

(:)

*

:

.1

.(Cumi, 1995)

.(2002)

*

.2006/8/10

2006/1/25

.2

(Pena)

.(O'Brye, 2002)

.(Horowitz, 1966)

(1)

.(Hershberger, 1999)

(Duerk, D.)

1993

-
-

•

.(Dugan and Zimring, 2002)

•

•

•

.(Tustler and Colleagues, 1993)

:

•

.(Koshley and Duff, 2003)

•

:

.(Mitt and Daniel, 1995)

.(Bertrand, 1993)

.3

.4

.(Curtis, 2000)

.(Alsuwayeh, 1985)

) (

-)
-)

(

.(1423)

.5

.(1999)

-

-

(%53)

•

:

-

-

-

:

-

-

-

-

-

(%62)

:

.6

•

•

•

:

(%43)

•

•

.7

)

.(

:

2004

(%32)

()

(

)
(2006

.(%24)

()

(%27)

(%22)

(%27)

.8

(%14)

()

(Vitruvius)

(Wotton, H.)

(%11)

(Hershberger)

(2)

(%13)

:(2)

| | | |
|--|--|--------|
| | | |
| | | () |
| | |) (|
| | | () |

)

.(Hershberger, 1999)

:

(

:

.1

.2

.3

.()

.(Duerk, 1993)

.9

()

McGraw-Hill.

Curtis, W. 2000. *Modern Architecture Since 1990*, PHAIDON Press Ltd., Third Ed.

1423

Duerk, D. P. 1993. *Architectural Programming: Information Management for Design*, New York: Van Nostrand Reinhold.

1999

Dugan, F. and Zimring, C. 2002. Interaction of Programming and Design, the First Unitarian Congregation of Rochester and Louis I. Khan, *Journal of Architecture Education*, (56):47-56.

(:)

: 1422

Hershberger, R. 1999. *Architectural Programming and Predesign Manager*, McGraw-Hill.

.14 2

Alsawayeh, W. 1985. *The Impact of Culture and Environment on Architectural Training: A Needs Assessment Approach to Designing Architecture Program for Kuwait*. Unpublished Ph.D. Thesis, Kuwait University.

Horowitz, H. 1966. The Architect's Programming and the Behavioral Science. *Architectural Science Review*, 9(3): 71-79.

Kahn, A. 1998. From the Ground up: Programming the Urban Site, *Harvard Architecture Review*, (10):54-71.

Koshley, B. and Duff, M. 2003. Design Follows the Numbers, *Urban Land*, (62):11-12, 84-86

Kumlin, R. 1995. *Architectural Programming: Creative Techniques for Design Professionals*, New York: McGraw-Hill.

Bertrand, R. 1993. The Role of Programming as Interpreter and Translator. In Wolfgang, F.E. Praiser (Ed.) *Professional Practice in Facility Programming*, New York: Van Nostrand Reinhold.

Cumin, R. 1995. *Architectural Programming: Creative Techniques for Design Professionals*, New York:

- Boston, Mass.: Cahners Books International.
- Preiser, W. 1993. *Recent Development in Facility Programming in Professional Practice in Facility Programming*, New York: Van Nostrand Reinhold.
- Robert, R. 1995. *Architectural Programming: Creative Techniques for Design Professional*, New York: McGraw-Hill.
- Sanoff, Henry. 1977. *Methods of Architectural Programming*, Stroudsburg Pa: Dowden, Hutchinson and Ross.
- Tustler, Wilbur H., Zilm, Frank Hannon, James, T and Newman, Mary Ann. 1993. Programming the Third Dimension. In Wolfgang, F.E. Praiser (Ed.) *Professional Practice in Facility Programming*, New York: Van Nostrand Reinhold.
- Mitt, L. and Daniel, D. 1995. *Architectural Programming Tool Box: Using Group Support Systems Technology to Increase the Effectiveness of User Participation in Architectural Programming*, Unpublished Ph.D. Dissertation, the University of Arizona.
- Moleski, W. 1974. Behavioral Analysis in Environmental Programming, in Lang, J., Burnette, C., Moleski, W. and Vashon, S. (Ed.) *Designing for Human Behavior: Architecture and the Behavioral Sciences*, Stroudsburg: Poa Dowden, Hutchinson and Ross.
- O'Bryne, P. 2002. Programming or the Art of Bringing Project to Birth, *Architecture D'aujourd' Hui*, (339):44-55.
- Pena, W., Caudill, W. and Focke, J. 1977. *Problem Seeking: an Architectural Programming Primer*,

Improving Architectural Programming Teaching Methods (Case Study at King Saud University)

*Raeyd M. Al-Dakheel**

ABSTRACT

The emerging role of architectural programming in developing nations in general and in Saudi Arabia in particular is not reflected in its place in local architectural curriculum. Programming courses have not been developed to match the local market needs or national development objectives.

This study attempts to document contemporary programming teaching methods and tools, to identify the architectural program at the King Saud University programming courses short comings and to address these shortcomings through comparison with similar programs proven methods.

Several shortcomings were identified by the study, most important are the limited number of course hours assigned, the little coordination between courses in the curriculum and the missing local projects data base. The study concluded with several recommendations to remedy these deficiencies.

KEYWORDS: Architectural Education, Teaching Architectural Programming, Programming Skills and Methods.

* College of Architecture and Planning, King Saud University, K.S.A. Received on 25/1/2006 and Accepted for Publication on 10/8/2006.