in City Regions**", Program on Globalization and Regional System-PROGRIS Seminar Presentation, March 30, 2006, University of Toronto.

Wu, W. (2005), **Dynamic Cities and Creative Clusters**, World Bank Policy Research Working Paper No: 3509.

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[1] The study is based on research findings of ITU subgroup of "Creative Cities / Regions" being one of the four thematic networks of an EUA (European Universities Association) project entitled "Creativity in Higher Education" carried out in 2006 within the framework of the Socrates program (EUA, 2007). The "Creativity in Higher Education" project mainly aims at accelerating the development of creativity and contributing to develop a culture of creativity in European higher education institutes.

Kentlerin geçirdikleri değişim ve dönüşüm kent ve yaratıcılık ilişkilerine farklı boyutlar katmaktadır. Kentler değişime açıklıkları, bilgi paylaşımı için getirdikleri olasılıklar ve olanaklar kadar, çalışan ve tüketen yüksek nitelikli nüfusu çekebilme kapasiteleri oranında bilgi ekonomisinin gelişimine katkıda bulunmakta ve onu yönlendirmektedirler. Bu çalışmanın amacı yaratıcı kent ve yaratıcı üniversite ilişkilerini İstanbul Teknik Üniversitesi'ne odaklanarak araştırmaktır.

Yaratıcı kent/bölge genel ve özelleşmiş altyapı sistemleri ile yenilikçi ve dinamik endüstri çeşitlerini desteklemektedir. Yaratıcı kent, çevresi ve altyapısıyla, farklı katmanlar sunmakta, insanlara yeni fikirlerini geliştirmek için olanaklar yaratmakta, ve bunlara dayanan projelerin gerçekleştirilmesini olanaklı kılmaktadır. Bilgi tabanlı altyapı aynı zamanda bağımsız ve aktif bir bileşen olarak, iyi organize edilmiş bir eğitim ve araştırma sistemi kapsamında yüksek eğitim kurumlarını ve araştırma merkezlerini de içermektedir. Bu tür bir sistemde, üniversiteler ve araştırma merkezleri bilgi yoğun kurumlar ve organizasyonlar olarak, kentin yaratıcı anlamda hızlandırılmasında stratejik öneme ve potansiyele sahiptir.