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A Pathological Study of Urban Design Skills' Non-formal Training in Iran, Case Study: Tehran Municipality

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Abstract: In today's world, one of the cities' major challenges is the crisis of the built environment quality. As the urban design group discussed, urban management (local authorities) actors are kind of urban designers who unconsciously affect the quality of urban environment by their decisions. Non-formal Education and in-service training programs are effective methods to qualify staff for making decisions about the built environment. However, observations have proven that, on the contrary to our expectation, the consequences of these programs do not have impressive results on Tehran's built environment. In other words, the quality of urban places is getting worse, in spite of the increase in number of urban design training programs. So, in order to find the roots of the problem, this research has been done in three main parts: (1) Recognizing the local authorities' influences on quality of built environment, (2) Identifying the factors which local authorities' staff consider in decision- taking/making in regards to the built environment, (3) Pathology of non-formal training system of urban design skills. The type of research that has been used in this study is survey under a qualitative research method. The purpose of using this method is achieving an in-depth understanding of the role of Tehran municipality as a local authority in the quality of built environment. This research investigates the "why" and "how" of decision-making; besides, the phenomenon of urban design skills training has been examined through observation as well as some interviews and questionnaires. The survey population is the people who are involved in training programs, including learners, educators, educational managers, officers and top managers at architecture and urban planning departments. To obtain more accurate results, the research sampling method that has been used in this study is systematic and targeted sampling. The results show that the municipality staffs do not believe in their impact on the planning and development process, as well as the quality of public realm and building design outcomes. According to the results, a fundamental review is needed in urban design training programs in terms of procedure, content and curriculum.

Keywords: Urban Design Skills, Urban Management, Curriculum, Built Environment Quality, Decision Making/Taking.

INTRODUCTION

As Barnett (1982) argued, today's city is not an accident. Its form is usually unintentional, but it is not accidental. It is the product of decisions made for single, separated purposes and there is a continuum from 'knowing' to 'unknowing' urban designers. Carmona et al (2003) argued that "'Knowing' urban designers are the professionals who are employed for their urban design expertise. And, 'unknowing' urban designers are those who make urban design decisions without considering what they are doing". Local authorities' staff (managers and other officers) are one of the most important ones who implement central government strategies, interpreting and developing the strategies, policies and design codes in the light of local circumstance.

One of the most effective ways to improve the skill of staff in term of deciding about the built environment is non-formal education or in-service training programs.

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However, in spite of the increase in number of urban design training programs within municipalities, the quality of built environment is getting worth day by day and this kind of training programs do not have adequate effects on local authorities' decision taking about the built environment. Since, there have not been considerable researches in this field, especially in Iran, this research involves a systematic process that focuses on presenting the general problems of urban design training programs, find gaps and identify opportunities to increase positive impacts of the programs (Fig. 1).

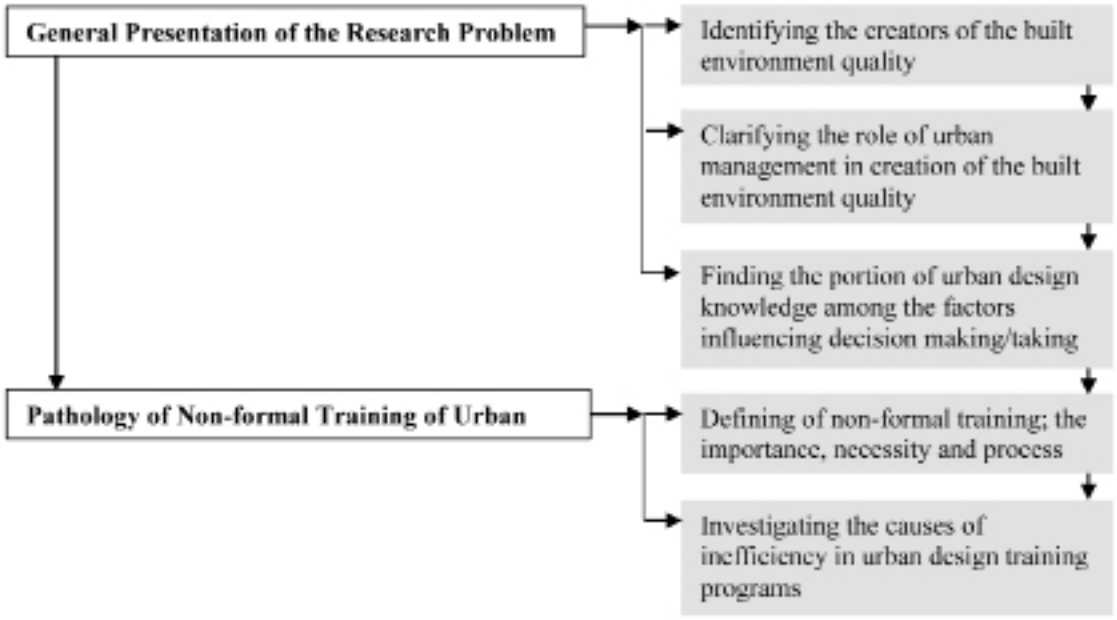

Fig 1. The Research Structure

It should be noted that in 3 stages of this process, the survey analysis has been used based on a field research.

1. Clarifying the role of urban management in creation of the built environment quality
2. Identifying the factors which local authorities' staff consider in decision- taking/making in regards to the built environment,
3. Investigating the causes of inefficiency in urban design training programs.

RESEARCH METHOD:

The type of research that has been used in this study is survey method with the qualitative approach. The purpose of using this method is achieving an in-depth understanding of the role of Tehran municipality as a local authority in built environmental quality (part 1) and finding the factors which influence the architecture and urban planning department staff's decision-taking (part 2). Besides, the phenomenon of urban design skills training has been examined through observation of the implementation process of an urban design course as well as interviews and questionnaires (part 3).

The type of used qualitative analysis in the paper was content analysis and the process of collected qualitative data analysis was:

- **Step 1:** Organizing the data (transcribing, translating, cleaning and labeling the data through analysis of content and logical reasoning)
- **Step 2:** Identifying framework (coding plan)
- **Step 3:** Sort data in to framework (coding the data, modifying the data)
- **Step 4:** Using framework in descriptive analysis.

In qualitative researches, participants (interviewees) are chosen with the aim of achieving more information about the phenomenon. There is a great emphasize on random sampling in quantitative research; however, in qualitative research, samples are invited to the research. Since this kind of research does not follow fixed findings and unchangeable facts; it tries to understand the phenomenon much better (Ranjbar et al., 2012, p. 238).

Therefore, to obtain more scientific and accurate results, the research sampling method that has been used in this study is systematic and targeted sampling. Table 1 Shows sampling details of each part.

Table 1. Sampling Information

Part	Data Gathering Instruments	Samples
1	Semi-Structured Interview	5 Specialists (2 project managers and 3 staff) engaged in 5 different urban design projects 3 Top managers at Tehran Municipality 5 Urban design academic staff
2	Semi-Structured Interview	8 Top managers at architecture and urban planning departments and city beautification organization of Tehran Municipality 16 Architecture and urban planning officers
3	Semi-Structured Interview	8 Top managers at architecture and urban planning departments and city beautification organization of Tehran Municipality 16 Architecture and urban planning officers 5 Educational managers
	Mixed Questionnaire Observation	26 Participants in an urban design training program
	Desk Based Review	The Published and unpublished reports of the held training courses.

In semi-structures interviewing the interviewer and respondents engaged in a formal interview and the researcher developed and used an "interview guide". This was a list of questions and topics that need to be covered during the conversation. This guild was followed by the interviewer; however, it was possible to stray from the guild when it was felt this is appropriate.

The mixed questionnaire consisted of both open and close ended questions and it was prepared based on first step of Kirkpatrick's Four-level Training Evaluation Model and it measures how the trainees reacted to the training. The 26 participants of this part of research were the managers and officers who worked at Architecture and Urban Planning Department of Tehran Municipality – Region 15, and had taken part in an urban design course. Also, their behavior, beliefs and group discussions were observed accurately by the researcher during the course.

In qualitative research sampling, one of the most important challenges is deciding about ending the sampling and reporting (ibis, p. 248). This paper indicates the data saturation through a special useful method which indicates what time new interviews do not lead to any new data and we can say saturation has been achieved.

The Urban Environmental Quality is Shaped by Whom?

In today's world, "the crisis of the urban environment quality" as one of the major challenges of cities is considered as a worrying concern. It seems there will be no guarantee for achieving a high-quality environment, if the urban development and physical plans happen without due regard for urban design and urban designers (Golkar, 2011, p. 88).

The urban design group (UDG) discussed that everyone acting in the environment is an urban designer because the decisions he/she makes affect the quality of urban space (Linden and Billingham, 1998, p.40). Thus, just as Carmona et al (2003) argued, all those who take a decision about the urban environment which result in shaping it are kind of urban designer. Based on their influence on design decisions which may be direct or indirect, the urban design consist of 'self-conscious urban design' (i.e. what people who see themselves as urban designers create and do) or 'unself-conscious urban design' (resulting from the decisions and actions of those who do not see themselves as urban designers) (Beckley, 1979, from Rowley, 1994, p. 187). In this sense, there is a continuum from 'knowing' to 'unknowing' urban designers. This is not a distinction in terms of the quality of outcome: the outcomes of both knowing and unknowing can be good and bad.

The results of Carmona's research on 'how public spaces in the contemporary city are shaped' (2014) shows it is possible to map out common parts of place-shaping. It is argued that: "it is necessary to understand the creation, re-creation and performance of the built environment across four interrelated process dimensions, self-consciously and un-self-consciously using design processes to knowingly and unknowingly shaped place" (Fig. 2).

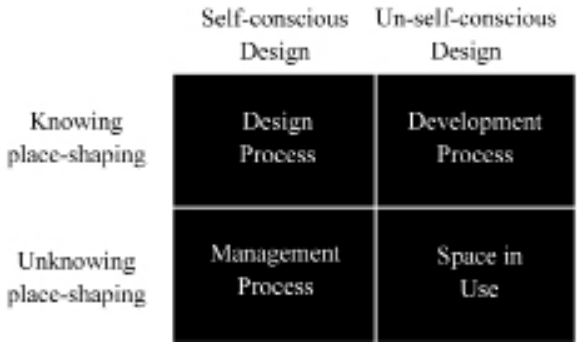

Fig. 2. The Typical Sub-processes of Urban Design(Carmona, 20014, p. 33)

Thus it is not just design, nor even development processes, that shape the experience of space, but instead the combined outcomes and interactions between:

- Design - the key aspirations and vision, and contextual and stakeholder influences for a particular project or set of proposals.
- Development - the power relationships and processes of negotiation, regulation and delivery for a particular project or set of proposals.
- Space (or place) in use - who uses a particular place, how, why, when and with what consequences and conflicts.
- Management - the place-based responsibilities for stewardship, security, maintenance and ongoing funding (Carmona, 2014, p. 33).

There is no doubt that, among these forces and factors one of the most important one is "urban management"(or local authorities). Those of urban environmental quality issues and challenges that are related to urban management's act and the decision can be creator or accelerator of other procedural and substantial issues, even though they are intangible and invisible in urban design. According to Madanipour's point of view, the urban design process and urban management system, contrary to their independent nature, have a close relationship with each other. So, lack of understanding of the exact relationship between these two concepts can lead to undesirable consequences on the quality of urban environment (Madanipour, 1996).

Therefore, it can be said that the existence of an aware and skilled urban management staff is one of the prerequisites for achieving high-quality urban spaces (English Partnerships, 2007, p. 173).

What is the Influence of Urban Management on the Quality of Urban Environment in Iran?

The concept of 'urban management' in Iran consists of three levels: national, regional and local levels. The lowest level of urban management in Iran includes the municipality and city council as the local authorities or public sector in each city (Saeed Nia, 1993).

There are some differences between countries in term of how local authorities affect the urban design process. To clarify this matter in Iran (especially in Tehran city), in this part of the study, the role and effects of the local authority on urban design continuum has been investigated (table 2). The survey instrument in this qualitative research has been semi-structured interviews. The sample specifications are shown in Table 1.

Table 2. Impacts of Urban Management on Built Environmental Quality

Factors: The Impacts	The Frequency of Mentioned Factors by Participants													
	1	2	3	4	5	6	7	8	9	10	11	12	13	sum
Approving the Various Stages of Urban Design Process • Applying personal preferences in projects • lack of step by step confirmation • Ignoring the previous approvals	*	*	*	*	*	*	*	*	*	*	*	*	*	13
Prioritization of Urban Design Projects - selection of Urban Spaces • Selecting the big and impressive and short term projects	*		*	*		*	*	*		*	*		*	9
Adherence to Project Implementation Based on the Approved Plan • Individual interpretation of design codes	*	*		*	*	*	*	*	*	*	*		*	11
Collaboration in Visioning • Confirming the excessive idealistic vision • Disability to negotiate and influence on other members • Not knowing the real demand and expect from all the professionals and decision-makers involved in shaping the urban spaces.	*	*	*			*		*	*	*	*	*	*	10
Approving the Design Codes	*	*			*	*	*			*	*			7
Estimating or Confirming of Design Consultants Fees		*	*	*		*	*	*		*	*		*	9
Implementation of the Projects • Investment in design projects based on individual and organizational interests.			*	*	*	*	*	*	*	*	*		*	10
Choosing and Hiring the Urban Design Consultants Companies			*	*		*	*		*		*	*	*	8
Collaborating in Goals Setting • Insisting on short-term goals, neglecting long-term goals and fundamental issues which need more time.						*	*	*	*	*	*	*		7
Engaging other City Organizations to the Urban Design Projects						*		*	*				*	4
Sum of New Statements in Every New Interview	5	1	2	0	0	1	0	0	0	0	0	0	0	

At first sight, it can be clearly seen that, all participants in this research believe the greatest impact of local authorities on the form and quality of urban spaces is related to their influence on approving the urban project process and documents. Regarding this issue, we can mention following problems:

- most of the time they use and insist on their preferences during evaluation of the urban design project,
- commonly they are not the fan of approving projects step by step during the project preparation and they fear of accepting the responsibility of approval,
- Besides, sometimes they ignore previous approvals and approve conflicting documents!

Also, how they respect the approved plans and documents is next item which indicates the influence of local authorities on urban design projects. According to the participants' comments, they use their positional power and they interfere with approval documents pretty often; for instance, sometimes they interpret the design codes or guidelines according to their individual preferences.

According to the data shown, the role of local authorities in implementation of the project and their collaboration in visioning process are another point.

It is noticeable that due to their beliefs which are based on organizational self-trust, collaboration with other urban organizations had often less impact on their decision-making.

Which Factors Influence the Urban Management Decision-taking about the Quality of Built Environment?

Several factors influence decision making; these factors can be divided into two general categories: Internal factors and external factors (Fig. 3). The internal factors refer to psychological factors which are related to the personal characteristic, age and gender (Bruin et al., 2007), previous experience (Juliusson et al., 2005), cognitive base (Stanovich & West, 2008).

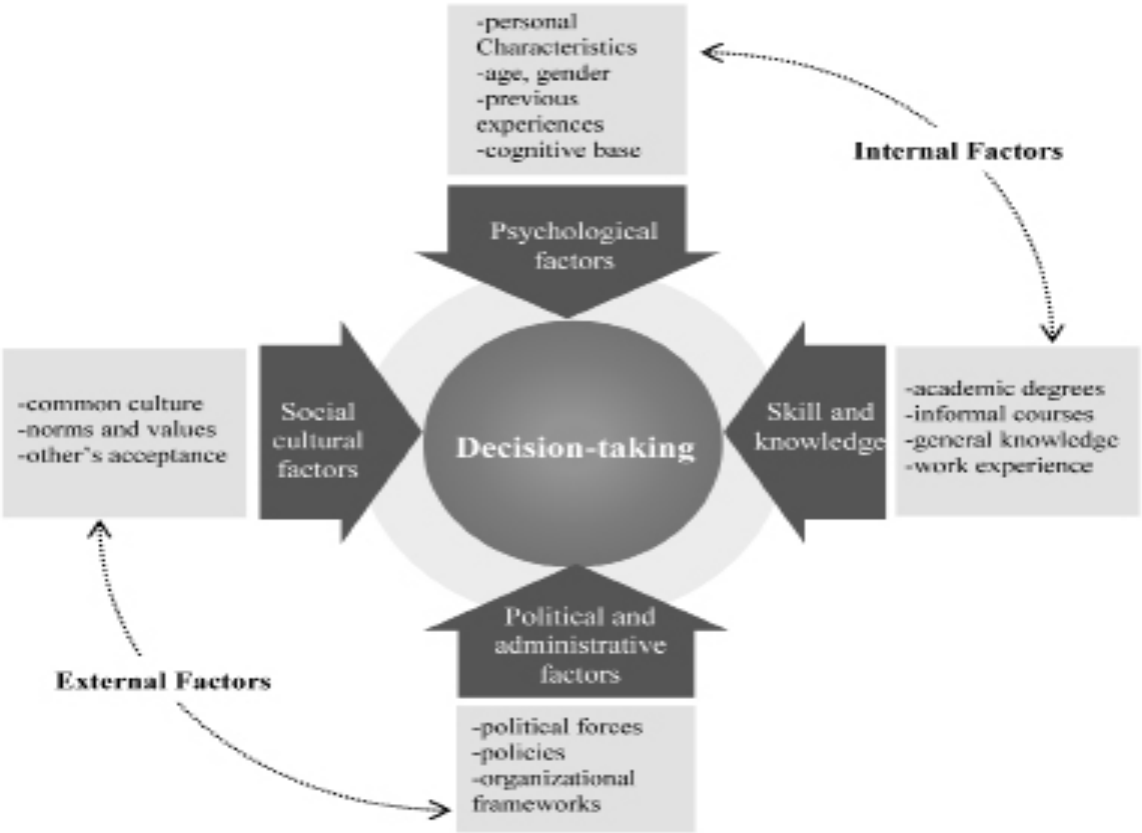

Fig 3. Factors Effecting the Urban Management Decision-taking

It is also important to consider external factors which are because of the decision environment. Social and cultural factors can make the profound impact on the process and consequences of decision-making as well as political and administrative factors (Maleki, 2007). Common cultures, norms and values as the social and cultural factors; besides, national policies and organizational frameworks (Robbins, 2012) are the most important items that are taken into account when decisions are being made.

In another part of the research, for investigating the issue among Tehran municipality officers and managers at architecture and urban planning department, interviews were conducted in-depth. Even though the influence of internal factors is not deniable, owning to the ambiguity of these factors, this part studies only the external parts. Table below (table 3) shows the interviews' results.

It should be mentioned that the research participants have announced that their urban design knowledge and skills affect their decisions more than 50%.

Table 3. Identification of External Factors Influencing the Decision-making

	Factors: The Impacts	**The Frequency of Mentioned Factors by Participants**																
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**Sum**
Architecture and Urban Planning Managers	Top Managers' Approach	*		*	*	*	*	*	*									7
	Time	*	*	*	*	*	*	*	*									8
	Desire to Improve	*	*			*		*										4
	Concerning with Post Maintaining	*	*		*				*									4
	The Knowledge of Senior Officers	*	*		*	*			*									5
	Inspection Systemfs		*	*	*			*	*									5
	The Importance of the Project		*	*	*		*											4
	Scientific Committee's Approach		*	*	*	*	*	*	*									7
	The Comment of Manger's Reliable Individuals			*	*	*	*	*	*									6
	Unexpected Incidents					*		*										2
	Informal and Private Relation with Design Consultant				*				*									2
	The Policies of other Organizations			*		*	*		*									4
	Sum of New Statements in Every New Interview	**5**	**3**	**2**	**1**	**1**	**0**	**0**	**0**									
Architecture and Urban Planning Senior Officers	Time	*	*		*	*		*	*		*	*		*	*	*		11
	Top Manager's Approach	*	*	*		*	*	*	*	*		*	*	*	*			12
	Rewarding System	*	*	*	*			*		*			*		*		*	9
	The Knowledge Level of Top Manager		*	*		*	*		*		*	*			*	*		9
	Desire to Improve		*	*	*	*		*	*	*			*	*				9
	The Importance of the Project			*		*	*	*		*	*	*	*	*		*	*	11
	Evaluating System				*		*		*	*		*	*	*	*	*	*	10
	Current Procedures							*		*		*		*			*	5
	The Knowledge Level of Coworkers									*		*				*		3
	Informal and Private Relation with Design Consultant											*				*		2
	Informal and Private Relation with Top Manager											*		*				2
	Sum of New Statements in Every New Interview	**3**	**2**	**2**	**1**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	

The table identifies the force of time, based on organizational policies, is considered by the architecture and urban planning managers as one of the most important factor which affects the decision-making process. Besides, the significance of effective individuals' approaches in a way that the top managers and scientific committee, who may conduct the projects, is front and center.

With officers who works in architecture and urban planning department, the top manager's approach and comments regarding the project is the most effective factor, because they usually worry about their post and they try to upgrade it; thus they do everything to keep their direct manager satisfied. Other important factors are the force of time and the importance of the project.

The place of informal and private relation between managers and officers as a client with hired design consultants for doing the urban design project in decision-taking is considerable, even though it has been mentioned less.

What is the Non-formal Training System of Urban Design Skills for Local Authorities Like?

Non-formal education or training is defined as "any organized educational activity outside the established formal system-whether operating separately or as an important feature of some broader activity-that is intended to serve identifiable learning clientele and learning objectives" (Coombs, 1974). In the light of this definition, it is clear that any kind of urban design training programs which are held at the municipality architecture and urban planning department as an in-service training can be taken as a part of the non-formal training system.

The non-formal training program is frequently organized to orient new comers or to orient the old ones. A study of Iran Municipalities Organization (2013) identified following factors as the main purposes of training programs for local authorities:

- Along with and adaptation with rapid development of science and technology؛
- To promote the continuous improvement of the job positions؛
- To eliminate deficiencies in the background preparation of the staff؛
- To keep the professional abreast of new knowledge؛
- To release creative activities؛
- To give the much needed support to the staff who are entering a responsibility or a new field of work.

According to the Carmona (2003) for most lay participants, awareness of environmental quality derives from personal experience and the media rather than from formal education, so, over the long-term, education and participation provide the means to inspire greater commitment to environmental quality.

Normally, all training programs have a specific program which called curriculum. The word curriculum generally refers to a number of educational programs which have the specific arrangement and usually follow specific academic or occupational goals. A curriculum normally includes general learning objectives and a list of subjects and resources. Some of them are very general and some have many details, such as teaching methods, essential resources, courses contents, final examination (El Sawi, 1996).

Essential considerations for curriculum development which are introduced by specialist are various, but the general one includes:

1. Problem Identification and needs assessment؛
2. Goals and objectives؛
3. Educational Strategies, important and relevant content؛
4. Implementation؛
5. Evaluation and Feedback (Kirkpatrick, 2007 & El Sawi, 1996).

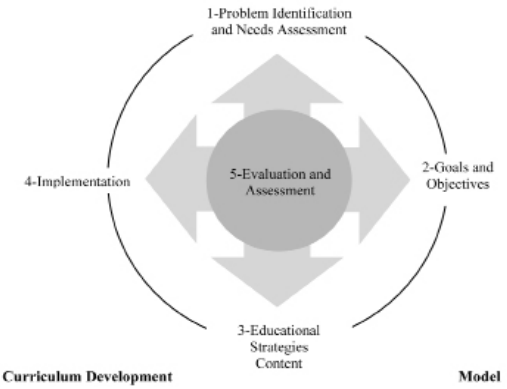

Figure 4. Curriculum Development Model

Fig 4. Curriculum Development Model

Step one starts with need assessment and problem identification. Clarification of real problems leads to more clear curriculum's goals, objectives and educational and evaluation strategies.

After clarifying the needs of learners, the curriculum begins to deal with setting goals and objectives. A goal or objective is defined as an expected outcome which an effort is directed. Once the goals and objectives are determined, the next step is to develop educational strategies. This step includes clarifying the content – specific material to be included in the curriculum and the methods – ways in which content is presented. The content of the curriculum should follow its specific measurable objectives.

Step four, implementation identifies needed resources: personal, time, facilities and funding/costs.

Step five closes the loop in the curriculum development cycle and provides information to guide individuals, and the curriculum in cycles of improvement and evaluation results can be used to seek support for curriculum, assess individual achievement and satisfy external requirements (Lynn MD, 2011, Kern DE, 2009).

The mentioned process shows rational steps of a curriculum. However, it is obvious that implementation of any curriculum is associated with some problems. Following, some problems of urban design training program have been identified through depth interviews with who are involved in urban design curriculum including learners, educators and educational managers. Also, the opinions of attendees in one urban design course have been assessed by semi-structured questionnaire which have been distributed among participants after the training course. This questionnaire has been prepared based on first step[1] of Kirkpatrick's Four-Level Training Evaluation Model and it measures how the trainees reacted to the training.

Which Problems Does Non-formal Training System of Urban Design Skills (Tehran Municipality) Deal with?

Generally, pathology of a training program is important because it sheds light on four aspects. They include:

- How well the training program met the learner's needs and objectives
- What knowledge and skills has been imported to the learners
- What desirable change has been brought in the learners' performance
- What organizational benefits has been yielded

tHowever, unfortunately, in today's organizations, this mechanism of training evaluation is in short supply. Organizations are unwilling to spend their resources for a comprehensive after-training evaluation and Tehran Municipality is not an exception. They end it by serving a ceremonious feedback form to learners and getting their opinions. But it must be realized that it may not lead to the desirable outcomes. It will not make your training programs effective and yield the desired results.

The specific impacts which are considered after non-formal training programs of urban design skills are:

- Improvement to the quality of building design؛
- Improvement to the quality of public realm design؛
- Improvement to the integration of highway design؛
- Residents satisfaction with development outcomes؛
- Occupier satisfaction with development outcomes؛
- Greater certainly for developers؛
- A faster development process؛
- A better coordinated design process؛
- Enhanced developer contribution (Ecotec, 2009).

The curriculum of municipality architecture and urban planning department staff was launched in 2011, as well as other positions, to support all local authorities to achieve better-designed environment. This part of the research is dedicated to the pathology of the mentioned programs. The in-depth interviews with learners, educators and educational managers and also the questionnaires lead to identifying the wide range of problems which are presented following. The problems are categorized based on training program development steps. It should be considered the educational managements' reports indicated that just 10 percent of the participants in such training programs have an academic background in related fields such as architecture, urban design, urban planning or landscape architecture.

Table 4. Non-formal Training System of Urban Design Skills Problems

Steps	Mentioned Problems
1.Problem Identification and Needs Assessment	• Lack of top managers' positive approach to urban design skills training • Inattention to clarify the urban design problems (the latest need assessment is related to 80's) • Lack of continuous and periodic need assessment • Not responding to the changing environmental policy • Inattention to the job positions new needs • Inattention to new paradigms of urban design
2.Goals and Objectives	• Uncertainty of courses objectives
3.Educational Strategies, the Important and Relevant Content	• Absence of major focus of the program • Weakness of need assessment related to necessary urban design skills for every position • Relaying on master classes more than workshops within urban design training programs • Absence of educational resources • Poor connection between the courses related to urban design • Poor connection between the course topic and the course content • Necessity of holding predetermined courses (not based on new needs) • Absence of identification of educators' necessary abilities for urban design training
4. Implementation	• Lack of supervision on urban design training process • Participation of learners with different urban design knowledge level in one class • Limitation in selection of educators (the educators should have the approval letter from the educational center) • Limitation in holding workshops and seminars class • Lack of motivation and incentives among participants • Absence of evaluating systems (No staff is blamed because of the lack of knowledge) • Attending irrelevant courses with staff's job position • Choosing the urban design courses based on education department manager opinion, not regarding the real need of staff • Limitation of budget • The ineffectiveness of some selected educators
5.Evaluation and Feedback	• Absence of clarified criteria for specific skills improvement • Lack of continuous monitoring of training programs • Continuous replication of defective processes • Not adopting scientific methods of evaluation • Course evaluating by course organizers (themselves) • Unreal statistics of evaluation • The weakness of organizers in terms of skill, knowledge and experience • Quantitative orientation

CONCLUSION

Both mentioned effects of urban design training are considerable; however, the advantages of appropriate education are undeniable. Due to necessity of non-formal training of urban design skills to architecture and urban planning department staff, and according to the research findings, there is abundant evidence to say:

- There is an urgent need for urban design skills with architecture and urban planning department staff,
- The main role of local authorities as a client in creation of public realm quality is related to their influence on the urban design projects process, including: approving the project, respecting other previous projects approvals and interpretation of design codes, advices and other documents,The Municipality top managers as the local authorities, almost do not believe in collaboration with other city organizations,
- The 'knowledge level' of staff affects their urban design decisions more than 50% rather than the other internal and external factors,
- The factor of 'time' or 'time limits' plays a considerable role in decision making/taking of all staff (top managers and officers),
- The attitude of effective and influential people (e.g. top managers, scientific committee) has a great effect on managers' decision making,
- The officers, who work at architecture and urban planning department, usually are worried about their job positions; so, their decision making process is influenced by their direct manager's approach, current trends, and other colleagues' operations,
- In spite of the dominant thought, the private and informal relation between client and design consultant plays a less important role in decision making/taking,
- Few people work in relevant professions and many officers have irrelevant academic degree; so, urban design training is only one of many issues that must be covered by local authorities training budgets.
- Learning in multi-disciplinary groups would be a useful approach to overcoming conflicts of interest between different groups involved in shaping the urban realm.
- The most important factors (or drivers) behind the development of skills have been the increasing awareness and focus amongst non-specialists and an increased political awareness (of urban design issues).
- The results indicate that workshop plays a prominent role in urban design skills development with almost 60 percent of respondents citing the workshop as an important factor in the enhancement of skills within their organization.
- Attendees have been little satisfaction with the quality of the training, with the vast majority reported the quality of provision as either bad or average.
- The responses indicated that the seminars were more important than the master classes to all aspects of skills development.
- The responses were less positive in terms of specific impacts on the planning and development process, as well as the quality of public realm and building design outcomes.
- According to responses, the fundamental review is needed in urban design training programs in terms of procedure, content and curriculum.
- Also, it should be mentioned as Foucault (1975) argued that in modern societies 'Power' is a Knowledge-based system of relationships which place individuals within it. This means training and education gives people power (adopted from Sarkhosh et al, 2001). In other words, one of the main challenges facing the education and improving the knowledge of urban management is increasing their power and courage while they are deciding about the built environment (Safavi, 2010). In other words, promoting of the environmental knowledge of urban management staff, as a double-edge sword, is a sensitive issue which has provoked many discussions; on one hand, it causes improving in Knowledge of qualitative consequences of decisions, on the other hand, it leads to false courage; for instance, the staff do not use advices of urban design consultants and make/take a decision based on their individual incomplete knowledge.

ENDNOTE

1. This level measures how the trainees reacted to the training. This questionnaire evaluates the feeling of attendees about the instructor, the topic, the materials, the presentation and the venue to measure reaction, because it helps to understand how well the training was received by the audience (Krikpatrick, 2007).

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