

AGCOM-DEVCOM CROSSOVER

A Participant-Observer's Journey

Felix Librero



University of the Philippines
OPEN UNIVERSITY



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By

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Los Baños, Laguna
Philippines
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FOREWORD

“Reflective practitioner” was the first thing that may come to one’s mind upon reading the title of this book “AGCOM-DEVCOM CROSSOVER: A Participant-Observer’s Journey.” But looking at it more closely, writing the reflections and sharing them with other professionals or even with the young scholars in the field of communication were going beyond the usual cycle of “learning from the practice and improving from there.”

The culture of sharing which UP Open University is advocating is very evident in this book authored by Professor Emeritus Felix Librero. This book is not just a practitioner’s narrative, but also an attempt to provide a comprehensive historical account of Development Communication as a field of study and as a communication practice. Further, through the author’s narrative, due recognitions were given to individuals who had been part of this AgCom-DevCom crossover journey.

I thank Professor Emeritus Lex Librero for taking the challenge of retracing the steps he made in his professional journey and synthesizing his reflections through this book. I, likewise, congratulate the book’s editorial team for being able to keep the format of the book intact, a personal narrative, and still make it scholarly and academic.

Melinda dP. Bandalaria
Chancellor
2016

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Prologue

I began my career in the field of agricultural communications in 1965, then crossed over to development communication in 1971 (when AgCom became DevCom), first as a student, and later as an academic, and practitioner. What seemed interesting is not so much what I did well, naturally with a lot of guidance in the process, as much as what influenced my own intellectual and professional growth and thinking.

The process was a professional experience and I was a participant in the events that transpired in the process, hence I believe that my account of such engagement or journey has a solid basis. Like all other personal accounts, however, mine was based largely on my recall of events that transpired during the period under consideration. At best, an account, including this one, could be as good as it is viewed from the perspective of who is telling the story; at worst, another account could be prepared by others and such accounts could possibly completely disagree with the ideas, concepts, and events herein. Two accounts could conceivably be supportive of each other or could be entirely different from one another. The latter expresses two points of view. Still, we can't possibly completely and absolutely not consider one or the other as accurate or inaccurate unless an independent, objective, and research-based story is written. That's the work of historians.

It is not the intention of this account to devalue the contributions of other individuals in the achievement of some outcomes (mainly, I am not competent to comment on their contributions to the subject matter at hand), nor unnecessarily strengthen my own approximation of my contributions. Those having different viewpoints from this narrative would, of course, do well to write their own narratives from which, I am very certain, we can learn much. In the meantime, this is my story. I hope it contributes to a clearer understanding of at least some of the events and nuances of the field based on my experience.

The box articles that appear in this volume were selected articles that I wrote for specific purposes, time, and audiences. They are, however, exemplars of how I have approached dealt with the subject matter I have been asked to speak on and my own perspective as development communication practitioner. In other words, this is my story as development communication professional and academic.

Introduction

I joined the Department of Agricultural Information and Communications (DAIC) as a student in 1965 when I enrolled in my first major course, AgCom 10 (Introduction to Agricultural Communications). After completing this course in 1966, I applied for and got employed as DAIC student assistant, collating mimeographed farm news releases. In 1967, I was DZLB student assistant, serving as student radio announcer and news writer, and then as full-time Station Supervisor in June 1968, after I graduated from the U.P. College of Agriculture (UPCA).

DZLB's history deserves a separate treatment, but for this account I need to put it in the context of my narrative. In 1962, Radio DZLB was conceptualized by UPCA extension experts as an experimental rural broadcasting station for the UP College of Agriculture with the help of Visiting Academics, Professor William Ward and Mr. Bob Rounsavell, both from Cornell University. To establish the radio station, UPCA was given a US\$2,700-grant from the New York-based Agricultural Development Council, Inc., which was then being funded by the Ford and Rockefeller Foundations. DZLB went on its maiden broadcast on August 2, 1964, and the first voice heard over DZLB was that of Thor (Arturo) Orig, an undergraduate student of agricultural communications at the U.P. College of Agriculture. At that time, Thor was student assistant working with DZLB. He had a very good radio voice.

Some UPCA graduates who joined DAIC and DZLB on full-time basis in the early to mid-sixties included Filipino pioneers in rural educational broadcasting like Romeo (Romy) Gecolea, Ponciano (Ning) de la Paz, Sabina (Tita Chabeng) Fajardo, and Maximo (Max) Pabale (from 1964 to 1966), Milagros (Agie) Hidalgo-Tetangco, Alicia (Alysh) Agudo-Arejola, and Pedro (Pete) Bueno (joined DZLB during the 1967-1968 period). Antonio (Tony) Frio (joined the department as Graduate Assistant in 1967, segueing as Instructor in audiovisual communication the following year, and myself (Lex) as Radio Station Supervisor of DZLB from 1968 onwards.

How I started working full-time at DZLB was a strange story by itself. When I finished my thesis in April 1968, DZLB's Station Supervisor Emma Henry had just resigned to pursue her interest in police work. As DZLB student assistant earlier, I knew about Emma's plan to resign and

I simply waited for the opportunity to join the DZLB staff on a regular basis. I applied for the position vacated by Emma, but DAIC couldn't hire her replacement immediately because she monetized all her leave credits, which meant the position would not be available until the latter half of June 1968. So I decided to work with DZLB on full time basis without compensation from April to early June 1968; I was hired toward the latter part of June. As I had been student announcer of DZLB earlier, I settled down with the chores at DZLB easily. I was in charge of two regular programs in terms of researching, writing, and announcing news and feature articles. I wrote and delivered the daily news and hosted a regular 30-minute program titled Samut-Samot, Inc., which was a music-and-information program that started the day's program schedule., Also, I had to coordinate and assist in the production and broadcast of other radio programs which were being aired in collaboration with other units of the College of Agriculture. For three months, I did pretty much ordinary work in DZLB, although I was also assigned as a general assistant in the other activities of the Department such as in the production and distribution of the Radio Farm News, a farm and home news service provided to media outlets like radio stations and newspapers in the country.

While the DAIC was still operating at the basement of the old library building, it began producing a news service called the Radio Farm News, which was distributed to media outlets all over the Philippines. When the Department participated in the then special project of the UPCA called Rice Information Cooperative Effort (RICE) in 1965, it co-published with IRRI and the Department of Agriculture the Rice Production Manual. It became the "bible" of farm technicians of the Philippine agricultural extension service.

On October 30, 1968, , "Information" in the Department of Agricultural Information and Communications (DAIC), was "edited" out at the department level as the word "information" was deemed superfluous (Cadiz, 1979). Since then, it was called Department of Agricultural Communications (DAC). From the cramped basement of the old UPCA library building (now the UPLB College of Arts and Sciences Building), where most of the initial work in agricultural communications were undertaken by the Los Baños-based pioneers in agricultural journalism, audiovisual communication, and extension publications, DAC transferred (on November 3, 1969) to its new building (where it still stands today) near the

main gate, across the main UPLB Administration Building (also known as Abelardo G. Samonte Hall). DAC shared the building with the Farm and Home Development Office (FHDO), then the extension arm of the UPCA. At the time that DAC transferred to its new building, Dr. Nora Quebral was the department chair (1968-1970). In 1970-1971, Dr. Juan F. Jamias became department chair, and Dr. Thomas G. Flores, again, in 1971-1972 until he left for the University of Wisconsin to serve as Visiting Professor. During that time, there were only the three of them that had PhDs and practically took turns in heading the Department. In 1969, however, Ms. Ely Gomez returned from Michigan State University with a PhD in educational media.

Dr. Quebral again became department chair from 1972-1976, during which time many changes in the Department occurred. For one, DAC was reorganized into three sections, namely: audio-visual communication section, broadcast communication section, and print communication section.

Earlier on in 1969, Glenn Paje came in as DZLB student assistant, and the following year (1970) Lolita Vega joined the station (from the Department of Entomology where she was Research Assistant) first as research assistant and later as program host, taking over the chores of Alysh Arejola when she (Alysh) joined the Farming Systems Research Institute of the College of Agriculture. In the meantime, I was promoted to Instructor II in 1972, but remained with DZLB where I taught rural broadcasting courses. Many people joined DZLB for some time when they were starting their career or in the process of enriching it. Those who did creative work at DZLB included Felimon Barral (who eventually transferred to the Department of Agriculture), Lynn Malilin (who later moved to the Cultural Center of the Philippines), Paul Manalo (who went back to the private sector), Epitacia Calatrava (who moved to the Philippine Housing Authority), Milagros Sandoval (who later joined a religious congregation), Noel Cartas (who joined the US Navy), and Myra Beltran (who joined the private sector). They were all part of DZLB during the 1970-1974 period.

From 1968 until he finished his BSA degree from UPCA, Louie Tabing did volunteer work as radio talent (pro bono) at DZLB. Sometime in 1973, Alexander Flor, fresh B. Journalism graduate from Silliman University, joined the DZLB Staff. I had the privilege of working very closely

with these two individuals in conceptualizing, designing, researching about, producing, broadcasting with and evaluating schools on-the-air for rural audiences. Sandy Flor also helped me in conducting training courses on community broadcasting. Sandy continued these tasks when I left for my PhD abroad. He joined SEARCA in the early 80s, and then the University of the Philippines Open University (UPOU), where he is based until today. To his credit, Sandy Flor stayed with the then Department of Development Communication (later Institute of Development Communication) where he finished both his MS and PhD degrees in development communication.

Dr. Alexander Flor, who has been with the University of the Philippines Open University (UPOU), wrote snippets of associated events at that time. For example, he made the following entry, years later, in his blog at LinkedIn (15 July 2014), titled DevCom Series: 5. DevCom Forerunners:

By the mid-sixties, the Department of Agricultural Information and Communications of UP Los Baños was filling-up with young US-trained PhD to its brim. Dt. Thomas Flores was the champion of its audiovisual section and Radio DZLB, which thirty years later would win KBP's Golden Dove Award as the Best AM Radio Station in the Philippines because of its development programming. Among his broadcasting staff were Dr. Ely D. Gomez and Felix Librero, who later became the first Director of the Institute of Development Communication and the second chancellor of the UP Open University. The communication research staff of DAIC boasted of Dr. Gloria Feliciano and her protégé, Dr. Cesar Mercado, both of whom would leave Los Baños for UP Diliman to found the UP Institute of Mass Communication, with Gloria serving as its first Director. The journalism section had Dr. Juan Jamias, who edited development communication's first book of readings. Sharing his office with Dr. Quebral.

It was Nora Quebral who, as chair of DAIC, crafted the development communication program, defined development communication as a field of practice, and proposed the renaming of DAIC into the Department of Development Communication, expanding Alan Chalkley's development journalism concept to other media encompassing the entire communication field as well. And she could not have chosen a more appropriate time to do so. The use of information, education and communication in the population and health sectors was picking up.

The Green Revolution demanded media support, particularly from rural broadcasters who were spreading the gospel of high yielding varieties and agricultural inputs from Latin America to Africa to Asia. And in the Philippines, a serious search for an alternative to the libertarian media was prompted by Marcos ideologues. In reality, there were indeed abuses by the mainstream press ranging from yellow journalism to sexual exploitation.

Its timing was perfect and so were the theoretical underpinnings. As Nora's students, we marveled at the ideas on development that she introduced with the work of Dudley Seers, among others. We were inspired by the alternative views on communication by Freire. We were intrigued by the concept of nonformal education presented by Coombs and how community radio can serve as its platform in the rural areas. We were excited by the prospect of a DevCom agenda structured according to Maslow's hierarchy of values.

Best of all, the setting was ideal for the practice. Los Baños and its neighboring towns served as our laboratory for this new social science. The University and research institutions dotting Los Baños provided content. The Department provided the media including a fully operational radio station and community newspaper. The students, faculty and staff provided the talent. And the pockets of poverty, malnutrition, ecological abuse, literacy, and social injustice in its environs provided the impetus.

As if by design, a parallel initiative was being conducted in the information science front by a regional agency situated in another part of campus.

Louie, on the other hand, joined Radio Veritas and, later, became a talent at DZMM where he continues to host a rurban (rural-urban) development-oriented radio program until today. And to date, he still serves as Chair of the Federation of Rural Broadcasters, the organization of community and farm broadcasters all over the Philippines. He is a multi-awarded national broadcaster and champion of Filipino as the national language.

On December 9-10, 1971, a symposium with the theme “In Search of Breakthroughs in Agricultural Development” was held at UPLB in honor

of former UPCA Dean Dr. Dioscoro L. Umali, who was then newly-appointed Deputy Director-General for the Far East of the UN Food and Agriculture Organization. In that symposium, Dr. Quebral presented her seminal paper titled “Development communication in the agricultural context” wherein she introduced to the public for the first time the term “development communication” (Quebral 1971; 1988).

In that symposium, Quebral made it clear that development communication was to be treated as science, so all the tasks associated with communicating development-oriented issues should be based on rigorous scientific inquiry. This was a strong argument for undertaking rigorous research in the field of communication even if our efforts, at that time, were limited mainly to agricultural and rural development. It would be safe to assume, however, that Quebral’s enunciation of development communication greatly contributed to the intellectual transformation of DAC faculty, staff, and students from a bridled focus on rural and agricultural development efforts to a wider development horizon that “makes possible greater social equality and the larger fulfillment of the human potential” (from the Quebral definition of development communication in 1971).

It should be borne in mind, however, that when Dr. Quebral introduced development communication, initially as a marriage between the twin concepts of development and communication, she did it at a time when the concept of development was pervasive in both the developed and developing world. Dudley Seers’ article titled “The Meaning of Development,” which was one of the “must read” articles of graduate students at UPCA, particularly at DAC and the staff of DAC, was published in 1968. In the same year, Donella Meadows, Dennis Meadows, Jorgen Randers and William Behrens III wrote the book titled *The Limits to Growth*. Four years later, in 1972, Gunnar Myrdal’s *Asian Drama* came off the press. These became our “bibles.”

During the mid- to the second half of the sixties, UPCA was host to visiting professors from Cornell University under the UP-Cornell Program. Together with UPCA professors, they became active in promoting the concept of national development, particularly through socio-economic development programs. It was under this academic ambiance at Los Baños that Quebral introduced the concept of development communica-

tion, which fitted perfectly in the efforts of government, the academe, and international aid agencies. It was, so to speak, an idea that had come of age. From the point of view of this writer, that was perfect timing for a perfect idea.

This kind of background and grounding in DevCom (right of passage as it were) provided me with the basics that I tried to harness in later years as might be discerned from the following box article.

Box Article # 1

UNDERSTANDING COMMUNICATION FOR DEVELOPMENT

Background paper prepared by Dr. Felix Librero for participants of the Workshop on Communication for Development, News and News Feature Writing for Implementing Agencies of the Trade Development Support Program, Department of International Cooperation, Ministry of Commerce, Government of the Kingdom of Cambodia, Kep Province, 13 February 2015.

Introduction

I believe I am making an accurate statement when I say that the management has a clear understanding of the importance of communication in the efficient and effective application of the Enhanced Integrated Framework (EIF) and the implementation of the Trade Development Support Program (TDSP). I have seen documents about development programs elsewhere, but I must say that one document that has highlighted very well the importance of communica-

tion in program implementation is that which refers to the TDSP and the EIF. The TDSP documents that I have seen, for example, have clearly identified communication, particularly strategic communication, as an important undertaking in the Program.

I am guessing, of course, that this might be the basic reason the TDSP and EIF have hired National Communication Consultants. Such would not have been undertaken had the management of the national program as well as the executor agency did not believe in the importance of communication.

It is appropriate, however, that we begin by defining what we mean by communication. This paper is heavily oriented towards strategic communication as we would be focusing on the macro-level.

What is Communication?

For practical purposes, I would like to avoid an academic definition of communication. Instead, let us look at a very practical and simple definition. For example, most experts who are at the same time practitioners will simply say that communication is the sharing of information and meaning. A more focused definition depends on the over-all intention of the process of sharing information and meaning. For our own purposes in this workshop, let us consider communication to have three common orientations, which are: mass communication, corporate communication and development communication. I shall give you later the philosophical and historical grounding of these orientations, which I am also referring to as communication strategies, but suffice it to say for now that these orientations have their own specific definitions.

For now, I would like to refer to mass communication as referring to informing and entertaining the “faceless” mass audience, while corporate communication generally would refer to informing and convincing the target stakeholders (usually members or beneficiaries of the organization) to accept what is being offered as an organizational given, and development communication would generally refer to informing and educating the target audiences (Librero, 2013; 2012). We shall be discussing this in much more detail later.

Why the Need to Communicate the Development Agenda?

There are three very practical reasons why there is a need to communicate the national development agenda to the stakeholders of national development. I have discussed these elsewhere (Librero, 2012), so I quote myself here:

To seek public understanding, acceptance, and support. The public needs to understand fully why the country needs to have a national development agenda and program, and why such program must be accepted by it. Public acceptance is a function of the public’s understanding of the national development agenda and program, and provides legitimacy to said development program.

To seek public commitment to the national development effort. Another feature that has very high significance in any national development program is public commitment. The public must be committed to the program so that there is strong basis for implementing it.

To seek public ownership to the development plan. Finally, the public must accept ownership of the national development program because this is an expression of absoluteness. If the public owns the program, then there is assurance that it is un-

derstood, accepted, and there is commitment to its full implementation.

A word about ownership. During the study tour of a delegation from Vanuatu (January 21-22, 2015) to Cambodia, brief observations were made about lessons learnt from previous study tours on trade and trade-related programs. The first conclusion that was mentioned was the significance of the fact that funded development programs must be “owned” by the beneficiary country particularly where the Enhanced Integrated Framework (EIF) was being implemented. Briefly, the principle is that a country-beneficiary must own the development program implemented in the country rather than refer to it as donor-led program. While funding might be coming from various donor countries, these donor countries have arrived at the conclusion that they would rather not be identified as responsible for the development program. Instead, it should be the beneficiary country that must “own” the development program even if funding comes from elsewhere.

This principle applies in the same way for national development programs planned and implemented by the executive branch of the government. If the general public accepts and owns the development program being implemented by the government, then it could be said that such development program is owned by the country and its people. Under such condition, it is assumed, the national development program will succeed.

What is a Communication Plan?

In most of the available literature, the concept of a plan is invariably associated with the concept of management, which is usually simplistically defined as determining where you are, where you want to be, and

how you intend to get there. Communication plan follows such kind of orientation (Librero, 2013). In a book titled *Communication Planning, An Integrated Approach*, Ferguson (1999) highlighted that there are five different types of communication plans according to purpose and content. For our workshop purposes here, we shall look at communication plans in terms of the following types:

Strategic Communication Plan

The most abstract of the communication plans is the strategic communication plan, which invariably means communication planning at the top management level, where management commitment to support the plan, must originate.

Operational Communication Plan

According to Ferguson (1999), operational communication planning is also “fairly general” or broad in nature, but must specify how the organization or perhaps the program shall achieve the strategic objectives of the program. At this level, planning becomes more concrete because planners should already rank-order priority communication activities, linkages to the strategic objectives must be clearly indicated, key client groups must be identified, and indicate complementary activities and services (Ferguson, 1990.)

Communication Work Plan

The communication work plan is usually a continuation of the operational communication plan, though it has much more details. In fact, the communication work plan, according to Ferguson (1999), identifies the following as its parts:

Products and services to be delivered;

Performance indicators to be applied;
 Milestones to be determined and measured;
 Evaluation methodologies to be adopted; and
 Allocation of resources to be made for specific products, services, and activities.

At this level, it is best to present the plan in matrix format, as follows:

Communication Work Plan

Specific Items/Activities	Month 1	Month 2	Month 3	Month 4	Etc.
(List items/activities)	Indicate start to completion of task in this column.				
1.					
2.					
3.					
4.					
Etc.					

This communication work plan matrix indicates the series of tasks that need to be undertaken as well as the relative time when such tasks/activities must be undertaken. In management, this is usually referred to as the (Program Evaluation Review Technique – Critical Path Method (PERT-CPM) matrix, an engineering tool to be applied in the performance of specified tasks. It gives you at a glance what task is being done and how long it shall take to complete this task. While it generally shows the sequence of events, it also indicates task overlaps over time.

Support Communication Plan

Many experts say that this is the most common communication plan; it identifies very specific activities. In brief, a support communication plan is a plan of action focused on highly specific aspects of a communication undertaking. A good example of a communication support plan refers to all the detailed communication activities and procedures that should be undertaken in the implementation of a specific proj-

ect under a program, for example. It could be specific communication activities identified to be implemented in managing a press conference. It provides very specific details, even to the extent of determining the time and place where such activity must be undertaken, and sometimes including expected outcomes.

Crisis Communication Plan

Perhaps the most practical definition of the crisis communication plan is that it is a set of communication activities that must be done to rectify things that have gone wrong in the implementation of a communication plan in support of a development program. Ferguson (1999), for example cited Meyer, Books and Goes (1990) who point out that life has a string of “long periods of boredom and short periods of terror.” This, obviously has reference to calm and turbulent periods. Applied in the lives of organizations, or even development programs, these periods of boredom and terror would easily be equated with periods of program implementation without significant problems encountered along the way, or crises situations. In crisis communication plans, therefore, significant aspects of the plan would include the following: crisis indicators, communication team members, communication strategies, response and control mechanisms, evaluation of operations, and guidelines for all communication activities, small or large scale.

Why the Need for Communication Plan?

In past years, organization managers rarely considered communication as important in the management of organizations and development programs. In recent years, however, both the public and private sectors have invariably relegated communicators to different levels of standards. For example, organization manag-

ers did not expect communicators to answer for their efficiency and effectiveness in the implementation of programs and organization objectives. This situation has changed. Communicators are now expected to be able to document their successes. To meet this much higher level of expectation, communicators must now have clear strategic, operational, and work plans so that they are clear about their objectives.

Comprehensive planning, according to Ferguson (1999), is a critical new communication function, which must be integrated into the planning cycles of organizations.

Building the Over-All Communication Orientation

In previous papers (Librero, 2013; 2012) I have ventured into an explanation of a process of achieving communication orientation, more specifically, development communication. Let me quote myself on this, as follows:

... the guidepost for a development communicator is a process of trying to reach the level of mental preparedness, readiness, and willingness to pursue with single-minded confidence and commitment through the use of communication, of a human development purpose or end-goal. It is a mental state that pre-determines how we must respond to and interpret a situation in order to be better prepared to pursue it through various means of communication.

The D-C-M Contagion

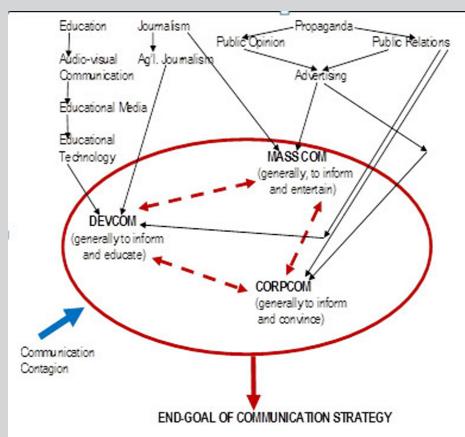
This was how I explained what I have referred to as the Development Communication – Corporate Com-

munication – Mass Communication (DevCom-CorpCom-MassCom) contagion in an earlier paper (Librero, 2013):

The fundamental assumption of the concept of contagion is that contact is provided by communication networks that serve as mechanisms or conduits to expose people and organizations to information and messages that affect behavior (Burt, 1993; Contractor and Eisenberg, 1993). As a result of this exposure to this network, it is assumed that members would develop beliefs, assumptions, attitudes, and behavior similar to these networks to which they belong (Carley & Kaufer, 1993).

Contagion theory, therefore, seeks to uncover the relationships among organizational members of the network. The significance of this relationship is that all members of the organization, the network if you will, are presumed to have similar levels of knowledge, attitudes, and behaviors. Under this condition, members of the communication organization or network would tend to influence one another into demonstrating similar levels of knowledge, attitudes, and behavior.

Figure 1. The D-C-M Contagion (Librero, 2013)



NOTES:

Corporate Communication and Development Communication have become independent of and more purposive than Mass Communication.

Mass Communication has been overtaken by Media Communication

The broken lines indicate direction of influence.

Everything operates within the ambit of human communication

Diagram indicates only the mediated aspects of human communication as they relate to mass communication, corporate communication, and development communication.

Communication as Tool for Development

In the past, it was customary to automatically label a set of communication activities that were designed to support or enhance the implementation of specific programs of action, particularly development programs, as communication support plan. As indicated by the DCM contagion above, we had, for purposes of this discussion, referred to mass communication as basically to inform and entertain the mass audiences, corporate communication to inform and convince the stakeholders to embrace the programs and products of organizations, and development communication to inform and educate audiences regarding the need to embrace and support the programs of development of both the private and public sectors of society. There are those that do not necessarily accept this categorization, but it is given here only as a means of simplifying the issue at hand rather than providing absolute definitions or differences among the three strategies.

As indicated in the DCM contagion, too, there is now

a situation (we suspect that this has always been there all this while but we have failed to highlight it) whereby mass communication, corporate communication, and development communication interact and influence one another in order to achieve the end-goal of communication. We are beginning to see now the blurring of boundaries between and among the three major strategies of communication (mass communication, corporate communication, and development communication). What this is telling us is that we have come to a point where we no longer pay particular attention to whether or not we are doing mass communication, corporate communication, or development communication. We simply do communication.

When we design a communication plan to facilitate the implementation of a development program, we are no longer insistent in calling it development communication. We now simply call it communication plan. This is what I have said in a previous discussion with communication specialists (Librero, 2013):

While we can always initially say that we will do development communication, for example, in actual practice we would be employing the methods and tools that are also methods and tools of both Mass-Com and CorpCom. The end-result is a blurring of the boundaries among the three communication strategies. They are differentiated mainly by the context in which they are undertaken, but they use similar procedures and similar tools, using similar measures of success or failure. The difference lies mainly in the focus of intention or context.

In order to facilitate the achievement of the objectives of, say, DevCom, the communicator could use entertainment as one of the techniques of making content more palatable to and enjoyable for the target audience. The same thing happens in the case of corporate communication or mass communication.

The purpose of pointing this out is to clarify to ourselves that what we are doing we may call development communication, but we ought to be aware that some, if not all, of the techniques and procedures that we might be employing are techniques and procedures that we also share with other strategies of communication. In other words, these are not mutually exclusive. We call our communication action DevCom perhaps because our dominant intention is the education of our clientele (see communication contagion) rather than the tools we use.

Elements of a Communication Plan

According to various sources, most communication plans exhibit eight elements, also known as substantive content or essential characteristics. These frequently appear to be conditions that must be undertaken or processes to be performed for all communication plans. They are as follows:

1. *Goals and objectives.* What do you want to achieve by implementing a communication plan? These will help you focus your communication efforts.
2. *Audience identification and profiling.* When you know your audience well, you are able to select the most effective ways of communicating with such audience.
3. *Message development.* Your messages, of course, are very closely tied-up with your communication objectives. These messages are pieces of information that could change the audience's level of understanding, beliefs, and perhaps courses of action about the development program you are promoting.
4. *Selecting communication channels.* What channels of communication are you go-

ing to use? This may be dependent on what media are consumed by your audiences.

5. *Select the activities and materials.* What are the activities and materials that you will use in the specific channels of communication that you have identified to be used?
6. *Establish partnership.* This refers to individuals, groups, organizations or businesses that will assist you by providing specific forms of assistance such as expertise, logistical support, funds, and other resources.
7. *Implementing the plan.* Communicating the development program is a major activity, and it will require substantial amount of resources, both human and non-human. Your ability to implement your plan will depend greatly on your work plan, illustrated in a Gantt Chart.
8. *Evaluate and adjust as needed.* There are two general evaluation approaches: formative and summative. Formative evaluation is what you do midway in the implementation of the plan to find out if you are achieving your objectives and running according to your time frame as expressed in your work plan. If you are not on schedule, make the necessary adjustments and proceed again. Summative evaluation helps you determine, at the end of the implementation of your plan, the extent of your achievement of your objectives. Compare the performance standards you have set at the beginning of the activity (objectives) and the results of the implementation of the communication plan.

Components of the Communication Plan

A cursory review of the literature of communication planning would indicate that what may be referred to as elements and components of communication plans are interchangeable sometimes. For purposes of clear planning focus, however, we are separating the two. Therefore, the basic components of your communication plan refer to those that need to be present in the communication plan. In other words, your plan will neither be complete nor work well without these:

1. *Event.* This is what warranted your communication plan, in the first place. The term “event” here would refer to the development program that you would want to communicate.
2. *Message.* This is the content of your communication. It is both the development agenda of government and the development program that you want the audience to know about.
3. *Communicator.* Who or what agency or organization is responsible for communicating the development program? In the case of TDSP, for example, the unit that is responsible for communicating it is the Department of International Cooperation (DICO). Of course, when we say that the DICO is the communicator, it automatically means the communicators of the department, i.e. the communication unit. However, it should be pointed out that the DICO as communicator means that all members of this department do have a communication function. Hence, they are all responsible, individually or as a group, for communicating the TDSP.
4. *Audience.* Who are the audiences of the support communication plan to promote

the development program? That is to say, who need to know, or who must know and understand the development program?

5. *Timing.* Especially for the development program, there is a need to constantly inform and situate the public about the substance of the development program and what its positive effects would be on the general population.
6. *Tools and format.* These refer to how messages shall be formulated or designed so that they may be transmitted through identified media and channels that will reach the target audiences. Conceivably, message design and media formats may vary according to the preferences of the audience.
7. *Follow-through.* This aspect refers to designed activities that shall be undertaken to determine whether or not information and messages transmitted have been understood by the target audience.
8. *Maintenance.* This refers to the means of updating the communication plan and the tools that are used. It is entirely possible that the messages may be updated, even changed.
9. *Accountability.* The issue of accountability has something to do with who (individual or organization) is ultimately responsible for the implementation of the communication plan.

Writing the Communication Plan

Writing the communication plan is not difficult once the content has been decided. To facilitate the pro-

cess, the steps in writing the communication plan are simplified here (www.crsprogramquality.org), as follows:

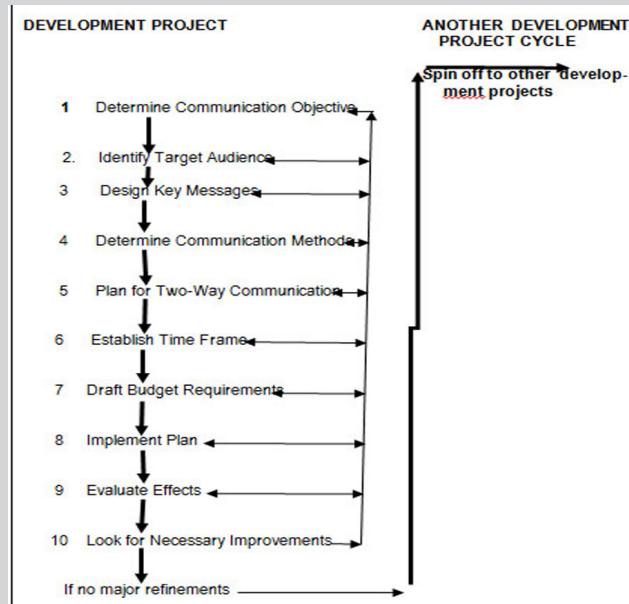
1. *Identify your objective.* For many planners, this is like asking the questions: where are you now?, where do you want to be? , and how do you want to get there? In other words, what do you want to achieve?
2. *Determine your target audience.* The audiences of national development programs are diverse in terms of interests, orientations, education, political leanings, and social status. It is always wise to analyze what comprises the over-all audience and determine whether or not a particular audience may be prioritized as target or not. Who is your priority target audience? Why? It would be helpful if you could prioritize the audience segments you wish to reach and determine what media channels and messages you would direct at them over what time period.
3. *Design your key messages.* Depending on who your audience would be, determine what kinds of messages you are going to use in your communication. Once you determine the kinds of messages you will need to communicate, you will, of course, have to design those messages in terms of how they would fit into the nature of media that you will use.
4. *Determine your communication methods.* This is really determining the communication channels you will use. Through what channels are you going to communicate to your target audiences? In today's world, multiple media channels would be most useful.

5. *Plan for two-way communication.* Communication specialists always emphasize that the process of communication must always be a two-way process. The communicator and the communicatee must constantly interact in order to achieve the intention of sharing information and meaning. In a communication plan, therefore, there must be a process whereby feedback is automatically considered so that communication participants must be able to make immediate adjustments according to the nature of the communication act.
6. *Establish your time frame.* In the realm of things, if there is a beginning, then there is an end. This condition requires that a time frame be put in place. The importance of time frame is that we should be able to easily determine whether or not we have achieved our communication objective. For practical purposes, we set to achieve our communication objective over a specific period of time so that we know when we should find out if we have succeeded or not. The obvious fact, of course, is that the time frame tells us immediately when we are supposed to have completed our task.
7. *Draft a budget.* The next important item is the budget, which is the financial expression of all activities that must be performed over a period of time. In general, the budget is expressed in terms of salaries and wages for personnel involved in the implementation of the communication plan, maintenance and operating expenses, and capital expenses, if any.
8. *Implement the plan.* This is a brief description of how the communication plan should be implemented. In general, not all activities are done

simultaneously. Certain activities will have to be undertaken ahead of others precisely because some outputs of specific activities might be needed as inputs to other activities in the process.

9. *Monitor the results and look for ways to improve.* Many communication plans do not include the aspect of monitoring and evaluation. In fact, frequently, this is considered a separate function and not part of the communication plan. From the point of view of evaluation, any communication plan may have to undergo two evaluation procedures. First, a formative evaluation may need to be undertaken to make sure that the implementation of the plan is going according to design. Second, when the entire plan has been executed and completed, a summative evaluation is usually undertaken to make sure that the plan was correctly implemented.
10. On the basis of the evaluation, determine if there are necessary refinements. Any refinements must lead back to the point where the problem has been observed. If there are no refinements, then it is presumed that the cycle can spin-off to another development project. That cycle continues.

Figure 2. How to Communicate a Development



It must be noted that each step requires a series of questions whose answers would help in determining the most appropriate action on that particular step of the process for the program. Here are some specific tasks to do relative to the steps identified. This list of specific tasks is not exhaustive, by any means.

Determine your communication objectives

1. What is your over-all goal?
2. What specific objectives will result in the achievement of your over-all goal?
3. What are your priority objectives?

Identify your target audiences

1. Who do you want to reach?
2. Prepare a profile for each of your audiences (e.g., gender group, age bracket, social class, cultural orientations, attitudes, etc.)
3. What media preferences do your target audiences have?

Design your key messages

1. What is your over-all message?
2. What secondary meanings do you want communicated?
3. What messages do you intend to communicate and through what means?
4. What types of communication would you use (verbal, non-verbal, etc.)?

Determine your communication methods

1. Print-based (newspapers, magazines, brochures, leaflets, fact sheets, journal articles, booklets/books, etc.)?
2. Telecommunications-based (broadcast, telephony, social media, etc.)?
3. Visual and display-based (exhibits, theater, cinema, caravan videography, etc.)?
4. Community-based, people-centered (community fairs, competitions, etc.)?

Plan for two-way communication

1. What is the feedback mechanism?
2. What are the mechanics of the feedback responding system?

Establish your time frame

1. When do you intend to begin your communication campaign (plan details of this step carefully)?
2. When do you intend to end your communication campaign (make sure you have detailed plan for whatever needs to be done on continuing basis).

Draft your budget requirements

1. Provide budget specifics for wages.
2. Provide budget specifics for staff involvement.
3. Provide budget specifics for supplies
4. Provide budget specifics for media coverage and support.
5. Provide budget specifics for contingencies.

Implement the plan

1. Pre-determine staff involvement
2. Identify specific tasks/activities

Evaluate the effects of your communication

1. Formative evaluation toward the first third of the operations.
2. Summative evaluation at the end of the cycle.

Look for necessary refinements

1. What are the results of the summary evaluation?
2. What needs to be improved or refined?
or
3. If no major improvements or refinements are necessary, spin-off to another project.

Conclusion

To summarize, when we communicate a development program/project, we may immediately say that we would be doing either mass communication, corporate communication or development communication. This is almost always automatic because of our own training and predisposition. In reality, however, we are actually doing just communication, pure and simple. Later, what we do becomes MassCom, CorpCom, or DevCom as a result of having contextualized what we are doing. The fact remains, however, that in any of these communication strategies, we use the same tools and the same measures of success or failure.

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In 1972, the Radio Farm News (RFN) was reconceptualized and split into two services: Development News Service (DNS), and the Development News Digest (DND). The DNS continued to carry crisp news items about research results and other new modern farming developments from UPCA, while the DND, which began circulating in April 1973, carried feature articles about how research results were influencing the farming practices in the Philippine countrysides. These news services, including the Rice Production Manual, continued to be published by the Department initially, but such function was transferred in 1980 to the Philippine Council for Agricultural Resources Research and Development (PCARRD).

In the same year, 1972, the Master of Science (agricultural communications) program, which was first offered in 1965, was renamed MS (development communication). With this renaming of the program, a number of graduate students began flocking to Los Baños. The first batch of grad-

uate students in development communication who were from outside of UPCA came in as graduate assistants with teaching functions starting in 1973. These were: Patricia Sto. Tomas (from the Girls Scouts of the Philippines), Esther Manigque (from a private educational institution in Manila), Rosita Valencia (from another educational institution in Manila), Madeline Mag-uyon (from the Institute of Mass Communication in Diliman), and Antonio Moran (from the then Philippines News Service). Having completed their master's degrees, they ultimately left the Department for their respective professional or other calling (in 1976 Sto. Tomas transferred to the Department of Labor to join the staff of then Secretary Blas Ople; Manigque withdrew in 1978 from the academe to care for her ailing mother and in the early 80's, she succumbed to cancer; Valencia went for her PhD in 1979 and ultimately migrated to the US; Moran became Assistant to UPLB Chancellor Emil Javier then later pursued his PhD in Australia. He came back to the then IDC where he later served as Chair of a Committee to Study the Elevation of IDC to the College of Development Communication. He later joined the UP Mindanao in the mid-80s; and only Mag-uyon (now Suva) stayed with the Department (now College) until her retirement in early 2016.

A clearer understanding of development communication education in Los Baños in recent years may be gleaned from an article that I prepared for the Asian Media Information and Communication Centre (AMIC). This article was a chapter of a book edited by Professor Srinivas Melkote of Bowling Green University, USA, and published by AMIC in 2012.

Box Article # 2

Development Communication Education in Los Baños: Contribution from Graduate Research

By Felix Librero

(Reprinted with permission from Melkote, Srinivas R. (ed.), 2012, **Development Communication in Directed Social Change**, Chapter 12, pp. 231-243.)

Background

This is a propitious opportunity to look back and take stock of what has been in the field of development communication the way it has been taught and practiced in the Philippines, where the term “development communication” was first introduced by Professor Nora Quebral of the University of the Philippines in 1971 (Quebral, 1971). The history of development communication in the Philippines is well-recorded by scholars from both the Philippines and outside (Man-yoso, 2006). The professional practice of development communication, as conceptualized in Los Baños (Quebral, 1986) has been well-written about (Ongkiko and Flor, 1996; Quebral & Gomez, 1976). Its theoretical leanings have been explained well (Jamias, 1972; Quebral, 1971) as well, but there is limited literature on how it has been taught (Librero, 1991; Quebral, 1988). This paper is not prepared to delve deeply into the curricular issues surrounding the teaching of development communication at the University of the Philippines Los Baños, the seat of DevCom in the Philippines. However, it is precisely the intention of this paper to look at graduate research in the last decade, particularly at the doctoral level, as a reflection of how DevCom might have developed and been, or being, taught as an academic discipline in Los Baños. For example, a cursory look at the basic strengths of development communication graduates in Los Baños today indicates that they are highly skillful particularly in the new information and communication technologies although they remain wanting in theorizing. This must have been the influence of the initial focus of development communication efforts in the country when the fundamental concerns were the application of communication models, techniques, and materials to enhance the development process in a “Third World” setting.

Beginnings of Development Communication Research in the Philippines

In the Philippines, development communication research started as far back as the early 1950s, when the present University of the Philippines Los Baños College of Development Communication (UPLB-CDC) started out in October 1954 as the Office of Extension and Publications (OEP) under the Office of the Dean of the then University of the Philippines College of Agriculture (UPCA), initially undertaking extension media studies. It has been 56 years since, but the focus and direction of research done, initially by a handful of young staff members and then later with significant contributions from graduate students, has remained without substantially digressing from concerns associated with the identification and description of what media were available in rural communities during the early 1960s to studies on availability and access to ICTs in the 1990s and on to the first decade of the current century.

Graduate research in development communication undertaken in the Philippines may be considered voluminous mainly because it was in this country where graduate programs (both in the master's and doctorate levels) in development communication started out way ahead of other graduate institutions worldwide (Quebral, 1988, p. 158, citing personal communication from John Woods of UNDP circa 1975).

As has been reported elsewhere (Librero, 2003), exploratory studies by staff members started in the mid-1950s while graduate research began in the late 1960s. Dissertations for the PhD degree started being written in the late 1970s, and the first PhD dissertation was completed in 1979. Incidentally, the refocus from pure agricultural and rural development orientation in communication efforts in the Philippines to development communication (concern for broader de-

velopment problems and issues) began in 1971 with the seminal paper of Quebral (1971), who coined the term “development communication.”

Initial Classification of DevCom Research in Los Baños

Graduate research in development communication in the Philippines became a growth point in the late 1960s, but a deliberate effort at classifying the nature of research being undertaken in those years began only in the late 1970s to the 1980s largely through staff meetings and informal discussions among academic staff of the then Department of Development Communication under the leadership of Dr. Nora C. Quebral. There was really no formal concept paper that laid out how development communication research was to be classified then. Everybody knew, however, that it was Dr. Quebral who conceptualized the typologies of development communication research then, and was formally reported much later (Gomez, 1993; Librero, 1993, p. 23), as follows:

People research. This deals with needs, problems, level of knowledge, circumstances, environmental beliefs and habits of members of the communication system. The sub-topics under people research include: information sources, attitudes, participation, adoption, innovations, and credibility.

Effects research. This deals with research on the impact of communication. The studies reviewed were sub-categorized into channel, effects, role of media, impact of media, and perceptions.

Normative research. This refers to studies that deal with how communication ought to happen in the system. This category was further sub-classified into format effectiveness, utilization pattern, learning systems and distance learning.

Policy research. This refers to studies that deal

with the analysis of communication systems, services, structures and infrastructures. They were sub-classified into communication structure, communication networks, communication flow, linking system, coordination and strategy.

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An attempt at establishing generalizations based on the above-mentioned typologies of development communication research in Los Baños, indicated the following conclusions (Librero, 2001; 1993):

People research indicated that the adoption of innovation, for example, was usually more successful when the adoption was based on the adopters' rational decision-making, which, in turn, was influenced by their experience and knowledge of the topic of innovation. It was also observed that the dynamic communication and interaction among members of a scientific community was a critical variable in the successful performance of a scientific task. In fact, active sharing of information clearly enhanced quality of scientific output among researchers and members of the scientific community in Los Baños.

Effects research has arrived at the conclusion that the media of communication performed a unique role in facilitating collective action at two levels: either in the consciousness of people, or in their physical participation in special or community action. The mass media tended to heighten the awareness of and interest in an innovation, while personal media tended to facilitate decision-making.

The general conclusion that normative research in

development communication has arrived at indicated representation of actual life experiences in media presentations like dramatizations appeared to have improved the teaching-learning process because the technique of dramatization enhanced realization of the significance of the roles and functions that individuals performed in real life through appropriate framing and focusing. It has also been observed that discourse analysis appeared to have been an effective tool in evaluating whether or not the communicator and communicatee were both moving towards a state of congruence in order to achieve common understanding of each other's meanings.

Policy research highlighted three significant observations. These are: first, a well-defined communication structure within a development program or agency was a necessary but not enough condition to achieve effective communication, although a communication structure that facilitated sharing of meanings of messages among members of the system was an assurance that effective communication could exist; second, an effective communication network was a powerful tool to ensure that members of a communication system would interact appropriately in order to share understanding of the content of communication leading toward achievement of objectives; and third, the effective communication of innovations was achieved much more easily and quickly if the source subsystem, linking subsystem, and user subsystem of an entire communication system were integrated to ensure that each subsystem was aware of what happens in all other subsystems.

This classification, it would appear, was introduced as a means of effectively combining what seemed (in terms of content) related and current at that time although appeared unrelated. However, it was not designed to be a generic categorization that could include works

still to be undertaken. Therefore, it might also appear wanting as a classification typology but not entirely inadequate because it has been able to provide realistic generalizations of research findings for a period of three decades (1970's-1990's). It still is applicable today, although not widely applicable outside of Los Baños, hence the need to employ a more widely accepted research classification.

Current Status of Graduate Research

In recent years, there has been another effort to classify the concerns of development communication into what have been referred to as threads, but which appear to focus on the practice of rather than research in development communication (Colle, 2002). These threads, according to Professor Royal D. Colle of Cornell University, include the following: the UNDP thread (also known as development support communication), the extension thread (borrowed from agricultural extension), the community participation thread, the population IEC and health communication thread, the social marketing thread, the institution-building thread, and the ICT thread, all of which also appropriately reflect programmatic classification of development efforts and concerns.

This report focuses on a meta-level analysis of graduate research in development communication, particularly the PhD dissertations which more or less are understood to provide clearer view of the trends in high-end research efforts in the field of development communication in the Philippines. From 1979 to 2010, a period of 31 years, 90 PhD dissertations were completed, which account for about 23 percent of graduate theses in development communication in Los Baños from 1964 (when the first MS thesis was completed) to 2010. However, if only the PhD dissertations completed from 2001-2010 are considered, the

32 dissertations completed during the period under review comprise a hefty 35.5 percent of the total of 90 dissertations completed since 1979 (Table 1).

Table 1. Graduate theses in development communication completed in Los Baños (1964 to 201).

Decade	MS*		PhD**		TOTAL	
	n	%	n	%	n	%
1961-1970	6	1.54	0	0.00	6	1.54
1971-1980	45	11.5	3	0.77	48	12.33
1981-1990	89	22.8	22	5.65	111	28.52
1991-2000	95	24.4	33	8.48	128	32.90
2001-2010	64	16.4	32	8.22	96	24.67
Total***	299	76.8	90	23.12	389	99.96

*First MS Thesis completed in 1964

**First PhD dissertation completed in 1979

***Total percentage due to rounding-off

The focus of this report are the doctoral dissertations conducted during the period under review (2001-2010). An analysis of the data indicates that more than one-fourth (27.08%) was classified as any of the three threads: UNDP thread (12.5%), extension thread (8.33%), and community participation thread (6.25%). It is notable, however, that only three dissertations were done in the area of social marketing and one each in the areas of ICT, population IEC and health, and institution building (Table 2).

Table 2. Classification of graduate research in development communication at UPLB (2001-2010).*

Classification	Total		MS		PhD	
	n	%	n	%	n	%
Extension Thread	32	33.33	24	25.00	8	8.33
UNDP Thread	27	28.12	15	15.62	12	12.50
Community Participation Thread	16	16.67	10	10.42	6	6.25
Social Marketing Thread	10	10.41	7	7.29	3	3.12
ICT Thread	8	8.33	7	7.29	1	1.04
Population IEC & Health Comm. Thread	2	2.08	1	1.04	1	1.04
Institution-Building Thread	1	1.04	0	0.00	1	1.04
TOTAL	96	99.98	64	64.50	32	33.32

*based on Colle's (2002) typology

**due to rounding-off

Colle (2002) clearly enunciated that his typology was meant for development communication, but it can as well be argued that the same typology is as easily applicable to mainstream communication practices and research.

A hindsight analysis of doctoral dissertations in Los Baños from 2001-2010 focused on the top three threads (UNDP, Extension, and Community Participation). The social marketing, institution-building, ICT, and population IEC threads appear to be less common areas for doctoral dissertation work, which becomes a significant issue if one considers the fact that development communication academic staff have openly discussed in their classes issues regarding these threads. This raises the question of who decides what topic a doctorate student should pursue as dissertation topic. Of course, this could ultimately appear as a naive question because, , while not openly discussed

in Los Baños, the graduate students' selection of topics for graduate theses is frequently influenced by the faculty advisor's research interest or the student's mother agency's current communication support for its development programs and efforts. A cursory look at anecdotal reports and personal testimonials from many faculty advisors and students undertaking graduate work indicate that the topics of research pursued by graduate students are frequently dictated, for practical purposes, by the research interests of the faculty advisor or the student's mother agency. It can, therefore, be argued that at least in the field of development communication, graduate research is not solely anchored on the research interests and curiosity of the graduate student.

The generation of new knowledge, which is presumed to be the primordial goal of academic research (i.e., graduate research) appears to be much more appreciated as a post-hoc function that is better done after a hindsight analysis of data and observations made in relation to the satisfaction of other, perhaps unrelated research objectives. A closer look at dissertations in development communication, done particularly by those who enjoyed scholarship grants to pursue their PhDs, would lead to the conclusion that these dissertations were designed more to solve existing field problems or clarify conditions affecting implementation of development programs than to generate new findings, information, or knowledge that are intentionally meant for theorizing.

It may be safe to conclude that dissertations in development communication undertaken in Los Baños have not been designed to lead purposely to theorizing but to solve existing problems or clarify communication situations. Gomez (1993) verbalized such concern when she reported, thus: "By nature, Dev-Com research is issue-oriented, problem-oriented and

action-oriented and its central concern is to seek solutions to specific development problems.” This was enunciated earlier on by the faculty and staff of the then Department of Development Communication when, in a brief historical narrative about the department, they said, “student and staff research in the department has been and continues to be primarily geared to understanding the development communication process in rural and agricultural settings” (DDC Staff, 1984, p. 121). This, unfortunately, led to an uneasy academic balancing situation where it has become necessary to choose between pursuing research under an open policy where researchers have the freedom to select what they want to study on one hand, and a situation where a research program has to be imposed to set the direction of academic efforts in the further growth of development communication as an academic discipline, on the other.

Establishing a research program has been tried in Los Baños in the past. For example, in 1991 the then Institute of Development Communication (IDC), now the College of Development Communication (CDC), undertook its first research workshop, precisely to chart a research program for the succeeding years. This research workshop highlighted the difficulty of arriving at a research program that could sufficiently cover all the concerns of development communication academics (IDC, 1991). What was clearly enunciated during the workshop was that there would be a need for more than one research program for the academic department. A research program, it was agreed, needed to have a focus and the focus determined who was to do what. An effective research program presupposes availability of resources needed in implementing the program, otherwise the more practical thing to do was simply set a research agenda, which was necessarily broader in context, so that researchers, including graduate researchers, may have the freedom to con-

ceptualize freely the kind of research they would want to pursue. It should be clear that even to this point there has been no such thing as a theory-oriented research program for development communication in Los Baños.

Table 2 shows that the population IEC and health communication thread was not a common research focus in the decade from 2001-2010. A possible reason could be that this same thread was well researched in the decade of the 70s when such thread became part of the agenda for development communication. However, it might be a different case for the ICT thread, which became an area of interest among development communication academics and practitioners in the 80's mainly because of its potentials as tool for effective development communication programs. As may be gleaned from the doctoral dissertations written during the years from 2001 to 2010, few were on the role of communication in institution-building as well as in social marketing. This was not to say that these two areas were not researchable areas. In the years under study, they (social marketing and institution-building threads) probably were not articulated well enough to gain attention and interest among graduate students and even academic advisors for reasons only they would know. Furthermore, such threads might not have been within the purview of institutions providing financial support to development communication graduate students at that time.

Over-all, the nature of doctoral dissertations done in development communication in Los Baños from 2001 to 2010 indicated diverse research concerns many of which could not be appropriately classified under any of the threads that Colle (2002) typologized. Standing out, too, seems to be the need for more rigorous work and much deeper analysis of data. The bulk of these dissertations were essentially case studies with very

small sample sizes. In fact, at least two case studies reported having gathered data and information from seven respondents. Interestingly, for the bulk of doctoral dissertations done during the time under review the graduate researchers claimed having employed a combination of both qualitative and quantitative methodologies. Quantitative analyses, of course, were not done on data gathered from very small samples, but a closer look at the qualitative analysis employed also indicated that the level of analysis could be substantially deeper, sufficiently sophisticated, and more rigorous.

In addition, further analysis of the dissertations under consideration indicates that the research objectives reflected mainly the identification and description of communication problems existing in the locales of the studies. There was minimal mention, if any, of objectives that tended to either attempt to formulate policy recommendations as a result of the studies, or, more importantly, to formulate research hypotheses that could be further tested. In fact, on the basis of the dissertations under review, only about eleven percent (11.5%) included recommending policies and almost 89 percent (88.9%) simply identified and described the communication problems existing in the research locales. It is worth recalling that Quebral herself emphasized the need for policy research in development communication when she said, "problem-oriented and interventionistic, development communication research must lead to and, in the end, be embodied in policy; otherwise it is self-defeating" (Quebral, 1988, p. 71).

In the 32 dissertations reviewed, there was no attempt to formulate or suggest any research hypothesis for further testing, which may be a reflection on the lack of efforts at theorizing in the study of development communication in Los Baños. This, in no way, would

intimate that development communication academics in Los Baños may be wanting in intellectual capacity to theorize but that they were exceedingly saddled with the need to identify, articulate, and resolve communication problems in their environment in order to strategize how best they might be able to enhance the development process, which has always been considered priority area in the Philippines. Still, theorizing remains a legitimate concern needed to be addressed.

Quo Vadis, DevCom?

On the basis of the Los Baños experience, one can say with some degree of confidence that as a profession and calling, development communication has been well articulated; as a field of research, it has focused more on the traditional concerns such as the clearer understanding of the role of communication in the facilitation of the development process through appropriate human interventions; as an academic discipline, it still needs deeper articulation and perhaps a reorientation of intellectual capacity and resources towards theorizing.

Up until the present, the nature of development communication graduate research that has been undertaken has focused on efforts to describe, understand, and solve communication problems in relation to what Quebral (1971) pointed out as the “development of the human potential.” It is not intimated at all that this kind of research should be discontinued. In fact, as new technologies are developed and deployed, there is continuing need to understand how these relate to development communication in efforts to enhance the social development process in the rural as well as the urban settings. Indeed, this is a significant consideration because development communication is extremely dynamic as it aims at moving targets all

the time.

There is a voluminous amount of development communication research done at the graduate education level in Los Baños, and in general this research has focused on the identification, description, and solution of existing communication problems. Clearly, there is need for greater efforts at hypothesizing and theorizing, but there are two schools of thought on this issue.

First, there have been efforts at formulating formal, institutional research programs with specific goals of undertaking quality research that directly leads to the formulation of theoretical propositions in development communication. How effective this approach might be remains a debatable issue among development communication academics in Los Baños. Formulating and implementing efficiently and effectively any research program with the goal of theorizing requires substantial basic research resources (human and non-human), which Los Baños is unable to provide (not in the past, not now, and probably not in the near future). This leads to the second school of thought.

Theorizing may be achieved through the synthesis of research that has been done over the last five decades (1950s – 2000s) of development communication in Los Baños. Effective synthesis work would lead at least to the formulation of research hypotheses if not theoretical propositions that would eventually lead to a grounded theory of development communication. As they are, though, this will require a lot more time, effort, and resources.

There is one factor that the UPLB College of Development Communication might consider doing to fast-track the process of theorizing in development communication. It shall have to decide whether to

formulate for itself a long-term research program, or to put in place a more open road map, frequently called a research agenda.

A research program requires more specific objectives that need to be achieved over a given time frame. It also means directing most resources (human and non-human) in pursuit of the objectives of the research program. Frequently, this also means that the research activities of both the staff and the students are pre-determined to fit the research program in order to gain some support possibly in the form of financial assistance. On the whole, a research program cannot possibly include everything that needs to be studied because there would be substantial amount of concerns and questions that would not fit the framework of a single research program. To address these issues outside of a particular research program's framework, there would be need to conceptualize and implement additional research programs. This is something that Los Baños may not be prepared or willing to do at this time.

A research agenda, on the other hand, might be more attuned to what Los Baños academics might be more willing to engage in given their individual as well as collective circumstances. A research agenda sets in broad strokes the over-all direction toward which all research undertaken in the institution might point without necessarily having to pre-identify researchable questions or specific topics. This provides some amount of elbow room particularly for graduate researchers who may have to contend with the demands and requirements of their respective institutions that provide financial support to their graduate work. The agenda, however, would need to be clarified so that those wanting to be involved might have a clear idea of the nature of research questions that they would want to formulate and work on. To some degree, this

approach could even help graduate students develop their research creativity (in the analysis of the literature, further explanation of the research issues and questions, selection of methodologies, and analysis and interpretation of data and information), which needs to be further addressed in today's graduate research scenario. Additionally, a research agenda provides more degrees of freedom towards collaborative work among graduate researchers, which may contribute towards the development of more useful skills in the practice of research in development communication.

A two-stage development communication research (which should include both undergraduate and graduate research) course of action for the Los Baños development communication school is offered.

Synthesis of what exists. As a general course of action, the school should undertake various mini-meta-analyses of development communication research in various areas of concern, perhaps according to the threads typologized by Colle (2002), or employing another set of research categorization, as an initial move to strengthen or revitalize development communication research in Los Baños. This appears to be of significance that requires immediate and short-term action on the part of Los Baños development communication academics and students.

Critical analysis of what can be. For practical purposes, development communication research in Los Baños should continue and follow what has been its trajectory over the last decades, however, new efforts must be pursued toward generalizations and formulation of research hypotheses or theoretical propositions that would lead to further strengthening of development communication as an academic discipline. Since the best approach to an understanding of how

development communication can work as an academic area is through an analysis of how it operates as part of the development process, it is suggested that development communication research look at its role and functions in the following development concerns for the coming few years. Necessarily, appropriate refinements will have to be introduced along the way.

- Agricultural and biotechnological developments
- Rural-institutional developments and urbanization
- Population, nutrition and health developments
- Public information, freedom of information, and public governance
- Educational developments (distance and electronic learning, and transnational education)
- Gender, human rights, and civil society issues and concerns; and
- Emerging communication technologies.

Truly, these seven categories provide a wide degree of freedom in the choice of what to research on as the collectivity of these seven categories seem like a catch basin for all concerns in human society, but the focus must be on development communication.

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Development Journalism and SANDIWA

Agricultural journalism was a popular field of study and practice in the Land Grant colleges of the US in the 60s. It came as no surprise that agricultural journalism was to be one of the focuses of extension education and agricultural communications in Los Baños as UPCA was generally patterned after the Land Grant Colleges. In fact, it was agricultural reporting and feature writing that became the first skills that undergraduate students in agricultural communications learned with some level of mastery, both for radio and the newspapers. Agricultural journalism was part of print communication which was one of the three major areas in agricultural communications, the two others being community broadcasting and audiovisual communication. Naturally, with the introduction of development communication in the early 70s as the main area of study, agricultural journalism became development journalism. During that time, too, the field of development journalism was also a new area of professional practice being espoused by the Press Foundation of Asia through its news service, DEPthnews, highlighting the areas of development, economics, and population as the new beats in news reporting. DEPthnews was also part of the international network of news services focusing on developmental issues that was being sponsored by UNESCO at that time, which included the Tanjug News Service of Yugoslavia, the Bernama News Service of Malaysia, among others.

A few years earlier in 1967, Elinora (Leni) Moral, already with a Master of Arts degree in journalism, was recruited Instructor, and Carmencita (Ching) Navarro, English major graduate from UP Diliman was recruited editor in 1968. The following year, 1969, Navarro transferred to the International Rice Research Institute. Moral became active in agricultur-

al journalism and then development journalism. When the Department of Agricultural Communications transferred to its new building in 1970, the young faculty of the department began informally discussing the possibility of publishing a community newspaper that could demonstrate the principles and skills being learned by development journalism students, working seriously to be able to demonstrate their expertise in the media triumvirate of the newspaper, radio, and audiovisual media.

About October of 1971, five faculty and staff (comprised of Leni Moral, Ning dela Paz, Pete Bueno, Tony Frio, and myself) of agricultural journalism, audiovisual communication, and farm broadcasting brainstormed on the possibility of starting a weekly community newspaper as an outlet for farm information in tandem with DZLB. Picking up from the philosophical orientation of development communication, the group decided to coin the name **Sandiwa**, from the Tagalog terms *isang diwa* (one soul). Moral became the Editor and I became an active columnist, writing the print version of my *Balitang Pambukid* (Farm News) radio program. **Sandiwa** came out with its maiden issue in January 1972. Through the efforts of the young faculty of development communication, SANDIWA's readership, even with low penetration rate in the rural areas, spread to the provinces of Laguna, Batangas, Cavite, and Rizal. Sustaining its publication was tough though.

The following year, 1973, the PhD in development communication program was approved by the UP Board of Regents. Then, on March 11, 1974, the Bachelor of Science in Development Communication (BSDC) was also approved, thereby completing the three-tiered formal education in development communication in Los Baños, the first such set of programs in development communication worldwide (Cadiz, 1979; Quebral, 1988). Finally, the inevitable had to follow. On March 28, 1974, UP's Board of Regents approved the renaming of DAC to Department of Development Communication (DDC). Cadiz (1979), reviewing the department's history, said, "The transformation signified the culmination of the department's almost 20 years of experience in extension-communication, an experience that brought about a widened understanding of the meaning of development and the crucial role of communication in advancing development" (p. 84). For me, a maturing professional who was just introduced to the concept of social development in a Third World setting, the transformations of the 70s were of profound significance.

When Martial Law was declared on September 21, 1972, Radio DZLB voluntarily went off the air. As Radio Station Supervisor, I had to personally supervise the silencing of the radio station to avoid physical closure by the Philippine Constabulary. I personally had to demagnetize (erase) all our canned programs on that day (Sunday) and told the technician not to turn on the transmitter anymore. Our Station Manager, Ning de la Paz, was stranded in Marikina, Rizal. The only radio stations allowed to operate then were the stations belonging to the government network. However, we continued to publish **Sandiwa**, and, in the Summer of 1973, a well-attended regional development journalism conference was held in Los Baños in collaboration with the Region IV Office of the Ministry of Public Information. That conference led to an agreement turning over the **Sandiwa** to the Ministry of Public Information. The agreement was signed on April 4, 1974 by Minister Francisco Tatad of the Ministry of Public Information (MPI), Chancellor Abelardo Samonte of UPLB (President Marcos issued the Presidential Decree organizing the UP System and creating UPLB as the first autonomous campus of the System in 1972), and Francisco Dauz of the MPI Bureau of Broadcasts (Dy, 1983). As usual, we of **Sandiwa** were operating as academics with only the good intentions of development journalism as an academic field of study in mind, so the Department turned over to MPI Region IV the publication of **Sandiwa** after the agreement was signed. We, of **Sandiwa**, had our own doubts about this transaction, but we probably silently agreed that if we wanted **Sandiwa** to continue being published then it must have some funding, which was something UPCA could not provide. Unfortunately, the publication folded up after only two quarterly issues. In each of those two issues, it was clear that about 70% of content was in direct support of the Martial Law government but was passed as developmental issues, while about 30% was focused on real developmental issues such as those about population, economic development in the country sides, and health and nutrition.

Sandiwa was a very good concept, but it came out when the Martial Law regime was looking for an appropriate media project to help legitimize its existence. Development journalism, through **Sandiwa**, was a good promotional strategy for the Martial Law government and became a powerful argument for the critics of development communication who had been claiming that DevCom was nothing but government propaganda of the Martial Law government of the Philippines.

While sticking it out with the academe, I found my own values as a neophyte writer of science stories continually change and improve, although I was only an average science writer. Much later, as an academic is wont to do, I began asking pointed questions as a means of coaching younger science writers towards what I thought were more appropriate and relevant topics of information sharing with the members of the rural communities.

Box Article # 3

QUO VADIS, PHILIPPINES SCIENCE AND TECHNOLOGY JOURNALISM?

(Delivered by Dr. Lex Librero at the Inaugural Symposium on the theme “Agricultural Science and the Media: Building Synergistic Partnership for Development” sponsored by the Philippine Agricultural Journalists, Inc., CALABARZON Chapter, held at SEARCA, 31 March 2006.)

I have chosen to speak on a topic that is tangential to the theme of this symposium, so I do seek your indulgence. I have been trying to address the issue of science and technology journalism in this country for quite sometime now. Hence, this opportunity to speak before you is one I couldn't simply pass without expounding on the issues that I have been trying to speak on. I hope my presentation will not be as boring as many of the science stories I have read in Philippine papers in recent history.

Science and technology has been a legitimate news-beat for a long, long time in the developed world. In fact, it has grown to be a perfect field for full feature stories that are given full, if not preferential, attention in international papers like the **Christian Science Monitor**, **New York Times**, **Los Angeles Times**, and magazines like **Time** and **Newsweek**. Specialized

television channels focus on science and technology.

In the Philippines, it's a bit different. We do not have enough good science stories published in our papers, nor broadcast on radio and television. So, through the Philippines Agricultural Journalists, Inc., I wish to lodge a complaint in the hope that our complacency in regard to the promotion of science and technology as full-fledged newsbeat may be reconsidered.

What I would like to do this morning is to highlight the whys of science journalism in this country. I'm not asking why we're doing S&T journalism; I'm asking why we're not doing enough of it and why we're probably not doing it right. To be fair, however, we've had great experiences with good science and technology writers.

Johnny Mercado, who started DEPTHNews, was the model of budding science journalists in the 1960s. His efforts ultimately led to the institutionalization of development journalism. Today, however, he writes about politics in his column in PDI. I sincerely hope he'll continue to write about science at least now and then.

Zac Sarian has been consistently writing about agriculture and agriculture-related issues. He has been very successful; he won the Magsaysay award in 1974. He makes modern agriculture very understandable and actually lucrative. He's still very active, I hope you're reading him, too.

Rudy Fernandez, the journalist not the actor, has also been explaining results of research to potential users of scientific information through his countless reports. In fact, most of the materials you read in the agriculture section of the Philippine Star once a week are his. That's the reason why he has two by-lines. He

has been doing very well, but may be Rudy should branch out to other science and technology areas outside of agriculture and fisheries.

While there have been quite a few science articles published in both the broadsheets and magazines written by various individuals, these articles, while good and well written, are more of the exception rather than the rule. Important issues and new developments about science and technology have not always been written up. For example:

I'd like to know why there was not much written about the invention by four DLSU students of a way of translating electronic messages into Braille. This gadget enables Filipinos who are visually disadvantaged to use the Internet.

I'd like to know how much in-depth scientific explanation and education slant was given to the landslide in Leyte, instead of how it influenced political bickerings in this country.

I'd like to know why the wild flora of Mayon Volcano understands the volcano better than people do. Somebody should write about the psychology of Mayon Volcano so that people will understand how it behaves and why it behaves the way it does. Did you know, for instance, that on Mayon's southeastern slope is a gulley 100 meters deep? What does it mean if lava on the tip of the volcano fossilizes and lateral explosion happens?

Will someone from your ranks want to do a road map of volcanoes in this country, explaining along the way their respective behavior? Naturally, these should be supported by scientific evidence, which are, by the way, available in the country's appropriate institutions. Just last week Mt. Bulusan in Sorsogon, Mayon Volcano

in Albay, and Taal Volcano in Batangas were showing unusual behavior. Do we understand exactly what is happening with these volcanoes and what this restiveness means to the people and the immediate environment surrounding them? What is the psychology of these volcanoes, for example?

Now, on more mundane issues, I'd like to know the answers to the following ten whys:

One, why are there so few writers in the science and technology beat? DevCom graduates are in the best position to do science journalism, but why are they shying away from the science and technology beat? They probably have found jobs much higher-paying than newspapering. Or is it possible they don't like to write about science? For example, I've seen some feature articles, good ones, written by DevCom graduates, but these were on the entertainment industry. I've seen a lot of materials written by DevCom graduates but such materials are speeches of some executives who may have become enamored with the writing skills of DevCom graduates.

Two, why is no one explaining comprehensively the importance to the Philippines of Mount Makiling aside from its folk value? What really is the true significance of Mount Makiling being host to 80% of Philippine flora and fauna? Demonstrate what can be made of it, not just guess what it might mean. Offer practical projects to be done here in relation to the efforts of this country to promote science and technology.

Three, why were there no follow up stories about the brief report on a Filipino astronomer's discovery of a new red spot on Jupiter? He was recognized by NASA. Why can't we do similarly, even only through science articles? Someone should write about Filipino

Astronomer Christopher Go, who's based at the University of San Carlos in Cebu City, and analyze this Filipino's character, and juxtapose it with his personality and character as astronomer. Let's try to understand our achievers and why they achieve so much and serve as icons for the Filipino.

Four, why are there no stories about the most published physicist in the country today, Dr. Cesar Saloma of the UP Institute of Physics? He received an international award for physics last year, and he has published more than 20 papers in ISI-listed journals the last five years. What are the implications of his research? What kind of personality does he have as Filipino scientist that makes him so productive? Does he exemplify the Filipino scientist, or is he perhaps an abnormality?

Five, why is there no one looking into the evolving areas of scientific endeavor in the Philippines? Who has written, for example, about nanotechnologies and their potential implications to Philippine economy and Filipino lives? UP is now spearheading efforts in this direction, but are our scientists getting encouragement from the Philippine government and public? What's the role of media in this pursuit?

Six, why is it that S&T's share of the national budget always minuscule? What are the deep-seated reasons for the lack of budget for S&T? Is it because our lawmakers take S&T for granted given that they do not have enough working knowledge of the field? How do we compare with other countries which used to lag behind us and are now way ahead because of the development of their S&T? How do we compare in terms of budgetary allocation? Perhaps you might want to write about the S&T budget from a historical angle and show that we have always relegated it to the background.

Seven, why do we drive away our inventors instead of helping them right here so that the country might benefit from their inventions? As things go, Filipino inventions have benefited other countries more than they have benefited the Philippines.

Eight, why is there no one explaining what kind of science education our educational system offers? Let's find out why the DepEd is very proud of some sporadic performances of a few people. Is this department not referring mainly to scattered successes of one or two individuals? How about the 15 million other children?

Nine, why can't journalists write about the basic fundamentals of genetic engineering without having to over emphasize the perceived political fallout? Should we not have a deeper knowledge and understanding of technology before we are fed with its potential political effects so that we can at least arrive at informed points of view in the end? Can we not learn new things without having to include the political aspects all the time? Is it not worth trying to learn and understand science and technology first before trying to understand the politics associated with it?

Ten, why do we refuse to highlight on a continuing basis the exemplary performance of Filipino scientists and inventors who have influenced the growth of science and technology in other developed countries so that our fellow Filipinos at home may gain hope from them? We may have done some in this area, but very sporadically.

I must emphasize that it's not enough that we write about these issues once or twice. We have to harp on them so that ultimately we can call some attention to them.

My friends, I hate to do this but let me verbalize further my other thoughts and observations on science stories in this country.

1. In general, there's too much politics in them. I don't think I need to explain that further.
2. Frequently, they focus on superficial issues and rarely do they explain the deeper foundations of why things happen the way they do.
3. Science stories frequently are unable to make science and technology interesting because of lack of innovativeness in presenting how they affect us both on an individual and collective bases.
4. Not many creative writers are explaining the fundamentals of science in creative ways that ordinary people will appreciate.
5. Many writers remain steeped too much in the 5Ws; they have not tried enough other approaches to writing science and technology stories to make them more appealing to readers. For example, perhaps we should begin looking at leads that deal with outputs, results, or impact rather than always harp on the lengthy names of institutions or agencies as sources of stories simply to satisfy the 5 Ws.
6. Many have been unable to write about science in a way that would influence policy making because the stories lack sufficient depth of analysis and clarity of implications to the life of the nation.
7. Many of our teachers find it difficult to teach science properly and with depth because the curricular programs only scratch the surface. On top of this, many of our teachers are unable to make science an interesting subject precisely

because they lack deeper understanding of it.

8. There are not enough science stories to publish because there are not many writers writing interesting science and technology stories.
9. Many of our writers may actually be contributing to the mysticism of science by being unable to explain it in layman's terms.
10. Science journalism is hard work. And many of our writers are not working hard enough.

Having said all these, let me bring to your attention an approach to writing science and technology which I think is worth considering.

In the mid-seventies, the late Johnny Jamias wrote a cover story in the *Philippine Farms and Gardens* titled "Developing the Sturdy Breed." This article was a story of how the late Dr. Pedro Escuro, father of the Philippine Rice Breeding Program, developed the C-varieties of rice in the College of Agriculture here in Los Baños. Johnny's approach was to juxtapose the rigors of scientific work, such as in the area of rice breeding, with the sterling character of Dr. Escuro as a scientist. Hence, the title of Johnny's article was not only referring to the variety of rice, it was also referring to the character of the breed of scientist that Dr. Escuro exemplified. The net effect was that the best rice varieties that the Philippines had at that time were developed by a dedicated Filipino scientist of sterling character, who was at par if not better than any other rice scientist in the world at that time. In other words, it takes good people to do good science. And the Filipino scientist has what it takes.

Lest you accuse me of mere pontification, I am proud to say that I used to write. I was not a very good sci-

ence writer, but I did try to be understood. Unfortunately, not many of us then did enough of what ought to have been done well.

I was the first to write about Laguna Lake as paradise lost in the making; this was in 1971, 35 years ago. That feature article was published by the *Philippine Farms and Gardens*, may be because Zac Sarian was the editor. Nobody picked it up. The lake was still clean, then.

In the Philippines, I was the first to write about the possible negative effects of chemical fertilizers on Philippine agriculture, this was in 1975, 31 years ago when it was fashionable to use more and more chemical fertilizers to boost agricultural production. That feature article was published in various papers may be because Johnny Mercado included it in the DEPTH-News packet at that time. Nobody picked up the issue right away.

I spoke and wrote about the Philippines being a potential hub for regional telecommunications as early as 1984, or 22 years ago, but nobody picked it up.

I've written about science education, farmer's organizations doing scientific agriculture, puzzles in modern Philippine agriculture, the poultry industry, mixed farming (such as fish and vegetables together, way before the rice-fish technology became fashionable), rice drying technology, and even the land satellite system used in forecasting cropping patterns in the United States– which was published in 1982 in *Gintong Butil*, then the newspaper of the NFA. That feature article on landsat was published by *Gintong Butil* may be because Sanny Galvez was the Editor. It was good that there was one editor who thought the material was worth publishing.

Only in very recent years have these issues come to the attention of other journalists in the country. Had

there been enough write-ups on these at the time they were introduced to the public, perhaps we could have influenced early formulation and adoption of appropriate policies encouraging the growth and development of S&T journalism in this country.

I steered clear of politics because I knew then that I would only contribute to the confusion if I wrote about it. My personal belief has always been that when you write about science and technology, you can not be irrelevant, you can only help educate people.

In any case, in this country we've got too many political writers, and not enough in the other important fields. May be this is because we still have not matured as professionals in an immature society. I'd like to quote Professor Randy David in his PDI column on March 19, 2006. He said:

In modern, stable democracies, politics is kept within institutional limits. It is not allowed to invade other spheres of society, or to occupy the greater part of a nation's time. The public remains conscious that there are other equally important things in life worth pursuing. There is art, there is economics, there is science, there is religion, and there is family life, etc.

He further said,

Nations undergoing the difficult transition to modern democracy – like the Philippines – tend to spend a lot of time on politics. Every single aspect of public life tends to be politicized. Thus it is the utterances of politicians rather than the achievements of artists, writers, teachers and scientists that hog the public's attention.

In other words, what Professor David is saying, and I agree with him, is that we have not matured yet as a democracy. In the field of science and technology journalism, we are even less mature. But we are on

our way to maturity. Still, we do have a long way to go. This is where the fundamental challenge lies.

For you, members of the Philippines Agricultural Journalists, Inc., who I consider to be the selected few, who have chosen to and have the opportunity to pursue it, must now cultivate the science and technology beat and do a good job at it to make a significant difference. Construct your own pathways. Build your bridges. Develop your own expertise in the beat you created. Be the best science and technology journalists in this country. I'm sure that someday you would be acknowledged for responding to this challenge.

If we had a group whose members are as enthusiastic in writing about science and technology as those writing about politics, then we should have a dynamic profession that could bolster the image and prestige of science and technology journalism in this country.

Now, with your indulgence, I would like to consider myself an elder of the Philippine Agricultural Journalists, Inc., having been an original incorporator in 1976 and the first Chair of a PAJ Committee called the International Relations Committee.

As an elder, I wish to give unsolicited suggestions for your consideration, if I may. First, if DEPTHNews no longer exist (I haven't seen a packet in recent times), would it be worth the salt of PAJ to put in place a replacement, such as a ***PAJ Syndicated Features***, or something. I would certainly like to participate again in such endeavor when I go back to writing after my assignment at the UP Open University, which is actually less than one more year.

Second, I'd like to see PAJ doing for the S&T field what PCIJ is doing very well for politics. Indeed, this would perhaps be one of your loftier goals . . . to be able to

undertake investigative reporting in the field of S&T in this country. Science and technology journalism can be as exciting, if not more exciting, than our brand of politics which, incidentally, has become hackneyed.

My friends, let's be proactive. Let's influence the direction of growth and development of S&T in this country. Let's help our scientists realize their dream of making the Philippines a haven for scientific work and quicken the cadence of development of our economy and society as a whole.

I look forward to a more dynamic science and technology journalism in this country through the Philippine Agricultural Journalists, Incorporated.

I did try to provide some general pointers on how to communicate scientific issues for a general audience, and I was not always successful but I did make some points.

Box Article # 4

Challenges in Communicating Climate Change

(The original version of this paper was delivered by Dr. Lex Librero as Keynote Address in the Third National Symposium of the Philippine Network for Agriculture and Environment, Inc., Trade Hotel, Manila, November 14-15, 2009.)

Challenge No. 1: ***Communicating Climate Change, a*** ***Scientific Phenomenon,*** ***to a Largely Unscientific Audience***

I did a very quick and crude survey among ordinary Filipinos and found some interesting data. I have sus-

pected this kind of data all along, but I still got surprised when I saw the numbers. I shall compare these with data from the United States based on a poll conducted by Harris International from November 10-17, 2008. As you can see from Table 1, we do have an unscientific Filipino audience.

Table 1. What Filipinos believe in.

The Issue	Believe In (%)	Don't Believe In (%)	Not Sure (%)
God	100	0	0
Heaven	98	1	1
Angels	93	1	6
Jesus is God or The Son of God	92	2	6
The Resurrection of Jesus Christ	92	4	4
Miracles	90	1	9
Hell	89	5	6
The Devil	87	4	9
The Virgin Birth	85	7	8
Creationism	83	7	10
Survival of the Soul After Death	83	8	9
Ghosts	68	11	21
Witches	43	21	33
Astrology	38	41	27
Darwin's Theory of Evolution	34	41	25
UFOs	26	26	48

In Table 2, we also see an unscientific American audience. However, it would be much easier to educate

American audiences about climate change compared to their Filipino counterparts. This is probably one time that we Filipinos should imitate the Americans. Even so, it appears there would still be a long way to go.

Table 2. What Americans believe in.

The Issue	Believe In (%)	Don't Believe In (%)	Not Sure (%)
God	80	10	9
Miracles	75	14	12
Heaven	75	14	13
Jesus is God or The Son of God	71	17	12
Angels	71	17	12
The Resurrection of Jesus Christ	70	18	13
Survival of the Soul After Death	68	15	17
Hell	62	24	13
The Virgin Birth	61	24	15
The Devil	59	27	14
Darwin's Theory of evolution	47	32	22
Ghosts	44	39	17
Creationism	40	31	29
UFOs	36	39	25
Witches	31	54	14
Astrology	31	51	18

Source: Mooney & Kirshenbaum (2009), *Unscientific America*.

We have here in the Philippines a decidedly “unscientific” audience who ranked Darwin’s theory of evolu-

tion 15th out of 16, and prefer to believe in the presence of ghosts and witches.

Interestingly, few also believe in astrology, and yet, there are hordes of people consulting the palm readers of Quiapo. This could be taken to mean we have in our hands a confused audience, but an audience that probably has a strong belief system that is less than scientifically-oriented. The question now is, how do we communicate scientific phenomena to an unscientific audience? That our science communicators could do much to inform and educate the public about the ill-effects of climate change is a given, but they could also be overwhelmed by the very strong belief systems of their audiences.

Climatic change is a very sophisticated scientific phenomenon, and we must communicate this to a largely unscientific audience. That is a challenge, indeed.

Perhaps our pollsters should consider doing more surveys to find out the magnitude in which Filipinos appreciate scientific knowledge so we can at least try to figure out how we could communicate more effectively and efficiently the topic to the public, and perhaps bother less with who will win the presidency today since the elections would not be held today, anyway.

Let us try to recall past thinking on the topic of climate change. Those of us who have been trying to communicate climate change know that we are dealing with a public that tends to reject the idea that change in climatic conditions is due to human activity. Our public has always been of the belief that any changes in the climate has always been the handiwork of God.

This is hardly the time for a side comment, but I find this difficult to pass. One can always suggest, at least in jest, that those victims of Typhoon Ondoy who

are claiming that their insurance companies are not willing to underwrite the cost of repairing their cars damaged by Typhoon Ondoy, may probably have to line up in church for loan because in this country, as provided for by insurance rules, an act of God is not covered by insurance.

In any case, to believe that climate change happens because of the activities of humans is absolutely a different pattern of thinking. It is a major shift in paradigm. And we all know that paradigm shifts always take a long time to gestate.

For example, it has been some 150 years after Darwin published his book, *The Origin of the Species*, and a large proportion of both the American and Philippine publics remain unable to grapple with the theory of evolution. In America, less than half of the population believes in the theory of evolution, but that means that more than half of Americans do not really believe in it. For Filipinos, the dividing line is also very clear. Only 34% believes in it, while 66% does not.

Here is how Simon Donner, Professor of Geography, University of British Columbia, explains why it is a challenge, indeed, to communicate climate change in a largely “unscientific” world:

From Galileo to Darwin, science is full of examples where new discoveries challenged traditional beliefs. If history is a guide, it can take decades or centuries for the new science to become the new orthodoxy. The battle over public acceptance of natural selection is still being fought 150 years after the publication of Darwin’s *The Origin of Species*. The potential for human-induced climate change may not belong in a list of the most fundamental scientific discoveries of the last 500 years. Like those discoveries, however, it does challenge a belief held by virtually all religions and

cultures worldwide for thousands of years. This long view of history needs to be reflected in campaigns to educate the public, who do not have the benefit of years of graduate training in atmospheric science, about the science of climate change.

Challenge No. 2:
*Climate Change is not a Breaking News
but an Oozing Phenomenon*

Science communicators, particularly science journalists, have found it very difficult to report on climate change because it is a phenomenon that is incrementally unfolding and the evidences are only trickling in. In other words, from the point of view of mass media news parlance, the story is not breaking (except in the case of Typhoon Ondoy and other similar cases), it is simply oozing or very slowly flowing. Such was how it was described by Boyce Rensberger, director of the Knight Science Journalism Fellowships at the Massachusetts Institute of Technology (Chandler, 2008) during a panel discussion on “disruptive environments” held last year.

Panelists were tackling the theme “communicating climate change: science, advocacy and the media.” Perhaps it is not only a question of how the phenomenon unfolds that is making it difficult for journalists to cover; it is probably partly because the scientists also are finding it difficult to explain why climate change is happening the way it does – oozing, instead of breaking.

An important concept that is always hammered into the heads of aspiring reporters in college is the concept of “breaking news,” which means “it is happening now.” Climate change is happening now, all right, but why does it not carry the same urgency as, say,

breaking news about an ongoing bank heist? The big difference is that the bank heist happens in just a few minutes if not seconds, while climate change happens anywhere from decades to millions of years. From the point of view of the public, climate change, unless it translates itself into catastrophic typhoons and floods like Typhoon Ondoy was, appears to be a long, long way into the future and so the urgency is not even perceptively felt. Scientists, however, feel it is an issue that is absolutely urgent and something must be done now. Looking at the long-term trend based on data collected over so many years, experts are seeing a quickening of the rate at which climatic conditions are changing. What they are seeing, based on scientific models and means, is making them more scared. But the public, not knowing the workings of science, does not appreciate this situation and, therefore, does not feel the same level of urgency so it is not significant information that warrants action right away. In other words, as it is considered to be act of God, so shall it be.

Do we have a choice in this situation? It appears we do not have much choice for now. We will have to continue with efforts at informing and educating the public about the significance of our changing climatic conditions. There are ways of doing this, such as focusing on the public's experience with, say, the *El Niño* and *La Niña* phenomena because these are events directly affecting the daily lives of people.

One of the panelists in last year's discussion at MIT was MIT's Kerry Emanuel, professor of atmospheric science who attracted worldwide attention when, just a few weeks before Hurricane Katrina slammed into New Orleans last year, he published a paper predicting the increased intensity of hurricanes due to global warming. Emanuel's comment in the panel discussion rang loud and clear when he said, "when it comes to

explaining complex scientific work to the media and the public, scientists are ‘not very well trained.’’ Still, Emanuel said, it should be pointed out quite clearly that science, indeed, is built on incremental progress and could be explained only in terms of simplified metaphors, which also invites criticisms from other scientists because metaphors are not exact (Chandler, 2008).

The message is rather clear: climate change is an unfolding phenomenon, and communicating it to the public is always a work in progress. Given such a situation, therefore, the communication expert would now have to devise ways and means of making such a content much more understandable to the public and invite appropriate action to mitigate the phenomenon. This is a process of informing and educating people, and everybody knows how slow and painstaking it is to educate people, especially when they refuse to be educated.

Challenge No. 3:
Reframing Climate Change as
Communication Message

Framing is a concept focusing on building a storyline that sets “specific stream of thought in motion, communicating why an issue might be a problem, who or what might be responsible for it, and what should be done about it” (Nisbet, 2009). Framing is a technique of focusing the message, and audiences usually rely on frames of messages to make sense of an issue. Journalists use frames to create interesting stories and reports. Framing also means making systematic and critical choices of the nature of information to be communicated giving greater weight to certain considerations and other elements over others.

In the last two decades, research in political communication and sociology has added more knowledge about the communication phenomenon of framing. Research has helped explain how media portrayals of events and issues interact with cultural forces to shape public views of complex policy debates on significant topics like climate change.

With proper framing, climate change could be made highly relevant to public needs and concerns than it otherwise could be under normal situations. For example, there was great opportunity during the Metro-Manila flash floods that accompanied Typhoon Ondoy on September 26, 2009 to explain that there was flood because the rainfall that normally would have fallen in 30 days was poured in six hours. This was a result of global warming, of climate change. Of course, explaining this situation in more understandable ways would mean we need more information to include in our explanation.

According to Nisbet (2009), it should be pointed out that not every individual cares about the environment or would defer to the authority of science. However, if the message about climate change is framed according to certain beliefs without necessarily changing its scientific foundations, then perhaps the public might have another view of it.

Nisbet (2009) suggests that we look at possible frames for the subject matter “climate change.” These frames could include the “economic development frame” which would essentially mean recasting climate change as an opportunity to grow economically. Hence, we could use phrases like “innovative energy technology” or “sustainable economic prosperity.” We could talk about conditions where our agricultural production system was devastated by the typhoon and all rice fields were flattened by wind and water, and

all the grains buried under water or mud. Destruction of property was of a magnitude we could hardly describe.

Another frame would be the “morality and ethics” frame which was used in Al Gore’s *Inconvenient Truth*. Why is it, for example, that the developing countries that contribute less than one percent of the gas emissions that cause global warming, have to suffer the brunt of climate change catastrophes? Not only that, they are also expected to spend as much in mitigating climate change.

Another frame has recently emerged. This is called the “public health” frame, which focuses on health implications of climate change. This frame was very clearly present in the aftermath of Typhoon Ondoy, and all other natural catastrophes. The other way of looking at it is that changing climatic conditions affect adversely our biological conditions and cause health disruptions that could range from mild to serious and fatal.

Through appropriate framing of the message, it is possible to create interpretive storylines that can be used to “bring diverse audiences together on common ground, shape personal behaviour, or mobilize collective action” (Nisbet, 2009).

Concluding Statement

So, to review the challenges now, we have to do better in informing and educating our publics about a scientific phenomenon even if such publics may not be scientific in their thinking and actions. We have to seek ways and means of explaining to people that climate change is not a one-time phenomenon that does not come back once it has happened but a continuing

phenomenon. Also, we have to make sure that our angles of interpretation, information, as well as education fit into the mind sets of people so that the message sinks in right away and people act immediately, and accordingly.

Let me conclude with a Chinese saying that has been made gender-sensitive. It runs like this. To be a dignified human, one has to sire an off-spring , write a book, and plant a tree.

My friends, siring an off-spring is probably not a mandatory requirement to stay alive. Many have survived without off-springs, and the world has survived as well. Much less write a book. Most of us, in fact, wouldn't bother to even think of it and the world will not perish. Planting a tree would perhaps have the most lasting effect on this earth and on mankind. So, isn't it about time you started celebrating your being alive by planting a tree on your birthdays?

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Development as Focus for Communication Studies

When the Extension and Publication Office under the UPCA Dean was elevated to an academic department (Department of Agricultural Information and Communications) and began offering the major area in agricultural communications under the BSA curriculum, there were no major areas in agricultural communications. Hence, the informal categorization of areas of specialization in agricultural communications was expressed in terms of the research one undertook for a thesis. In the absence of a better parameter, this was casually used as a yardstick to provide a general idea of where graduates of agricultural communications and later development communication believed they had critical advantage over their peers in mainstream communication.

From 1963 to 1974, the graduates of agricultural communications were graduates of BSA major in agricultural communications and their theses would show that they studied mostly the use of extension media and their variations. From 1975 onwards, however, the BSDC was already offered. The three major areas of community broadcasting, development journalism, and audiovisual communication practically predetermined the nature of undergraduate theses being undertaken by students. The content areas of theses started to spread out to concerns not purely agricultural, such as community nutrition, sanitation, family planning, deforestation, and the like (Maslog, 1988). As the graduate program in development communication strengthened, so did efforts in the analysis of the role of communication in the development process. Development models became popular frameworks for the in-depth study and analysis of the role of communication in the planning and implementation of development programs in the country.

All this provided enough grounding for myself that gave me enough latitude to address other concerns in later years. For example, I had tried to look into some research issues in development communication not only in Los Baños but in the Philippines.

Box Article # 5

**Status and Trends in
Development Communication Research
in the Philippines**
By Felix Librero

(Reprinted from *Media Asia*, Volume 32, Number 1, 2005, pp. 35-38.)

To understand more clearly where DevCom research is heading in the Philippines, let us first go back to where we have been. We have been doing research over the last five decades, starting out in agricultural communication in the 1950s.

In the first two decades (1950s and the 1960s) of devcom research working the country, the focus was on the role of communication in agricultural and rural development. In the 1970s, there was added interest in issues about population, economic development, health and urban development. The 1980s ushered in interest in industrial and environmental problems, while in the 1990s, we began feasting on the role of the new information and communication technologies. Today, we are also beginning to look at new and exotic topics such as knowledge management. There has been really no effort at changing research interests, just simply that the new interests were added on to existing research thrusts. In other words, the range of research interests increased, providing researchers a wider latitude of choices. Of course, all these have proven to be significant research thrusts.

Because of the great efforts we poured into DevCom research from the 70s to the 90s, let us look at what transpired during this period.

In our earlier attempt to synthesize DevCom research

in the Philippines, we arrived at the following conclusions particularly with regard to research gaps and directions (Librero, 1993):

1. The bulk of DevCom research in the Philippines has been quantitative, and the most common methodology employed has been the survey. Admittedly, quantitative studies are important, but it must be pointed out that many important communication issues cannot be fully explained or understood by mere quantification.

For this reason, we have recommended then that more qualitative studies were needed without necessarily sacrificing quantitative research. Our initial suggestions were to undertake studies on perceptions and attitudes towards programme being implemented by the government, NGOs, structural analyses of support communication for development programmes, communication behaviour patterns of planners, implementers and beneficiaries of development programmes, basic information flow in relation to technology transfer, and communication network analyses.

2. We had observed that there was a need for more studies on communication process, putting emphasis on non-linear models of communication. Most research conducted previously dealt basically with the traditional source-message-channel-receiver model. This model, which some communication experts consider “linear,” has been said to be wanting because in reality communication is not linear. Research that would explain how the interactive models actually worked out under Philippine conditions were found to be necessary.
3. Up until the late 1980s, DevCom research in the Philippines depended heavily on descriptive statistics.

There had been little effort at inferring from these descriptions of communication situations. Hence, the studies done until that time had contributed to the formulation of generalizations. There has been little active effort in the formulation of research hypotheses for further testing. However, the substantive descriptions of problems also led to at least potential solutions to communication problems felt at that time. In other words, the focus of interest was on applied research where the objectives generally were geared to solving existing problem situations rather than to theorize.

4. As early as two decades ago, we had already seen the need for proactive research in development communication. We said that time that there was a need for a conscious effort to uncover possible solutions to potential problems that would ultimately result in the onslaught in the country of communication problems that may surface later as a result of the decisions and actions that were being made at that time.

In other words, we must strive to reach that stage where we should be able to identify possible solutions to potential problems before such problems actually arise. Of course, such can only be achieved through proactive research.

Shifts in the Practice of DevCom

In the late 90s, when we made a third effort at synthesizing DevCom research in the Philippines, we looked at concerns regarding the discipline of development communication. There were two significant developments resulting from years of practice and research, namely, a shift in the over-all practice of development communication, and a shift in research approach.

Here is how these significant developments then were described in a paper we presented at a series of scientific meetings of the **Philippine Social Science Council** under the theme *Encounter of the Social Sciences and Other Branches of Knowledge* (Librero, 2001).

1. The shift in the philosophy and general practice of communication has been a subtle one, which means that one was not necessarily replaced by another. This may be more aptly called branching (or bifurcating), because, after all, a new approach has merely been introduced while the old one is still workable. In the traditional approach, the role of communication is primarily that of informing and generating public goodwill through invariably entertaining means. The flow of information is generally top-down, or centre to periphery, directed at a mass of people identified to be the passive receivers of information. This approach is still very much in vogue and will remain useful for a number of purposes. To achieve other objectives, however, another approach has proved more appropriate. Moving from the entertainment mold towards more dialogue and participation, this approach highlights the need for client education through more active participation. Perhaps the essence of this approach lies in its prerequisite of participation. Quebral (1988) summarized the prerequisites of client participation particularly in the development process, as follows:

The development plans are specific and clear enough for average understanding. They do not merely echo the rhetoric of democratic development in their preambles but truly manifest in their strategies a primal concern for the welfare of the majority of the population. They are in accord with the opinions, aspirations, values, and backgrounds of the citizenry. They were there-

fore arrived at through consultation, dialogue and other mechanisms of egalitarian governance. The communication infrastructure for participatory planning, implementation, monitoring, and evaluation in development has been laid out.

2. The shift in the fundamental approach to communication research has been influenced greatly by the fact that the traditional empirical approach has not completely been able to explain significant concerns associated with adoption of innovations particularly in the fields of agriculture and environment. This shift has resulted in two general approaches, namely: empirical research and critical research. The distinction between these two has become very important in the context of modern communication research.

Empirical research is characterized by its emphasis on quantification. By doing so, empirical researchers draw a distinct line between fact and value. They are interested in discussing things objectively, without consideration of values. Dissanayake and Belton (1983) observed that “The broad context in which communication operates is not given adequate attention.” In other words, “Precision of instruments becomes more important than the contextual factors hand historical perspectives.” This has resulted in little attention to cultural values in communication research.

Critical research, on the other hand, is a “problem-posing conscious-raising activity attuned to the broader social structural contexts of communication” This research approach adopts the holistic and interactive view of communication and considers the relationship of communication research and cultural values as critically important. Dissanayake and Belton (1983) observed that:

While the empirical researchers maintain that there is clear disjunction between fact and value in communication research, critical researchers emphatically express the view that facts and values are inextricably linked and can hardly be separated. Those who propose a critical approach to communication research encourage a self-reflective turn of mind and an interest not only in explanation and clarification but also in action.

The distinction between empirical research and critical research may be highlighted by the kind of questions they seek to answer. Empirical research seeks to answer the questions how and how much, while critical research seeks to answer the questions why and why not.

At this point, I wish to digress a little bit and point out what we, in the social sciences particularly in the field of development communication, have been able to do. This has something to do with the social aspect of technology. Each technology that is developed in the technical field has its own social aspects, which have long been unclarified and unattended to by technology developers. So in the past, technology developers frequently claimed that their tasks had been done after developing their technology.

Whether or not the technology was socially acceptable was left to the social scientist, particularly the development communicator, to resolve. That is, if it was not initially acceptable, it was the responsibility of the development communicator to make it socially acceptable. With a lot of prodding from the development communicators and other social scientists, however, technology developers have come to realize that their responsibility is not only to develop technology but also to develop technology that is socially acceptable. And they are able to do this when we work hand-in-hand with them.

Current DevCom Research Interests

Two current legitimate concerns that we have are the efforts in employing new or at least alternative methodologies on one hand, and substance, on the other.

Methodological Studies

In the last five to ten years, there has been an increasing interest in the Philippines in qualitative research methods. Qualitative research, of course, is an area one can go into when one has gained a lot of experience doing quantitative studies. This is because quantification skills are also very important in the proper analysis and understanding of non-quantified information. A researcher steeped in quantitative techniques will do very well in the conduct of qualitative research. However, a qualitative researcher who has not mastered the techniques of quantification is not likely to do well doing research that deals with a lot of quantified information.

One would be interested to know that about 20 percent of current PhD dissertation students in the College of Development Communication in the University of the Philippines Los Baños have claimed to be doing either pure qualitative studies or studies that employ at least some amount of qualitative methodologies among development communication students.

There are three communication methodologies that have become popular among graduate researchers in development communication in the Philippines in the last few years. Of course, these methodologies also require expertise in quantitative analysis.

1. *Problematique analysis.* This methodology, which has been gaining adherents among graduate stu-

dents in the Philippines allows us to look at the frequently confusing interactions among symptoms in a communication system by establishing their causal relationships and highlighting possible decision points. The intention is to identify the root cause of a problem by tracing them through the symptoms that are associated with their existence. This approach is based on systems theory, and is also popular among management researchers.

2. *Retrospective case analysis.* While this methodology is not exactly new, more and more graduate students are becoming interested in it because of its simplicity and usefulness as a means of building an accurate story of a situation. Among development communication students, building stories revolving around specific cases is always interesting. A specific case analysis technique popular is the story mapping technique that has been developed but which still has to become popular. This technique puts your respondent right at the centre of your research data collection activities by describing his/her own story using illustrations drawn or provided by the respondent, and without someone else interpreting them for him/her. In other words, you let your respondents provide the data and let them explain and interpret such data as well.
3. *Naturalistic inquiry.* There are many techniques of conducting naturalistic studies such as using unobtrusive measures, non-participant observations, and the like. The main idea is that you observe people in their natural setting and see how they react to various phenomena which interact with one another. In other words, study the natural condition of things without any external interference. This approach is useful in the study of communication and management behavior of people in their natural settings. As you and I

know, people behave one way when they are in an artificial environment, and in another way when they are in their natural environment.

Current Interest Areas

As we all know, there is a whole lot of research problems that development communication researchers must look into. However, based on our experience in the Philippines, there seems to be certain areas of concern that dominate the minds of researchers at certain periods of time.

What is not catching the attention of DevCom researchers in the Philippines are various issues that we can generally categorize into the following groupings:

1. Impact of the new information and communication technologies (ICTs) on development and social behavior. There are many specific studies that can be done under this category. Suffice it to say, these kinds of studies deal with modern telecommunications systems and information technology and how they affect human and social behavior. For example, how does the Internet influence the way social services are provided? What is the impact of SMS technology on social behavior change? A whole lot of questions need a whole lot of answers.
2. Communication system analysis. There has been a fairly wide interest in the analysis of communication systems and how they affect decisions that are made. However, there is a whole lot of crucial issues that still have to be dealt with. We still have to know more about how the communication systems operate and how they actually affect other aspects of our lives. Some of the questions that still need answers are: Why are communication infrastructures functioning the way they do?

What are the critical factors influencing how communication infrastructures function in support of development programmes? Why are certain arrangements of communication resources and roles more effective than others? We can ask a lot of questions but we still are not quite in a position to provide answers. We need to know more.

3. Communication and distance education. Distance education has achieved its maturity worldwide as a full-blown system of delivering a wide range of educational services. But distance education can only be successful if it has the necessary communication tools and techniques it can use at its disposal. Distance education, as we all know, is highly dependent on communication technology. In the Philippines, in the last few years, there have been a number of studies on distance education as it relates to communication. However, we still have a long way to go.
4. Communication policy studies. We have done quite a bit of work in the field of communication policies, but we still have a long way to go. Policies change according to the growth and development of the discipline, and policies influence greatly the manner in which things are done. We will not run out of research questions that need answers in the field of communication policies.

Future Directions

From our vantage point, we see certain areas of concern becoming more interesting to development communication researchers over the next few years. We would like to categorize these into three major concerns.

1. Methodology. We shall continue to develop our

expertise in the conduct of qualitative research. While qualitative methodologies are interesting, they are not as easy as they sound. We need a wide range of expertise, such as in the use of quantitative techniques of data analysis, power of observation, ability to internalize social situations and ability to relate various fields to one another in order to do good qualitative analysis.

2. Content. More and more researchers shall be focusing on the content of the following fields of interest: impact of ICTs, policy studies, impact of multimedia technologies, impact of the Internet, impact of rapid developments in telecommunications (such as broadband and wireless technologies), and knowledge management.

A new area of interest is unfolding right before our eyes. This is called the “attention industry” (Davenport & Beck, 2001), reviewed by Velasco, 2001). As we all know, the rate of growth of information is geometric, and the volume of information that we must deal with is going way beyond our capacity to process. According to Davenport (page?) and Beck, the attention industry is governed by the law of supply and demand, which goes this way: “as the amount of information increases, the demand for attention rises.” This should open a whole new range of research interest among development communication researchers.

3. Theorizing. We have been doing development communication research in the last four or five decades Sad to say, we have not really seriously considered going into theorizing. We now know a lot, but we still have to formulate basic principles or a definite theory of development communication.

The key to theorizing is synthesizing. So far, not much synthesis work has been done. There are not many who have developed interest in doing synthesis work. We have had the opportunity to do some amount of synthesis of development communication research in the Philippines, but this is not enough. More work is needed. We would like to see the day when development communication researchers not only in the Philippines but in the region as well, formulate theoretical propositions regarding the study and practice of development communication. It is high time that we did so. It is time we did our own theorizing. After all, we have more than enough expertise in the region.

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Communication as Art/Science: The Debate

Development communication was clearly defined by Quebral (1971) as the “art and science of human communication applied to the speedy transformation of a country and the masses of its people from poverty to a dynamic state of economic growth that makes possible greater social equality and the larger fulfillment of the human potential.” This formal definition has been taken both literally and figuratively by experts in the twin areas of development and communication, sometimes in combination with one another, and frequently independent of each other.

The discussion as to whether DevCom was art or science, even if it was clearly enunciated in the Quebral definition, did not stop. The debate even became more lively with the administrative developments in the Los Baños campus in the early 1970s when Proclamation No. 53 was issued by Malacañang on March 5, 1972 creating the University of the Philippines System, with UPCA becoming the first autonomous campus of the UP System. UPCA became known as the University of the Philippines Los Baños (UPLB). Immediately, the then UPCA was reorganized and many of its departments were elevated as colleges. One of these was the Department of Humanities, which became, together with departments such as Agricultural Zoology, Agricultural Botany, Physics, Math, Statistics, and Agricultural Chemistry became the core units of the College of Arts and Sciences, with Dr. Edelwina Legazpi, UPCA Humanities Chair, as the new UPLB-CAS Dean.

Although the then Department of Agricultural Communications did not plan to separate from the College of Agriculture, it immediately submitted its curricular proposal for a four-year Bachelor of Science in Development Communication (BSDC), which was approved in March the fol-

lowing year. It is difficult to pin down on individuals certain events that transpired during this period because documentary evidences could not be found. Suffice it to say, however, that there was a proposal for an AB in DevCom (privately believed by many to have been formulated by two faculty members of the Department of Agricultural Communications) which was taken into consideration by the newly set-up Department of Humanities in the new CAS.

It was not as if there was completely no basis for the idea of offering an AB program in development communication. It should be noted that at UPCA, student organizations (fraternities and sororities) were very active promoters of cultural life through regular and frequent theatrical productions of both Shakespearian and Filipino stage plays. In other words, many students already studying at UPCA were arts-oriented, and their number was steadily increasing. Private conversations with those believed to-be proponents of the AB in development communication proposal would point out to this trend as one of the more important bases for proposing to offer an arts-oriented development communication program in Los Baños, as there was to be no possibility of offering a mass communication program at UPLB, there being already a program in Diliman.

The idea of an AB in Development Communication curriculum, however, was earlier vetoed by the DAC with the belief that DevCom should remain to be a science-oriented curriculum in communication based on the fact that it (DevCom) was being developed as a social science rather than plainly an arts program. This generated lengthy and passionate debates.

From a dispassionate point of view, however, this writer, at that time, suggested that the issues of whether or not DevCom was art or science was beside the point. The more significant point that was being offered for discussion was the issue of why the need for two separate communication curricula in a small campus like UPLB which was known to be a campus for life sciences rather than social sciences or the arts, in the first place. This issue reached the discussions in the Social Science Commission created by then UPLB Chancellor Emil Javier to discuss the role of social science in the life of the UPLB as an academic institution. The Commission did not deal squarely with the issue of the two communication curricula

at UPLB, but it declared that the social sciences in Los Baños were treated as second class citizens.

The original proposal of an AB in DevCom was renamed AB Communication Arts, which became a banner program of the new Department of Humanities in the new CAS. The AB ComArts initially had two major areas: public speaking and expository writing. In the mid-1970s, due to persistent requests from ComArts students, the Department of Development Communication decided to permit ComArts students to cross-enroll in the first four basic courses in DevCom: introduction to development communication, fundamentals of development journalism, fundamentals of community broadcasting, and fundamentals of audiovisual communication (which later became educational communication). A few semesters later, ComArts students requested that they be allowed to enroll in more advanced courses in DevCom. This raised the issue of how different these two programs were, which may be viewed from two points: vertical difference in terms of depth, and horizontal difference in terms of breadth. Development communication runs deep in its commitment to development. Here is what Quebral said in her foreword of her book in 1988:

While there may have been some sort of moratorium in the debates as to whether or not DevCom was art or science from the early 80s to the present, one still feels the silent disagreements as well as commonality in concern among both the faculty and students of these two curricular programs. Some of the faculty members of the ComArts Program were graduates of DevCom in both the bachelor's and master's degree levels. Some have even pursued their PhDs in DevCom. There is still wisdom in reviewing dispassionately the relationship between the two curricular programs.

The Growth Years of DevCom at Los Baños

The 1970s and the 1980s could easily be considered the growth years of DevCom in Los Baños. One must recall that Quebral introduced the term “development communication” for the first time in December 1971. In a succession of events after that, the then Department of Agricultural

Communications was renamed Department of Development Communication in 1973. The following year (1974), the Bachelor of Science in Development Communication as degree program was approved and the existing MS in Agricultural Communications was renamed MS in Development Communication. The PhD in Development Communication was first offered in 1977 (Librero, 1991). In-between the events that transpired during the 1970s, more individuals joined DZLB and Dev-Com.

In the 1980s, major events happened such as the implementation of a four-year R&D program in Development Communication (1982), the creation of the Educational Communication Office (ECO) also in 1982, the publication of low-cost publications by ECO during the decade, and the elevation of the Department into the Institute of Development Communication (1987). Various activities during the decade demonstrated intense academic and professional activities in the field of development communication.

From a curricular point of view, the BSDC was designed to provide students the opportunity to (BSDC Brochure as cited by Librero, 1991):

1. acquire a theoretical base in the sciences and applied arts that underlie the study of human communication;
2. learn practical skills in mediated and interpersonal communication;
3. gain a basic grasp of the issues and problems of development in general and of the subject of development area in particular; and
4. apply the concepts, principles and skills of communication to the solution of problems in a developing society.

On the other hand, the MS in Development Communication Program “offers the students advanced training in the principles and practice of purposive communication for development,” while the PhD program “explores in depth and breadth the synergistic relationship between communication and development” (MS in Development Communication and PhD in Development Communication brochures, respectively, as

cited by Librero, 1991).

From 1982-1986, the then DDC implemented the first and so far only national R&D program in development communication titled “A National Development Communication Research and Research-Based Information Utilization Program of the Philippines” (of which I was appointed Program Leader) with funding from the Philippine Council of Agricultural Resources Research and Development (PCARRD). Participants in this national program were UPLB, Central Luzon State University (CLSU), Central Mindanao University (CMU), and the Visayas State College of Agriculture (ViSCA), now Leyte State University (LSU). Under this program, the department also initiated and published a low-cost journal called the Devcom Quarterly, which published articles, research reports, and essays from local and foreign authors. Without institutional funding after 1986, however, Devcom Quarterly was ultimately turned over to the Philippine Association of Communication Educators (PACE) to become its official journal following the recommendation in 1987 by a review committee comprised of Drs. Quebral, Jamias, and Crispin Maslog, all senior faculty of the then Institute of Development Communication. As following events proved later, the PACE published only two issues (1988 and 1989) under a different publication name before the publication went out of circulation due to lack of financial resources.

In November 1987, the then Department of Development Communication was elevated as the Institute of Development Communication (IDC), still under the UPLB College of Agriculture, and I was appointed first Director of IDC. During that time, DDC was acknowledged, at least informally, by PACE as having the strongest faculty in development communication in the Philippines, one reason the UP Board of Regents approved its elevation as IDC. There were 23 members of the DDC/IDC faculty with almost a 50-50 gender distribution and the following proportion in terms of graduate training: 11 in-residence with PhD degrees, 10 in-residence and two affiliate faculty with PhD degrees (Maslog, 1988). All members of the non-teaching staff of IDC at that time have earned graduate credits in development communication.

This period gave additional opportunities to myself and to the younger faculty of the Department (Institute) to pursue what we considered very important areas of interests for the further growth of DevCom. We were branching out to science communication and strategic communication.

We did develop the area of science communication to include scientific communication, published a few papers on this topic, and offered a major specialization area in science communication. After a few years, however, there were no serious takers of strategic communication that not enough efforts went into the development of this sub-field.

Box Article # 6

STRATEGIC COMMUNICATION IN SCIENCE AND TECHNOLOGY

Address given by Dr. Felix Librero, Associate Dean, UPLB College of Agriculture, during the Symposium on Strengthening Indigenous Development Management Practices for People's Empowerment, ACCI Auditorium, UPLB-CEM, March 2, 1994. Dr. Librero was then Associate Professor of Development Communication at the Institute of Development Communication.

The theme of this First Development Management Week celebrations that coincide with the 7th year anniversary of the Department of Development Management, UPLB College of Economics and Management, is “Strengthening Indigenous Development Management Practices for People’s Empowerment.”

Such theme is quite interesting, and from the concept paper prepared by Dr. Viviene A. Gonzales, Chair of the Department, I find terms that we, in the field of development communication, are quite familiar with. These terms include such concepts and constructed as proactive, information generation, empowerment and other catch phrases. For this reason, I have decided to digress a bit from the original topic I was asked to talk about to one that I feel is of critical importance to us at the moment, both in the fields of development communication and development management. The topic is what I refer to as strategic communication in science and technology. I feel that this is as

much the concern of development managers as it is that of development communicators. After all, we are concerned here about resources (communication and knowledge) that must be properly managed to become useful in our efforts to push national progress at a faster rate.

I shall proceed to describe what I mean by strategic communication (or stratcom), related what, in general, we have managed to do or were unable to do in the past, look at what we can do, and then focus on the management issues associated with this concern.

I hope that this slight detour, rather than unduly confuse the issues you have decided to tackle during this symposium, shall bring to the fore other issues that must be of concern to development managers as much as it is for development communicators.

Strategic Communication ... What?

Strategic Communication (stratcom) is a term I borrowed from the Institute of Development Communication, particularly from my colleague Dr. Rex Navarro who conceptualized it as part of the strategic plan toward the turn of the century. We do not have a final definition at the moment since we are still piecing it together, but suffice it to say that the IDC has organized a faculty cluster in this area.

Stratcom necessarily has to be outward-looking to gain something inwards. It is no less critical to our development efforts than trying to understand indigenous management practices.

If by the term “strategic” we mean being of “vital importance within an integrated whole or to the taking place of a planned occurrence,” then strategic communication must be a communication approach and

plan toward achieving particular long-range goal, using critically important information not usually or commonly available for day-to-day public information sharing purposes. We can have strategic communication for various areas of concern. To dramatize this, I have decided to dwell more deeply into what I refer to as strategic communication in science and technology.

I chose science and technology as an area of concern because this is an area I feel we, in the Philippines, are still very weak in. We need to develop our capability not only to generate new scientific knowledge and technology but more and more to undertake global information search in science and technology. This is a basic requirement for leap-frogging. We cannot afford not to take advantage of what is already existing elsewhere for two reasons. First, it takes a very long time to develop new knowledge and technology by starting from basic research. We do not have the time even if we may have had the intellectual capacity to do so. Second, we simply do not have the necessary resources to engage in basic discovery of new knowledge as basis for developing the technology that we need to progress.

We must utilize knowledge developed elsewhere, but we must first obtain such knowledge before we can use it.

What Have We Done in the Past?

As there are no available data on this, I shall give you my own impressions. All other things being equal, and based on the general flow of things, we can discern the following:

1. Over the years, we have been open and completely generous in sharing scientific information with

others, particularly with other countries. We never hide anything. In fact, we even brag about our ability to disseminate scientific information that we may have generated in our own laboratories with government expense through the English language, which we proudly announce to the world that we are experts at. Look at what happened with our makapuno technology. Thailand has been commercializing it for decades now after gaining access to information about this technology from both Filipino scientists and students. How about the case of nata de coco? Our scientists in UPLB proudly and freely gave scientific information which could have been considered a business secret. Our scientists not only gave the information freely to scientists of another country but also did not even bother to claim any technical rights to it. What happened? Japan eventually registered nata de coco as product of Japanese technology. We did not even complain.

2. When our scientists or university researchers or faculty members travel abroad to attend conferences, they rarely include in their reports new things that they may have observed outside of their itineraries. That is to say, they have generally not been active in collecting information that could be beneficial to the country or at least to the institution they represented. Among our scientists in the past, National Scientist Dr. Dioscoro L. Umali was known to have always brought home seeds of various fruits he had eaten and found good for research and production purposes. He always was able to dig out advanced scientific information about them as he was a scientist par excellence.

What We Can Do

There are three things that I suggest we can do:

1. We need to understand better how the Filipino scientist communicates. To some degree, we have started work on this by trying to find out the information seeking and utilization behavior of our scientists. We have to do more studies in this area so we can come up with conclusive findings. For now, we are simply working on basic assumptions about how our scientists communicate.
2. We must now Filipinize publication of breakthroughs in scientific and technological work in this country. For starters, we have decided in the UPLB College of Agriculture that as much as possible technical papers published in the Philippine Agriculturist must be written in Filipino, but shall carry abstracts in English. Those that shall be written in English shall carry abstracts in Filipino. The point is that if there are real scientific breakthroughs resulting from researches done, say in Los Baños, we need to announce such breakthroughs to the scientific community. But the announcement need not be in English. It can be in Filipino. By so doing, we hope that the Filipinos may benefit from the information first before non-Filipinos do. Scientists in other parts of the world who may be interested in the new knowledge will simply have to communicate with their Filipino counterparts. Our hope is that the Filipino scientists shall share new information in exchange for some that they have no access to but which may be available from their counterparts abroad. In this situation, we shall engage in guarded information exchange where we shall not necessarily be at the losing end. Information sharing, after all, must be a two-way arrangement.
3. It is high time now that we engage in global information search in the field of science and technology. I have a very simple suggestion. The UPLB

should revise the form used by faculty members to report on their trips abroad. We should emphasize, for example, that any faculty member going on official trip abroad must make it a point to gather as much information on any scientific activity in the places visited. The information gathered need not be directly related to the purposes of the travel. However, such information must be filed with the university and university officials and scientists must study seriously such information and find out what advantages we can get from them. Global information search is our best way to access advanced scientific and technological information from abroad. We are not in a position to generate our own new scientific knowledge because we do not have the resources. Let us search and use what is already available elsewhere while not necessarily foregoing efforts to seek new knowledge on our own.

We must realize that every country, perhaps except the Philippines, is doing global information search. Our visitors in Los Baños, whether they come from developing or developed countries, are doing this all the time. It is high time we did the same thing as well.

What are the Development Management Issues Involved?

There are five basic development management issues that I feel we must address now. They are not easy, but certainly they are doable and worth doing. They are issues that can be addressed properly by appropriate management practices some of which may even be indigenous.

1. *Information generation and utilization.* We do generate a vast amount of information right here on campus through research and theoriz-

ing. What we have been unable to do is put all this information in the right perspective. Much of this information available seem to be unconnected and unrelated. Such being the case, we are unable to use said information effectively.

We have also been unable to, or perhaps we have been uninterested in synthesizing what is available. We do research here and there, but how much of this research is duplication of some studies done in the past? There is a need to study the literature first prior to determining the research problem to work on. This way we can identify the gaps and work to plug these gaps. Given our meager resources for knowledge and information generation, we must prioritize the things that we want to do in the area of information generation.

How about information utilization? You and I know that much of the research results remain useless because they have not become public knowledge. Our scientists, without having to say it, have decided that disseminating the results of their research is no longer their responsibility but that of the communicators. Sad to say, we in the communications field, have not always stood up to the challenge. And so, the new knowledge continues to be hidden somewhere in filing cabinets and book racks.

2. *Empowering the people by providing them enough scientific and technological information.* We keep on hearing that the people must be empowered if we have to achieve progress. I still have to hear just exactly how this empowerment has to be done. As far as I am concerned, the best way to pursue this is to provide the people enough information on which they can base their day-to-day decisions and run their own affairs. We may push this further by providing people with scientific and

technological information so they may be able to participate in the pursuit of national development. This we can provide if we have a strategic communication plan for science and technology in place.

3. *Determining the appropriate mix of high-technology and indigenous information and knowledge systems to facilitate the development process.* We cannot and should not completely depend on high-tech as much as we should no longer be completely dependent only on indigenous information systems. There must be a happy mix between the two, and we must continuously search for this mix that should be appropriate to our needs. While we can engage in high-tech global information search, we must study and understand how indigenous knowledge systems work in order that we may be able to use it to share with our clientele in the countrysides scientific and technological information designed to facilitate countryside development. Identifying and utilizing this indigenous information infrastructure can facilitate better widespread use of scientific and technical information necessary for social, political, technological, cultural and economic development.
4. *Providing the right amount of the right information at the right time for the right purposes.* The new technologies of communication enable us to do this. We have, however, been hard put to make right decisions regarding our telecommunications development plan. For example, the Cavite-Laguna-Batangas-Rizal-Quezon (CALABARZON) telecommunications development plan covers only the industrial estates. Telecommunications in the residential areas would probably remain poor since the CALABARZON plan appears to have left to the national telephone program the development of telecommunica-

tions outside of the industrial estates and the population centers in terms of information access.

But even beyond CALABARZON, we, as a nation, must think seriously about information access not only in terms of making information accessible to our farmers and the labor force, but for us as a nation to have access to information outside of our national boundaries. We must have a mechanism to obtain information from outside. The reason why Japan is so ahead in terms of information access is because it maintains an international network of market information searchers. Any and all information it obtains is made available to Japanese producers who, in turn, produce the goods that Japan exports.

One of the most important tasks for our commercial, agricultural, and science attaches abroad would be to search for information and feed such information back to the Philippines, but everybody knows that we are not doing this. Meanwhile, their counterparts at the various embassies in Manila are extremely busy collecting information from us.

5. We need to develop a culture of science and technology information searching among our people, particularly our young scientists and professionals. We must develop thirst for new knowledge, for any information that can help our national development efforts. We observe that our neighbors, i.e., Thailand, Indonesia, Malaysia, Vietnam, Myanmar, Cambodia, and Laos have been sending out their young scientists on educational tours in other countries, including the Philippines. This may be an indication that the Philippines, in fact, is a good destination for scientific and technological information seekers from our neighboring countries. In the past, Japan, Korea, Taiwan and

Singapore did the same thing. The Japanese are particularly adept at this. It is high time we did the same thing.

The issues I have identified are critical development management issues as much as they are development communication issues. Perhaps we should start dealing with them now with some amount of seriousness.
Conclusion

My thesis in this paper Is this: we need to have a strategic communication plan and that this plan must focus first on science and technology because this is where we are weak in. The intention of a strategic communication plan is to gain access to information that we need but do not as yet have. At the same time, we should start at being more discriminating in our sharing of new scientific information with others. It does not mean that we should not share information. It simply means that when we have new information we should make it a point that the first users must be Filipinos.

I submit that this is an area in which development management must now start getting into. Development management and development communication must, together, get into this area of concern because this is where we will make the difference in the future.

In 1986, the IDC, conceptualized and implemented a summer internship program for its graduating students majoring in community broadcasting. As IDC Director, I presented to the Head of the German Foundation, Freiderick Ebert Stiftung (FES), the idea of FES providing small funding for the internship program for the succeeding year, 1987. So the IDC was able to invite graduating students from other higher education institutions in the Philippines to participate in IDC's community broadcasting internship program..

This was a highly successful program, judging from the number of interns (15) from other educational institutions (10 schools) all over the Philippines that enrolled, however, the Institute could not sustain the financial resources required after the two-year FES funding assistance was completed. The internship program comprised of 120 hours of guided training in the entire process of community broadcasting with the following components:

1. Review of Concept and History of Radio Broadcasting
2. Overview of Community Broadcasting
3. Radio Program Conceptualization
 - 3.1. Generating a program idea
 - 3.2. Designing various radio program formats
4. Program Production
 - 4.1. Scriptwriting
 - 4.2. Program construction
 - 4.3. Actual program broadcast
5. Program Monitoring and Evaluation
 - 5.1. Conducting a listenership campaign
 - 5.2. Formative evaluation of radio program broadcasts
 - 5.3. Content adjustment based on feedback information
 - 5.4. Summative evaluation of radio program

During that same period, IDC also conceptualized and implemented another program, the publication of the ***IDC Monograph Series*** and the ***IDC Faculty Papers Series***, also with initial FES funding. Again, when the funding assistance was completed, these programs could not be sustained given the available budget of IDC at that time. Two outputs of the IDC Monograph Series were:

Barroga, Serlie and Ely D. Gomez. ***The Agenda-Setting Function of Selected Philippine Newspapers in a rural Setting*** (MS Thesis of Barroga).

Casal, Ma. Stella L.; Centurion, Diosnel, Fr.; and Gomez, Ely D. ***Communication Roles of the Catholic Church*** (MS thesis of Casal and Centurion).

The lone output published under the IDC Faculty Papers Series was:

Jamias, Juan F. ***Understanding Development Communication Today.***

Elevation as College of Development Communication

In 1999, the Institute of Development Communication was finally elevated to its current status, the College of Development Communication, with the following objectives (proposal submitted to the BOR, 1998):

1. Provide higher education for students who will pursue careers in development communication practice, teaching and research;
2. Investigate the interrelationships between human development and the processes and structures of communication with emphasis on research that promotes equity, empowerment, environmental sustainability, peace, and human rights; and
3. Undertake training, advisory and action programs that help build up the resources and communication capabilities of people, communities, institutions and other participants in the development process.

It should be noted that when the UP Board of Regents approved the elevation of the IDC as the College of Development Communication (CDC), it had the following academic staff complement: 23 full-time, in-residence (12 with PhDs, 9 with MA/MS, and 2 with BS degree); 9 part-time or Affiliate faculty (7 with PhDs and 2 with MA/MS degrees). The new College also had seven (7) individuals who were considered “under study” as potential teaching staff. Over-all, in 1998, CDC had in its faculty 19 with PhDs, 11 with MA/MS degrees, and two with Bachelor’s degrees, for a total of 32 warm bodies that were performing teaching functions, still considered the strongest faculty of communication in any educational institution in the Philippines then.

Perhaps one of the most significant milestones in the life of the CDC so far was when it was designated in 1999 by the Commission on Higher Education of the Philippines as one of two Centers of Excellence in Communication in the Philippines. On top of this, the BSDC is the model curriculum in development communication that is being duplicated in other tertiary educational institutions throughout the country as well as in other developing countries (CDC Brochure, 2008). Besides, in 2008, the CDC published the maiden issue of the Philippine Journal of De-

velopment Communication, becoming effectively a continuation of the research publication efforts of the previous departments starting with the *DevCom Quarterly*, then to the IDC Monograph and Faculty Papers Series, and finally to the *Philippine Journal of Development Communication*. Indeed, this publication pattern might be likened to the institutional-structural development pattern of DevCom beginning with the Office of Extension and Publications (OEP) under the UPCA Dean's Office, DAIC, DAC, DDC, IDC, and finally the CDC. In other words, none among the major and minor events in the history of development communication in Los Baños could be treated independently of other events. All are chronologically interrelated when put in appropriate context.

In 2000, I transferred to the U.P. Open University. For a few semesters, I continued teaching a course at CDC, after which my attention shifted to the UPOU when I became UPOU Chancellor in early 2001 until early 2007. My intellectual interest in devcom, however, remains until today. After all, communication is an integral part of instructional delivery in distance education.

Enrollment Trend in DevCom

Enrollment trend on a decade-basis, from the 1960s to the last decade shows a continuing climb even if there may be slight shifts within the decade. According to figures from the CDC Secretary's Office, the decade's (2000-2010) enrollment peak was during the school year 2003-2004, when undergraduate enrollment was 1,685 the biggest during the decade. Graduate enrollment peaked at 136 in school year 2005-2006. The enrollment trend for the last decade is shown in Table 1.

Table 1. Aggregate enrollment, UPLB-CDC, 2001-2010*.

School, Year	Undergraduate	Graduate	Total
2000-2001	1,259	67	1,326
2001-2002	1,467	67	1,534
2002-2003	1,607	91	1,698

2003-2004	1,685	117	1,802
2004-2005	1,644	133	1,777
2005-2006	1,601	136	1,737
2006-2007	1,463	114	1,577
2007-2008	1,350	117	1,467
2008-2009	1,454	99	1,553
2009-2010	1,512	82	1,594

*SOURCE: UPLB-CDC Secretary's Office, 2008..

It may be noted that while the enrollment figures are certainly encouraging, historically, there has not been any active student recruitment undertaken by the College of Development Communication. Therefore, one might surmise that promotion of DevCom as a field of study has been mainly through word of mouth.

As of 2010, the full-time and part-time faculty complement of the CDC had the following profile:

Table 2. Full-time faculty members, UPLB-CDC as of 2010.

Name	Academic Rank	Degree	Field	Institution
1.Albia, Joclarise E.	Instructor 6	BS	Dev-Com	UP Los Baños
2.Balinos, Aiza M.	Instructor 2	BS	DevCom	UP Los Baños
3.Cabrera, Liza A.	Asst. Prof. 1	MS	DevCom	UP Los Baños
4.Canubas, Altheia G.	Instructor 2	BS	DevCom	UP Los Baños
5.Carpio, Lynette B.	Asst. Prof. 1	MS	DevCom	UP Los Baños
6.Castillo, Hermilea Marie C.	Asst. Prof. 1	MS	DevCom	UP Los Baños

7.Centeno, Edmund G.	Asst. Prof. 2	MS	DevCom	UP Los Baños
8.Chico, Mark Lester D.	Instructor 2	BS	DevCom	UP Los Baños
9.Custodio, Pamela A.	Asst. Prof. 5	PhD	DevCom	UP Los Baños
10.Custodio, Rhodora Ramonette D.	Asst. Prof. 2	MA	MassCom	UP Dili-man
11. Dagli, Winifredo B.	Instructor 3	BS	DevCom	UP Los Baños
12.Day, Rommel A.	Asst. Prof. 1	MS	DevCom	UP Los Baños
13.Francisco, Rosa Pilipinas F.	Asst. Prof. 1	MS	DevCom	UP Los Baños
14.Flor, Benjamin Paula G.	Asst. Prof. 6	PhD	DevCom	UP Los Baños
15.Jamias, Serlie B.	Assoc. Prof. 4	PhD	DevCom	Macquarie Univ.
16.Lim, Aldo Gavril T.	Instructor 7	BS	DevCom	UP Los Baños
17.Maligalig, Jon Paul F.	Asst. Prof. 1	MS	DevCom	UP Los Baños
18.Montemayor, Garry Jay S.	Instructor 5	BS	DevCom	UP Los Baños
19.Osalla, Ma. Teresita B.	Asst. Prof. 3	MS	DevCom	UP Los Baños
20.Suva, Madeline M.	Assoc. Prof. 7	PhD	Comm.	U. of Wisconsin
21.Tatlonghari, Rosario V.	Asst. Prof. 1	MS	DevCom	UP Los Baños
22.Tirol, Ma. Stella C.	Assoc. Prof. 2	MS	DevCom	UP Los Baños
23.Torres, Cleofe S.	Professor 2	PhD	Ext.Com.	UP Los Baños

24.Velasco, Ma. Theresa H.	Professor 8	PhD	DevCom	UP Los Baños
25.Villar, Ricardo B.	Instructor 3	BS	DevCom	UP Los Baños

SOURCE: UPLB-CDC Brochure, 2008.

Table 3. Part-time faculty members of UPLB-CDC as of 2010.

Name	Academic Rank	Highest Degree	Field	Institution
1.Cadiz, Ma. Celeste H.	Assoc. Prof.	PhD	Ed. Tech.	
2.Campilan, Dindo M.		PhD	Dev-Com	UPLB
3.Flor, Alexander G.	Professor	PhD	Dev-Com	UPLB
4.Lapitan, Julian A.				
5.Lumanta, Melinda F.	Professor	PhD	Comm	Michigan State University
6.Quebral, Nora C.	Prof. Emeritus	PhD	Comm	University of Illinois

SOURCE: UPLB-CDEC Brochure, 2008.

Epilogue

For me, it has been a long and satisfying intellectual journey that began in the sixties. Until today, I have continued pursuing additional interests that are closely related to the intellectualization of development communication. If anything, my grounding in both agricultural and development communication widened my intellectual horizon and has made me even more cognizant of my disciplinal environment. The following box articles are examples of the variety of issues and topics that I continue to

speak on and write about.

It's probably correct that retirement is not an option for one who has been active in a field like communication. While my generation may have preferred tinkering with concepts and frameworks, I must admit that today's generation, and perhaps future ones, are the technological gurus of communication.

Box Article # 7

POTENTIALITIES IN ACADEMIC RECORDS AND DATA MANAGEMENT: FROM A DEVCOM PERSPECTIVE

Keynote Address delivered by Dr Felix Librero before the National Conference of the Philippine Records Management Association, UP Los Baños Chapter, on the theme "Academic Records and Data Management in the Information Age: The Digital Revolution," Baguio City, November 18, 2009.

Introduction

Records management itself is not my field of expertise. You are the experts in this field, so I leave the clarification of content and meaning to you. What I happen to have some interest in is the wide range of concerns that deal, at least tangentially, with the protocols followed in your tasks as records and data managers and custodians. I happen to operate as a professional in the field of communication, whose basic tools are the same tools you use in your profession. It comes as no surprise that when there are developments in the field of communication technologies, there are corresponding changes in the manner in which you perform your jobs as records and data managers. This is where our concerns converge. This is where we exchange ideas and concerns.

It is my intention, therefore, to relate to you what I see as possibilities in the changing nature of our tools so that you might be able to decipher for yourselves what innovations

you may want to introduce to facilitate an efficient and effective management of records and data in your organization.

I must underscore the fact that these are simply ideas for consideration, not instructions that must be carried out now.

How Records Management is Generally Understood

Records and Documents: What are they?

For non-experts and lay persons, a lively exchange of ideas always happens when the topic of records and documents come up. How do these two differ, if, in fact, they do? Or how similar are they? The usual definition given a record is that it is a “document or other physical entity that serves as evidence of an activity or transaction performed by the organization and requires retention for some time period” (Microsoft, 2009). This definition, of course, is very computerese. Informally, in social science research circles, a record is referred to as a document that bears the date when the activity or transaction recorded transpired (based on a class lecture of the late qualitative research expert Egon Guba, circa 1980). Hence we have examples of records such as receipts, minutes of meetings, and the like. When, for example, a piece of paper containing information does not have a date on it that indicates when the activity or transaction described in the piece of paper happened, then it is considered simply as document and not necessarily a record. Perhaps this differentiation was deemed necessary by researchers who had to explain as accurately as possible the information that they may have gathered in the process of undertaking a research activity.

Why Manage Records and Data?

This is a very ticklish issue. Managing normally connotes some sort of interventions that others also call manipulation. It really depends on the purpose for which the “man-

agement” is being made. There are two very important issues here.

First, the issue of one being a public record. By definition, and according to existing laws, public records should be accessible to the public at large. This becomes a bone of contention when there are rules that tend to curtail this public right called right to information. We recall the Memorandum Circular from the Office of the Ombudsman sometime in early September 2009 making it more difficult to access SALNs (Statement of Assets, Liabilities, and Networth) of public officials. There was a loud uproar from media regarding this circular.

Second, the issue of one being a private record. It is a different case when a document is classified as private document. By law, it should not be accessible to the public unless the owner of the document gives permission that it be made accessible to the public. What may be considered private document contains information of a private nature and is not for public consumption for a number of reasons.

Trends in Managing Information Storage

To many experts and ordinary users of information, managing records and data is not really the issue. The issue is managing information storage. In other words, how must we handle and where must we store records and data in order that these may be easier to store and be made accessible whenever necessary?

There are three very distinct trends that all personnel of records and data management offices must be familiar with today and in the next years. Let me deal with these singly and briefly.

Miniatrization

Look around you. Inspect your office equipment. Even your office supplies. They're all becoming smaller and

smaller. In the recent past, our computers were main frames that occupied whole buildings. Today, you have palm-sized computers. Remember your calculators? They used to be as large as typewriters on top of your desks. We used to have floppy diskettes that were 5.25 inches in diameter, then somebody thought of making them smaller so we had smaller discs with larger capacities. People were not content with the amount of information that these discs contained so they developed DVDs and made them smaller and smaller until we now have flash drives that are becoming tinier and tinier whose storage capacities are now moving quickly towards the quadrillion bits level.

It may be pointed out that, as modern users of information, we have taken for granted that our gadgetry's main characteristics are now larger storage capacity and portability. Clearly, the direction is miniaturization in size and enlargement in capacity. Things are becoming smaller and smaller, more powerful, more accessible, and much more portable so we can use them anywhere at any time. Of course, small things may be easier to store, but they are also easier to misplace.

Miniaturization will continue and gadget designers will intentionally make things smaller and smaller even as they become smarter and smarter. Look forward to the day when all the records and documents of your entire organization will fit into a tiny chip inside the small pendant hanging on your necks, or perhaps slipped right under the gemstones of your rings.

Digitization

The transformation of information from analog to digital formats have always been an exciting field. Analog information flow continuously like liquid. This is why in the past, we had large reels of audio and video tapes or reams and reams of mimeograph paper filed in our steel cabinets. Now the information is transformed into something that looks completely different. The symbols, such as letters and words that we are used to are now transformed into digital form or numbers. Digitization is transforming

letters or characters or symbols into what is called binary codes expressed either as one or zero. This has made it possible to store information in much smaller space, such as computer chips that are so small you can actually lose them in your pockets. Digitized information are easier to store and easier to access as well.

The very basic reason why we need to digitize is to enable users, such as researchers and archivists, to work with extremely important materials without having to worry about destroying the original material itself. For example, materials such as original documents that have become brittle with time need not be damaged by users. Digitized versions of these materials can be manipulated electronically and will provide as much if not more information as physically manipulating the actual material itself.

The additional advantage of digitization is that you can actually improve the quality of the material. If you digitize pictures, you can easily enhance the picture itself without manipulating the film, plus the fact that you don't need to use the expensive film anymore. Well, you don't need film anymore. Digitized sound is much better to listen to because all the notes are enhanced and the over-all sound quality is largely improved.

Convergence

Here I am referring to convergence of technologies which has enabled us to combine the features of different media formats. For example, radio broadcasting now is done through computers and radio programs are even broadcast on television. All sorts of communication gadgets are put into use and the combined effects have been mind-boggling, something we never thought possible in the early days of radio broadcasting.

From the point of view of records and data management, the convergence of technologies has made it much easier to work on large volumes of information and documents over much shorter periods of time with very much easier processes. In fact, through a mere click of the computer

mouse you are now able to transfer and save large volumes of material in split-second. In short, information processing, storage, and retrieval have become possible in just a wink of an eye.

There is no limit to what you can do to improve your system of managing records and data. Whether or not you are dealing with large volumes or small volumes of records and data, you now expend only a very short amount of time doing your work. In other words, the volume is no longer a significant variable in performing your tasks.

Trends in Digitization

As digitization is the operational term now, let us have a quick look at it. We have the following concerns to deal with. They shall affect your tasks as records and data managers, and they will actually dictate your efforts.

Metadata Moving From “New” and “Exotic” to “Operational”

Experts have been pointing out to us that more and more, we need to become concerned with being knowledgeable and conversant about information and data that deal with content which traditionally have been outside of our immediate disciplinal areas. These information that normally cut across traditional disciplinary boundaries are made by users to converge with others for the purpose of discovering new meanings and uses. Our clients think more holistically and they need to have access to records and data about issues that could be related to their work even if they appear to be unrelated. This is a very logical assumption because in our kind of work everything is related to everything else. Professionals, policy makers, decision makers and ordinary individuals need more holistic information to arrive at informed decisions.

The conglomeration of all the data, information, and knowledge needed to achieve a holistic understanding of issues is what we refer to as metadata, which is what hap-

pens when we look at things at the macro-level. Metadata used to be a mind-boggling concept that was nice to discuss or throw around in academic discussions, but today this collectivity of data and information has become very necessary in the effort to better understand new concepts and new knowledge. Metadata are now better understood and have taken a new meaning and practical utility among most data and information users.

This situation will certainly push the records and data manager to become much more creative in collecting, storing, and retaining such data and information. In fact, it is entirely possible that old data and information may no longer be disposed off the way it is done now, but transformed into formats that could be stored better under new processes so that they may be usable later.

One of the basic considerations we must be aware of is that in today's world it would help if we become more careful in discarding the information we may think has lost its usefulness. That data or information could be the basis of a new knowledge in years to come. In other words, the principles that you have adopted as bases for determining whether to retain or dispose off data and information from your storage system need to be reviewed and restudied. These principles were developed at a time when you did not have the technologies you now have. In this situation, you need to work with the disciplinary experts.

Creation of Institutional Repositories

In simple terms, institutional repositories refer to independent information repositories that are largely-institution-based. In a way, they are the microcosm for larger repositories. For example, an extensive institutional repository would be the IRRI data base that contains all the necessary information about rice science in the world. In spite of the convergence trend, specialized institutional repositories will continue to thrive. The alternative will be to create giant repositories that contain practically everything. While possible, this would require efforts and skills and manage-

ment structure that are still far into the future.

The creation of institutional repositories shall continue. In fact, institutional repositories may become the norm during the next five to ten years. These repositories, which shall essentially be specialized records management units, shall ultimately be interconnected and access shall be much easier and quicker than it is today.

Furthermore,, your institutional repositories might, in fact, be comprised of several subject matter repositories. For example, the large UPLB repository might be comprised of smaller repositories on various subject matter areas since UPLB is into myriad areas of concern, such as agriculture, natural resources, engineering, the arts, and so forth.

Social Networking

A definite trend among users of data and information, particularly those accessible through the Internet, is active interaction with information. This is what generally is referred to as social networking – the interaction with information and through such activity people network is enhanced. Experts have pointed out that “people want to do more than search and retrieve; they want to comment, review, rate, rank and otherwise contribute and interact with information” (Palmer and Storey, 2008). The best example of this interaction of users with information is the Wikipedia itself. This process is enhanced greatly by micro-blogging through Facebook, Twitter, and the ever-increasing social network technologies.

Technically, a social network is a condition where individuals are linked together through common interests. For example, individual users of computers connected to the Internet link-up with one another to share information such as blogs, pictures, videos, etc. In time, this network of individuals becomes very large and the amount of information shared very voluminous. The presumption is that members of the network are free to contribute to the clarification of ideas, even introduction of new meanings. This is the strength of the social network.

Universal Search

In 1984, I described in a symposium organized by People in Communication at the Ateneo a system of accessing information without having to travel in space. This was how I presented the idea:

Suppose I were to do a library search for information regarding a paper I was writing, I should be able to do this from my office by connecting to the UPLB Library. If the UPLB Library had the material, then I should be able to download or print the document right in my office without having to disturb anyone in the UPLB Library. If the UPLB Library did not have the information I needed, then its electronic system should be able to connect me to the UP Diliman Library, or the Ateneo Library so that I could continue doing my library search.

Such a scenario then sounded innovative, but today it sounds absolutely crude. A much more complicated, effective, efficient, and large scale system is operational today called Google. Other search engines do it, too. YouTube does it well.

The important thing is, people prefer to go through just one entry into interconnected systems. It's like you just enter through one door of a shopping mall and you're exposed to all that is available in the Mall without exiting. The moment you exit the Mall, that means you're done and ready to go home.

Global Discovery

This trend focuses on making digital collections accessible to user tools like search engines. For example, your blogs, if they are listed in Google, are made accessible to Google users automatically.

This could happen two ways. While your digital collections will certainly continue to be more accessible to external users, developments in the future will lead to inward application as well. That is to say, more and more users

internal to your organization will access such digital collections because they will need these to become more effective and efficient members of the organization.

Personally, I would prefer to start with the internal mechanisms of this concept of global discovery. In many organizations, for example, official memoranda are uploaded into the organization's WAN system so that each member of the organization can access it. For example, there is an old software called Yak. Install this in your computer and you become part of an internal organization network. All computer units connected to this network will receive automatically all the releases, such as office memos and reminders from any source-member of the network. You do not have to exert effort to access it because it automatically warns you through an alarm system the moment there is new information uploaded.

But this has to be under a mind set that fits the requirements of the system, such as the first thing that a member of the organization does upon getting to office is switch on his/her terminal and look at the latest circulations. Then, his/her last activity before leaving office after the day's work must be to look at his/her terminal to find out what might be newly circulated information.

This system will have to be connected to the giant computer mentioned earlier. The moment that happens, then everything would become accessible globally. Look forward to the day when you shall be able to access everything from your desktop unit, or perhaps even from your palm-size unit that you bring with you everywhere you go.

Digital Curation

Digital curation involves not only preservation of digital materials but includes "selection, appraisal, and enhancement" of data. Experts are warning us that we are paying much less attention to digital curation than we ought to. Palmer and Storey (2008) point out that "digital preservation, like global climate change, has that feeling of a looming disaster that won't grab attention until the disaster

actually occurs." What they are telling us is that we may be collecting and collecting, and storing and storing, but such data need to be preserved and enhanced to be compatible with newer generations of technology. If we don't clean them up now and then, and preserve them, upgrade their format, we will ultimately lose them through technological incompatibility, for example. This, I believe, includes the task of transforming the data into a format that is compatible with the new technology being used. This probably means also that you will need a digital curator in your organization sooner or later.

Beyond Special Collections

The very clear direction now is that everything is being digitized, which is aptly called mass digitization. Today, of course, the emphasis of most institutions is selective digitization, but we are fast moving toward mass digitization even if this requires enormous amount of resources to achieve.

The number one performer in this area, it appears, is Google. Google has done an enormous amount of digitization work of practically what appears to be important to Google users today. The situation has been aptly called the Googlization of the information industry.

Palmer and Storey (2008) remind us:

Digitization is a challenge and an opportunity and this is the moment to consider how to move forward. In a world where it is increasingly felt that if it's not online it doesn't exist, we need to make sure that our users are exposed to the wealth of information in our collections.

Scaling up digitization will compel us to temper our historical emphasis on quality with the recognition that large quantities of digitized materials will better serve our users.

What's Across the Border?

The flow of technological changes worldwide is rather dizzying for practitioners. It must be more confusing for users such as those of you in the records and data management industry. You want to set up your system now, but you will find such system obsolete perhaps within one year. You want to be on top of the technological flow all the time? Then you will have to change your hardware and train your people in the new software needed in operating your hardware on a yearly basis. Let us consider two major concerns: technology trends, and the rise of the intelligent machines. These two work side by side, so let's look at them in tandem.

Perhaps the most important development in recent times that has greatly influenced the way we handle and manage data and information is the World Wide Web (www).

We have navigated from Web 1.0, to Web 2.0, which is what exists today, and now comes the talk about Web 3.0.

Web 1.0, was also known as “read only Web.” At the height of its popularity in 1996, it had 45 million users globally. It catered mainly to the technologically savvy and companies that had the technical expertise to provide content on the web. It was focused on company website homepages, and information providers owned content which many people had access to. In general, the features of Web 1.0 included services like the Britannica online, HTML (hyper text markup language), portals, directories, Netscape, page views and some advertising.

Web 2.0, which is what we use today, is also called the “read-write web” because “anyone who wishes to create and share content can do so easily without needing much technical expertise” (Koh, 2007). People converse through the Web and they are finding ways of doing collaborative work through it. Clearly, in Web 2.0, knowledge about how to use the Web is no longer under the control of a few technical people or companies. Koh (2007) observes that there is now mass participation. In fact, Web 2.0 claims more

than one billion users globally. Its focus is on communities of users, blogs, sharing content, the Wikipedia, XML (extensible markup language) format, RSS (really simple syndication or rich site summary), web applications, and the Google, among other things. Web 2.0 is about user-generated content. In the Web 2.0 environment, people consume as well as contribute information, therefore the line that separates information users and content publishers has become very blurred.

Web 3.0, which is also called the Semantic Web, according to experts, may still be many years from maturation but it is now being felt. The focus is on providing meaning to data, personalization of information, and intelligent information search.

In the Semantic Web, contents, whether in the form of text, images, video, or something else, will have their own descriptors that help bring meaning, context, and relevance to such content. All this will, hopefully, make things easier and perhaps even more interesting. For example, programmers are now developing smart search engines that would be able to infer what the user is looking for and will surf the Internet to find only the information that is relevant to the user's query. Indeed, Web 3.0 marks the rise of the intelligent machine. Here is how experts describe Web 3.0:

... in this new era, traditional approaches to content, document and digital asset management are no longer enough. Instead, organizations need to find a way to harness their social intelligence and adopt a new way of thinking about knowledge management and search. Organizations need to be able to quickly harness the collective wisdom of its members, and use this wisdom to disambiguate and inform vetted content. The power of collaborative online communities can be used to add semantic understanding to enterprise content, which helps organizations improve productivity and search access, and, ultimately, become more competitive, innovative and effective.

I hardly understand Web 2.0 and certainly I am not an expert on Web 3.0. What I can suggest is that you listen to Kevin Kelly explain what Web 3.0 is. Look him up at YouTube. Web 3.0, Kelly says, is just one giant computer which contains everything because the pattern of operation is sharing data so that every little idea is linked to other little ideas through the web, through entries from all of us connected to the web. In a way, these various small computers linked together become a giant computer that collects all the information it has from all of us humans that use the web. Out of this, this giant computer forms its data base. In other words, this giant computer, which essentially is Web 3.0, is duplicating the human brain. Us, humans ... we have become the external senses of the web rather than the other way around. Semantic web, therefore, also means worldwide data base.

Put differently, do not be surprised if in the next few years, the contents of your academic records at UPLB, for example, will ultimately be accessible to individuals anywhere the world over, whether you know them or not. Well, that is now beginning to happen, so the thing to do is to make sure that you do have the right codes and securities for your files to make them safe from hackers. However, it should be pointed out that any part of your data base that you do not provide security codes would practically and instantly mean they can be for public consumption and could be accessed accordingly.

To the alarmist, this would mean absolute mockery of the right to privacy. My own personal belief is that this giant computer called Web 3.0 will function like the human brain. Our brain has a place for data and information that we have decided not to divulge. Those data or information cannot be accessed unless we ourselves give the signal that they may be accessed.

Identifying Information Risk Situations

Information is a very significant asset of any organization. In fact, it is a critical asset (Parapadakis, 2009) that could

lead to right decisions for the organization. There are times, however, when critical information cannot be used due to certain situations which we must try to avoid. These situations are called “information risk” situations, and experts like Parapadakis (2009) describe them as follows:

Non-Capture Situation

This is a situation where the critical information is not captured into the system. Someone may have forgotten to include it. A large amount of information is lost during collection because its importance is not fully appreciated by those responsible for collecting and securing them. One consideration here, of course, is that frequently people are not always aware of the future significance of specific information at the time they encounter such piece of information.

Information Loss Situation

This is the risk of information being accidentally removed or deleted from the system. As everybody knows well, this can happen very easily. Frequently, we rationalize this by saying “the hard disk crashed.”

Malice Situation

This is the risk of the critical information being deliberately removed, or perhaps intentionally corrupted or damaged. From a legalistic point of view, this is called “spoliation of evidence,” which is really the “destruction or significant alteration of evidence, or the failure to preserve property for another’s use as evidence in pending or reasonable foreseeable litigation.”

Attribution Situation

This refers to the risk of losing the context and metadata describing the information. Managing data is important, so is managing the context in which the data may be used. All information are useful to the extent that they are used in context.

Unauthorized Access Situation

This is the risk of the information being accessed by unauthorized persons. When people begin asking “where did you get this information?” it means that they are suspicious as to why and how you have in your hands what they consider to be confidential material.

Unavailability Situation

This is the risk of technical failures that prevent access to the information. A classical example of this risk is the announcement, “the computer is down!” The point in all these is that the data and information may have been carefully collected, processed, and stored, but if they could not be accessed, they have very little value.

Findability Situation

This is the risk of the information being lost in what has been called the “digital landfill.” Perhaps that information was not properly classified. The danger of not being able to find the information is real, hence there is need for the organization to put in place techniques that would insure that the information is properly captured and classified so that it can be quickly discovered or found.

Inaccessibility Situation

This is the risk of the information becoming inaccessible due to the medium or format. For example, a document on 5.25-inch diskette in Wordstar format can't be read by MSWord 2007 in Vista format today.

What Might Be Our Problems?

There are all sorts of problems, but I have on my own personal list six issues that I believe you in the business of records and data management must deal with sooner or later. These issues you already are aware of, so I'll just mention them in passing.

Unwillingness to Share Resources

This would refer both to software and hardware resources. It is rather unfortunate that frequently, people do not like to share use of equipment. For example, individuals almost always would want their own units of computers and printers right on their desks for their own, personal use. In addition, they would like to keep to themselves whatever information they received from sources other than themselves. In fact, information that they generate they almost always consider to be their own. The fact is, if you use public properties to generate such information, then such information becomes public property.

Individualized Record Keeping

Most individuals in the university, for example, will maintain their own files of records and data. It is, of course, understandable that people normally look at documents in their possession as personal records and documents. This is one reason why, for example, professors require their own cabinets and recording systems. This is also one reason why it is difficult to find important records and data that would help clarify certain events in the life of organizations and institutions. While it is easy to say that the collection and storage of records and data is the responsibility of a certain organizational unit, it happens also that individuals do not normally voluntarily give copies of documents in their possession to the unit responsible for such collection and documentation. A trick in effective and efficient records and data management programs is voluntary sharing of information among members of the organization.

Inability and Unwillingness to Use the Same Hardware and Software

Well, some people simply do not like to use open sources, for example. Besides, people usually prefer certain models of hardware and certain types of software. Migrating to a single system, for example is difficult mainly because people sometimes are not willing to go the additional distance of learning to use the new system; they are content with

whatever system they already have grown familiar with.

Continuing Distrust of Machines

For a long time now, many still do not like or are not comfortable using machines. Of course, being machine-dependent is as bad. For as long as we look at machines as entities that are taking over our jobs, then we remain skeptical about them. However, we should look at machines and technologies as means to facilitate our work. They are means to an end rather than the other way around. One of the myths about machines is that they do make mistakes at times. Well, we should realize that the mistake is not the work of the machine but of the programmer who happens to be a human being. The time when a simple machine in the office is able to think and decide and by-pass the humans is still way into the future for most of our institutions and organizations.

Capital Investments in Technology Remain Steep

There are those who would like to keep abreast of the developments in technology and would want to always be the first to own top-of-the-line gadgets each time these come out of the market. This pattern of behavior is extremely expensive and unsustainable. On the other hand, there are institution decision makers who insist on using obsolete machines and expect them to perform like top-of-the-line machines. What we ought to remember is that there are machines that would certainly have to be replaced when their respective life spans end, and there are machines that could still work way beyond their life spans, especially if they have been properly maintained over the years. What would dictate the use of machines is level of efficiency and effectiveness that we are after in the performance of our tasks.

A good reminder is, use technology, new or old, to the extent that it provides you most efficiently and effectively what you require.

Mind Set is not Ready Yet

People do claim knowledge about the importance of new gadgetry and technologies, and what they can do to improve performance. Sometimes this happens only at the theoretical level. They discuss the need but stop short of putting in place the right machines for the right tasks because they are not ready for what these require in the long run. Besides, the policies may not be there yet. In our experience, policies always come late. For example, some government agencies today still require original hard copies of certain documents that have been digitized on top of soft copies that can now be available. This thinking and behavior pattern are remnants of past eras when digitization was non-existent. The process doubles or triples the amount of work to be done but does not change the value or significance of the document.

Concluding Statement

If there is one clear message in this presentation, it is that the phrase “records and data management” is a miniaturization of the nature of work that you have to do. Perhaps it is high time that you contextualize what you do. On the basis of what I have presented to you, I propose that you begin thinking in terms of archiving as a logical extension of the concept of records and data management. For example, you should no longer be talking simply of UPLB Records Management. Instead, you should already be talking of UPLB Archives.

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Box Article # 8

PLAGIARISM: AN INTELLECTUAL LEPROSY

Talk delivered by Dr. Lex Librero in the 11th Talakayan Series for Environment and Development (TSED), School of Environmental Science and Management (SESAM), UPLB, College, Laguna, 13 January 2011.

Defining the Playing Field

Plagiarism, we've been told, is a very serious academic offense that deals with both the legal and ethical issues of using someone else's work without proper citation or attribution. In this presentation, I shall not dwell on the legal aspects. You'll need a copyright lawyer for that. Instead, this session shall focus on plagiarism as an ethical issue in graduate education. We shall try to tackle issues like why plagiarism should be important to us, why students plagiarize, and how might we be able to avoid plagiarism.

Quite candidly, I can say without batting an eye lash that most of us, if not all, have committed some form of plagiarism in the past, consciously or unconsciously. So the challenge is, let those without sin cast the first stone.

There are two reasons why we sometimes think we probably shouldn't worry about committing plagiarism, as may have been discussed in various other fora, namely: (1) we didn't entertain any malice in not giving credit or attribution for an idea or work done by others when we used it,

and (2) we simply may not have been aware that someone else may have beaten us to the idea that we have written or spoken about, which we may have consciously or unconsciously owned in the process without attributing it to some others other than ourselves.

Does this mean that if these two considerations exist there would be no plagiarism committed? Not exactly. Notwithstanding the decision of the Philippine Supreme Court in connection with the plagiarism case filed against one of its own Associate Justices, intentional or unintentional, with or without malice, plagiarism is plagiarism. From the legal point of view, perhaps the Supreme Court decision has significant meaning. From the point of view of ethics and intellectual honesty in the academe, however, that means nothing or very little if at all.

Now, why use the term “leprosy” in a discussion of plagiarism? Well, leprosy, as everybody knows, is a chronic disease that has caused the banishment of sufferers or lepers from mainstream society in the past because leprosy was initially considered to be highly contagious and incurable. Its external marks are skin lesions on the face which makes you look ugly that none would ever want to touch you. On the whole, leprosy was stigmatizing to individuals who contracted it in the early 20th century. In the 1930s, however, scientists found cure to leprosy, and has also been found to be actually non-contagious although the social stigma has remained.

I view plagiarism in the same vein, considering it as some kind of an intellectual disease. It is chronic because you don't become a professional plagiarist right away. Instead, when you plagiarize somebody else's work, perhaps as a first-time incident, and actually see some benefit from the action as it may enable you to, say, cope with the demands of an academic assignment, such simple experience would probably make you do it again, and again, and again until the act becomes a habit over a relatively short time. When you make it a habit to plagiarize other people's work, you become known as a plagiarist and you'll carry the stigma of being a plagiarist (a stealer, a thief, or cheat) through your

professional life.

Over the years, people, specifically students, have lost the art of giving credit to whoever it is due. Instead, they have become so adept at simply cutting and pasting and forgetting about citing their sources. The plagiarism disease may be curable, if you're able to put in check your tendency to use others' work without attribution (intentionally or unintentionally), and depending on how the university looks at the issue. Most universities abroad have policies and strict rules about plagiarism that students must abide by, but many universities in the Philippines are silent about the matter.

A friend of ours, Professor Jonathan Baggaley of Athabasca University in Canada, pointed out recently (Baggaley, personal communication, 2010) that if plagiarism was a serious problem two decades ago, it is pandemic today. This situation has probably been worsened by the “cut-and-paste” technology through the Internet.

Defining Plagiarism

What is plagiarism? Wikipedia, quoting the Random House Compact Unabridged Dictionary published in 1995, and the Oxford English Dictionary, offered the following detailed definition of plagiarism: “the wrongful appropriation, close imitation, or purloining and publication, of another author’s language, thoughts, ideas, or expressions, and the representation of them as one’s own original work.”

Others have defined the word in simpler, more direct terms. For example, Stephen Moss (2005), writing for The Guardian, defined plagiarism as “the attempt to pass off the ideas, research, theories or words of others as one’s own.” He said, plagiarism is a serious academic offense. The website of the Southern Connecticut State University (<http://www.southernct.edu>) used in its entry on plagiarism the title “Plagiarism is Cheating.” In another website (<http://www.plagiarism.org>) plagiarism was referred to as “fraud,” which means “outright deception, and sometimes almost ‘accidental’ misrepresentation” or, from the point of

view of financial investments, “failure to disclose or to tell the whole truth” (<http://www.fraudlaw.org>). At the University of California (Davis), plagiarism is defined as “using another’s work without giving credit,” and the student is tersely reminded that “scholarship entails researching, understanding, and building upon the work of others, but also requires that proper credit be given for any ‘borrowed’ material” (<http://sja.ucdavis.edu>).

As reported by Wikipedia, it was in the 18th century, in Europe, when new morals and ideals were institutionalized and applied in academia and journalism. In these institutions today, “plagiarism is now considered academic dishonesty and breach of journalistic ethics, subject to sanctions like expulsion and other severe damage” (<http://en.wikipedia.org>). Wikipedia also pointed out that this was not so in the case of the arts. Referring to the 18th century as point of reckoning, Wikipedia explained that “in the previous centuries authors and artists were encouraged to ‘copy the masters as closely as possible’ and avoid ‘unnecessary invention.’” Indeed, as Palanca Hall of Fame Awardee Butch Dalisay (2010) observed, “... artistic creation often begins with unabashed imitation. Back when people had fuzzier notions or cared less about copyrights and what we today would call ‘intellectual property,’ writers often filched plots and stories from one another, or from those who came before them.” In fact, a quote attributed to poet TS Eliot, says, “immature poets imitate; mature poets steal” (Moss, 2005). Of course, that quote was referring to a period prior to the 18th century, not today.

What's the Implication of these Definitions?

The phrases used in the definitions we have cited highlight the importance of giving credit to sources. To some degree this means there is sense of originality in previous works upon which current writing efforts may be based. In today’s world, however, one might say that it is no longer possible to come up with an original piece of work. For example, everything that you discuss in your classes have been based on previous work done by others before you. When you write term papers, essays, theses/dissertations,

you're using the works of others to build your own work.

Contrary to what many believe, however, it is still possible to come up with original work today. What would constitute an original work? In the academe, you're given tremendous doses of data, information, and knowledge distilled or otherwise transferred from previous works of others. By themselves, these pieces of data or information would not mean much beyond definition of terms or phrases. However, you can come out with original ideas or new interpretations out of these data, information or knowledge. This process is called in education knowledge construction. The new knowledge that you're able to determine and define, or otherwise construct, based on what existing knowledge says constitute new knowledge (especially if what you've come up with is something different from the original ideas in your sources), which would be your original contribution to the literature or current body of knowledge. Put simply, new and different interpretation of similar facts and information would constitute new information or knowledge. Of course, its acceptability in the community of experts would be a different matter.

Some Exemplars of Plagiarism

Plagiarism exemplars in the recent past abound. We recall the complicated plagiarism accusation leveled by the faculty members of the U.P. College of Law against an SC Associate Justice in connection with his ponencia on comfort women. He was accused of having copied, without proper citation or attribution the work of Evan Criddle and Evan Fox-Decent (see related materials in <http://www.opiniojuris.org/20/10/07>; <http://www.philstar.com>; <http://www.gmanews.tv>; <http://www.opiniojuris.org/tag/philippines-plagiarism-allegations/>; <http://www.up.edu.ph>; <http://services.inquirer.net>). Resulting from this case seems to be a ghost-hunting spree (<http://www.abs-cbnnews.com>).

I have an example closer to home. In 1976, I wrote a manual on the school on-the-air based entirely on how we at UPLB's Radio DZLB conceptualized and implemented

this radio program format (Librero, 1976). I did not know that while the manual was being mimeographed in the then Department of Development Communication, a Sri Lankan visitor, named C.V. Rajasundaram, who was then a consultant with the Asian Institute of Broadcasting Development in Kuala Lumpur, visited DDC and got hold of the yet unbound mimeographed copy of the manual. He did not even come to meet with me when I was just at DZLB on the second floor of the department. Then he came out with a book in 1981 titled Development Communication, an AIBD/AMIC Manual for Media Trainers with Special Reference to Broadcasting, which was published by the AIBD and AMIC. Part II, Unit IV of the book (p. 100-109) contains word for word reproduction of my manual. The book was a reference book in the training course of the AIBD for broadcasters in Asia. In one of those trainings, the then Station Manager of DZLB was a participant. When she came home to Los Baños she informed me that my manual was copied and made a chapter of a book they were asked to read. I wrote the AIBD, AMIC, and UNESCO about the matter, although I was not interested to pursue it in a court of law. The book was removed from the shelves, so I was told, and Rajasundaram was probably blacklisted because he was not part of any broadcasting training circle after that. I suppose he was asked about that incident later on because a friend of mine from the AIBD (the Deputy Director General himself) sent me a copy of Rajasundaram's letter explaining that he was going to cite me as author of the manual. Well, he never got in touch with me in spite of the fact that I was easy to get in touch with that time since I was just here in Los Baños, a place he himself had visited earlier. Clearly, he failed to give me credit for the creation of the manual. Furthermore, he actually used it as a complete chapter of his book, hence it was a case of the presence of malicious intent to actually claim the material as his own when, in fact, it was not. That was plagiarism, pure and simple.

About a decade after that incident, very significant portions of the master's thesis of Alexander Flor appeared, word-for-word, as an article in *MediaAsia*. The article was authored by a faculty member of the then Institute of Mass

Communication at UP Diliman. I suggested to Sandy Flor to report the matter to the university but he decided otherwise.

In another instance years after this incident, some portions of the doctoral dissertation of a colleague in the then Department of Development Communication were used without proper attribution. A graduate student who copied parts of my colleague's dissertation committed the unfortunate and intriguing mistake of submitting it as part of her dissertation proposal to her advisor, who was none other than this colleague of mine herself. Recalling the incident, my colleague said, "the material looked so familiar so I checked it out and lo and behold it was part of my review of literature in my dissertation." She filed a complaint with the Department of Development Communication, and the student was barred from continuing her PhD program in development communication. This was a case of gross intellectual dishonesty on the part of the graduate student, who did not only plagiarize but submitted the plagiarized material to the person who was the original author of the material plagiarized. In some other occasion, this could have been considered adding insult to injury. For more examples of plagiarism right in the University of the Philippines System, look at the article "Intellectual Dishonesty in the Internet Age" by Celeste Ann Castillo Llaneta (<http://www.up.edu.ph>), which was published in the July-August 2010 issue of The Forum, a weekly publication of the University of the Philippines System.

Now, let me point out that, in general, the responsibility of reporting cases of plagiarism committed by students falls on the shoulders of the professor, but other students can file complaints against those they suspect of having committed plagiarism, especially if they know the facts surrounding a possible plagiarism case.

I have heard of many possible plagiarism cases outside the UP System but let me consider those as simply hearsay since I do not have first hand information on them. I have heard people talk about them, though.

Detecting Plagiarism

How do we detect plagiarism? Over-all, we should doubt the originality of one's work, say a term paper, when we see any or all of the following warning signals (Baggaley, 2010):

1. *Multiple styles in English.* I refer to this as the “too-good-to-read syndrome.” You can hardly detect anything wrong with the paper from grammar to logic, except perhaps some incoherence among paragraphs that could be considered the hallmark of un-retouched product of the “cut-and-paste” technology.
2. *Assignment is too long.* You might be getting papers perhaps having more than 5,000 words instead of just 2,000, as you might expect from the nature of the content. When a student turns in a lengthy paper that appears to be well-organized and written, especially when there is hardly enough time to do a good job of it, begin to wonder whether or not said student really did all the work. Of course, it goes without saying that you must be familiar with the writing styles of your students. We do have graduate students who are good writers.
3. *Assignment may be off-topic.* This could be the result of today's “cut-and-paste” technology. The submission may, in fact, be dealing with the same topic as assigned but the orientation of the write up may be different from what is expected. That means being out of topic.
4. *Presence of give-away terms* like “this article ...,” “as indicated in the previous paragraph” ..., or even having many paragraphs put together to form a single paper and yet the paper is incoherent.
5. *Citing literature that is not related to the course materials.* This is a clear sign that the material was most likely done by another person not familiar with how the topics in the course are treated. There's a good chance that this is a product of the cut-and-paste technology,

By and large, plagiarism may be easy to detect but a bit un-

easy to resolve without hard evidence because plagiarists always claim innocence. In a journal article titled “The mind of a plagiarist,” Baggaley & Spencer (2010) identified the following defense mechanism tools of a plagiarist that they refer to as “protestations of innocence:”

1. *Protestation of indignation*, where the plagiarist, when confronted with the evidence that he has plagiarized, would insist, quite angrily, that he has never plagiarized in his entire life;
2. *Protestation of exaggeration*, where the plagiarist claims that the accusations against him were exaggerated;
3. *Protestation of blame*, where the plagiarist would argue that his teachers should have told him of his behavior earlier on, implying that he could have changed his behavior;
4. *Protestation of confusion*, where the plagiarist would claim that since he has done the same thing over and over he may have lost sight of the extent to which he may have committed plagiarism; that he may also claim that this might have been due to the fact that he is from a different culture;
5. *Protestation of ignorance*, where the plagiarist would try to explain that until now he had never really understood completely the meaning of plagiarism; and
6. *Protestation of the academic validity of plagiarism*, where the plagiarist, realizing that he would be expelled from the university, would suddenly confess that he had for a long time been compiling quotations and that he has started using them in making his assignments. In revealing this strategy, he might be trying to justify that what he has been doing was an acceptable approach for him to cope with his academic work or assignments.

Types of Plagiarism

According to a website that deals with plagiarism issues

(<http://www.plagiarism.org>), “plagiarism is not always a black and white issue.” It is said that there is a very thin line between plagiarism and research, and frequently this boundary is blurred. To be able to detect the various forms of plagiarism, particularly the more ambiguous ones, seems a necessary step towards preventing plagiarism more effectively. Most would believe that copying some one else’s work, or perhaps even just borrowing ideas, is plagiarism. However, the words like “copying” and “borrowing,” according to <http://www.plagiarism.org>, are sometimes ambiguous and can actually hide the seriousness of the plagiarism offense.

From the point of view of the Northwestern University (<http://www.writing.northwestern.edu>), there are two types of plagiarism: deliberate and accidental. Deliberate plagiarism, the Northwestern University website emphasizes, is cheating, pure and simple. Accidental plagiarism, on the other hand, is a bit more complicated. There are two types of accidental plagiarism. First, there is the paraphrase without any citation because the author simply forgot to include the citation in an otherwise appropriate paraphrase of the original author’s ideas. Second there is the misplaced citation, where a source may have been quoted but the citation may be inadvertently excluded.

Accidental plagiarism can be easily remedied. The presumption, of course, is that one does not intentionally plagiarize somebody else’s work and when one is informed about the error one should be more than willing to rectify such error, like providing the missing quotation marks or citation.

The two types of plagiarism may be presented in a matrix, as follows:

Sources Not Cited	What It Means	Sources Cited (But Still Plagiarized)	What It Means
Ghost Writer	You turn somebody else's work, word-for-word, as your own.	Forgotten Footnote	You cite a source but provide incomplete information that could hamper location of your source.
Photocopy	You copy major portions of text from a single source without any changes.	Misinformer	You provide inaccurate information about your source, hence it cannot be found.
Potluck Paper	You copy from many different sources and just adjust sentences so they can fit together, but you retain the original phrasing.	Too-Perfect Paraphrase	You properly cite your source but forget to put quotation marks, thereby making it appear that the wordings are yours.
Poor Disguise	You retain essential content but you alter or change some words or phrases.	Resourceful Citer	Proper citations, appropriate paraphrasing, proper use of quotation marks, but practically no original work included (such as new interpretation, etc.). Actually, this is easy to spot because the paper looks like it's all in quotation marks.
Labor of Laziness	You spend a lot of time to paraphrase material from other sources and make them fit together instead of doing original work.	Perfect Crime	You use quotes in some places but paraphrase in most places without providing source, which makes it appear that you own the paraphrase.

Adopted from: <http://www.plagiarism.org>

Why do People Plagiarize?

Plagiarism has been observed to be commonly practiced, especially among those in the academe, like researchers, teachers, and students. There are celebrated cases of plagiarism among known researchers and scientists, but it is believed that these pale in comparison with what academics generally think to be the frequency of unreported cases of plagiarism among students in universities. Why do people engage in plagiarism?

From the point of view of this writer, having been a development communication professor, published author, editor of professional publications, and member of the Edito-

rial Board of an existing technical journal, there may be a couple of major reasons why cases of plagiarism do happen, especially in academe.

The “Work Overload” Syndrome

This syndrome is influenced by the fast-paced nature and rate of workload in academe, which leads people to employ ways and means of making their tasks easier and quicker to complete. Frequently, there's too much work to do in so short a time, and people are unable to cope because they have to meet deadlines. “The pressure of a deadline is also a familiar motive” to commit plagiarism, says Llaneta (2010) in her article in *The Forum* (<http://www.up.edu.ph>). The combination of meeting deadlines and the piling-up of assignments over a short period of time provides the student a pressing reason to copy and submit someone else's work to satisfy a course requirement or other academic requirement.

The “Unaware” Syndrome

Some students commit plagiarism because they claim they are not aware that copying or borrowing some one else's work and passing it off as one's own is intellectual dishonesty that should not be committed at all. This, of course, is a lame excuse but the fact is, many students really may not be aware what exactly plagiarism is, and they might even truly believe that there is nothing wrong with copying the work of others since practically everybody is doing it. This has been made worse by the “cut-and-paste” technology enhanced by the Internet. Students generally simply say, “I didn't know that that is plagiarism” and think that should be end of it.

This situation may even be exacerbated by the presence of what have been referred to as the “buy-and-sell” entrepreneurs of term papers, and essays, and theses, and dissertations which Llaneta (2010) refers to as RectoOnline.com. This business, by the way, is an international phenomenon. There are numerous writing services online where one can either write for pay or order an essay or thesis for a price.

The price probably ranges from US\$10 to US\$50 per paper, but a thesis, especially graduate thesis, probably costs more.

Important Reminders on Plagiarism

There is a concept that stands out in importance where plagiarism is concerned. This is the concept of “common knowledge.” If something is considered “common knowledge,” you don’t need to cite your source. Common knowledge, however, differs from one type of audience to another. When you deal with non-common knowledge, you’ll have to incorporate your citation in your text. There are three ways of incorporating your citation in your text, namely: quote, paraphrase, or summary, according to the rules on plagiarism at the Jackson State Community College in the US (<http://www.jsc.edu>).

The Quote

A quote, according to the Jackson State Community College, is “an exact reproduction of an author’s exact words in your own text.” There is a caveat in using quotes. We’re reminded by experts to use quotes sparingly. If we use too many quotes, it would appear that we’re unable to contribute something original in our paper. If you have more than three lengthy quotations in one page, you might be using quotes too much. Our sources tell us to consider the following rules when we use quotes:

1. “Enclose the word-for-word quote in quotation marks (“ ”) to show that the source author’s exact words appear in your paper.
2. “If you change anything about the original material to make it fit more neatly or clearly into your essay, use square brackets ([]) to indicate that material has been added or changed.
3. “Use ellipses (...) to show that material is left out.

4. “If the material you are quoting is longer than four lines, use block quote format, which means that you should not use quotation marks but instead indent the whole quoted bit one inch from the left margin so that it is clear what is your original work and what is quoted.”

Paraphrase

Your paraphrase is how you state the author’s ideas in your own words, which must convey the same meaning as the original author’s. A paraphrase is usually similar in length compared to the original material. You use your own words even as you include in your paraphrase the original names, figures, events, and other factual information from the original author’s material. Nevertheless, you may have the best paraphrase but you’ll still have to cite your source within your text just the same.

Summary

A summary, which is much shorter than the original material, is your own restatement of the author’s ideas but focusing on the major points in the material. As much as possible, avoid using quotes within a summary.

Whether or not you are employing quotation, paraphrasing, or summary in presenting the ideas of your source, you must always cite your sources.

Some Recommendations

For practical purposes, the following are recommended as further actions required in the university:

1. The subject of plagiarism should be integrated in all basic courses, especially introduction to research courses, in the different curricular programs of the university.
2. The university must include in its Student Manual the subject of plagiarism. Such manual entries on

- plagiarism must be clear on the rules and sanctions.
3. Faculty, students, and staff of the university must be encouraged to report cases of plagiarism at least to the academic departments, which should have formal structures that would look into such complaints. It is suggested that existing structures, such as the faculty and student ethics committees, be the venues for resolving plagiarism issues.
 4. Regular research seminars for students must be conducted, and plagiarism must always be a regular content in these academic undertakings in the university.

It is further recommended that students must familiarize themselves with the major style guides for academic writing. These style guides are voluminous, but you can have a look at their online versions to be familiar with them. The major style guides may be presented in the following matrix:

STYLE GUIDE	COMMONLY USED IN	URL
American Psychological Association (APA) Style Guide*	Commonly used in the social sciences.	http://owl.english.purdue.edu
Modern Language Association (MLA) Style guide	Commonly used in the humanities and the arts.	http://owl.english.purdue.edu
Council of Biology Editors (CBE) Style Guide	Commonly used in the sciences and mathematics.	http://www.monrecc.edu
Turabian (Chicago) Style Guide**	Commonly used by students.	http://www.uchicago.edu

*Similar to the APA style is what sometimes is known as the Harvard Style.

**The Turabian style, formally known as A Manual for Writers of Term Papers, Theses, and Dissertations, was developed by Kate Turabian, formerly dissertation secretary of the University of Chicago, specifically for students. It employs footnoting and endnoting as a technique of in-text and page citation.

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Box Article # 9

Transnational Education: A New Development Communication Message

Paper presented by Dr. Felix Librero at the Plenary Session on the New Paradigms of Development Communication, 17th Annual Conference of AMIC, Manila Hotel July 14-17, 2008.

Transnational Education as Development Issue

The theme of this year's AMIC conference, "*Changing Media, Changing Societies: Media and the Millennium Development Goals*," appears straightforward and simple on the surface. In fact, it seems almost innocuous. On closer look, however, we see a much more complicated reality particularly in terms of how media may be influencing or even changing our perceptions of the millennium development goals on one hand, or how our interpretation and understanding of the millennium development goals influence the manner in which we use media and apply development com-

munication principles to facilitate a better understanding of said development goals. In other words, our interpretations, either way, are value-laden and culturally-influenced.

In this session, we are focusing on what has been referred to as New Paradigms in Development Communications. Since I have been more active in trying to communicate education the last fifteen (15) years rather than undertaking useful research on the changing development communication landscape, I am afraid I am not able to announce to you that I have stumbled upon an exciting new paradigm in development communication. I can only tell you that, indeed, there is an old chap with a new uniform in the block that appears to be in need of communication support in order to gain more critical attention. This old chap is education wearing a new school uniform called transnational, hence the term transnational education. But I am jumping the gun. Let me back track a little bit.

Six years ago in 2002, a massive volume titled **Approaches to Development Communication**, edited by a friend, Professor Jan Servaes, was published by UNESCO. Chapter 6 of that volume, titled “Threads of Development Communication”, written by another friend Professor Royal D. Colle, described what he referred to as the seven “threads” of development communication, as follows: UNDP thread, extension thread, community participation thread, IEC thread, social marketing thread, institution building thread, and ICT thread. These “threads,” I believe, comprise what may have been referred to as the paradigms or patterns of development communication.

Inherent in these threads or patterns of communication in development is the systematic application of communication theory and practice in enhancing education, which, from my vantage point, remains the mother of all development issues, both in the developed and developing regions of the world. It is the common denominator of the eight millennium development goals set by the United Nations, the presumption being that the more educated one is the better would be one’s understanding of the problems that need to be solved, and the more one

would be in a position to seek solutions to said problems.

Indeed, education is a significant development issue and will remain so for quite a long time yet, which has become an important concern because of the proliferation of educational programs and services being offered across national boundaries. For example, today in the Philippines, a large number of educational programs are being offered by an increasing number of educational institutions from outside the Philippines. A similar situation does exist in other countries in the ASEAN Region.

The delivery of educational programs across national boundaries, otherwise known as transnational education (TNE) or cross border education (CBE), is a rich area for the creative use of media and innovative application of communication principles and practices. For educational planners and decision makers in a country, the proliferation of TNEs is a concern on two points: first, the concern regarding quality of the academic programs being offered which may not satisfy the standards that a recipient country may have adopted for its educational services; second, the manner in which these educational services are delivered, which the recipient country may be unable to check particularly because the educational programs are mostly offered through ICTs and the Internet, may not be appropriately accessible to end users in the recipient country. On top of this, we are aware, too, that there are many courses or subjects that have been simply transcoded for uploading to the Internet without the benefit of proper instructional design appropriate to this form of delivery and are possibly designed more for commercial purposes rather than the satisfaction of the appropriate educational needs of a country and its people. Such courses, indeed, need to be tempered with the cultural background of the learners that are being targeted by these course offerings.

Nature of Transnational Education

The Philippines, through CHED Memorandum Order No. 02, Series of 2008, otherwise known as the Policies, Standards, and Guidelines (PSG) on Transnational Education

(TNE), has adopted the UNESCO definition of TNE which refers to “all types of higher education study program, or sets of courses of study, or educational services (including those of distance education) in which the learners are located in a country different from the one where the awarding institution is based. Such program may belong to the education system of a State different from the State in which it operates, or may operate independently of any national education system” (UNESCO, 2001).

TNE is a legitimate development issue particularly because it also is governed under the rules of the General Agreements on Trade and Services (GATS). The Global Alliance for Transnational Education (GATE) has even defined it as an export product when it said (GATE, 1997):

Transnational education denotes any teaching or learning activity in which the students are in a different country (the host country) to that in which the institution providing the education is based (the home country). This situation requires that national boundaries be crossed by information about the education, and by staff and/or educational materials.

Ziguras (2003) explains that the delivery of educational services across national borders may be categorized by GATS into four modes of supply, namely:

1. *Consumption abroad*, which involves students traveling abroad to live and study in another country.
2. *Cross-border delivery*, where both the educational provider (like teachers) and beneficiaries (like students) remain in their respective countries and communicate through various means.
3. *Commercial presence*, where the education provider delivers services in the learner's country usually through involvement of a local partner institution or even a branch that delivers the foreign program.

4. *Movement of natural persons*, which refers to people traveling across national boundaries to deliver services, such as giving lectures to students abroad who are enrolled in transnational education programs.

Education is one of the twelve service sectors covered by GATS. And there is good reason for this. For example, Professor Sergio Machado dos Santos (2000), in a paper presented before the Conference of the Directors General for Higher Education and the Heads of the Rectors' Conference of the European Union, observed that there has been a "trend of an increasing competition in higher education" in the United States that was becoming a global phenomenon. The features of the trend study in the United States that he cited include the following:

1. Many of the existing universities and colleges in the United States have been developing remote-site strategies necessitating putting up of branch campuses. Many of these new branch campuses may be found in the developing world.
2. An increasing number of educational institutions have been offering distance education courses and programs. Most of the distance education programs that are being promoted in developing countries originate from universities in North America.
3. Conglomerates of large universities have been creating large virtual universities to serve as active brokers for their distance education programs and courses.
4. For-profit universities have been attracting large investments from Wall Street to provide post-secondary education and training in markets considered "huge and ripe for the picking."
5. For-profit universities that have huge funding and who have international ambitions have been increasing in numbers.
6. Many new education providers "hope to be

the brokers of choice for the flood of course-ware hitting the Web." This may be one reason for the existence of many bogus universities offering distance education programs to gullible students from the developing countries.

7. Industry groupings have come together to organize their own education enterprises, often called the corporate universities, to lessen their dependence on traditional universities whose outputs they have been dissatisfied with.

The written intention of GATS, of course, is to level the playing field. In fact, theoretically, academic programs offered by universities in the developing world might even be more appropriate to the needs of students from the developing world compared to those offered by universities from the developed countries. However, the fact remains that it is the rich and large universities in the developed countries that have the resources to offer their academic programs beyond their shores. Consequently, therefore, the flow of transnational education is one way, from the rich countries to the poor countries. Nevertheless, the host countries (poor, recipient countries) are not completely hopeless as they are still in a position to regulate the entry of transnational education programs through appropriate national policies and guidelines that they can impose on education providers wanting to operate within their national boundaries.

Philippine TNE Policy Framework

The Philippines has adopted a national policy framework for TNE through CHED Memorandum Order No. 02, Series of 2008. In formulating these policies and guidelines, the Commission on Higher Education was guided by the principles adopted by the UNESCO/Council of Europe as stated in the Code of Good Practice in the Provision of Transnational Education (June 2001). The PSG on TNE issued by CHED on 28 January 2008 covers the following areas of concern: scope of coverage, extension of regulation, procedures for registration of TNE programs, me-

chanics of recognizing foreign higher education providers and their programs offered in the country, and mechanics of recognizing Philippine higher education institutions engaged in TNE.

An important feature of this national policy framework is the definition of the categories of TNE, based on provisions of the General Agreement on Trade Services (GATS), of which the Philippines is a signatory. The modes and categories of TNEs subject to appropriate policies, guidelines and regulations in the Philippines are as follows:

First, distance education where: institutional partners enter into equal relationship and deliver programs through distance education and both award the academic credit or degree; the program is offered directly by an awarding institution with no local agent/franchisee/partner, in which case such institution would be known as the foreign higher education provider (FHEP); or a Philippine higher education institution uses programs or courses created or owned by an FHEP under a license agreement but where credit may be awarded by the local institution.

Second, conventional mode of education offered transnationally where: partners enter into an equal relationship and deliver programs face-to-face and both institutions award credits of degrees; conventional programs offered transnationally by an FHEP with a local branch in the Philippines, or a Philippine HEI with a foreign branch; or conventional programs offered by an FHEP through a franchiser or a local partner and credit is awarded by the FHEP.

Third, blended learning where: partners enter into an equal relationship and deliver programs using blended or resources-based learning techniques with both institutions awarding the credit or degree; conventional programs offered across national boundaries by an FHEP with a local branch, and Philippine HEI with a foreign branch, using a mix of face-to-face and distance education; or conventional programs offered by an FHEP through a local franchiser or partner using a mix of face-to-face and distance education and where credit of academic degree is awarded

by the FHEP.

During the last decade, there has been a sharp increase in the number of educational institutions based in other countries, particularly in North America and Europe, that have offered their academic degree programs to Filipino students through what have been described in advertising materials in newspapers as “get your degree in six months” or such kind of selling points. What has become alarming in this practice is that most of these educational institutions abroad have simply adopted some kind of a partnership with small institutions in the Philippines that are not even qualified to offer educational programs. These institutions have been free to do so because until this year there has been no set of policies on the conduct of transnational education in the country.

The Philippines’ CHED recognizes that “globalization, changing foreign policies, and liberalization of trade in goods and services worldwide have created a climate for borderless teaching and learning as well as expanded opportunities for transnational education” (CHED Memo No. 2, Series of 2008). Furthermore, CHED has observed that “this phenomenon, together with rapid developments in information and communications technology, promotes access to foreign qualifications, degrees, certificates and diplomas. It also encourages Philippine universities, colleges and training institutions to offer credits and degrees in borderless environment.” In a sense, TNE arrangements should provide education that meets human, social, economic, and cultural needs of the Filipino learners.

TNE as Development Communication

In the field of education, the dominant concern of development communication in the past has been the effective and efficient use of media to translate concepts so that they may be easier understood and learned. Therefore, for quite some time priority concerns were focused on appropriate use of media in explaining concepts. Two properties of media along this line that have been influential in the translation of concepts into learnable objects are called

the fixative property (which refers to media's capability to freeze and store any learning event), and the manipulative property (which refers to the capability of media to change the appearance and meaning of content).

Today, the dominant concern has shifted to the transmission of educational content across national boundaries and cultures on top of using media to teach content. This particular concern fits very well the third property of media, the distributive property, which refers to the capability of media to transport across time and space any learning event. It is this third property of media that has come out dominant in the communication of transnational education programs.

From my angle of view, transnational education happens not only as legitimate message for development communication, but actually development communication itself. Transnational education is a development message, which, initially originated from the developed world. Today, however, even educational institutions from the developing world are making their educational programs relevant and useful even to those from the developed countries of the world. For example, the University of the Philippines Open University (UPOU) has graduated foreign nationals in its Master of Development Communication program. This academic degree program is getting an increasing number of inquiries from foreign students. It helps that perhaps UPOU's MDC program is perhaps the only master's degree program in development communication offered in the distance mode so that students throughout the world interested in earning a master's degree in development communication may do so through distance education. This is perhaps one reason many students in developed countries have chosen to seek their education from universities in developing countries either through conventional or distance education modes of delivery. Either way, this process is transnational education in motion.

According to Ziguras (2001), through transnational education many writers have expressed the possibility of what they call "educational imperialism" because for a long time now "higher education has always involved the exporting

of knowledge and techniques from educational 'centres' to the peripheries (Altback, 1981 as cited by Ziguras, 2001). This exporting of knowledge has become much easier and quicker with the use of advanced information and communications technologies, which has actually increased the scale of transnational education because educational institutions in advanced countries are able to coordinate the operations in other countries through the use of information and communications technologies. For example, Jae-Eun Joo (1999) has reported that the "Internet tends to reinforce the World Information Order, which means that the flow of information in the world has always been from the rich and developed countries to the poor countries of the developing world. Consequently, what the people of the developing world receive is information from the advanced countries only and very little from other developing countries including their own. From the point of view of education, therefore, this phenomenon means that the education that learners from a developing country gain from educational programs originating from the rich countries are designed to satisfy the needs of learners in a developed country rather than needs of learners from a poor, developing country. In other words, this could be a mismatch between educational needs and educational programs offered.

Challenges to Communicating TNE Programs

The relationship between transnational education and development communication is not exactly clear and I am not quite prepared to argue that communicating transnational education is a new development communication paradigm. What I am prepared to argue, however, is that transnational education is, indeed, a content that requires perhaps a more creative pattern of communicating particularly because the communication flow should not only be from the developed world to the developing world but both ways. To be able to do justice to this pattern of communicating transnational education as content particularly flowing from the developing world to the developed countries of the world, we must be able to address a major issue: access.

A positive approach to the issue of access is for education providers in the ASEAN Region to develop and offer academic programs that are more globally-oriented. The point is, ASEAN learners should no longer have problems of accessing content from the developed countries due to language or cost or technology. The more important concern is reverse access, or to make our educational programs in the ASEAN Region more accessible and acceptable to students in other parts of the world. The issue of access should now be a challenge for us to develop programs that we can offer to students from the richer countries of North America and Europe. We have the expertise as well to become education providers for other countries, rich and poor alike.

In dealing with the challenge of access, we have to consider sub-issues, as follows:

1. *Content.* There are academic areas the expertise of which reside in the region. This is where we can start from. ASEAN universities can band together to offer a strong program on Southeast Asian Studies, or specific ASEAN universities can offer programs in their respective areas of expertise and interest. The Philippines, through the University of the Philippines Open University, has started internationalizing its program in development communication, which is getting an increasing number of takers from North America and Europe.
2. *Language.* Traditionally, language is considered a problem particularly in residential education, and it remains a problem in face-to-face classroom instruction. In today's world, however, and in the context of transnational education, the problem of language has at least been partly resolved by the use of the Internet.
3. *Economics.* Since transnational education programs are accessible through the Internet, students from the ASEAN Region no longer have to worry about the high cost of accessing education in the developed world through residential programs. However,

there is a new issue on the economics of transnational education that can even discourage further development of TNE programs in the region. Teaching faculty living in the region will most likely command lower salaries compared to those living in the developed countries, but this would probably be mainly due to the difference in cost of living. Students from the developed countries accessing educational programs offered by universities in the developing world should consider cost as the least of their worries. Indeed, courses offered from Third World universities are always much cheaper to access compared to courses offered from universities in richer countries.

4. *Cultural issues.* Downes (2000) has identified four concerns associated with cultural issues that need to be addressed. These are: pedagogical, acceptance, content, and political concerns.

Pedagogical concerns might include conflicting views about the roles of teachers and learners. For instance, in some cultures students may not be expected nor required to engage in active discussion with their teachers. I maintain, however, that our professors in the ASEAN Region are well prepared to engage their students from richer countries in academic discussion and demonstrate their wisdom.

Acceptance concerns could refer to students from developed countries who may not easily accept the fact that their teachers come from a less developed country. Or perhaps, students from a developed country may not necessarily appreciate the wit and humor of a teacher from a poor country. This, of course, is a matter of interpretation. ASEAN professors are well respected in known universities in North America and Europe. Indeed, they are at par with, perhaps even better than, their counterparts elsewhere.

Content concerns could involve different assump-

tions and views on various educational subject matter. For example, students from different cultures would have different views of the concept of democracy, or religion, or economics, or even human relations. While ASEAN students have a deep understanding of these concerns in the context of the developed world, it is perhaps high time that those from outside the Region must understand the perspectives of those from the ASEAN Region. If real understanding of this mindset cannot be taught, at least it can be demonstrated.

Political concerns could refer to state policies that would tend to interfere with academic content. In some places, for example, academic freedom is probably not acceptable to government. Teachers will then have to decide whether or not to bow to government policies regarding how educational services would have to be provided. We live in a diverse world, and we are all entitled to allowances when it comes to understanding and acceptance of one another's orientations. Such understanding and acceptance improves human relations worldwide.

These cultural issues, once understood and accepted, would facilitate better understanding and perhaps even acceptance of the product that we would want to communicate, our transnational education programs. By offering our counterparts from the developed world an opportunity to learn from us, we are promoting not only world understanding but also the tenets of education for all as well which has been enunciated by UNESCO.

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Box Article # 10

GETTING PUBLISHED IN ACADEMIC JOURNALS: SOME PRACTICAL GUIDELINES

The original version of this presentation was prepared by Dr Felix Librero for the Southern Tagalog Regional Research Conference organized by the Commission on Higher Education in Lipa City in September 2011 but which didn't push through. That paper was refined and included as Appendix E of the book, Writing Your Thesis (A Practical Guide for Students) by this author, which was published by the U.P. Open University earlier this year.

This version was presented in the Journal Writing Seminar organized by the Graduate School Student Council in collaboration with the UPLB Graduate School, held on December 10, 2012, held at the UPLB College of Public Affairs

Introduction

This presentation includes the issue of why we should, but sometimes, couldn't publish; why we should publish our work; how to write publishable journal articles; a few words about the issue of plagiarism, which is becoming a problem of pandemic proportions today; going through the peer review process; and, finally, what we mean by the academic journal.

To academics, getting published is a very important achievement. Going through the process of getting published, however, is daunting and yet most of us still brave it. Let me explain three reasons most academics would go through this frequently humbling experience: why you want to get published, why you are not able to publish, and why you need to publish your work.

Why do you want to get published?

There are both philosophical and practical reasons why we want to get published. Regarding the philosophical

reasons, author Abby Day (1996), a British educator and author of *How to Get Research Published in Journals*, said there are four good reasons to publish your work. First, she says, “because you have to.” Many academics do have the propensity to publish not by choice but by demand of their profession. To some degree, publishing has become an obligation.

Another reason Day cited is “because you want to get ahead.” In today’s world, those who are very good in communicating with their peers are definitely in demand. For academics and most professionals, this happens through publications.

Third reason cited by Day is “because you need to learn from others.” This happens when you get feedback from other experts in your discipline about your publication. Feedback frequently leads to collaborative work, particularly in the publishing process. This refers to the top three types of feedback specially from referees or reviewers: your article may have been accepted, rejected, or sent back for revision.

Sometimes we are dismayed and discouraged when we get rejection letters from journal editors. When I was starting out trying to get published in newspapers and magazines, I used to get depressed whenever I received rejection letters from editors. Yes, I got a number of those rejection letters. When I began to venture into publishing academic articles, I continued receiving rejection letters, this time from journal editors. I considered the experience as a learning experience. When your article is rejected for publication in a particular journal, there are very important reasons for such rejection, so it’s important to learn from the experience.

A fourth reason why you should publish, according to Day, is “because you need clarity.” What does she mean by this? This refers to writing with a focus because no one can write without a focus. When you write, you are able to clarify your thinking by putting difficult and usually abstract concepts into words that others may understand better. When

we write, we try to write, then edit what we have written, then we revise, and actually do everything possible to make what we have written (our argument) much clearer and better understood.

Perhaps one of the many time-tested measures of successful membership in the academic community is academic publications, hence the traditional “publish or perish” syndrome. It is a compelling reason to publish, indeed. For example, we at the U.P. Open University must publish if we want to hold onto our jobs. In fact, one of the requirements for tenure is at least one publication in a peer-reviewed academic journal.

When I was Chancellor of the UPOU, we had to let go of five very good Assistant Professors because they lacked the publication requirement. We did not renew their appointments even if we needed them badly during the incoming semester. These were people we had trained during the previous three years to do the things we had promised we would do as an open university. They were, of course gladly recruited by other institutions that intended to offer courses online. They are now happy in their new jobs as they’re not required to publish, and they’re getting much better salaries, too.

At the UP Open University, when one crosses the rank of assistant professor to associate professor, one must have published two articles in refereed journals during the time that she/he has been assistant professor; and from associate professor to full professor, three publications. Any promotion within the rank requires at least one publication. All these, of course, are on top of other usual requirements like high teaching ratings, doing research, extension involvement, creative work involvement, and the like.

Why You’re Not Getting Published

Now, the question is, why are you not published? Day (1996) also names four reasons why many academics don’t get published. You may have heard of these reasons before,

but what exactly do they mean? Let me call these four as syndromes.

First, the *not-good-enough-yet syndrome*. I know of many academics, especially Filipino academics, who do not have publications, or have not published thus far, because they don't like to publish what they consider "mediocre" articles. They want their articles to be perfect when they are published. Well, there's no such thing as a perfect article. According to Day, the central issue is what she calls "going public," which is a phenomenon derived from the Latin word publicare, or to make public. Getting published, of course, has its advantages and disadvantages. When you get published, expect criticisms even as you may receive congratulatory remarks. I have always believed that Filipino academics don't publish because they don't like to be criticized for what they have said or written, even as they are generous with their own criticisms of someone else's work.

If you have a research, you publish it for a basic purpose: to gain feedback from other experts so that you might improve your work. If you are scared that other experts might think you did a lousy job of it, then you'll not get published and your ideas will remain unknown. Down the road, some one who may not be scared of being criticized will eventually publish a similar paper. You may find said paper worse than what you wrote earlier, but the other person got published and you did not. In the following years, various researchers, experts, and authors will publish articles related to the original idea until it has been improved and becomes acceptable hypothesis, or principle, or theory that shall have been accepted by the scientific community. Then, you'll regret not having published it first.

Second, the *fear-of-rejection syndrome*. Many academics simply are afraid that when they submit an article for publication, the journal will reject it. I have received quite a number of rejection letters myself and I can tell you that I did not like the idea of being rejected. No one does because rejection is taken to mean failure. Therefore, the more you dislike receiving rejection letters from journals, the more

you'll not submit any paper for publication, and the more you will not get published.

If, in spite of getting rejection letters now and then you continue sending out articles for publication in journals, the likelihood of getting published becomes higher. That, of course, means you'll have to maintain some form of standard of quality in your papers. In doing so, you'll have to focus on what Day (1996) refers to as success factors, namely: proper identification of your target audience, clear purpose of why you are publishing your article, and clear statement of the implication of your conclusions in the article.

Third, *people-might-steal-my-idea syndrome*. You shouldn't be afraid of people using your ideas. According to Day (1996), if your work is original it can't be replicated easily, if your methodology is rigorous it can be replicated very easily, and if you have argued well that your work is important, then it can stand as an original piece of work. It is not enough to simply have a good idea, although that is an extremely good start.

Day (1996) cited the respected British scientist, Sir Douglas Hague, as having said: "The whole point of academic research, of course, is that its findings should not be opaque and inaccessible, but available to those who could benefit from them – not least those outside universities."

This is precisely the reason why academics who are well-published rarely fear that their ideas could be stolen by others because they do understand that mere ideas are cheap and that no one really gets anywhere simply because s/he thought of something. If you want your ideas to be useful to you, then you must be able to communicate them clearly to others.

Fourth, *I-don't-have-time syndrome*. Of course, you'll never have enough time. Sometimes I call this the "graduate student syndrome." You'll always be busy with something, usually mostly insignificant things. Management experts who study use of time seem to agree that the people who

use their time wisely are usually those that are able to concentrate intensely on whatever it is that they are doing. Well-published authors are probably as busy as or perhaps busier than you are, but they are able to manage their time wisely. It's not a question of how much time you have, but how most effectively you make use of such time.

In other words, time is not the problem.

Publishing-Mad World

We live in a publishing-mad world. The amount of publications has been taken to reflect the amount of new knowledge generated by scientists. About five decades ago, the scientific knowledge was growing exponentially, according to Price (1963). He observed that "if any sufficiently large segment of science is measured in any reasonable way, the normal mode of growth is exponential." This meant that the size of scientific knowledge was doubling every 15 years. This increase in new knowledge has always been measured in terms of the number of academic publications, which has been found to be increasing by a factor of 10 every 50 years (Martin, 1981). In the year 2000, therefore, there were supposed to be 1,000,000 academic journals in the world. The online journals were not included in this count. By year 2050, there will be 10,000,000 academic journals in the world. Again this probably would not include online journals and books. Martin (1981) estimated three decades ago that there would be 200 million book titles in the year 2040. Fortunately, these books are now digitized so there is much less problem of space where they could be stored. Otherwise, with 200 million books, stored in the traditional fashion, a library would require something like 8,000 kilometers of bookshelves and a card catalog of 750,000 drawers.

The appropriate question now is, do we still have an opportunity to publish original work today, given that practically everything most likely has been studied and written about? This is not only a common question but also a legitimate one as well. Given all the publications coming off the presses, one wonders if we would still be able to come

up with original work that is publishable – a very legitimate concern, indeed. However, if you look carefully at the scientific literature of your discipline, you'll see that much of what is there would be reports of application of theories or part of theories applied in specific locales, employing new methods of doing things, and the like. You'll find as well that highly innovative ways of applying or explaining certain theoretical propositions using different data sets are not frequent. Too, you'll realize that at least in the Philippines rarely do you find articles that are actually discussions of innovative analysis of secondary data. These are still considered original work.

Writing a Publishable Journal Article

If you want to write, write! This was the best advice I got from my professor in journalism when I was an undergraduate student. Indeed, you can't become a good writer by simply thinking that you're a good writer. However, even if you may inherently be a very good writer, you'll have to consider certain factors that bear on the quality of your articles. In an online seminar conducted by Dr. Dan Remenyi (<http://www.academic-conferences.org>) he discussed major factors that writers must be fully aware of. Let's look into these factors.

Understanding the Different Types of Articles or Papers

In general, you can write quite a number of different publishable articles, but let's consider possibilities just in relation to one completed research project. Here are some articles that you might be able to produce out of one research project report.

Full research report. The most common type of article would be reports on research findings. This article would contain all the aspects of the research project undertaken but treated as a journal article, therefore, it should adopt the format that the journal requires.

Literature reviews. I recall that when I was in graduate school my professor in research methods specifically pointed out: “the most publishable portion of your dissertation is the review of the literature” (based on class lecture of Dr. Ivor K. Davis, Indiana University, 1978). He said that everybody in the discipline would be interested to find out what you did with the literature. Literature reviews are syntheses of the latest in the discipline. The wider your scope of coverage, the more your review will be welcome because it would indicate how much work you have done to be on top of the new developments in your discipline.

Theoretical or speculative discussions. Normally, research projects would have theoretical frameworks on which the research is anchored. A more detailed and clearer, perhaps innovative, discussion of this theoretical framework will be useful to most readers of the journal. For example, other academics would be interested to know other ways of treating a theoretical proposition. There may be a fresh way of looking at a particular theoretical proposition, even with the use of an old data set.

Methodological discussions. New methods of doing things, especially if they can help arrive at new ways of understanding concepts and phenomena are always interesting to academics. They are always interested to know the results of innovative approaches such as reconceptualizing or revising traditional methodologies and testing such innovative formulations.

Comments, communication, reviews, critiques. Well-researched critiques or comments on current issues in the scientific community, particularly as regards appropriate application of methodologies or interpretation of data, are always welcome materials for publication. They provide fresh views on otherwise common issues in the scientific world.

In highly respected traditional scientific journals, such as that which is published by the Royal Scientific Society of London, there are sections called “Communication With the Editor” or “Letters to the Editor,” where letters to the

editor would be published. These letters usually deal with the progress of research being undertaken by scientists but they are not full-length scientific articles that have been peer-reviewed. How important are these letters? Well, they could serve as evidentiary documents testifying that a particular researcher may lay claim ownership to a new knowledge or discovery. This is an important document for consideration, for example, by award-giving institutions such as the Nobel Prize, which considers date of discovery of something as very significant basis for giving the award.

Difficulty of Getting Started as Published Academic

Not fully seeing and understanding the opportunities. I have had numerous opportunities to discuss with academics, young and old, in various Philippine universities, and have been amazed by the publication productivity of many but what they write are mostly extension-type materials. These same academics are in an excellent position to undertake disciplinary research, which are rich sources of potential academic journal materials. Perhaps these academics have not had the time to really see the potentials and opportunities before them.

Fear of failure. There are many who do not like to start because they're afraid they would fail. This is a powerful negative motivation. As already mentioned earlier in this paper, this fear of failure includes fear of rejection or getting rejection letters and fear of criticisms. One aspect that potential authors fear is the peer-review process. By the way, did you know that Filipino reviewers are much more strict compared to their counterparts abroad? Sometimes their comments are very critical and their suggestions difficult to comply with. To some degree, these same comments or suggestions may not be well-thought out in the first place, especially if the reviewers themselves are not published authors.

Lack of commitment to publish. What I hear most of the time are assertions that academics want to publish but that

they do not have the time to do research and write articles. If these colleagues of ours truly mean well, then they would always find ways to write and publish. If you think you don't have time to publish, make time for it. Your time investment in publishing will be well-rewarded in time.

Lack of institutional support. In Philippine universities, publications are required, say for promotion of academics, but frequently they (academics) are left on their own to have their papers published in journals mostly from other institutions outside the country. Many of the journals we have in this country are sometimes looked down upon as mediocre because they have not been able to raise their standards to equal international publications. Besides, these publications frequently do not survive beyond one issue due mainly to lack of funds. This may also be largely due to lack of confidence in these journals by our published colleagues, who prefer to have their articles published in journals abroad. Local technical journals have limited circulation (frequently they are given free), hence they have limited reach.

Avoiding Failure Factors

According to Remenyi, there are six failure factors that commonly influence the productivity of academics in terms of publications. Let's consider these individually.

Unrealistic expectations or targets. As already mentioned in the paper earlier on, many academics want to publish only the perfect article. Unfortunately, there's no such article. In fact, you publish, say an article on new methodology, for the purpose of getting other experts to comment on it and contribute to improving it until it becomes generally accepted in the scientific community.

Lack of focus. Sometimes, even when you have something important to write about, you are unable to focus on which part you need to expound on because you want to discuss all you have in your mind. Usually, when you write about everything you have in mind the article would not have any

focus, a case of too much too foggy manuscript.

You prefer high-risk topics. Unfortunately, such topics also require data that are extremely difficult, if not impossible, to access. Furthermore, some journals would not touch these high risk topics if they know that they would not be able to sustain interest in them with sufficient and meaningful data and high level analysis.

Lack of theoretical knowledge and methodological skills. An academic weak in theory and in methodology would really have a fundamental problem writing articles on research that would interest readers who are also experts in their own disciplines. Journals are waiting to receive articles on innovative, perhaps even daring but logical or fresh interpretation of theories, but usually this would require very skillful manipulation of methodology. If one is weak in both, then s/he has a problem.

Inability to know when to stop. This is very common among inexperienced researchers, wanting to break into the world of the published academics. This is what I call the “graduate student syndrome.” For example, graduate students, when they search the literature, tend to read as much as they can, taking notes on all topics they read about and using all those notes when they write their thesis chapter on the review of the related literature. Why? Because, having exerted substantial efforts in reading and taking notes, they have to use the information that they gathered so painstakingly or all these would go to waste.

Another example is when the researcher asks more questions than the research problem requires. Too many questions lead to too much data, much of which may have weak links with the main research problem. And because the researcher has spent resources in gathering the data, somehow s/he has to use them one way or the other. The result is that the research report, particularly its “publishable” version lacks focus.

Lack of knowledge of appropriate journals. This is a serious shortcoming of academics wanting to get published.

It is very important that you study the journals you want to publish in. What writing style do they follow? The APA (American Psychological Association) Guide is usually used in the social sciences, MLA (Modern Languages Association) Guide is used in the humanities and the arts, while CBE (Council of Biology Editors) Guide, is used in the sciences and mathematics. What format do they follow? What's their requirement in terms of data presentation and use of diagrams and pictures? Read the "Information for Authors," which is usually printed in the inside back cover of the journal.

Planning a Publishable Academic Article

Planning an article worth publishing is actually planning a research project from which an article for publication may be based. Generally, it involves selecting an appropriate topic to research, assessing the resources you'll need in doing the study, doing literature review, selecting your study methodology, collecting evidences or data, analyzing those data using accepted statistical tools, and writing the article or report.

The Issue of Plagiarism

In an earlier paper this year, I wrote that plagiarism is a "serious academic offense that deals with both the legal and ethical aspects of using someone else's work without proper citation or attribution" (Librero, 2011). That may encapsulate the various definitions of plagiarism, of which there are generally two types: deliberate and accidental plagiarism.

Deliberate plagiarism is cheating, pure and simple. Accidental plagiarism, on the other hand, is a bit more complicated in that there are two types also of accidental plagiarism, which are: paraphrasing without any citation, and misplaced citation.

There may be a couple of reasons why plagiarism happens in the academe. First is the situation where an individual

is overloaded with work but has to meet certain deadlines, for instance. There's too much to do in so short a time. Hence, some find it "helpful" when they simply copy someone else's work just to meet the deadline. There may be no malice in this per se, but it's plagiarism just the same. Second is the situation where an author would claim he/she isn't aware that he/she is committing plagiarism. This is probably the easiest but perhaps weakest kind of defense against plagiarism accusations.

The thing about plagiarism is that it is not a criminal offense. It's an ethical and moral offense. In the academe, however, offenses against ethics and intellectual honesty are serious offenses and are meted powerful sanctions like intellectual ostracism and, perhaps worse, being black-listed from any future publication opportunities and academic recognition. Furthermore, plagiarism stigmatizes much like leprosy does, hence I refer to it as intellectual leprosy (Librero, 2011).

There are ways of avoiding possibilities of being accused of plagiarism. The most important is appropriate citation of sources or credit attribution for work being used. The rules on these are found in various style guides, such as the APA Style Guide, MLA Style Guide, and the CBE Style Guide.

General Considerations in Writing Your Article

Before you start writing, read the instructions to authors printed on the inside page of the back cover of the journal you intend to submit your article for publication. Familiarize yourself with the rules of the journal, and follow the instructions well. If you submit an article not following especially the instructions to authors, you'll find the editors to be much less considerate.

In any case, there are three issues that authors must contend with, according to our resource expert, Dr. Remenyi. He refers to these as critical issues, vital issues, and proof reading issues.

Critical issues. These refer to the physical appearance of your article. It should have a title page that must contain not only the title but the name of authors and their institutional affiliations as well as email addresses. On the first page of the article must appear an abstract (the length of which depends on the requirements of the journal), key-words and phrases that should be used in the journal (if your article gets published). Follow referencing conventions, which means you need to study what style the journal follows. Following the title page, you must have a table of contents that should also include the list of figures, diagrams, and perhaps pictures. Following these pages might be an acknowledgement page, if you intend to put one, although generally this is not done for journal articles. Acknowledgement pages in articles submitted for publication in journals will almost always be excluded in actual publication.

Vital issues. These generally refer to matters that authors must seriously consider as they write their articles. Among these are the following:

1. You are expected to write to be understood, not to impress. This is the first rule of effective communication. You are supposed to make your readers understand what you have written about, not simply appreciate your dexterity with the use of words.
2. Do you have a story to tell? Well, another way of asking this question is, can you tell an interesting new story based on your research, that other experts might be interested to know?
3. Write in simple sentences and sentence structure. To many journal editors, the fewer the words per sentence, the better. Well, this is on top of all other requirements such as your sentences should be devoid of grammatical errors, misspelling, and the like.
4. Have you been able to create a structure and flow for your article? I recall, for example, what my research professor in Graduate School used to tell his

students. My professor, Dr. Ivor K. Davies of Indiana University, used to tell us: the title of your study must be reflected in your discussion of your research problem, which must be reflected in your research questions, which must be reflected in your research objectives, which must be reflected in your hypotheses, which must be reflected in your discussion of results, which must be reflected in your conclusions, and which must be reflected in your recommendations. If you have all these elements fit into that kind of one-on-one mould, then you have a research framework and a logical flow of information, he would say.

Proof reading issues. This doesn't refer only to mechanical proof reading. It refers generally to more fundamental issues. Of course, you need to proof read your article over and over until you find no more errors. Sometimes the best way of doing this is asking others to read your article, for two reasons. One, you're a poor editor of yourself. Two, you can benefit from the initial feedback you can generate from people you know and have asked to read your article prior to sending it to the journal.

If you have access to a good editor, have your article seen by a professional editor. Journal editors don't have time to edit submissions before they send such submissions or articles to peer reviewers. And peer reviewers hate articles full of errors.

Things You Can't Complain About

1. Most journals today have a waiting list of possibly close to 100 articles per issue. The editors may not have the time to immediately take a look at your article so feedback from them may take time. Don't be too impatient.
2. When your article comes back with feedback, you can almost be sure that those feedback may already have come from the peer reviewers assigned by the Journal to review your article. Comply with the suggestions right

away and revise your article accordingly, then send back the revised article to the Editor.

3. While your article is being considered for publication by one journal, don't submit the same article to another journal. This is highly unethical and considered taboo in academic publication. What is the sanction? Your article will not be published and you will be black-listed. Word gets around fast among editors and publishers, so even if you submit articles to other journals in the future, editors in those journals would already know they should not entertain any submissions from you until such black-listing has been lifted. This could take a long time, even until forever, and you wouldn't be able to do anything about it.

A Word About Multiple Authorship

In many published articles, you would find multiple authors. How do you list authors properly? An essay originating from the International Scientific Institute (ISI) Press (<http://www.garfield.library.upenn.edu>) described in the book titled *How to Write and Publish a Scientific Paper* authored by Robert A. Day (published in 1978), a well-known author and long-time editor of the Journal of Bacteriology. Day's discussion of how to treat multiple authors, as highlighted in the ISI Essay, is worth remembering. The ISI essay says,

... the first or 'senior' author should be the primary progenitor of the work in question. The name of the leading associate should appear second. The third author should have taken a lesser role in the experiments than the second, and so on. Bob also decries that practice of listing the names of people – laboratory heads, for example – who took no part in the experiments or the original conception of the research. While such a practice may be regarded as good grantsmanship, he writes, it is basically dishonest.

A Look at the Peer Review Concept and Process

What is Peer Review?

The concept of peer review applies in various circumstances. For our purposes, however, we'll look at peer review as a tool to help improve articles for publication in peer-reviewed academic journals. According to the Chancellor's Doctoral Incentive Program of the California State University, as cited in the Center for Distributed Learning website (<http://teachingcommons.cdl.edu>), peer review refers to the "process of screening of submitted proposals or manuscripts, and encourages authors to meet accepted standards of their discipline." It is, in general, the "evaluation of creative work or performance by other people in the same field in order to maintain or enhance the quality of the work or performance in that field" (<http://www.linfo.org>). The idea behind the peer review is that a larger group of individuals will be able to detect some weaknesses and perhaps errors in a work or performance and will be able to offer impartial evaluation of said work or performance.

In the case specifically of peer-reviewed academic journals, the peer review process occurs prior to and after publication of an article. Why should peer review still happen after the publication of an article? Frequently, in the academe, evaluation and discussion of ideas even after publication normally continues for a long time until most if not all issues concerned are largely resolved by members of the scientific community, particularly of members of the same discipline.

Why is Peer Review Important?

Peer reviews are designed to "prevent dissemination of irrelevant findings, unwarranted claims, unacceptable interpretations, and personal views" (<http://teachingcommons.cdl.edu>). Consequently, articles not peer-reviewed, if they get published at all, are usually "regarded with skepticism" by members of the profession and scientific community.

Corollarily, therefore, the peer review is not only a process of vetting new ideas but also a process to “improve the prestige and importance of an idea or process” because when they have gone through the peer review process they’re considered reliable as their facts and premises have been checked for accuracy (Hinckley, eHow.com). The eHow website (<http://www.ehow.com>) lists the following advantages of the peer review: it helps maintain standards for the discipline, it provides credibility, and it helps improve quality.

Types of Peer Review

According to Elsevier, a known international academic publisher (<http://www.elsevier.com>) in Europe, there are three types of peer review. These are as follows:

1. Single blind review, refers to the situation where the names of the reviewers are not known to the author. This is the traditional peer review process and by far, the most common type in practice. The singular advantage of this type is that the author cannot influence the reviewers. One problem, however, is that if the reviewer is in the same discipline and possibly in the same university as the author, the reviewer might withhold comments thereby delaying the publication of the article and giving the reviewer a chance to publish first. It is always a concern for authors that some might steal their ideas through the review process, which, indeed, is a legitimate concern. After all, in academic publishing there's always cut-throat competition.
2. Double blind review, refers to the situation where both the author and the reviewers are not known to each other, that is, the author does not know who the reviewers are and the reviewers do not know who the author is. The advantage of this process is that if the reviewers do not know who they are reviewing they may not be influenced by the prestige of the author but only by the contents of the

article being reviewed. However, experts also say that it is quite impossible not to know who may be the author of a particular article since the world of academic publication is a small world filled with experts and authors who usually know one another. In other words, there's no absolute anonymity.

3. Open review refers to a situation where all the reviewers and the author or authors know one another, and the process of giving comments and suggestions is open to all. There are other experts who see this process as disadvantageous because it could be less honest where fear of retribution (or vengeance) may influence some to tone down their comments and criticisms. This could be a problem where junior reviewers would withhold otherwise significant comments on the works of their senior counterparts for fear that this would damage their prospects in future publications. After all, those they review will eventually be their reviewers and academic authors may not easily forget and forgive those who made it difficult for them to publish.

What are the Pitfalls of the Peer Review?

The peer review as a practice is not fool proof. In fact, it's not even an assurance that an article will be absolutely devoid of inaccuracies once it gets through the peer review process. For example, in what was an obscure experiment that proponents of the peer review process would rather forget than remember, the website, eHow, an Internet site that focuses attention on the peer-review process, reported what has been known as the Sokal Affair which is explained as follows:

The effectiveness of peer review has also been routinely questioned. In 1996, a physics professor at New York University, Alan Sokal, submitted a paper on quantum gravity to a peer-reviewed journal called "Social Text." The paper was nonsensical and sent in as an

experiment. As Sokal described it, the experiment was to find if the journal would “publish an article liberally salted with nonsense if (a) it sounded good and (b) it flattered the editors’ ideological preconceptions.” After it was published and then revealed to be a hoax, merits of peer review were called into question.

Indeed, there are a number of serious issues that have been raised against peer review but it has remained a respected part of establishing academic knowledge. The most recent challenge to the peer review process are those posted in the Internet, where most of the documents posted have not had the benefit of testing or confirmation by other experts and disciplinary authorities. This is now the focus of attention in the scientific community.

How Does the Peer Review Process Proceed?

Various journals follow their own procedures. In general, however, the following are the steps of the peer review process (<http://www.jri.ir>):

1. The author submits an article to the editor of a journal.
2. The Editor-in-Chief verifies the relevance of the article to the journal’s policy. If it’s not relevant, the article is returned to the author with the comment that it is not relevant to the goals of the journal. The editor might suggest that the author sends it over to another journal. Usually, editors do this to encourage young authors to continue their publishing efforts.
3. If the Editor-in-Chief finds the article relevant and worth publishing by the journal, she or he identifies reviewers and sends the article to the reviewers for evaluation.
4. When the reviewers send in their reviews or evaluations, the Editor-in-Chief would usually ask the Editorial Board to study the comments of the reviewers.

5. Frequently, the Editor would ask the author to respond to the comments and suggestions of the peer reviewers. The author is expected to respond to the comments and suggestions by the peer reviewers as quickly as possible, depending on how soon the author wishes the article to get published.

When the author has submitted clarifications regarding the comments of the reviewers, the Editor would determine who among the reviewers she or he may refer the author's comments to. Usually, this second round of review would no longer involve all the original reviewers.

6. When the peer reviewers have substantially been satisfied with the clarifications of the author, the editors of the journal would approve or disapprove the publication of the article. If they approve the publication of the article, they would then make some editorial revisions according to non-content related comments of reviewers and put the article on the publication line. At this point, the Editor-in-Chief would inform the author that the article has been accepted for publication and that the article will appear in a specific future issue of the journal.

So You Want to Publish in a Journal?

Traditional Printed Journal vs. e-Journal vs. Online Journal

Many seem to believe that academic journals have changed and that they are no longer like they used to. The traditional journal is a printed book-like publication, and you access it through subscription or the library in a university. In recent years however, due mainly to advanced technology, these traditionally printed journals have been digitized and stored on CDs. When you subscribe to these journals, you get the CD instead of the printed copy. Invariably, they have been called electronic journals or e-journals. The only difference between the two is that the e-journals are stored by electronic means, mostly CDs. Sometimes they

are stored in computers.

The more recent versions of the e-journals are published online, hence they're called online journals. You can access them online and they're not necessarily available in CD formats. Online journals are also peer-reviewed. In other words, they're no different from the traditionally printed versions. What makes these two differentiable is that one is published traditionally (in print format) and when it's stored in electronic format it's called e-journal. On the other hand, a publication that is primarily accessible only online or through the Internet is an online journal, which you may download should you want a hard copy. In all other aspects, however, they are the same.

Common Organization Structure of Academic Journals

Publishing a journal is a major undertaking, mainly because it is highly expensive and difficult to maintain and keep its professional and academic character. Most academic journals are usually published jointly by professional societies and professional publishing houses, or by professional societies and academic institutions. Rarely can one academic society continuously sustain the publication of a journal, and a journal published solely by an academic institution is usually suspected of just promoting the interests of the institution primarily, and the interest of the discipline only secondarily. Joint publication is a strategy that most journals have adopted to insure sustainability and to continue maintaining a professional character.

An academic journal operates with a set of policies that are supportive of the goals of both the joint owners-publishers, but the journal is run by a small group of individuals called the Editorial Board, in which both the joint publishers may or may not be represented. There are times when the publishers would hire or invite distinguished individuals within the discipline to serve as members of the Editorial Board, which serves as the policy-making body of the journal.

The most common designations of individuals running the daily operations of the journal are: the Editor (usually called Editor-in-Chief or Chief Editor), Managing Editor/Copy Editor/Executive Editor, Production Manager, Circulation Manager, and sometimes the subscription Manager. The editorial staff may maintain editorial assistants as well.

Sometimes a journal will just depend on its Board of Editors who would also serve as peer reviewers. Otherwise, a separate pool of experts known as the Board of Reviewers may be organized. This becomes the adviser to the Chief Editor. This Board is comprised of respected professionals and academics who have been invited to be members of the board because of their credentials and professional standing in the disciplines. Usually, they are there for the honorific titles rather than professional pay.

What Makes a Journal “International”?

The three factors that determine whether or not an academic journal is “international” are its scope of content and members of its Board (Editorial, Editorial Advisers, or Reviewers). An international journal always includes in its coverage in each issue articles from international authors on a wide range of international or global issues within the discipline. Furthermore, the Editorial Board, the Board of Reviewers and the peer-reviewers come from various international organizations or universities. Then, of course, the journal must be circulated internationally.

Here are examples of international journals:

The American Journal of Distance Education is a publication of the American Center for the Study of Distance Education at Pennsylvania State University, USA, run by an Editor and an Assistant Editor with policy assistance from an Editorial Board of 26 members from various organizations and universities in Canada, Hongkong, South Africa, Spain, Taiwan, UK, and the USA. This is an example of a journal published fully and singly by a university (PennState).

The Journal of Open, Distance and e-Learning is a joint publication of the UK Open University and Routledge (Taylor and Francis Group), a professional publisher. It is run by an editor with the assistance of an Editorial Board of 21 members from Australia, Brazil, Canada, Germany, Hongkong, New Zealand, and the USA. This is an example of a journal published jointly by a university (UK Open University) and a professional publisher (Routledge).

Distance Education is a joint publication of the Open and Distance Learning Association of Australia and Routledge. It is run by an Editor and a Deputy Editor, and assisted by an Editorial Board comprised of 30 members from Australia, Belgium, Canada, Germany, India, Nigeria, UK, and the USA. This is an example of a journal published jointly by a national professional association (Open and Distance Learning Association of Australia) and a professional publisher (Routledge).

The Journal of Development Communication is published solely by the Asian Institute for Development Communication. It is run by an Editor assisted by an Editorial Advisory Board of eight (8) members from seven countries (Bangladesh, China, Japan, India, Indonesia, Malaysia, Philippines, Singapore, Sweden, the USA, and UNESCO). This publication is an example of a journal published solely by a regional organization.

Asian Journal of Communication is published jointly by the Asian Media Information and Communication Centre (AMIC), the School of Communication and Information of Nanyang Technological University of Singapore, and Routledge. It is run by an Editor, two Associate Editors, and assisted by an Editorial Advisory Board comprised of 23 members representing universities in Australia, China, Denmark, Hongkong, Indonesia, Japan, Malaysia, The Netherlands, Philippines, Singapore, Taiwan, Thailand, UK, and the USA. This is an example of a journal jointly published by a regional organization (AMIC), a university (Nanyang Technological University of Singapore), and a professional publisher (Routledge).

Journal of Southeast Asian Education is published solely by the Southeast Asian Ministers of Education Organization, a regional organization of governments. It is run by three Editors, and each issue by Guest Editors. The Editors are assisted by an International Advisory Board comprised of representatives of the different regional centers of SEAMEO, and universities in associate member countries that do not host any Center of SEAMEO.

The Philippine Journal of Development Communication is solely published by the UPLB College of Development Communication. It is run by an Issue Editor, assisted by an Editorial Board comprised of senior faculty of the College. The Editor also has the assistance of Reviewers, who are identified and invited by the Editor on per issue basis. This is an example of a national journal published solely by an academic institution. One of the major problems of this kind of journal publication is sustainability.

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THE BOOK'S COVER

The cover depicts a “bangka” that is leaving the shore of an island on its way to another island. Clearly, the visual effects are from the point of view of the communicator who appears to be on board the bangka.

The cover is a symbolic design typical of the boat-dock analogy in the early treatises on communication in the days of agricultural communications at UPCA in Los Baños. In those times, communication was explained from an engineering-transportation point of view where the boat symbolized the channel, the docks symbolizing the receivers and senders of communication, and the passengers or cargoes the content of communication. This was how communication as science was taught in Los Baños in those early years. There have been more esoteric interpretations of communication after that, particularly when the discourse shifted from agricultural communications to development communication.

The author takes this opportunity to publicly thank Dr. Jegs G. Librero, the author's wife, who designed and executed the book cover. She also shot the picture used in the book cover.