Developing and Managing a Research Program:
FEU-SURE and Urbanization Issues

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1.0 Introduction

This paper presents various conceptual frameworks that can be a basis for developing a more grounded research program. One framework relates the different aspects of teaching and modes of research to learning and scholarship that can facilitate a more holistic approach to research development particularly an "embedded research program". It also discusses the changing modes of research practice and the need for higher education institutions (HEIs) to respond and adapt to these changes. These changes highlights the emergence of the "collaborative and application-based research mode among stakeholders". It then proceeds to discuss urbanization and its impact to society emphasizing the catalytic role of urban universities in harnessing its positive impact and mitigating its negative consequences. Some concerns in research and development in the Philippines are also raised after which the initiative of Far Eastern University (FEU) to establish an urban research-based Center for Studies on the Urban Environment (SURE) and its research program, activities and management concerns are detailed. A road map to a sustainable research program as being adopted by FEU-SURE is also shared to give impetus and guide other HEIs who would like to pursue similar urban research programs.

2.0 Research and Teaching: Definition, Concepts and Linkages

Research can be defined as an act and attitude of an inquisitive mind. It is not merely an activity that deals with finding information and transcribing data but a manner of thinking. It is the quest for finding the truth (Leedy,1974). It is also cited that research can be considered as a cyclical process that is sparked by a query in a researcher's mind. It proceeds with the statement of the problem; development of a hypothesis or an analytical framework; information gathering and its consequent analysis and interpretation. As further stated by Leedy (1974), when there is no mental struggle to force the facts to reveal their meaning, there is no research.

Linda Groat (2002) an architectural educator, citing the work of Snyder (1984), noted that research is "systematic inquiry toward the creation of knowledge". She elaborated that the notion of systematic inquiry suggests that there is a conscious demarcation of how particular information is culled from the rest of people's experience, how it is categorized, analyzed and presented. Research, she continued, necessarily involves reducing lived experience or observed phenomena to chunks of information that are noted and categorized in some way.

She further explained that the objective of research is the creation of knowledge. She clarified that the created or new knowledge need not always be grand theories but can also emerge in relatively small increments and be attained through a variety of means, citing some architectural research concerns such as assessing the outcome of fusing two previously distinct functional building types; testing materials through a series of built projects; and evaluating the success of particular building forms in communicating intended meanings to different stakeholders.

Groat and Wang (2002) introduced a framework wherein architectural research can be facilitated. In any research undertaking, they contended, there are three realms that needs to be considered wherein

one is framed though not predetermined by the other. These are a system of inquiry, a research strategy and research tactics in that order. The system is the philosophical stance or worldview that defines the reality of the researcher while the strategy is the general research design method and the tactics, data gathering techniques.

Groat and Wang was challenged to develop an integrative framework for architectural research after observing that there is a common tendency in architecture to divide knowledge into domains with particular sub-disciplines. They cited as an example that insights derived from research in energy-efficient technologies cannot easily be integrated with insights drawn from aesthetic analyses of exemplar buildings.

The result of the Groat and Wang's work is the identification of seven research strategies that can directly be applied to research concerns in architecture and urban research as well. *Interpretative/Historical Research* which typically draws upon evidence derived from archival or artifactual sources. This is so because the research question focuses on a setting in the past. *Qualitative Research* which seeks to understand the settings and phenomena in a holistic and full-bodied way. It focuses on contemporary social and cultural circumstances. *Correlational Research* which is the discovery of patterns or relationships among specified variables on interest in a particular setting or circumstance. *Experimental or Quasi-Experimental Research* which is the preeminent standard for empirical research and the bedrock of much materials and building components testing.

The other research strategies for architectural research as categorized by Groat and Wang are: *Simulation Research* whose essential characteristic is that some aspect of the physical environment is recreated in one of a variety of modes, from a highly abstract computer simulation to a full scale, real life mock-up. *Logical Argumentation Research* whose hallmark is the sequence of logical steps within a closed system typified by a philosophical treatise on architectural aesthetics or a mathematical model to develop a computer software with architectural applications. The last category is the *Mixed Methods/Case Study Research* in which a particular setting or circumstance is investigated holistically using a variety of data collection and analysis techniques.

Research in higher education is thought of as having four separate yet overlapping functions. These are *discovery*, *integration*, *application* and *teaching* itself (Boyer and Mitgang, 1996). The *Scholarship of Discovery* are researches that increase the storehouse of new knowledge within the discipline. The *Scholarship of Integration* are efforts by faculty to explore the connectedness of knowledge within and across disciplines thereby bringing new insight to original research. The *Scholarship of Application* are those concerned in the exploration how knowledge can be applied to consequential problems in service to the community and society. The *Scholarship in Teaching* are those that views teaching not as a routine task, but as perhaps the highest form of scholarly enterprise, involving the constant interplay of teaching and learning. Scholarship here can be defined as the integrated act of researching and teaching that facilitates learning.

Citing the study of Samuelowicz and Bain (1992), Chalmers and Fuller (1996) identified five conceptions of teaching held by university teachers. The terms in parenthesis were made by the author. These are the following:

1. *Imparting information (Impartation).* Teaching is seen as a teacher-centered activity which involves imparting the information or knowledge which makes up the subject matter in a one-way process from the teacher to the student. The teacher's aim is for students to know more as a result of the teaching. The teacher's responsibility is to provide the information, the framework and the appropriate examples.
2. *Transmission of knowledge and attitudes to knowledge, within the framework of an academic discipline (Framework Transmission).* Teaching is seen as a teacher-centered

activity with the emphasis on developing the competence of the students so they can deal with the subject matter and apply the concepts. The teacher's aim is for students to know more and be competent users of the knowledge received from the teacher. The teacher's responsibility is to provide the conceptual framework of the subject so that students can readily acquire it.

3. *Facilitating understanding (Facilitation).* Teaching is seen as a teacher-centered activity with the emphasis on getting students to understand the information so that they can apply this to new problems both in and outside the discipline. The teacher's aim is for students to be able to apply their knowledge and understanding in new circumstances. The teacher's responsibility is to make this understanding possible by pitching explanations at the right level.

4. *Activity aimed at changing students' conceptions or understanding of the world (Framework Anchoring).* Teaching is seen as a cooperative activity, with the student as the less experienced learner. The teacher's aim is to change students' naïve understanding so that they become more like experts, within the conceptual framework of the discipline. The teacher's responsibility is to involve the students actively in their own learning by using a variety of teaching strategies and methods to achieve that end.

5. *Supporting student learning (Learning Enablement)*. Teaching is seen as a student-centered activity in which students are responsible for their learning and the content of that learning. The teacher's aim is to encourage and sustain the students' own interests. The teacher's responsibility is to help plan, monitor and provide feedback on students' work as well as provide conceptual guidance. This conception usually applies at the postgraduate level.

Research findings are consistent with the idea that it is not teaching and research that are directly related, but that each is related to something else. Brew and Boud (1995) suggested that the link between research and teaching is learning. Elton (1986) likewise suggested that scholarship is the link between teaching and research. He stated that scholarship in both discipline and pedagogy is concerned with new and critical interpretations of what is already known. He recognized that engaging in scholarship is engaging in a learning process. This process according to Brew (1988) is research whereby much learning proceeds.

Brew and Boud (1995) concluded that higher education is concerned with both the production and reproduction of knowledge. University staff are expected to be involved in the former by means of research. This knowledge, they contended, needs to be disseminated to students and to do this effectively the researcher must be involved in teaching. Investigations into the application of teaching and learning indicate many positive features for both the student and the teacher. Their experience, they further stressed, indicates that the benefits are legion; the researcher finds a willing and often able audience with whom to expound and develop ideas and clarify concepts. It provides a very cost effective way in which to test for implications and applicability. They concluded that research and teaching are not in conflict – the relationship is two-way and genuinely symbiotic; by combining the two activities it is often possible to create a product that has value significantly greater than the sum of the parts.

It can be seen from the discussion above, as taken from the perspective of faculty and researchers, that research and teaching is connected and facilitated by learning which is in turn enhanced by scholarship. Various conceptions of teaching at different levels were also presented. These can now then be related to the concepts of learning of those being taught: the students

Six student conceptions of learning were synthesized from various studies by Chalmers and Fuller (1996). The terms in parenthesis were termed by the author. They are the following:

1. *A quantitative increase in knowledge (Knowledge Accumulation)*. Learning is seen as acquiring information or 'knowing a lot' or 'knowing more'. This acquisition takes place as a result of absorbing and storing knowledge.

2. *Memorizing and reproduction (Iteration).* Learning is seen as storing information that can be reproduced as isolated pieces of knowledge. This takes place through rote learning, repetition and memorizing.

3. *Applying knowledge (Application).* Learning is seen as acquiring facts, skills or procedures that can be retained and used as necessary. This takes place through the acquisition of knowledge that can be applied or used.

4. *Making sense or abstracting meaning (Abstraction).* Learning is seen as relating parts of the subject matter to other known parts and to the real world. This takes place through relating what is learned to other knowledge.

5. *Interpreting and understanding reality in a different way (Realization).* Learning is seen as involving a change in understanding or comprehending the world by re-interpreting knowledge. This takes place when learners identify patterns in information and relate these to information from different contexts and situations. As a consequence of identifying relationships that have not previously been recognized, learners change their understanding in a qualitatively different way.

6. *Changing a person (Learning Assumption).* Learning is seen as understanding the world differently and as a consequence learners change within themselves. This takes place through a deep involvement in learning and by being *in charge* of one's learning.

The six conceptions are thought to form a structural learning network, starting at the initial level at which learning is seen as simply knowing more, through to where learning is changing the person. Each level below encompasses all of the preceeding levels as seen in the graphical representation as applied to architectural education (Fig.1). This relational diagram can be used a basis for developing an embedded research agenda in different levels of teaching and learning thus harnessing the synergy between teaching and research and integrating these two major function of the university.

RESEARCH to GIVE: Generate new knowledge; Integrate local and indigenous knowledge; Ventilate emerging knowledge and Engender a culture of research and knowledge development.

3.0 The Changing Practices of Research

The research enterprise that has gradually been put in place in universities is guided by a set of research practices, or a system of behavioral and institutional norms, which ensures that results are sound. These research practices set the terms of what counts as knowledge, who is allowed to participate in its production, and how accreditation is organized. These practices have generated what we know as the disciplinary structure of science; this structure in turn, has come to govern the management and organization of universities today. In particular, it should be noted that the disciplinary structure is specialist. Whether in sciences, the social sciences or the humanities, specialism has been seen as a secure way to advance knowledge.

The disciplinary structure also organizes teaching by providing a framework for the curriculum. The disciplinary structure is the essential link connecting teaching and research and underpinning the argument that in universities they properly belong together. Of course, research not only adds to the stock of specialist knowledge but transform it as well. The research enterprise is dynamic. Its research practices articulate the disciplinary structure and, over time, change what is regarded as the essential ideas, techniques and methods to be learned.

It is a characteristic of the research enterprise to break out of existing cognitive structures. But today the mode of knowledge production is also changing as new research practices are being introduced to cope with the complexities of the research questions that need to be addressed. Tow modes of knowledge production can be distinguished, each associated with a distinctive set of research practices (Gibbons in Brennan et al, 1999).

The Disciplined-based Knowledge Production (DKP). Most universities make use of a model of knowledge production that has a disciplinary basis. This structure provides the guidelines about what the important problems are, how they should be tackled, who should tackle them, and what should be regarded as a contribution to the field. Because the disciplinary structure has be institutionalized in universities, naturally they have become the primary legitimators of this form of excellence.

The Application-based Knowledge Production (CKP). In contrast DKP where problem solving follows the codes of practice relevant to a particular discipline, CKP is problem solving organized around a particular application. In the former, the context is defined in relation to the cognitive and social norms that govern basis research or academic science. Recently this has tended to imply knowledge production carried in the absence of some practical goal. In CKP, by contrast, knowledge results from a broader range of considerations. Suck knowledge is intended to be useful to someone whether in industry, government or society more generally; this imperative is present form the beginning. Knowledge thus produced is always produced under an aspect of continuous negotiation, i.e. it will not be produced unless and until the interest of the various actors are included. Such is the context of application. CKP is the outcome of a process in which supply and demand factors can be said to operate, but the sources of supply are increasingly diverse, as are the demands for differentiated forms of specialist knowledge. CKP thus becomes diffused throughout society, being produced in many different sites. Thus CKP is characterized by transdisciplinarity, heterogeneity and organizational diversity; enhanced social accountability and reflexivity and a more broadly based system of quality control.

The implication for universities is that the research in many important areas is cutting loose from the disciplinary structure and generating knowledge that does not seem to be drawn to institutionalize itself in university departments and faculties in the conventional way. At times, it often seems that research centers, institutes and "think-tanks" are multiplying on the periphery of universities while faculties and departments have tended to become the internal locus of teaching provision.

Universities are now confronted with the challenge of how to accommodate these new research practices. Important intellectual problems are emerging in a " context of application". The research agenda and the funding of its are now the outcome of a dialogue of researchers and users, regulators, interest groups and others. Unless that dialogue produces a consensus no research will be done. Research has become a participative exercise involving many actors; experts move less according to the dynamics of their original disciplines and more according to the problem interest, which is itself determined by a more complex set of factors than those found within disciplines. In this process, universities are only one actor among many. The challenge for them is whether or not they can be sufficiently innovative to remain part of the process of dialogue (Gibbons in Brennan et al, 1999).

4.0 The Urbanization of Research: City Knowledge Development and Management through University-Community Partnership

Urbanization refers to a process in which an increasing proportion of an entire population lives in cities and the suburbs of cities. It is seen as one of the most powerful phenomena influencing global sustainability prospects today. The convergence of economic growth, population growth and urban expansion offers both great challenges and potentials for sustaining a city. These challenges and potentials of urbanization are more felt in the cities of the developing world such as Manila. A considerable part Manila such as the Sta. Cruz, Quaipo and University Belt Districts have become compact urban areas that has high concentration of people with its concomitant problems of obsolescence, congestion, pollution, criminality, escalating housing costs and social and economic polarization

Urban universities have been faced with a unique set of issues stemming from the urban crises of the 1960s, and the resulting deterioration of their surrounding neighborhoods. Since that time, these universities have often found it necessary to become involved in neighborhood development work in order to attract and house faculty, students and staff. These efforts frequently have been opposed by non-university affiliated residents of these areas, who feared displacement and changes in neighborhood amenities and costs. Many universities learned difficult lessons about undertaking neighborhood development work without regard for the desires and needs of non-university affiliates. More recently, universities have found that it may be in their own best interests to engage in research and development work with the cooperation and support of other community members (Marwell et al, 2003) .

Richard Rosan, President of the Urban Land Institute, wrote in 2002 that "few institutions have more to offer in propelling economic development on both a national and local basis than colleges and universities. They are the creators and disseminators of knowledge and understanding that can help address urban challenges. As leading institutions in their communities, they are powerful economic drivers, technology centers, employers, developers and investors."

In the United States, it was observed that the traditional insularity of universities is being superseded by the solidarity of school and community. Urban universities are putting their money and human capital to work in collaboration and cooperation with the local government, and the non-profit and private sector. They are targeting a wide range of issues, including local economic development projects, affordable housing, public health services and environmental protection.

This involvement by universities represents a major shift in thinking and commitment. In earlier decades, just as people abandoned cities to flee to the suburbs, and manufacturers closed or moved, many universities abandoned cities by building both physical and psychological barriers around themselves. Some became so big, they turned into self-contained, self-enclosed communities, with no relation to the surrounding neighborhoods and no motivation to be involved in urban research and community improvement. This can also be observed in the Manila experience.

The changes as mentioned by Marwell et al (2003) can be attributed to the following:

1. **The Knowledge-based Economy Shift**. Following World War II, the United States' economy started evolving from one powered by brawn to one powered by brain. This was due in part, to research conducted by major universities such as Stanford and the Massachusetts Institute of Technology. However, during the 1990s, the evolution of the knowledge-based economy became a revolution. As a result, both the role of universities started expanding, and in many cities now, universities are among the largest employers. This is true not just in traditional university towns, but in large urban areas like Philadelphia, where the University of Pennsylvania is the largest single employer in city.

2. **Institutional and Economic Survival**. Universities are increasingly involved in urban revitalization to protect their campuses and create a favorable environment. As noted, universities cannot pack their bags and move if the neighborhoods surrounding them become uninviting, blighted and dangerous. Higher education is competitive like any other field -- students want to live and go to school in a fun, exciting neighborhood, and their parents want them to live and learn in a safe environment. Clearly, it is in the institutions' best interest to promote and participate in community revitalization.

3. **Civic Engagement**. A third reason is an increasing emphasis on the university's role as a major civic participant, and on the responsibility of the university faculty and staff to be engaged in community issues that affect the university either directly or indirectly. Certainly, greater involvement in housing and community development is one manifestation of this civic engagement. In addition, universities are

expanding their teaching and research focus to include social outreach to youth and families, kindergarten through high school education, information technology and public policy. In this context, Henton et al (1997), a partner proponent in the development of Silicon Valley, coined the term **Civic Entrepreneurs**, which are entities, foremost of which are universities, that help interests come together to deal constructively with forces of change. They are marked by mediating people and organizations which facilitate the establishment of "economic communities" which they defined as places with strong, responsive relationships between the economy and the community. These provide companies and communities with sustained advantage and resiliency. These, they contend, are the appropriate structures in the evolving globalization of the world system.

In sum, the social component of "town-gown" agreements has become more critical as universities have grown more willing to be a part of the community, not just located in the community.

The Concept of University-Community Partnerships

It is becoming a universally accepted concept that **collaborative partnerships** among the city stakeholders are the key to the continued vitality, livability and sustainability of cities. Two key players in this partnership are the **local authorities in close coordination with urban communities** and the **city-based or urban universities**. These urban partnerships can be venues where the academic and technical expertise of the universities and the practical and actual experience of local authorities and communities can converge and synergize to build a mutually beneficial connection, communication, cooperation and collaboration for the betterment of the city. As the universities are given the opportunity to actually apply their ideas and concepts of urban development, the local authorities and urban communities are introduced to helpful processes and methodologies that can enlighten and empower them. A mutually reinforcing partnership should be forged between an institution that can primarily think and those that are mandated to act or implement programs and projects for the public good.

Dr. David Cox of the University of Memphis, citing the study of Chaskin and Brown (1996) enumerated three factors that can influence urban community/neighborhood change: **individual behaviors, broad socio-economic structural changes and changes in the networks within which people function.** He further noted that there are six (6) dimensions of community that provide the means to affect those factors which include enhancing the following:

- **Human capital** by improving the assets of individuals within a neighborhood, such as a skill or knowledge through social services, education, training, and leadership development;

- **Social capital** through improved interpersonal networks, trust, coordination, and cooperation for mutual benefit;

- **Physical infrastructure** through improved housing, transportation, and recreational and open space;

- **Economic infrastructure** in the form of how goods and services are distributed and how capital flows within the community and the larger environment. Activities may include improved job opportunities and capitalization of private and commercial institutions.

- **Institutional infrastructure** by improving the scope, depth, leadership, and interrelationships of the community's institutions, including public services, non-profits, and private-sector institutions;

- **Political strength** by increasing the ability to exert a legitimate and effective voice within and outside the community.

These six dimensions provide a framework for organizing University-Community Partnership improvement activities.

According to Marwell et al (2003), relationships that ensue between universities and communities tend to follow certain distinct configurations. From a review of approaches to university-community partnerships, nine distinct models emerge.

1. Faculty-Directed Research: The most common partnership is one formed between a community-based organization (CBO) and an individual faculty member for research purposes. Usually initiated by the faculty member, this approach is implemented according to the faculty member's personal interests and expertise. A variation on this model is its use in participatory or collaborative research; here, the faculty member can serve either as the project initiator or as a collaborator. The faculty-directed research model often transforms into or originates as a service-learning or formalized university center model, or even a service (volunteer) relationship. A key research approach being developed in this mode is research–teaching integration wherein a research agenda is embedded in the course work of students (Oaña, 2002). This will be explored in some universities in the University Belt.

2. Service-Learning: Another common model is the service-learning model. This is a form of experiential learning in which students apply their classroom learning in a community setting outside the university. A wide range of activities is incorporated in this model, from internships to consulting to other classroom projects. This model usually is limited to a one-semester time commitment, although many faculty members maintain relationships with the same CBOs on a regular basis. This allows them to provide services through students over multiple years. The success of these partnerships is highly dependent on individual students' expertise and motivations, and their professors' supervision. Students are directly supervised by their professors and turn in their work product to their professor.

3. University-Based Consultancy: This model relies on the use of academic expertise to help the community develop theoretical understanding about some issue of interest. This approach often is initiated by an individual or organization from the community seeking information about a specific problem. Assistance takes the form of a time-limited, project-based contract between the university expert and the community actor. Methodologies can include technical research and analysis, data collection and analysis, action research, conflict resolution and needs assessments.

4. Formalized University Center: This model is usually the outgrowth of individual long-term partnerships that have developed a specific expertise and relationship between university and community. The formalizing of the relationship occurs in recognition of the long-term use by the community of a particular service from the university. A center extends the university-community relationship beyond the time-limited efforts of previous models, via a formalized entity with formal operating procedures and a mixture of staff, student and faculty participation. Centers frequently generate their own financial support through grants from private and university sources, and may even incorporate as their own nonprofit organization.

5. Continuing Education/Management Training: Many universities and colleges offer continuing education services such as management training or seminars for individuals working in the nonprofit sector, or to specific nonprofit organizations. This model involves the extension of specialized university knowledge for nonprofit organization staff development, and the cultivation of staff and organizational expertise. This training is usually carried out in a classroom setting and can lead to certificates or degrees. This model is institutionalized within the university, and can be financially profitable for it.

6. Service: Linking Community Needs with Volunteers: Many universities have offices, student groups, or clubs whose sole purpose is to link people associated with the university to volunteer opportunities in the surrounding community. In addition, faculty members and administrators often serve

as board members for local community organizations. While volunteer contact is largely on an individual-interest basis, these associations are a way for community groups to keep in contact with and be apprised of potential resources within the university. The initial volunteer contact can easily become part of a larger, more comprehensive partnership.

7. University Corporate Citizen: In addition to the role they play in education, most universities also have a corporate citizen role; they are powerful economic and social players in their communities, and have an interest in promoting good relationships with other local actors. "Good corporate citizen" efforts often are led by a university's community relations or public affairs office. They usually are the result of a university's interest in local community and economic development for the purposes of attracting students and faculty, and making a social contribution to its city and the local workforce.

8. Government/Philanthropy: Government and foundation roles in the encouragement of university-community partnerships also constitute a model of partnership. The overriding interests of foundations and government are to foster, encourage and develop specific areas of research and practice. The agenda for this type of university-community partnership is set or greatly influenced by the foundation and/or government body, rather than by the university or individual researchers. This model carries the extra punch of funding allocated specifically for the preferred approach to these partnerships.

9. Intermediary Support: The last model identified, that of intermediary support, exists when a third party steps in to facilitate the transmission of expertise or need between universities and communities. These intermediary organizations may develop their own expertise to bring to nonprofits, or they may link community interests and university expertise through various funding sources and coordination services. The expertise provided is usually management-focused and includes technical training, consultancy, data production, new venture "incubation," or clearinghouse services.

Any university-community partnership could begin with one of these models, and then develop into another model. This type of transition would depend on factors such as general interest, capacity, outcomes, longevity of the relationship, and other extant relationships, due to the fact that each model requires different responsibilities and responsiveness from each partner. These models offer a roadmap to begin to understand the breadth of university-community partnership approaches.

5.0 Concerns in Research Development and Management in the Philippines

The results of the interviews of Philippine architectural educators and the survey assessments of the state of architectural education can be representative of the challenges and opportunities facing Philippine research at present. The following four challenges for research are enumerated and discussed below (adapted from Oaña, 2002):

The Challenge of Engagement. Research is generally seen as an activity dissociated from teaching. Faculty cannot do research because they are too loaded up with teaching. The embedded research approach can be an answer to bridge this dichotomy. Universities need only to explore ways and means for this integrated approach to be tried and tested.   .

It is an accepted truth that one can never be what one wants to be if one does not know who and what he or she is. Self-knowledge is vital to development. Through this, one can sieve and process what is appropriate for one's development. Likewise, in the field of research, it is essential for researchers to know who they are and what society demands of them before acquiring knowledge in developing themselves. Thus, multi-dimensional studies on who and what we are as researchers need to be pursued with the results disseminated. Also a clear statement of the goals of Philippine urban research should be articulated and related to the identified knowledge bases. These can serve as guide to the

development of appropriate locally generated knowledge that can help in preserving the national identity and helping national development. Specialization concerns need to be grounded in this frame.

The Challenge of Equity. For research to benefit the majority, it is imperative for researchers to strike a balance between the need to be globally competitive and to be locally responsive. New methods and technologies should be assessed in terms of their appropriateness to both national needs and global demands. Likewise teaching and research methods should be primarily calibrated to the inherent character of local students. Thus the knowledge and skills learned and generated should first benefit the country and majority of its people as much as the world. It is also envisioned that the knowledge generated can be equitably shared among HEIs. Furthermore respect for regional differences and needs be inputted in developing an equitable knowledge base. The National Centers of Excellence are mandated to lead in developing their knowledge bases along these lines.

The Challenge of Vitality. It has been said that the gauge of satisfaction in the areas of architecture, urban design and related fields of urban research are measurable most especially by the quality and vitality of life in the built environment. Urban researchers should be in the forefront of renewing and harnessing the urban and architectural heritage. It is stated that the most essential challenge of urban research is to transform, enhance and revitalize urban culture and heritage.

The Challenge of Connectivity. Knowledge is like water and power. They need to flow. It can only flow and be beneficial if the proper pipeline or flow network is laid. The speed and diversity of knowledge flow has been facilitated by the advent of the information technology particularly through the internet. Teaching and research are being revolutionized because of computer technology. This connectivity can also harness knowledge access and interaction among researchers. A knowledge network can be set up through such technology. Furthermore distance and flexible learning systems can be developed more effectively. Moreover, connectivity implies connectedness, the work of researchers in a given field should connect to the work of those from other disciplines focus on urban concerns and link to the aspirations and character of the people it is to nurture and the nation it is to ensconce.

As cited by Bernardo (1997) in his assessment of research in the Philippines, research needs to be programmatic for useful and meaningful knowledge emerges from research only when there is a sustained and coordinated effort at understanding the different components of a problem. He further noted that given that research should generate useful knowledge and given that resources and support for research are scarce, it make as a great deal of sense that research efforts be programmed systematically. It has been the experience of the academic society as a whole that its research efforts cannot effectively contribute to the nation's development partly attributed to the preponderance of extremely confined studies with limited insight and bounded significance (Bernardo, 1997).

6.0 A University's Response to the Urban Challenge:
The Establishment of the FEU Center for Studies on the Urban Environment

"…One's success has often been gauged in terms of the material wealth that one accumulates. Higher ethical considerations, however demand, that the worth of the individual be measured by the quality of service that he renders to the community. Hence not only selfish interest but also public welfare should direct one's energies and command one's zeal."

Dr. Nicanor B. Reyes, FEU Founder and First President, 4 April 1938

The **FEU Center for the Studies on the Urban Environment (FEU-SURE)** is the brainchild of FEU leadership led by Dr. Lourdes Montinola, the only surviving child of the Founder and immediate past FEU President, Dr. Edilberto de Jesus in the year 2000. It is fully supported by the current President, Dr. Lydia Balatbat-Echauz. The Center was set up as a response to the

continuing degradation of the urban environment especially in the inner-city. As its initial major project, the Center organized an International Conference on the Megacities in the 21st Century in November 2000. It was able to gather speakers from different Asian and Western countries to share their knowledge and experiences in urban renewal and development. Prior to this, FEU-SURE through the different Institutes had held a series of lectures by recognized Filipino professionals and executives dealing with urban concerns. The Center started with Environmental Planner (En.P.) Miguel Carpio as Executive Director until the early part of the 2002 so he can fully concentrate as Dean of the FEU Institute of Architecture and Fine Arts (IARFA). He was succeeded by En.P. Joel R. Oaña from the University of the Philippines. The Center is aiming to become a university-based research and extension unit that will enable and strengthen local city-community-university urban partnerships. These partnerships are the key in harnessing and generating resources for good governance and empowerment to facilitate a better urban environment.

6.1 The Vision of the Center

Empowered city-community-university urban partnerships efficiently and effectively harnessing, generating, protecting and managing urban heritage and resources for a better urban environment.

6.2 The Mission of the Center

The FEU Center for the Studies on the Urban Environment (FEU-SURE) is a university-based research and extension unit that aims to enable and strengthen local city-community-university urban partnerships to harness and generate resources for good governance and empowerment to facilitate a better urban environment.

6.3 Objectives

- To assist the various academic units of the University in the development and application of appropriate and multidisci-plinary urban research that are relevant and responsive to the developmental needs of urban communities geared primarily to the upliftment of the urban quality of life;

- To develop studies and facilitate venues and partnerships that can foster the transfer of knowledge on the urban environment for the inspiration and capability-building of the University community;

- To explore and innovate new technologies to adapt to the developmental needs for a better urban environment;

- To strengthen the research and service functions of the University through an integrated teaching-research and service programs for urban community capability-building and alleviation of urban problems;

- To assist in the holistic development of capable, competent and competitive professionals that can bolster the leadership capacity of the nation;

- To attend to the publication and dissemination of the research output and other related activities of the Center in tandem with other concerned units of the University.

6.4   Research Management Profile

- Overall strategy for the management and development of its research activities

As a Center focused on the renewal of the urban environment, a community-based action research strategy is being espoused anchored on the development of university-community partnerships and the integration of the research and teaching function of the university. Still at its conceptual stage, the research-teaching integration approach is embedding a research agenda in the coursework of students. The strategies are expounded in the Proposed Institutional Development and Strategic Plan of the Center and other attached materials.

- Research priorities in accordance with national needs and outcomes utilization

The research initiatives of the Center is focused on the development of a responsive and relevant curriculum particularly for the architecture and planning courses that have direct impact on the environment. This is a priority consideration for CHED. It also would like to contribute to the intent of the Local Government Code (RA 7160) and the Urban Development and Housing Act (RA7279) to build the capabilities of local governments and communities to preserve and enhance their physical, social, economic and cultural heritage and environment. This concerns poverty alleviation and job creation through community-based urban renewal initiatives which are the top two concerns of the current Philippine government. It will also focus some of its studies towards the decongestion of Manila and the enhancement of the impact of the light railway transit and other studies to facilitate urban revitalization and heritage conservation. The role of urban universities and its partnership with the other stakeholders in the renewal of cities is also a research priority of the Center particularly in the context of the coming UN Decade of Education for Sustainable Development (DESD) in 2005 in support of the Global Higher Education for Sustainability Partnership (GHESP). The partnership is a joint initiative of different international network of HEIs.

- Local and International research networks and linkages

The Center is currently deeply involved in two research networks. These are the Council of Architectural Researchers and Educators (ArchCARE) Establishment Initiative and the Manila Urban Research Network and Alliance (Manila Urban RenewALL) in collaboration with the University of Tokyo Center for Sustainable Urban Regeneration (cSUR). These focus on the research priorities of the Center on responsive and relevant curriculum and urban renewal studies respectively. A proposed Study on Urban Character with the University of Melbourne is currently in its exploratory stage. Pertinent materials concerning these linkages are attached.

- Research Personnel and Partners Profile

The Executive Director and Research Head of the Center, a Registered Environmental Planner, has been in the field of architecture and planning research for sixteen (16) years. He had been a part of the University of the Philippines (U.P.) Diliman Research Community since 1988 starting as a Research Assistant at the U.P. Building Research Service (UPBRS) under then concurrent Director and Dean of the U.P. College of Architecture, Dr. Geronimo V. Manahan, an eminent architect-planner-educator in the Philippines. With the guidance of Dr. Manahan, he developed, assisted and implemented researches on building materials, housing, small-format aerial photography and other architecture and planning-related research concerns until 1996 when he moved as Senior Research Associate to the U.P. College of Architecture. In the College, he undertook researches and studies related to architectural and planning education, institution-building and urban renewal. He also did some team-teaching arrangements with the Faculty on Urban Planning and Design. He assumed his current position at FEU-SURE in September 2002. He has brought his network of professors and researchers

to be potential research partners of the Center.

He earned his B.S. Architecture and Master of Arts in Urban and Regional Planning Degree both from U.P. and is a Registered Environmental Planner. He was a recipient of a thesis support grant from the APEC Study network for his Masters' Degree Thesis entitled " A Community-based Adaptation of Land Readjustment for Urban Renewal in Metro Manila: Lessons from Three East Asian Cities' Experiences

He serves at present as one of the Board of Directors of the Philippine Institute of Environmental Planners (PIEP) and is Chair of the Continuing Professional Education Committee. He also teaches Environmental Management focusing on Cities in the FEU Institute of Graduate Studies. He still continues as Coordinator of the Council of Architectural Researchers and Educators (ARCHCARE) Interim Steering Committee with Proponent Core Architectural Schools of UP, UST, FEU, Mapua, PUP and CCP.

- Support to its postgraduate research students

The Director teaches from time to time a course on Environmental Management for the graduate students of the Institute of Graduate Studies. He also advises graduate students for their Masters Degree Thesis and supervises some student research work that concerns the urban environment. He currently advises, Ms. Everjeann Redulla, a Faculty in Tourism of the FEU Institute of Accounts, Business and Finance for her Masters Degree thesis at the UP School of Urban and Regional Planning on the Inner-City Urban Heritage Tourism, An Approach to Urban Revitalization: The Application of Avenida-Rizal Avenue, City of Manila. He also co-supervised with Dr. Fernando Zialcita of Ateneo de Manila University, a Japanese student of La Trobe University in Australia who did some phenomenology research with selected sidewalk vendors at Nicanor Reyes Street. Mr. Daisuke Tanaka is a sociology-anthropology student of Dr. Trevor Hogan, an Australian professor which has links with the Center. Dr. Hogan is the one who established the Philippine-Australia Study Network based in Ateneo.

- Community contribution through the effective transfer of know-how, technology and applications of knowledge.

Through its Nicanor Reyes Street Revitalization Initiative where stakeholders' dialogue, consultation and fora were undertaken, the University was able to influence the local government to make the University Belt Area as its next area for development under its "Buhayin ang Maynila" Program. The Center is now undertaking Street Stakeholders Profiling Study Series which will serve as inputs to the potential development public-private partnerships for urban renewal. Furthermore, the Center has encouraged the involvement of other universities to undertake their own researchers of the streets where they are located. For this purpose, the Inter-University Cooperation for Community-based Urban Renewal (IUCCURE) was formed composing of four (4) HEIs in the Central U-Belt Area, Far Eastern University, University of the East, the University of Manila and Philippine School of Business Administration. The joint program is the Streets of Manila Study and Development Series. Other schools, upon presentation of the program in the U-Belt Consortium R&D Linkage Meetings, also got interested to undertake their own street studies. Among them are Adamson University, Manuel L. Quezon University and FEATI University. A Street Study Urban Research Seminar-Workshop is being planned to help the schools undertake their researches and coordinate and link the effort to develop a continuing local knowledge generation for the urban revitalization and cultural heritage preservation of the Streets of Manila. A Pedestrian Circuit connecting strategic streets in the U-Belt that can be sustained through University-Community Partnerships of HEIs in the street is also being conceptualized and operationalized.

The Center through the project leadership of Dr. Elizabeth Melchor, was also able to complete a project

for the League of Cities of the Philippines (LCP) to aid them in urban and local area development. This is the City Development Strategy (CDS2) Toolkit Development Project. " The project was implemented through the League of Cities of the Philippines, Inc. (LCP) which received technical assistance grant from the Cities Alliance (administered by the World Bank) to support the preparation of city development strategies for a number of Philippine cities.

The Center has also embarked a FEU Urban Heritage Conservation Program (FEUConserve). This is in response of the University to the encouragement of sectors in Philippine local heritage conservation to share its experience to the international community in its effort to preserve its own architectural heritage. One of this initiatives is through participating in UNESCO's Asia Pacific Heritage Awards for Cultural Heritage Conservation. This Award recognize the efforts and contribution of individuals and organizations within the private sector, including private-public partnerships who have successfully restored and conserved structures and buildings of heritage value in the Asia Pacific Region. The University has completed its output for participation in the 2004 cycle of the Program. It is encouraged by UNESCO to also participate in the 2005 cycle. A recognition of the effort will instill more "pride-of-place" in the University Belt Area that can help in uplifting the character and asset of the urban community.

7.0 The SURE Road Map to a Sustainable Urban Research Program

In their book, Emblems of Quality in Higher Education, Developing and Sustaining High Quality Programs, Haworth and Conrad (1997) observed that a high-quality program cannot be reduced to a handful of discrete items or benchmarks that faculty and administrators piece together: Quality demands the collective intelligence and commitment of many people who mutually invest in their own and other's learning. Their concept of quality is grounded on their Engagement Theory of Program Quality. The theory is founded upon the definition of high quality programs as those which contribute to enriching learning experiences for students that have positive effects on their growth and development. The theory is organized around one central idea: student, faculty, and administrative engagement in teaching and learning and for the purposes of this paper, research. As principal stakeholders in higher education, they need to invest in five separate clusters of program attributes: diverse and engaged participants, participatory cultures, interactive teaching and learning, connected program requirements, and adequate resources.   They noted that rather than "assembling" a high quality program, a more appropriate and sustainable approach is people "growing" or "cultivating" one with this attributes.

Seeing an affinity with the precepts and premises that they are espousing for quality programs in higher education with those presented in this paper consistent with the goals of engagement, vitality, equity and connectivity, a road map for a sustainable research program as espoused by FEU-SURE is presented as action points (adapted from Oaña, 2002):

Encourage More Diverse and Engaged Participants. A wider participation among researchers needs to be encouraged. It is observed that each has their own unique insight to contribute to a more flexible integration of research and teaching than can be adjusted to their own educational context and environment. The National Centers of Excellence for Architecture were not accredited as such to strengthen its hold and monopoly of knowledge but to disseminate and more importantly to encourage other schools to realize their own potential in contributing to the betterment of the Philippine urban conditions.

Establish More Participatory Cultures. It is widely accepted in any development field that the sustainability of a program is proportionate to the level of collaboration of the stakeholders or beneficiary community. Thus it is imperative that the community of researchers, educators and administrators establish a venue for participation having a shared program direction, fostering

"community spirit" and supporting each other to take risk in developmental ventures. Collectively they can develop a coordinated and coherent research-teaching agenda and collaborative research networks.

Develop More Integrated and Interactive Research-Teaching Learning Systems and Programs. The research-teaching integration approach is just one system but not the only system. It is encouraged that the whole community of researchers and educator venture into developing their own system based or inspired by those already being developed. Moreover, a more integrated research topic selection can be collaborated on by the HEIs to accelerate the increase of knowledge data that can serve as sources of the knowledge base of urban research . These can be facilitated by inputting in the integration: critical dialogue, integrative learning, mentoring, cooperative peer learning and out-of-class activities.

Facilitate More Connection and Coherence in Program Requirements. It is the aim of all learning institutions to offer a holistic learning experience both for their faculty and students. This consist of integrated and full development of the person, his or her understanding and adeptness in applying the necessary processes and adapting to the existing societal systems and the quality of his work that contribute to a better environment. A continued assessment of the curriculum and their integration with an urban research agenda should be undertaken focusing on the identified attributes of quality.

Generate More Adequate Resources. A plan or a program is good only when it can be efficiently and effectively implemented. It can only be done with adequate resources and its proper management. Ample financial support for both students, faculty and researchers should be generated. Research programs and their integrated courses should be developed and delivered with flexibility while supportive institutional and departmental reward structure can be developed for faculty and researchers. An important concern is the creation of Research Professor position to team up with Teaching Professors to sustain the integrated framework. But if the adequate resources cannot be generated at a particular time, a strategic stewardship of existing resources should be employed. This can only be made possible through clear goals and priorities. Furthermore, universities can partners with NGOs and local agencies in developing research-oriented policy and development studies that access the grants offered by multilateral and bilateral agencies such as the EU, USAID,ADB and World Bank among others.

In our country, we are still experiencing fragmentation and compartmentalization of learning due to the prevalence of discipline-based research orientation. It also exacerbated particularly by the perceived dichotomy of research and teaching and the seeming disconnectedness of education to the actual developmental concerns of urban communities and the built environment. Some HEIs have already taken initiatives to respond to this predicament of the academe. But there is a need for an integrated general framework and methodologies that can help in their effort to be more coordinated and coherent. I hope this paper contributes in the attempt to answer this need.

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One factor that accelerated the urbanization of the City of Manila was the establishment of higher education institutions in the urban center. Higher education institutions were established in Manila at the Intramuros area as early as 1571, when the Jesuits built the Real Colegio de San Jose. Thereafter various universities and colleges were established in the heart of the city, more numerously across the Pasig River. Through time, the challenges brought about by the urbanization has been compounded. The Manila University Belt Area has become a compact urban area that has a high concentration of people with its concomitant problems of obsolescence, congestion, criminality, escalating housing costs and social and economic polarization. It is now experiencing a major urban restructuring. These complex urban problems cannot be only solved on a hunch or on the whim of local leaders. These necessitate a thorough understanding of the place, the people and institutions in the area and lessons from parallel experiences in other countries. It needs the assistance of "urbane" knowledge institutions such as the universities. The paper will discuss the catalytic role of universities in the regeneration of cities and the development of a framework of partnership between the city, the universities and the community in the context of the University Belt Area and related initiatives.

1.0 The Urban -- Urbanization and its Impact to the City of Manila: Focus on the University Belt Area

Urbanization refers to a process in which an increasing proportion of an entire population lives in cities and the suburbs of cities. It is seen as one of the most powerful phenomena influencing global sustainability prospects today. The convergence of economic growth, population growth and urban expansion offers both

great challenges and potentials for sustaining a city. These challenges and potentials of urbanization are more felt in the cities of the developing world such as Manila.

Urbanization in the Philippines is characterized by the primacy of Metro Manila. Its population increased from nearly 2.5 million in 1960 to over 9.9 million in 2000. The population growth of Metro Manila has slowed down from 3.3 percent per annum in 1995 to just 1.06 in 2000 as new growth has shifted to the urban fringe. Manila, aside from Navotas, is still the most densely populated area with a density of 43,205 persons per sq.km. recorded in 1995. If the daytime population (those working or studying in the area) will be considered, this density will even go much higher.

1.1 The Manila University Belt Area

One factor that accelerated the urbanization of the City of Manila was the establishment of higher education institutions in the urban center. Higher education institutions were established in Manila at the Intramuros area as early as 1571, when the Jesuits built the Real Colegio de San Jose. Thereafter various colleges were established by other religious groups, prominent among them is the University of Santo Tomas, which was founded in 1611.

The first schools which originally located and paved the way for the eventual establishment of the University Belt were Sta. Catalina, which set up a convent in the Legarda area as early as 1893; San Beda and La Consolacion, founded in 1901; Centro Escolar de Señoritas, the precursor of the University, founded in 1907; Holy Ghost now the College of the Holy Spirit, founded in 1913 and Mapa High School, which opened as the East High School in 1923. All five started elsewhere before converging at the Mendiola area. This period can be called as the sectarian stage of the development of the University Belt Area.
The non-sectarian stage of the development of the University Belt can traced back to two schools, one public and another private. The public or government school is now known as the Polytechnic University of the Philippines (PUP) which was founded in 1904 as part of the city school system of Manila. The first private school that located in the area and eventually evolved into a university is the University of Manila. It transferred to its present site at the University Belt Area in 1919. Currently there are about 14 major higher education institutions in the area with a total student population of about 130,000.

The two largest non-sectarian universities in the U-Belt Area are Far Eastern University and the University of the East. During the 1960s they had a jointly reached an enrolment of about 100,000 students which from then on were cut down as they built satellite campuses outside of Manila. The Far Eastern University was founded in 1928 by Dr. Nicanor Reyes, along with other distinguished educators from the Department of Economics of the University of the Philippines. He envisioned a school that would promote the teaching of accounting to Filipinos, a profession formerly available only to foreigners. He wanted to prove that Filipinos were capable and trustworthy in handling the hundred of enterprises that would result with the coming of the independence of the country. The University of the East started as a Certified Public Accountant (CPA) Review Class just a year after the war in 1946. It was established by Dr. Francisco T. Dalupan, Sr., a colleague and partner of Dr. Reyes in FEU before the war.

Sensing the degradation of the urban environment around them and the decay of the urban heritage that have cradled their institutions, both schools undertook initiatives to renew the inner city of Manila. As part of its program to develop a strong research capability particularly for the betterment of the environment, FEU in 2000 initiated the setting up of the Center for Studies on the Urban Environment (SURE) to coordinate the University's research efforts with the support of its different Institutes. Being located in the U-Belt area at the heart of Manila since 1928 and observing the continuing degradation in its immediate urban environment, FEU would like to contribute its share in the alleviation of this urban condition. UE, on the other hand facilitated the establishment of the UE Foundation for Research and Advanced Studies, Inc. with the aim to harness knowledge for the benefit of the university, the community and the environment. The Foundation commissioned an urban renewal study around its immediate area that was completed in 2001. Considering their common objectives, in 2003, the two universities banded together along with the University of Manila

and Philippine School of Business Administration to form the Inter-University Cooperation for Community-based Urban Renewal (IUCCURE) for an initial two-year program.

1.2 Current Urban Challenges in the U-Belt Area

The Manila University Belt Area can be considered as a compact urban area that has a high concentration of people. The educational institutions along and directly accessible from Claro M. Recto, the main thoroughfare, are host to about 130,000 students with 117,000 in the tertiary level. Along with the estimated resident population of 25,000, an aggregate of about 155,000 people are moving in and out at its central area. In addition, an annual average daily traffic of 17,000 vehicles are passing through C.M. Recto with the intersection at S.H. Loyola as the observation point. This volume of pedestrian and vehicular movements aggravated by inappropriate urban design and management is causing traffic congestion and impeded traffic flow in the area. The unregulated location of sidewalk vendors in the area has also made the situation worse.

Another concern observed in the area is the lack of convergence nodes which are important in optimizing student interaction among the U-Belt students. These nodes can also contribute to the strengthening of community integration. Urban alienation can happen between groups of people if no venues for interaction among them are made available. For a highly dense compact area, pedestrian parks and green open spaces become necessities. These can also help diffuse urban tension and foster social cohesion especially among students from the different schools in the area.

The main engines of the economy of the U-Belt are undoubtedly the students and the university personnel. Because of the presence of a large market base, the U-Belt has assumed a dominant commercial character which has given priority to shopping and recreation rather than to enhancing a learning atmosphere. This incompatibility with the educational setting has to be addressed. This situation has at least to be balanced so as a complementation between these two main functions of the urban area can be achieved.

Moreover, the urban blight and incongruous architectural character unconducive to the productive and creative pursuit of learning and the good life have also been identified as important concerns. Environmental problems, more specifically flooding and an inefficient solid waste disposal system are gravely experienced in the area (Manalo and Oaña, 2001) .

The area is in the midst of a major urban restructuring due to the operation of another light rail transit (LRT2) and the pedestrianization of a segment of a major thoroughfare, Rizal Avenue under the existing LRT1. This physical development drastically altered the movement of people and their experiences of the urban space. Furthermore, old theatres in the area are torn down to give way to computer schools and facilities. This is partly in response to the move of the national government to identify the University Belt Area as one of the national information technology (IT) hubs in the country.

2.0 The Urbane – The University in the City

"Universities cannot afford to become islands of affluence, self-importance and horticultural beauty in seas of squalor, violence and despair"
Dr. Ernest L. Boyer, Sr., President, The Carnegie Foundation for the Advancement of Teaching, 1994

2.1 The Nature and Function of the University

Teaching, research, and service historically have all been fundamental functions of the university. From the evolution of its focus on educating the leaders of society, to its function of providing sites of research to enhance national productivity, to the inclusion of a service dimension, higher education has adapted to societal needs. The relative importance of teaching, research and service, however, differs according to

each university's history, mission, student body, and surrounding community. The extent of universities' commitments to working within their wider community environments depends strongly upon these factors.

A study by Marwell et al (2003) noted that one key distinction among universities in terms of their orientation towards community concerns is whether the university is a public or a private institution. Public universities are established with clear missions to serve their communities through education, research and service. Whether land-grant universities founded to improve the productivity of farmers and rural industries, or public university systems dedicated to teaching and research more generally, the agendas of public institutions are significantly impacted by the concerns of local, state, and federal governments. In the extreme, governments may hold back public university funding in order to force university-community partnership activity. Private institutions, by contrast, have much greater autonomy in making decisions about their involvement with community members and organizations. While motivated by the desire to be good corporate citizens, private universities ultimately are not constrained by government in the same way that public universities are. While private universities have more leeway to pursue their own particularistic interests, there exist exemplary university-community partnerships in private universities, such as the University of Pennsylvania, Trinity College (Hartford, CT), or Temple University.

Urban universities have been faced with a unique set of issues stemming from the urban crises of the 1960s, and the resulting deterioration of their surrounding neighborhoods. Since that time, these universities have often found it necessary to become involved in neighborhood development work in order to attract and house faculty, students and staff. These efforts frequently have been opposed by non-university affiliated residents of these areas, who feared displacement and changes in neighborhood amenities and costs. Many universities learned difficult lessons about undertaking neighborhood development work without regard for the desires and needs of non-university affiliates. More recently, universities have found that it may be in their own best interests to engage in development work with the cooperation and support of other community members (Marwell et al, 2003) .

Richard Rosan, President of the Urban Land Institute, wrote in 2002 that "few institutions have more to offer in propelling economic development on both a national and local basis than colleges and universities. They are the creators and disseminators of knowledge and understanding that can help address urban challenges. As leading institutions in their communities, they are powerful economic drivers, technology centers, employers, developers and investors."

2.2 The Dilemma of the University in the City

As stated above, universities are catalysts for economic development. Over the past decade, these institutions have become more directly involved in the economic and social stability of the neighborhoods and communities in which they are located. They had no choice. Because they cannot move to a better location, they have a real stake in making the best of where they are.

In the United States, it was observed that the traditional insularity of universities is being superseded by the solidarity of school and community. Urban universities are putting their money and human capital to work in collaboration and cooperation with the local government, and the non-profit and private sector. They are targeting a wide range of issues, including local economic development projects, affordable housing, public health services and environmental protection.

This involvement by universities represents a major shift in thinking and commitment. In earlier decades, just as people abandoned cities to flee to the suburbs, and manufacturers closed or moved, many universities abandoned cities by building both physical and psychological barriers around themselves. Some became so big, they turned into self-contained, self-enclosed communities, with no relation to the surrounding neighborhoods and no motivation to be involved in community improvement. This can also be observed in the Manila experience.

The changes as mentioned by Marwell et al (2003) can be attributed to the following:

1. **The Knowledge-based Economy Shift**. Following World War II, the United States' economy started evolving from one powered by brawn to one powered by brain. This was due in part, to research conducted by major universities such as Stanford and the Massachusetts Institute of Technology. However, during the 1990s, the evolution of the knowledge-based economy became a revolution. As a result, both the role of universities started expanding, and in many cities now, universities are among the largest employers. This is true not just in traditional university towns, but in large urban areas like Philadelphia, where the University of Pennsylvania is the largest single employer in city.

2. **Institutional and Economic Survival**. Universities are increasingly involved in urban revitalization to protect their campuses and create a favorable environment. As I mentioned earlier, they cannot pack their bags and move if the neighborhoods surrounding them become uninviting, blighted and dangerous. Higher education is competitive like any other field -- students want to live and go to school in a fun, exciting neighborhood, and their parents want them to live and learn in a safe environment. Clearly, it is in the institutions' best interest to promote and participate in community revitalization.

3. **Civic Engagement**. A third reason is an increasing emphasis on the university's role as a major civic participant, and on the responsibility of the university faculty and staff to be engaged in community issues that affect the university either directly or indirectly. Certainly, greater involvement in housing and community development is one manifestation of this civic engagement. In addition, universities are expanding their teaching and research focus to include social outreach to youth and families, kindergarten through high school education, information technology and public policy. In this context, Henton et al (1997), a partner proponent in the development of Silicon Valley, coined the term **Civic Entrepreneurs**, which are entities, foremost of which are universities, that help interests come together to deal constructively with forces of change. They are marked by mediating people and organizations which facilitate the establishment of "economic communities" which they defined as places with strong, responsive relationships between the economy and the community. These provide companies and communities with sustained advantage and resiliency. These, they contend, are the appropriate structures in the evolving globalization of the world system.

In sum, the social component of "town-gown" agreements has become more critical as universities have grown more willing to be a part of the community, not just located in the community.

2.3 The Concept of University-Community Partnerships

It is becoming a universally accepted concept that **collaborative partnerships** among the city stakeholders are the key to the continued vitality, livability and sustainability of cities. Two key players in this partnership are the **local authorities in close coordination with urban communities** and the **city-based or urban universities**. These urban partnerships can be venues where the academic and technical expertise of the universities and the practical and actual experience of local authorities and communities can converge and synergize to build a mutually beneficial connection, communication, cooperation and collaboration for the betterment of the city. As the universities are given the opportunity to actually apply their ideas and concepts of urban development, the local authorities and urban communities are introduced to helpful processes and methodologies that can enlighten and empower them. A mutually reinforcing partnership should be forged between an institution that can primarily think and those that are mandated to act or implement programs and projects for the public good.

Dr. David Cox of the University of Memphis, citing the study of Chaskin and Brown (1996) enumerated three factors that can influence urban community/neighborhood change: **individual behaviors, broad socio-economic structural changes and changes in the networks within which people function.** He further

noted that there are six (6) dimensions of community that provide the means to affect those factors which include enhancing the following:

♦ **Human capital** by improving the assets of individuals within a neighborhood, such as a skill or knowledge through social services, education, training, and leadership development;

♦ **Social capital** through improved interpersonal networks, trust, coordination, and cooperation for mutual benefit;

♦ **Physical infrastructure** through improved housing, transportation, and recreational and open space;

♦ **Economic infrastructure** in the form of how goods and services are distributed and how capital flows within the community and the larger environment. Activities may include improved job opportunities and capitalization of private and commercial institutions.

♦ **Institutional infrastructure** by improving the scope, depth, leadership, and interrelationships of the community's institutions, including public services, non-profits, and private-sector institutions;

♦ **Political strength** by increasing the ability to exert a legitimate and effective voice within and outside the community.

These six dimensions provide a framework for organizing University-Community Partnership improvement activities.

According to Marwell et al (2003), relationships that ensue between universities and communities tend to follow certain distinct configurations. From a review of approaches to university-community partnerships, nine distinct models emerge.

1. Faculty-Directed Research: The most common partnership is one formed between a community-based organization (CBO) and an individual faculty member for research purposes. Usually initiated by the faculty member, this approach is implemented according to the faculty member's personal interests and expertise. A variation on this model is its use in participatory or collaborative research; here, the faculty member can serve either as the project initiator or as a collaborator. The faculty-directed research model often transforms into or originates as a service-learning or formalized university center model, or even a service (volunteer) relationship. A key research approach being developed in this mode is research–teaching integration wherein a research agenda is embedded in the course work of students (Oaña, 2002). This will be explored in some universities in the University Belt.

2. Service-Learning: Another common model is the service-learning model. This is a form of experiential learning in which students apply their classroom learning in a community setting outside the university. A wide range of activities is incorporated in this model, from internships to consulting to other classroom projects. This model usually is limited to a one-semester time commitment, although many faculty members maintain relationships with the same CBOs on a regular basis. This allows them to provide services through students over multiple years. The success of these partnerships is highly dependent on individual students' expertise and motivations, and their professors' supervision. Students are directly supervised by their professors and turn in their work product to their professor.

3. University-Based Consultancy: This model relies on the use of academic expertise to help the community develop theoretical understanding about some issue of interest. This approach often is initiated by an individual or organization from the community seeking information about a specific problem. Assistance takes the form of a time-limited, project-based contract between the university expert and the

community actor. Methodologies can include technical research and analysis, data collection and analysis, action research, conflict resolution and needs assessments.

4. Formalized University Center: This model is usually the outgrowth of individual long-term partnerships that have developed a specific expertise and relationship between university and community. The formalizing of the relationship occurs in recognition of the long-term use by the community of a particular service from the university. A center extends the university-community relationship beyond the time-limited efforts of previous models, via a formalized entity with formal operating procedures and a mixture of staff, student and faculty participation. Centers frequently generate their own financial support through grants from private and university sources, and may even incorporate as their own nonprofit organization.

5. Continuing Education/Management Training: Many universities and colleges offer continuing education services such as management training or seminars for individuals working in the nonprofit sector, or to specific nonprofit organizations. This model involves the extension of specialized university knowledge for nonprofit organization staff development, and the cultivation of staff and organizational expertise. This training is usually carried out in a classroom setting and can lead to certificates or degrees. This model is institutionalized within the university, and can be financially profitable for it.

6. Service: Linking Community Needs with Volunteers: Many universities have offices, student groups, or clubs whose sole purpose is to link people associated with the university to volunteer opportunities in the surrounding community. In addition, faculty members and administrators often serve as board members for local community organizations. While volunteer contact is largely on an individual-interest basis, these associations are a way for community groups to keep in contact with and be apprised of potential resources within the university. The initial volunteer contact can easily become part of a larger, more comprehensive partnership.

7. University Corporate Citizen: In addition to the role they play in education, most universities also have a corporate citizen role; they are powerful economic and social players in their communities, and have an interest in promoting good relationships with other local actors. "Good corporate citizen" efforts often are led by a university's community relations or public affairs office. They usually are the result of a university's interest in local community and economic development for the purposes of attracting students and faculty, and making a social contribution to its city and the local workforce.

8. Government/Philanthropy: Government and foundation roles in the encouragement of university-community partnerships also constitute a model of partnership. The overriding interests of foundations and government are to foster, encourage and develop specific areas of research and practice. The agenda for this type of university-community partnership is set or greatly influenced by the foundation and/or government body, rather than by the university or individual researchers. This model carries the extra punch of funding allocated specifically for the preferred approach to these partnerships.

9. Intermediary Support: The last model identified, that of intermediary support, exists when a third party steps in to facilitate the transmission of expertise or need between universities and communities. These intermediary organizations may develop their own expertise to bring to nonprofits, or they may link community interests and university expertise through various funding sources and coordination services. The expertise provided is usually management-focused and includes technical training, consultancy, data production, new venture "incubation," or clearinghouse services.

Any university-community partnership could begin with one of these models, and then develop into another model. This type of transition would depend on factors such as general interest, capacity, outcomes, longevity of the relationship, and other extant relationships, due to the fact that each model requires different responsibilities and responsiveness from each partner. These models offer a roadmap to begin to understand the breadth of university-community partnership approaches.

2.4 University Initiatives in the City: The American Experience

The direct involvement of universities in neighborhood and community revitalization programs, while perhaps not new, has taken on a new meaning. Due to the tight financial resources of public agencies, communities are approaching universities more directly to contribute their own resources and expertise to revitalization efforts. Ventures with civic groups, businesses and governments are resulting in stronger neighborhoods, enhanced economic development and an improved quality of life. They are now prevalent in the United States as exemplified below:

1. **Clark University in Worcester, Massachusetts** – About 17 years ago, the University Park Partnership was formed with community groups and business organizations to revitalize Clark neighborhoods. The university refurbished dilapidated and abandoned homes, resold them to area residents and subsidized mortgages for buyers. The university also opened a secondary public school that serves as a development program for teacher education.

2. **Duke University, Durham, North Carolina** – Since 1996, the Duke-Durham Neighborhood Partnership Initiative has worked to improve 12 nearby neighborhoods. The university invested more than $2 million in an affordable housing loan fund to promote homeownership, and is involved in housing rehabilitation and new home construction.

3. **Marquette University, Milwaukee, Wisconsin** – During the 1990s, Marquette invested more than $50 million in its Campus Circle revitalization, building or rehabbing 350 housing units. As a result, the crime rate dropped in half and a dozen businesses opened.

4. **Trinity College in Hartford, Connecticut** – Since 1996, Trinity has invested more than $7 million of its endowment to develop a neighborhood revitalization initiative targeted on a 15-square-block area surrounding the college. The centerpiece is The Learning Corridor, a 16-acre educational complex that will house an elementary school, middle school, and a high school educational center. Trinity's investment has leveraged tens of millions in dollars in support from government at all levels, corporations, foundations and alumni.

5. **Union College in Schenectady, N.Y**. – In 1998, the Union-Schenectady Initiative was begun, a $10 million plan to revitalize the neighborhood bordering the campus and foster homeownership. The college's contributions include providing $1 million a year in scholarships for children of qualified home buyers; renovating dozens of properties in the area; providing mortgage programs for college staff and community residents; and developing neighborhood security programs and infrastructure improvement programs.

6. **Yale University, New Haven, Conn**. – For the past eight years, Yale has been part of the New Haven Initiative, a partnership to promote homeownership, economic development opportunities, improve public schools and revitalize downtown. The university offers an incentive program for employees to purchase homes in New Haven neighborhoods and academic programs with New Haven high schools. In addition, Yale has invested more than $20 million in downtown to support retail and spur residency in the center city.

7. **Harvard University, Cambridge, Mass**. – Harvard's 20/20/2000 fund provides $20 million in low-interest loans to non-profit groups that build affordable housing. Harvard has also pledged $1 million in grants to non-profit groups that help find solutions to the area's affordable housing shortage.

8. **University of Pennsylvania** – In 1992, Penn developed the Center for Community Partnerships to revitalize West Philadelphia neighborhoods. The university has been involved in a broad-based effort to stimulate neighborhood revival through the development of several new businesses, including a hotel, retail complex and cinema, giving special emphasis to minority-owned and female-owned enterprises. It is also

reaching out to local residents for employment opportunities, and is extending its purchasing to benefit businesses throughout Philadelphia. It has in place a housing program and is involved in public school development for the neighborhood.

The common goal of all these efforts is an improved quality of life for the residents of the university and community—what benefits one benefits the other. In today's environment of shrinking municipal budgets, shifting federal priorities and uncertainty overseas, innovative partnerships such as these are a key way—and sometimes the only way—to address the pressing needs of urban areas.

3.0 A Proposed Framework of Engagement for Universities and other HEIs towards the Urban Regeneration of Manila

Taking the cue from the university-community partnership experiences in the United States, it is high time that Manila-based universities and HEIs actively engage themselves to help regenerate Manila. The City is currently experiencing great changes. Many parts of its urban area are experiencing obsolescence – that of outliving their period of utility - or are faced with new developments such as the operation of two light rail transit systems. Also many property owners, institutions, inhabitants and even the local government itself do not have the means, the predisposition and more importantly the appropriate knowledge to harness their properties and urban heritage to make them sustainable and useful to themselves and the city. These necessitates urban regeneration which is defined as "the comprehensive and integrated vision and action which leads to the resolution of urban problems and which seeks to bring about a lasting improvement in the economic, physical, social and environmental condition of an area that has been subject to change" (Roberts, 2000)

3.1 Essentials Elements of Urban Renewal or Regeneration

Based on the author's studies, there are three essential elements of urban regeneration or inner city revitalization: **place, people and partnerships.** The first element - **place** – is analyzed through the area resource assessment which looks at the physical/visual, economic and socio-cultural resources of the study area, and proceeds to identify the major assets of the area. The second element. – **people** – involves the assessment of the capability of the area stakeholders. An area stakeholders' capability assessment can be undertaken which is essentially concerned with the characterization of individuals, groups, and entities who form the urban community. The third element – **community-based partnerships** – explores partnership arrangements that are essential for the implementation and sustainability of urban regeneration initiatives. The effectiveness of community-based partnerships is the main ingredient for the success of these initiatives (Figure 1). Their value goals are efficiency, equity and effectiveness respectively.
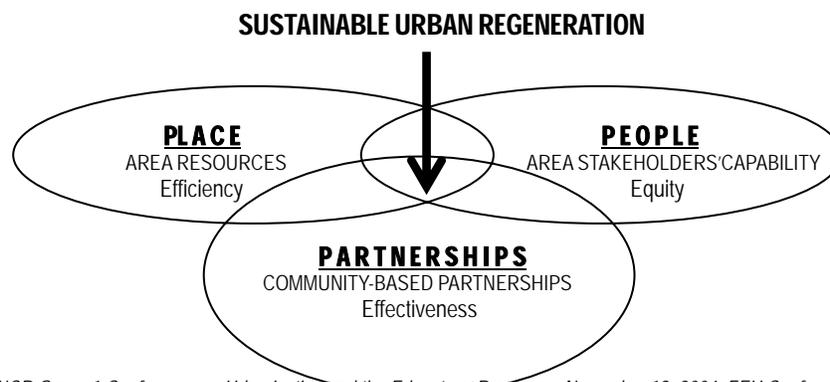
SUSTAINABLE URBAN REGENERATION

PLACE
AREA RESOURCES
Efficiency

PEOPLE
AREA STAKEHOLDERS'CAPABILITY
Equity

PARTNERSHIPS
COMMUNITY-BASED PARTNERSHIPS
Effectiveness

Figure 1. Essential Elements of Urban Regeneration
(adapted from Oaña, 2000)

3.2 Requirements for an Effective Community-based Urban Regeneration

For an effective urban regeneration, based on the experiences of democratic countries and their ascendant civil societies, the following imperatives must be put in place. They are to be undertaken sequentially and chronologically developed in a continuing cycle of development.

♦ Establishment of a **Community-based Partnership** among stakeholders anchored on **need sharing**; **resource and capability sharing**; **risk-sharing**; **profit-sharing** and **development-sharing.** (KATUWANG SA PAGPAPANIBAGO)

♦ Facilitation of **Community Empowerment** gives greater authority and power to local groups which allows them more freedom and control to identify, prioritize, develop and manage programs and projects directly affecting them. (KAKAYANAN NG KOMUNIDAD)

♦ Development of effective **Community Decision-making Processes** where the needs, views and perception of all stakeholders are heard, deliberated and factored in the decisions with reference to agreed upon performance standards and development guidelines. (KAUKULANG PAGDEDESISYON)

♦ Enhancement of **Community Responsibility and Accountability** which clarifies the role and commitment of each stakeholder and the program for capability-building to assume the identified role.(KATAPATAN SA PANANAGUTAN)

♦ Recognition of **Community Accessibility to Locally-Generated Fund and other Sources** creates a responsible community that adheres to the rules that it has set for itself and allows independence to chart its own growth and development with the capacity to generate its own resources. (KABAHAGI SA KAYAMANANG LUNGSOD)

3.3 A Proposed Stakeholders' Linkage Model for Capacity-Building in the University Belt Area

Based on the observation and interviews with the stakeholders in the University Belt Area, they are interacting with each other in connection with their motivations and intents. The land and building owners supply business, office and activity spaces to the business entities, civic organizations and the resident population. They also directly and indirectly make available housing and dormitory spaces to the students. They in turn are compensated through the payment of rentals.

The resident population interacts with the civic organizations and the business entities by availing or procuring services and supplies for their daily need. The civic organizations, in turn, receive support in terms of public recognition of their cause and the business entities in terms of payments. These two stakeholders interact with the public sector agencies, primarily the city and barangay administration, in the provision of infrastructure and urban services, which in turn, the government expects them to diligently pay their taxes (Manalo & Oaña, 2001).

The Universities and other HEIs, considered to be the major stakeholders in the University Belt Area, interact with the public and private sectors in the provision of needed services and supplies. It also interacts

with civic organizations as part of its extension program. At the moment, this link with the civic organizations is not very strong due perhaps to priority concerns. All the stakeholders are sensitive to the needs of the students either for business or welfare purposes since they comprise the largest number. This interaction can serve as a preliminary frame where the potential partnership can be conceptualized (Figure 2).

Within this framework, a university-community partnership model as applied to the University Belt Area is conceptualized. This is a linkage model for the stakeholders' collective capability building (see Figure 3.) The initiative of a university-community partnership can lead to community empowerment where each stakeholder can learn that the community can enhance resources through networking rather than individually dissipating these. Each member of the community has a role to play, much like a team that has collectively committed themselves to regenerate their area to meet their varying needs, interests and concerns. From this individual stakeholder's realization and commitment to be an active part of the community, an effective decision-making process can be set up leading to a sense of community responsibility and accountability (Manalo & Oaña, 2001). When the community has jelled into an integrated diverse whole, an effective partnership can now come into place.

4.0 Prospects

Universities around the world are taking a pro-active stance in urban development particularly those who have located in the cities. Rather than being passive and just reacting to the circumstances around them and their immediate environments, they are now creating opportunities to help renew the communities, initially where they are through university-community partnerships. In the advent of the coming UN Decade of Education in Sustainable Development, the universities, because of their knowledge generation capability, are challenged to be leaders in the effort of global sustainability through the Global Higher Education for Sustainability Partnership. They have proven their mettle in reviving local economies.

It is reported that in 1996, more than half of the $100 billion gross domestic product of the Silicon Valley economy came from companies started by Stanford graduates and faculty. In 1998, Silicon Valley attracted $4.7 billion in venture capital; had 15 percent of area workforce in research and development; and was the home of more than 40 percent of the wealthiest individuals in technology.

Other classic examples of the universities' impact on economic growth can be found in the role of Massachusetts Institute of Technology, Harvard University and other area universities in creation of the Route 128 corridor around Boston.
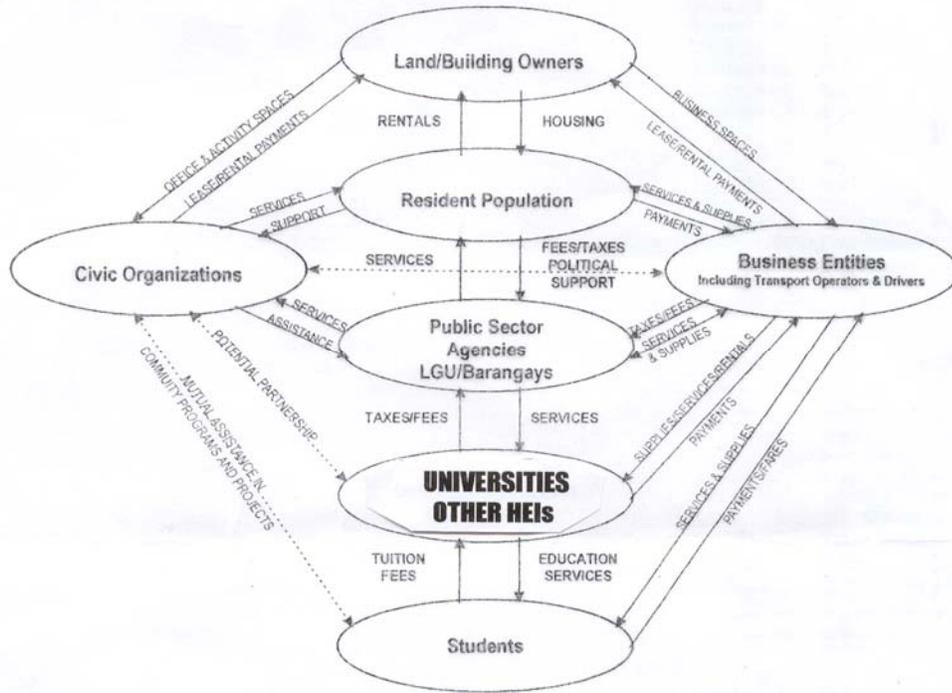
Figure 2. Actual and Potential Interaction of Stakeholders in the University Belt Area
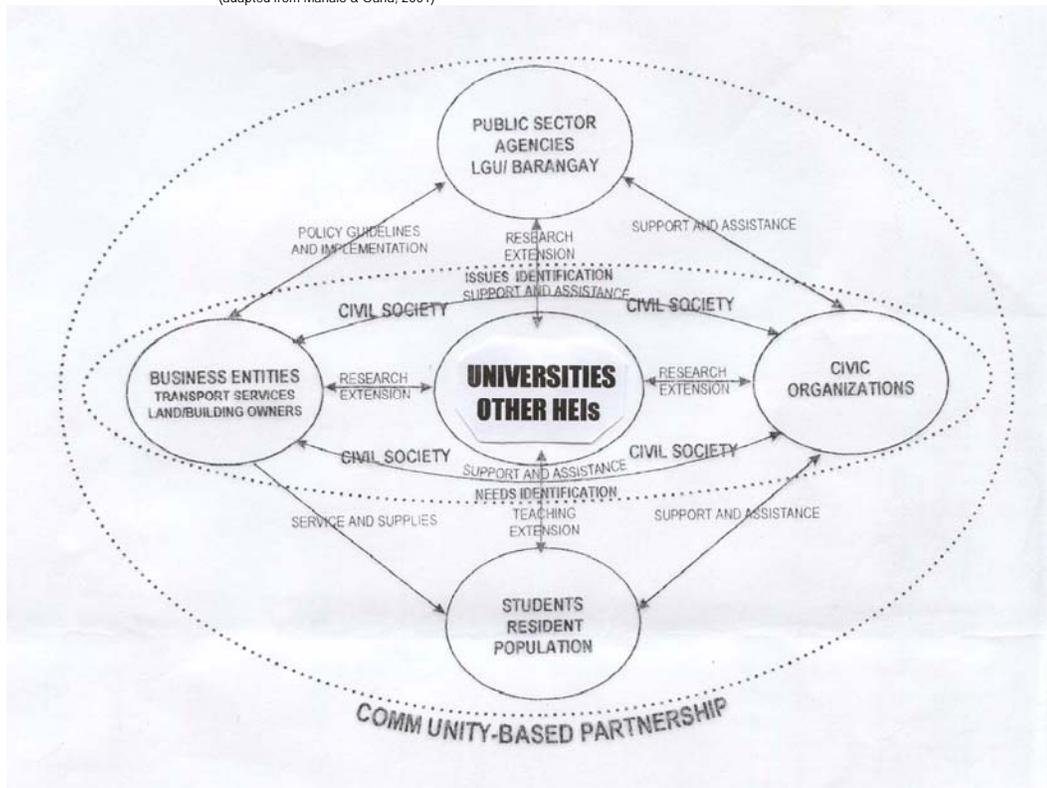(adapted from Manalo & Oaña, 2001)

Figure 3. A Proposed University-Community Partnership Linkage Model in the University Belt Area
(adapted from Manalo & Oaña, 2001)

Table 1. A Sample Place-Partnership-People Development Guide for the University Belt Area

Place (inputs)	University-Community Partnerships (outcomes)	People (Stakeholders) (inputs)
Plus (+) Urban Heritage High Accessibility (LRT1 &2) Diversified Urban Experience Multicultural Link Historical and Cultural Value Tourism Potential Knowledge-based Business Interests Educational Center Home of Pioneering Private HEIs Information and Communication Technology Hub	A Prime Knowledge Village Conducive Learning/Living Environment and Public Spaces Opportunities for Interaction and Exchange Urban Security and Appropriate Community-Led Disaster Mitigation Measures Suppression of Illegal and Demeaning Enterprises Enhancement of Opportunities brought about by the LRT1 & LRT2 International Student Market Prime-up Attraction and Retention of the Best Researchers and Educators	Plus (+) Knowledge-based Business-oriented Market Sensitive Entrepreneurial Adaptive Representative of Typical College-Age Filipino Youth Existing Loose Network among Universities and other HEIs Cooperative if mutually beneficial
Minus(-) Congested/Polluted Criminality Hazard Blighted Informal Settlements Chaotic Lack of Public Spaces Deficient Total Learning Environment	Local Economic Development Urban Heritage Harnessing (Heritage Asset Management) Appropriate Network Mechanisms Urban Quality of Life Threshold Standards/Incentives Socio-Economic Integration	Minus(-) Transient Population Presence of Criminals Thriving Forged Document Business Uncontrolled Vending Businesses Unregulated Jeepney Operations (illegal queuing/terminal)

MIT's contributions alone are enormous: More than 1,000 MIT-related companies are headquartered in Massachusetts; MIT-related firms include Raytheon, Gillette, Thermo Electron, Lotus Development, Bose, and PictureTel; Teradyne, founded by MIT graduates in the 1960s, is still located Boston; MIT-related firms employ more than 300,000 people, with some 125,000 people in Massachusetts; and MIT-related firms represent at least 5 percent of the state's employment.

One other success story is Research Triangle Park, supported by Duke, University of North Carolina (UNC) and North Carolina State University (NCSU.) The business start-up rate in the Research Triangle Park area is the highest in the state, the unemployment rate the lowest, and per capita income and average wages are well above the state average. The park was conceived in 1959 by the universities, government and industry leaders to be an economic engine for the state. Today, it has at least 100 companies employing more than 36,000 people. Major companies such as IBM, Nortel, Motorola, DuPont, Harris Microelectronics and SAS have operations in Research Triangle Park.

Other U.S. universities are effectively pursuing the same path trailblazed by the above institutions. In a study, they are collectively called "Innovation Universities," for their efforts in economic development at local and regional level. These institutions stand out, in terms of sheer economic impact, because they have the following common characteristics:

- Inclusion of economic development in mission, vision and goal statements.

- Pursuit of industry research partnerships.

- Industry education partnerships.

- Industrial/technical assistance.

- Entrepreneurial development.

- Technology transfer.

- Faculty rewards for participation in economic development activities.

- Formal partnerships with economic development agencies.

Based on the above experiences in the United States, perhaps the Metro Manila universities can venture to develop its own initiatives in the context of the assets of the nation as a people and the heritage of its places. They can be "urbane" enough to try to generate our own indigenous knowledge to regenerate the urban - our cities, starting with Manila as our " Philippine Knowledge Hub". We hope our universities can rise up to this urban challenge. Perhaps some are already on their way.

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