

**An Education Note:**

**THE NEED TO INTERNATIONALIZE HOUSING PROGRAMS**

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Abstract

A case is built in support of increasing the level of international content in U.S. housing programs. Potential advantages to local and foreign students are identified. An approach to incorporating international issues in programs, courses, and research is adapted from work by other researchers. It is recommended that U.S. faculty should participate in international housing projects.

Introduction

International Housing Needs

Providing shelter worldwide to large populations is recognized as a complex and costly problem. The use of traditional construction methods needs to be expanded in combination with appropriate levels of technology. In addition to using indigenous materials more effectively, new construction materials need to be developed. Simultaneously, social and cultural factors should be considered. Ural, Krapfenbauer, and Nedeljkov (1988) made this point to the 1987 International Association for Housing Science Congress:

The end product of all of our endeavors must be to help to make our living environment a better one. This topic needs concern and dedication, because almost half of the population of our world does not have decent shelter. Unless they are helped to have a decent home, the social and economic order of our times will be endangered (p. i).

It is evident that application of science and technology to housing problems and needs of people is only a partial solution. Now is a crucial time in history because massive housing projects built after war, civil unrest, and natural disasters are aging. There is also a growing, older generation to house. Developing countries which are primarily rural, highly populated, and very poor, lag in providing needed shelter. These and other social, economic, and political factors provide an imperative to study housing alternatives for an ever-growing world population.

Large numbers of units are needed in developing countries to shelter rapidly growing populations.

The urban explosion now taking place in developing countries constitutes one of the most radical and rapid social transformations in history. In less than half a century, the population of Latin America has gone from being predominantly rural to predominantly urban, and by the year 2000, urban dwellers will outnumber rural

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Makela and Tripple

dwellers by three to one. By then, too, in East and South Asia, the percentage of people living in urban areas will rise between 230 to 300 percent in a mere 50 years (Wells and Sims, 1987, p. 15.).

To date, few countries serve as good models of how the housing supply can meet demand at affordable costs while maintaining economic and social stability. The magnitude of housing needs in a developing country can be illustrated by Kenya.

It is predicted that Kenya's population will double to 30 million by the year 2000 (from half that number in 1979). Kisumu, the third largest city in Kenya, had a population of 153,000 in 1979; 50 percent of its population were in slums or squatter settlements. At the same time, only 2000 units of public housing were added in the 20 years prior to 1987. The need is estimated to be 2000 per year (Akatch, 1987, p. 2-3).

Meeting demand in this situation is almost impossible. If population growth continues, supply will always fall behind demand. It is unlikely that enough housing can be built to meet the needs of current and future populations in Kenya or other developing countries.

Developed countries accommodate the greatest portion of their citizens in adequate housing. However, in these countries housing quality, internal environment, and external environment are still of concern. March (1987) recognizes this in his discussion of indoor air quality. "Increasing concern is being expressed in varying degrees on the risks to building users' health caused by the design of buildings and the selection of materials used in construction" (p. 63). This is elaborated further in Curwell and March (1986) where correlations are made among health, aesthetics, and sensible cost.

These two cases are the extremes. Each illustrates the importance of internationalizing our housing curricula and courses to meet the needs of individuals. The Kenyan example clearly indicates the magnitude of the demand existing in most developing countries.

Housing issues are not being adequately considered. More than half of the world's population is homeless or living in substandard housing. In developing countries, a grossly inadequate supply of housing units and lack of infrastructure contribute to the inability to provide even a minimal level of shelter. Attempts to provide a greater supply of housing in Ghana have resulted in "generalized and inappropriate housing design solutions" (Anokwa and Wellington, 1988). Often designers of new housing have ignored traditional design and its cultural significance.

Many are concerned that over the next 20 years developing countries may not be able to supply enough housing to meet demands from population growth, natural disasters, and heightened expectations. Even if a developing country were able to increase its housing inventory at a dramatic rate, its economic system may lack the stability to withstand such rapid growth. Stocks of building materials, appropriately skilled labor, and available capital must be brought together in a timely fashion. Furthermore, diversion of any of these major resources to cope with another crisis will delay suitable and affordable housing for the world's people.

Harvard's president, Bok (1988), wants educators to investigate "traditional values and the emergence of many contrasting beliefs and lifestyles" in our global society. He encourages study abroad, more foreign students in our programs, and seeking "fresh synthesis" versus "preoccupation with narrow specializations." Housing programs should consider these recommendations. Housing curricula in the United States should prepare students to understand housing worldwide, from a multidisciplinary perspective.

### Internationalizing Housing Programs

Harper and Spencer (1987) identify the development of study questions as the first step in a comprehensive approach to study food and culture. Housing educators can readily apply this approach. Several basic questions to guide the study of housing as a global issue are listed below. The questions may be approached from a micro-view (a local municipal area) or a macro-view (a continent or the world).

1. From current population data, how many housing units must be added annually to provide adequate housing for 50 percent, 75 percent, or nearly all of the population? How and when can the greatest number of people be sheltered? What are the choices of housing types and adequacy?
2. If countries (or regions) embark on an effort to house their citizens, what are the economic, social, political, and environmental costs and benefits?
3. What effects do housing large populations in urban areas have on migration, employment, environment, peoples' expectations, and families? Does availability of housing increase rural-to-urban migration? Does it alter the demand for labor and threaten local economic, environmental, and social climates?
4. What cultural, political, and economic factors make housing solutions for one community inappropriate for others? Why do multiple units of flats work in some cities and fail in others? How are needs and solutions for rural housing similar to urban housing? What are the educational needs of residents?
5. What are appropriate technologies and financing for providing shelter? When should local materials and labor be used to build housing units? When should technology and skilled labor be imported? How will skilled labor be housed if the local population is without shelter? What is the appropriate mix of technology, indigenous materials, and labor? What is the role of public and private sectors?
6. How can the practices of the developed countries be put in context with other options? Are educators cognizant of physical requirements, social needs, and resource bases of people and environments in other countries?

These suggested questions can serve as a basis for course content and readings. They can help one understand and formulate solutions that contribute to improved housing worldwide. Questions like these should help students and faculty balance a range of international housing needs: from concerns with indoor air quality, aesthetics, and the "high" cost of housing to concerns for people with no shelter.

The remaining steps for a comprehensive study stated by Harper and Spencer (1987) include: 1) identification of sources of information; 2) planned data collection and evaluation; 3) synthesis of answers gained from data analysis; and 4) summary and presentation of results and conclusions. Combining these with the suggested study questions can direct course development, course units, students' projects, and research to study housing from a global perspective.

Another means of internationalizing education is to optimize the experiences of foreign students at U.S. colleges and universities. Nicol (1979) provides insight into education of international students in his statement:

There are certain measures which can be undertaken to improve the relevance of curriculum to the needs of foreign students. There can be an exchange of professors in subjects most usually studied by foreign students and by foreign student advisers... It will enable the U.S. professor to understand the local system of education and also to advise foreign students better (p. 25).

Makela and Tripple

Another educational need of international students is that their study deal with problems in their home countries. Wickham (1979) goes one step further in this directive to encourage that their research be executed in the home country. The reasoning is that students should be prepared to make effective professional contributions after their formal education. At the same time, studies done by these students provide background relevant to an international perspective in housing courses.

#### Developing an International Perspective

Where does one begin to gain a perspective on housing as an international issue? Less than fifteen articles on housing in other countries are found in Housing and Society over the last ten years. Most of these describe housing in a developed country or a specific geographic area of a developing country. These articles can serve as a starting point.

The International Journal for Housing Science and Its Applications is another source. It includes articles from a wide range of disciplines and countries. Some articles focus on housing from a social science perspective. Other articles are studies of technically-related properties of building materials and techniques. Proceedings of the International Association of Housing Science as well as other international conferences (i.e. International Federation of Home Economics) or conferences from related disciplines in other nations (Anokwa and Wellington, 1988) are also valuable resources.

United Nations' documents and reports are a major source of housing and population data. The United Nations' proclamation of 1987 as "International Year of Shelter for the Homeless" and subsequent programs provide current perspectives on housing as a global issue. Recent news events--earthquakes in Armenia, floods in Brazil, and hurricanes in the Caribbean--provide evidence of the severity and immediacy of housing needs. United Nations' reports can provide background for problem-solving exercises.

Housing professionals should not overlook international visitors to their communities and students on their campuses. Often they are willing to share their experiences with housing situations. International program offices usually maintain a list of individuals willing to share perspectives. Secondary schools may have one or more exchange students willing to come to campus.

Interaction with colleagues in related disciplines at international conferences and on campus will enhance teaching a global perspective of housing. The list of professionals from which the International Association for Housing Science draws its members is useful in identifying fields for exchange:

Engineers, architects, lawyers, physicians, contractors, economists, sociologists, home economists, educators, material scientists, systems engineers, financiers, transportation engineers, land developers, federal, state, and local government officials, industrialized housing experts, union officials, and others who are interested in the various aspects of housing as human habitat...(International Association for Housing Science, 1988, p. 310).

Faculty should explore opportunities to work on an international housing or community project. Use housing expertise to add the dimension of human shelter needs and satisfactions to what may have been originally conceived as merely a technical project. Even with a wide array of formal and informal housing systems (Sebestyen, 1987), it will take much interaction to effectively link housing needs of families to planned housing built by technical professionals. Much expertise is needed.

### Recommendations

Housing should be approached from both interdisciplinary and global perspectives. No single discipline has solved shelter problems. It is unlikely that solutions lie solely within one field. Housing educators and students should be reminded that progress will be greater if interdisciplinary cooperation is applied to the complex problem of providing housing to individuals as well as to the masses in their cultural context.

The suggested questions may be used as a point of departure. They can provide students with an international perspective on housing and a greater awareness of global housing needs. There are no easy answers. If there were, housing problems may have already been solved. At least they would be closer to solution than they are now, especially in developing countries.

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