



THE INTERNATIONAL JOURNAL OF ORGANIZATIONAL INNOVATION

VOLUME 1, NUMBER 1, SUMMER 2008

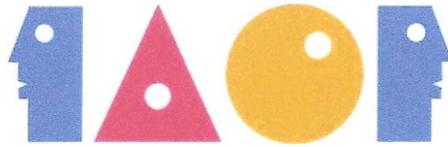
EDITOR:
DR. FREDERICK L. DEMBOWSKI

ASSOCIATE EDITOR:
DR. CHARLES JEN

TABLE OF CONTENTS:

Guidelines And Advice To Authors, Editors And Reviewers Of Submissions To Professional Journals And Conference Proposals by Frederick L. Dembowski	pg. 2
Organizational Innovation And Entrepreneurship In Universities by Dr Alex Maritz and Mehdi Salaran	pg. 52
Study On The Development Of Compensation Communication by I-Ming Wang and Hsiu-Fang Lin	pg. 67
Student Perspectives of Self-Access in a Multimedia English Learning Center By Wen-wen Cheng and Mei-ling Lee	pg. 88

The International Journal of Organizational Innovation (ISSN 1943-1813) is a peer reviewed journal published online quarterly by The International Association of Organizational Innovation. For more information on the Association and its annual conference, go to: <http://www.iaoiusa.org/>



International Journal of Organizational Innovation

GUIDELINES AND ADVICE TO AUTHORS, EDITORS AND REVIEWERS OF SUBMISSIONS TO PROFESSIONAL JOURNALS AND CONFERENCE PROPOSALS

FREDERICK L. DEMBOWSKI
HIBERNIA ENDOWED PROFESSOR OF EDUCATIONAL LEADERSHIP
SOUTHEASTERN LOUISIANA UNIVERSITY

PREFACE

This monograph was written for the purpose of providing guidance to those scholars and practitioners who would like to author a journal article, and for those who have been asked to serve as the editor or reviewer of a journal. These guidelines and suggestions are general in nature and, while intended for application on journals, may be adapted for use for any type of publication or proposals for conference presentations, etc. The sources for this work come from many different professional fields & organizations and were written in different languages. Throughout, reference is made to a journal CALLED *NCPEA CONNECTIONS*, for which I helped found and served as the Managing Editor. These references are made to serve as an example.

No organization should adopt these guidelines wholly as written here, but should modify them to meet their unique needs. While every effort has been made to credit the original authors for their work used in this volume, it is likely, with the use of on-line sources, that errors of credit through citations have been made. For these errors, I apologize to the original authors.

Frederick L. Dembowski, Ed.D.
Hibernia Endowed Professor of Educational Leadership
Southeastern Louisiana University
June, 2008

The author may be contacted at: drfdembowski@aol.com

PART I ADVICE TO THE PROSPECTIVE AUTHOR

This chapter provides guidance to authors for the process of writing and submitting an article for publication. The first section provides a discussion of the primary components of an article with a description of the contents of each component. This is followed by a checklist of issues that should be considered by the author. Next is a checklist of the usual components required in the submission process of the article to the journal. This section concludes with some general advice to authors. It is highly recommended that aspiring authors also read the chapters for editors and reviewers in order to have a better idea of the editorial process and what the people serving in these roles will be considering in their review & decision making.

I. THE ANATOMY OF A RESEARCH ARTICLE

The essential components of the research article should be considered by researchers/authors in the process of planning, conducting and reporting of the research problem. Many of these components of a research article are essential considerations in the planning of independent research and in the preparation of research reports/journal publications. (Faccioni N.D.)

THE NATURE OF THE PUBLICATION

The nature of the material, its presentation style and its technical complexity will vary widely between publications intended for a scholarly or “popular” audience. Even amongst these two types of publication there will be differences in the nature of the material according to whether the article is found in a text, monograph series, journal series or conference proceedings, etc., and on whether or not the material has been subject to independent review prior to publication. It is possible, of course, to find essentially the same information published in both types of publications, in which case it is important to identify the primary source or reference, and to establish that it has been faithfully interpreted by different authors or over time. (Faccioni N.D.) Below are the usual components of an article. An * indicates an optional feature of a component.

THE TITLE PAGE

The title page should contain the following components:

TITLE

AUTHORS, *Titles, *Academic Credentials & *Affiliations

DATE SUBMITTED FOR PUBLICATION

*KEYWORDS (important for on-line search engines.)

TITLE

The title of a research article will generally be limited by the publication process to no more than 80 characters. Nonetheless, the title must be informative as to the nature of the research and the

treatments or groups of subjects involved. *Often a journal will also contain a “running title” or header of approximately 40 characters, which will appear at the top of each page of the article. (Faccioni N.D.)

AUTHORS

The surnames, initials (or given names), titles, academic credentials and institutional affiliations - I often have to email authors to ask for this information causing delays.

DATE SUBMITTED FOR PUBLICATION

Dates of submission and acceptance for publication may indicate the need for extensive review of the original manuscript, and may also be important reference points on topics which are either/both controversial or rapidly developing areas of knowledge. (Faccioni N.D.) It also provides the editor with needed information in tracking the editorial progress of a submission.

KEYWORDS

With the increasing availability of online search engines and research databases, the effective use of keywords is the only means of conducting a comprehensive literature search on your topic. The number of keywords will be limited by the publication (generally 5-8) but should be consistent with conventional use to enable effective integration into existing databases. (Faccioni N.D.)

*ABSTRACT

Read the author guidelines of the journal to determine if an abstract is required. Even if not required, include an abstract as it provides reviewers with an “executive summary” prior to the full review. The Abstract will generally be limited to 150-200 words, but must contain essential details of the purpose, methods, results and conclusions of the study. Often, in conference proceedings or on a database such as Dissertation Abstracts, the abstract will be the only source of information available, emphasizing the need for a concise but informative style for this aspect of the research article. (Faccioni N.D.)

*ACKNOWLEDGMENTS

The article should acknowledge assistance from outside sources in the conduct of the research. This may include financial assistance in the form of a research grant, technical or other assistance from non-authors and even commercial sponsorship (the conduct of research into effective management by a management consulting company does not imply any bias, but at least the association with the research should be clearly identified). (Faccioni N.D.)

THE ARTICLE NARRATIVE

The narrative section is the primary component of the article and should contain the following sections:

INTRODUCTION
METHODS
RESULTS
DISCUSSION

For a more complete discussion of the components of the narrative, see the reviewer guidelines section and the section on how to critique an article.

INTRODUCTION

The Introduction should identify the purposes of the article in relation to others in the field. There may be need to incorporate a limited number of essential relevant references in this section, but this may not be the place for an extensive review of the literature. (Faccioni N.D.) Some publications may require a separate section for a Literature Review and others may not. In any case extensive literature reviews are another type of article and not necessarily part of a research article/report. However, a sufficient number of references should be given to provide the reader with the research foundation of the article.

METHODS

The essential feature of the Methods section is that it should contain sufficient information to enable replication of the research study. Within this section it should be possible to identify the type of study which has been conducted, (i.e. cross-sectional or longitudinal; descriptive or experimental; case study or multi-group etc.). (Faccioni N.D.)

The number and any identifying characteristics of the subjects in the study should be clearly stated, along with the type and number of groups into which they have been allocated (if appropriate) (Faccioni N.D.). Any pre-test conditions which have been required of the subjects should be reported. Ethical considerations and procedures for subjects providing their informed consent for participation in the study should also be reported here (this may be a requirement for publication in some journals).

Data collection procedures may need to be described in some detail if they are unique or at least referenced to an alternative source if they have been utilized in previous research. Information related to the validity and reliability of test procedures; and a statement as to whether data collection is manual or automated should be provided if they are important to an effective understanding of the research process. In study where subjects complete multiple tests, the sequence of tests will need to be stated, and where tests or treatments are repeated, it will need to be clear as to whether allocation to tests was systematic or random. (Faccioni N.D.)

In evaluating test protocols, it is important to identify whether test methods are relevant/specific to the subjects under examination, and whether the tests reflect current knowledge. Assessment of test procedures utilized in the study will involve identifying whether

the tests are conducted under field or laboratory conditions; whether there has been complete or only partial cover of relevant measurement parameters; and whether the units of measurement are appropriate. (Faccioni N.D.)

Description of the statistical methods utilized in analyzing the data merits special consideration in reporting on research results (Faccioni N.D.). The statistical methods appropriate to be used will depend on factors such as the number of subjects and groups; the type of data (continuous, by category etc); and the number and sequencing of treatments applied to the subjects etc. The statistical tests used in the analysis of results (t-test, ANOVA, Multiple Regression, Tukey HSD etc) should be identified and it is essential to state the level of probability accepted in determining statistical significance.

RESULTS

It is possible to report results from a research study either independently or in combination with some discussion and interpretation or analysis of their potential impact. The method of choice may be prescribed by the journal concerned or may depend on the complexity of the study. Ethical considerations dictate that research results be reported in a form which retains subject confidentiality, regardless of how elite or otherwise interesting the subject(s) in the study may be. Certainly, special procedures will be required to obtain consent of the subjects to do otherwise.

Results may be expressed in a combination of text, tables and figures, but not necessarily in more than one form unless this is important for clarity. It is generally not necessary to duplicate tables and figures, but statements in the text can be used to complement either of these forms of data reporting. Figures are preferable to tables (a picture is worth a thousand words!), but both will require a concise, informative caption, and should be able to stand alone from the text. Statistical significance of results may be expressed in figures and tables, as well as in the text. Where it is appropriate, comparisons with existing data or expected results may be included with results from the current study, to provide a context for interpretation. (Faccioni N.D.)

DISCUSSION

This section of the report is used to link the outcomes of the research to the purposes of the study, to the prior evidence referred to in the Introduction, and to future studies in related area(s). New and important results should be emphasized, but without simple restatement from earlier sections. (Faccioni N.D.) A major function of this part of the report is to outline implications for policy and for changes to practice. Stringent statistical analysis of research may, by itself, underestimate the implications of small but important changes in performance parameters. Little things can and do make a difference! Examples of this may be where minor differences in performance can determine success in activities, or where even a small difference in performance applied over the long time period of an application may have a cumulative effect on the subject. For this reason it is sometimes appropriate to consider the “practice significance” of the results of the study independently of the formal statistical analysis, while

accepting the limitations of extrapolating these results more widely. Finally, it may be appropriate to recommend further actions or other related research studies to confirm tentative results or to pursue related research problems.

REFERENCES

References included in a journal article should be only those referred to in the preceding text, and will generally be limited to no more than 20 sources. It is important that all these references are the primary or original sources of the information cited. Secondary references such as reviews of literature, and particularly textbooks, should be avoided. The reference listing will generally be alphabetical. While the preferred format will generally be specified by the journal in its “Instructions to Authors”, it is essential that sufficient information is provided to enable the source to be accurately identified by a reader. Reference citations within the text may include author(s) name(s) or a numerical tag identified within the reference list. (Faccioni N.D.) There are a number of acceptable referencing formats (i.e. APA), but it is essential that a consistent style be utilized throughout the article or report. The use of a particular style may be required by a particular publication and will be specified in the “Instructions to Authors”. (Faccioni N.D.)

II. *MANUSCRIPT CHECKLIST*

The checklist that follows provides information to help ensure that authors do not leave out important information in their manuscript. Unless the publication specifies different requirements, authors should include each of these components in the manuscript. * indicates a component that is typically optional. Additional relevant information on this topic may be found in a later section entitled Criteria for Judging Manuscripts and how to critique an article. Use this checklist to ensure that the manuscript meets the following criteria.

1. Completeness (AERA N.D.)

- goals and objectives are clearly stated
- purpose of the article is achieved
- solutions are presented
- presentation of the material is fully logical and coherent
- information is succinct yet comprehensive
- unnecessary information has been removed
- ramifications are identified
- significance of the information is apparent
- importance to scholars, policy makers & practitioners is identified

2. Authoritativeness

- occupational or disciplinary specific terms are explained or excluded
- references are relevant to the topic
- proportional mixture of author and others' works (AERA N.D.)
- authorities from other fields are cited
- all relevant sources are cited using the required style
- information is up to date
- sources of assistance are acknowledged

___ permission to use others' work is obtained

3. Expertness (AERA N.D.)

___ proper methodology is used

___ methodology has been applied appropriately

___ novel or new methodology is justified

___ reasons for using previously unused methods are sound

___ methods are presented clearly

___ methods can be replicated as identified

4. Singularity (AERA N.D.)

___ new information is provided or existing knowledge confirmed

___ unique, original, or new elements are clearly revealed

___ how old information may be used by others is stated

___ applicability to salient groups is identified

___ information that is presented is timely

___ information is specialized or generalizable

___ those who could use the information are identified

___ how the article improves or extends the existing body of knowledge

5. Quality (AERA N.D.)

___ article follows journal & style guidelines

___ correct grammar, syntax, spelling, and punctuation are used

___ nonsexist language is used

___ ethnic bias is absent

___ "handicapping" language is absent (e.g., the disabled)

___ information is presented in an orderly manner

___ jargon and esoteric terms are absent

___ communication is parsimonious

___ article has been proofread

___ original and copies have a clean appearance

(adapted from Matkin & Riggan 1991)

III. A MANUSCRIPT SUBMISSION COMPONENTS CHECKLIST

When submitting the manuscript to the publication, the following components should be included unless otherwise specified by the publication's instructions to authors. *indicates a component that may be optional – see the publication's guidelines to authors for exact requirements. You should always obtain and review the author guidelines for the journal you are submitting to and follow these guidelines closely.

___ Letter of intent to the journal editor (include article title, request for review, and general area where it may fit into the journal). Attach with a paper clip. (Trent, N.D.)

___ Title page (includes the article title, author's name, title and affiliation). Attach with a paper clip.

___ *Biographical sketch (includes a brief statement identifying the author, titles, academic credentials and affiliations. Other information may include major professional awards, offices held and/or contributions to the field). Attach with a paper clip.

___ *Abstract or executive summary (summarizes the article, usually in 150 – 200 words; the number of words allowed depends on the journal). Include keywords.

___ Article narrative should begin with the title of the manuscript, followed by the information to be communicated Trent, N.D.). The article's narrative should include all of the components discussed earlier in the section entitled THE ANATOMY OF A RESEARCH ARTICLE.

___ References (includes only those citations used in the manuscript as compared to a bibliography that includes other relevant sources although not necessarily cited in the article). Include a bibliography of all materials reviewed only if required.

___ Tables, figures, illustrations, pictures (includes original forms used in the article, but not necessarily the original printer-ready proofs or negatives).

_____ *Permission to reprint (includes all signed documents giving the author permission to include previously published materials) (Trent, N.D.).

IV. ADDITIONAL ADVICE TO AUTHORS

1. **IMPORTANCE OF A GOOD TITLE** - Even a perfect article, one that reports an original observation clearly and concisely, suffers if an editor is unable to understand the significance of the work. An editor will almost always rely on the title and abstract of a manuscript to make a preliminary decision (pre-review) about the appropriateness of the work for the journal in question and to choose referees. The title and abstract must convey the experimental approach, key results, and novel conclusions of the work. Excessively long and comprehensive titles and abstracts make the editor's job more difficult (ASCB.ORG, 2002).

2. **IS YOUR WORK APPROPRIATE FOR THE PUBLICATION?** – if there is any question, prospective authors should consult the editor in advance of submitting a manuscript to such a journal to establish if the work has a chance of success (Hanna, 1996).

3. **PLAGIARISM OR DUPLICATE RESEARCH** - With computerized manuscript tracking, TURNITIN and the ever increasing coordination of journal software, it is foreseeable that a reviewer will not only have access to CONNEXIONS but also to similar manuscripts submitted to other journals, which makes the likelihood of detection much greater. Any author who deliberately attempts this type of academic deception may be “blacklisted” from future publication. (bmjjournals 2002).

4. **USE REJECTION AS CONSTRUCTIVE CRITICISM** – Many journals are peer reviewed (also referred to as “refereed”). The review process is detailed in a later chapter of this text. Authors should read that chapter to see what reviewers (also called referees) are looking for. A large proportion of submitted manuscripts are rejected, often multiple times, before publication. Most academicians experience such failure and rejection. You should not take criticism as a personal attack; indeed, doing so may undermine your chances of success (Stake, 1986). Instead, use the feedback you receive in a constructive manner to revise the manuscript and resubmit it. If the rejection feedback makes resubmission possible, resubmit as soon as possible. Try to follow the reviewers' suggestions/requirements as closely as you can. If you do not follow a suggestions, you should explain why in the text or in the cover letter. If the rejection feedback suggests a new venue, make the suggested changes and send the manuscript to a new outlet.

Not all review suggestions are equally useful. Some may reflect the preferences of a particular journal reviewer. If there is no possibility of resubmission to that journal, you may be better off incorporating immediately the suggestions you deem appropriate and resubmitting your revised manuscript to a new outlet without further delay. If you perceive the reviews of your manuscript contain sexist or racist assumptions or in other ways seem to be systematically biased against your research, it is appropriate to tell the journal editor of your concerns. Often, if your concerns sound legitimate, the editor will secure another review. (Matkin & Riggat

1991) The next section contains the actual submission guidelines & forms for a sample journal called: *NCPEA CONNEXIONS*.

THE NCPEA CONNEXIONS PROJECT

TO SERVE AS AN AUTHOR

Similar to many journals, submit your materials to the editors of the NCPEA/CONNEXIONS, via an e-mail attachment, using the structure and formatting guidelines given below. These documents should be scholarly but practical, short and to the point. Before submitting, you need to identify the category (domain) where your material would best fit, in terms of the knowledge base organizational structure given below, giving the name of the domain or sub-domain. If appropriate, please try to link the material with ELCC or ISLLC standards. Develop the materials so that anyone reading them will be able to implement them in their courses with little or no modification.

Please follow these general structure and formatting guidelines. All materials should be submitted in MSWORD, using Times New Roman font size 12, with all one inch margins using 8.5 by 11 inch paper. All materials should follow APA style.

Send materials you wish to have peer reviewed to the Managing Editor at the following email address: fdembowski@selu.edu

All submissions must have the Submission Cover Page given below as the first page of the submission! *If the Submission Cover Page is not included with your submission, your submission will be sent back to you!* This Submission cover Page contains requests for information identifying the applicable domain, sub-domain and category type where your material best fits. Upon receipt by the editor, your submission will be sent to the Domain Coordinator of the domain that you have selected. From there it will go to the peer review team. You will be notified regarding the result of the review process. There are three possible outcomes: *accept* (usually with minor editorial revision), *revise* based on reviewer comments, and *reject*. If, in the opinion of the peer review team, your material could be utilized with minor changes, you will be so informed with a brief list of needed corrections. (Unfortunately, due to the expected volume of submissions, we will not be able to provide detailed editorial assistance.) If your material is accepted for posting, we will ask you to fill out a form which allows the free use of your material for this purpose (open content copyright). You will retain the copyright of your original material, you will be identified as the author, and you will receive similar credit to having published in a recognized, respected peer reviewed education journal. You will retain full rights to the material and the materials may not be changed without your approval.

III. Submission Directions & Guidelines

Submissions for the *NCPEA/CONNEXIONS Project*: All proposals will be subject to blind review and evaluated on the basis of their relevance to the guidelines and criteria listed below.

- The topic of the submission must be specifically identified with one of the domains listed below.
- Please check the most appropriate domain to place your submission.

- Please check the most appropriate category type for your submission.
- Submission selection criteria also include the following: (a) competent scholarship, (b) readability, (c) contribution to the pedagogy and practice of educational administration, (d) significance and value to educational administration professors and practitioners, (e) accord with theory (or if in disagreement, is carefully argued and/or tested in other ways), (f) logic, (g) quality of presentation, (h) timeliness.
- See also the attached style guidelines for all submissions.

THE PROPOSAL REVIEW & PUBLICATION PROCESS

- The Proposal may be submitted *AT ANY TIME!* Submissions will be reviewed as they are received.
- Authors will be notified of the results of the review process within 60 days of initial receipt.
- All submission should include the attached Submission Cover Sheet with a 100-150 word summary, and a brief biography listing significant published work in the topic area of the proposal. And the submission itself.
- *Use the Submission cover Page included on the next page.*

GENERAL SUBMISSION GUIDELINES

*All Submissions for NCPEA/CONNEXIONS MUST Be Written
Using the Following Style Guidelines:*

1. Use MSWORD only & Run the spell check and grammar support before submission.
2. Use APA Style throughout your entire document.
3. Use the APA tables formatting document to help you with any tables.
4. Use the APA art formatting document to help you with any figures or art.
5. Use APA headings and sub-headings appropriately & effectively.
6. Use 1" margins and Times Roman 12 point font.
7. Put all tables, figures, diagrams and artwork on separate pages, camera ready.
8. Check each reference in the text to see that you have the complete citation in the reference section of the paper in APA style.
9. Make sure the dates for each citation in your paper match the dates cited in the reference section for each reference.
10. Do not use any headers, footers or running headers in your document, except for page numbers. Place page numbers in the upper right hand corner of your manuscript. Do not place your name anywhere in your document except where indicated in the guidelines

to authors. The Yearbook Editors will remove any identification information from the manuscript prior to peer-review.

11. When you think you are finished with your manuscript, set it aside for a day or two and then read it one more time.
12. If you are new to the publishing process, get some editorial assistance before you submit your paper.

Submission # _____

NCPEA/CONNEXIONS

Submission Cover Page

<p><u>Be certain to include all of the following:</u> <i>(incomplete proposals will not be considered)</i></p> <ol style="list-style-type: none">1. This Submission Cover Page completed,2. A 100-150 word Summary of proposed article,3. A brief bio of author(s) listing significant published work in the topic area of the submission,	<ol style="list-style-type: none">4. The submission itself <p>Please email all your submission materials to the managing Editor, Fred Dembowski via: drfdembowski@aol.com</p>
--	---

(Please print clearly & Use Additional Pages for more co-authors as needed.)

1. Title of Submission:

2. Primary Author and Sole Contact Person for Notification of Co-Authors:

Full Name: _____

Title: _____

Affiliation: _____

Address: _____

Personal Phone: () _____

Email _____ (Please print clearly)

3. Co-Author(s): (Primary Authors will be responsible for all notifications)

Co-Author 1:

Full Name: _____

Title: _____

Affiliation: _____

Address: _____

Personal Phone: () _____

Email _____

NOTE: All Correspondence will be via email with the primary author only. That person, in the case of multiple authors, has the responsibility to convey the information to the others in a timely fashion.

CATEGORY TYPE - Please check the most appropriate category type for your submission:

- _____ (1) Annotated literature reviews
- _____ (2) Key ideas and theories
- _____ (3) Instructional modules
- _____ (4) Case studies and Simulations
- _____ (5) Practitioner stories
- _____ (6) Performance assessments, i.e. good evaluation items (with sample answers).
- _____ (7) Related web sites pertinent to educational administration
- _____ (8) Opinion pieces which challenge pertinent knowledge and beliefs.

DOMAIN – Please check the most appropriate domain for your submission:

- _____ A. Historical, social, cultural, and philosophical foundations (including ethical, economic, political, and gender issues)
- _____ B. Research Methods
- _____ C. Learning theory (including theories and ideas pertaining to human growth and development, personality, and intelligence)
- _____ D. Curriculum (decision-making, content, instructional methodology, student evaluation, and curriculum change processes)
- _____ E. Student Services (counseling, career guidance, student discipline, dropout prevention strategies)
- _____ F. Administration of Special Programs
- _____ G. Personnel
- _____ H. Educational Management
- _____ I. Educational Leadership
- _____ J. Human Relations
- _____ K. Organizational change (systems analysis and design, organizational structure, flow charts, strategic planning, computer spreadsheets/databases, quality control)
- _____ L. Site-based leadership
- _____ M. School law
- _____ N. School finance
- _____ O. School public relations
- _____ P. School facilities
- _____ Q. District leadership
- _____ R. Educational leadership preparation
- _____ S. Educational technology
- _____ T. International

_____ U. Other

KEY WORDS – Please identify 5 key words for your submission for use by search engines:

PART 2. ADVICE TO THE EDITOR

I. THE ROLES OF AN EDITOR

Education related journals usually employ busy academics to serve as editors whose charge is to: establish whether a manuscript is appropriate for the journal (pre-review); to select expert referees; to render a final editorial decision on the fate of the work; and to determine the order of submissions for publication. Thus, the editor serves many roles in the publication process.

The Pre-Review

Some submissions are rejected without formal review when the editor decides that the content of the submission is not within the scope of a journal or if it seems unlikely that a manuscript will pass muster with critical referees; this process is called “pre-review”. It is the editor’s responsibility to spare the author and potential reviewers wasted time and effort in considering a manuscript that is inappropriate for the journal. If in question, prospective authors should consult an editor in advance of submitting a manuscript to such a journal to establish if the work has a chance of success. Referees also have day jobs, and it is the editor’s role to identify appropriate and responsible reviewers (ASCB.ORG, 2002).

The Editor as Facilitator

Most colleagues are honest and fair and can be counted on for a timely return of a constructive critique. Editors will often cultivate groups of such cooperative reviewers who are appropriate for the areas for which the editor is responsible. This is done to facilitate a professional and timely review of submissions. Unfortunately, some colleagues cannot be counted on for fair and impartial judgments. Typical antisocial behaviors include excessive delays in returning critiques, vague and judgmental decisions, impossible and excessively detailed demands, and even the occasional breach of confidentiality where the referee transmits privileged information to a colleague or student. Referees who display such behavior must be avoided (ASCB.ORG, 2002).

It is also the case where some reviewers do not return their reviews in a timely manner thus slowing down the entire review & submission for publication process. These reviewers should be given “due process” by first being reminded to return their reviews, then warned by the editor that their unprofessional behavior may result in their dismissal from the review process, and finally, if warranted, dismissed from the reviewer list or from the board of editors. Sometimes, due to personal or professional demands, the reviewer may request to be removed temporarily from the active list of reviewers and not to have submissions sent to them. There should be a limit to this time period as the reviewer will still be listed as a reviewer in the publication, but not doing any of the work!

The Editor as Judge

Some of the most competitive journals have the unfortunate habit of consulting far too many referees. Whereas two opinions may suffice, usually three or more are sought by editors. This may be because the editor may be unwilling to exercise independent judgment in weighing the merits of two divergent opinions. Or they simply want the benefit of additional reviews to enhance the quality of published articles. However, sending the submission to four or more reviewers has the effect of increasing the burden on responsible reviewers who are deluged with requests and it increases the prospect that an antisocial referee will be consulted. (ASCB.ORG, 2002). It will also very likely slow down the review process.

When the article reviews have been returned, the editor must use professional judgment to weigh the opinions and make a determination of the next action to be taken in the publishing process for publishing. There are a number of options: a. publish as is, b. make minor editorial changes & publish, c. return to author for revision, or d. reject the article (usually done when all review are negative. Some decisions are clearly positive or negative, but most rely on the editor's judgment. Many reviewers prioritize their criticisms. The editor must determine if the most serious flaws in a manuscript can be rectified by changes that are well within the scope of the author's capability. In some circumstances, such as requiring the conduct of a component of a study again, the required change may not be feasible. Although some publication decisions rest on one or more flaws identified by both reviewers, most often this is not the case, and one reviewer may identify a serious issue not considered by the other. For this reason, a conscientious editor will read and weigh the merits of each opinion, and then decide which issues will form the basis of a final decision. Some difficult decisions are best left to the day after the critiques are first considered. Sometimes another opinion or reviewer may be sought. In some cases, the author may demonstrate that the reviewers' comments were inaccurate. A good rule of thumb is that all referees should be re-consulted when the revisions take more than three months to complete. (ASCB.ORG, 2002)

The Editor as Compiler

The editor must exercise judgment in determining whether a submission will be published. There is, however, a more important role for the editor. What type of articles should be in a particular journal? What is the order of the publications in the journal and how is that order established? Ultimately, the editor of a journal will determine what will be the "niche" of the journal. The editor should consider the constituents of the journal. (Hanna, 1996)

The decision letter is an opportunity for the editor to place reviewers' criticisms in the context of a field or the scope of the journal. Conscientious editors will interpret, and not merely repeat, the bottom line of a referee. Key criticisms should be highlighted and an honest appraisal of the prospects for favorable consideration of an amended manuscript should be spelled out. Authors are not well served by false encouragement. If a manuscript is in principle publishable, but not in the journal under consideration, the editor should suggest an alternative venue. (ASCB.ORG, 2002)

In some cases, the author may choose to contest the decision of a editor. These cases can usually be handled by a polite response from the editor or, in the event of an irreconcilable difference, through the intervention of a senior editor or it may be presented to the Board of

Editors. Experienced authors avoid invective in posing questions to the editor. In some cases the editor may choose to forward comments directly to the reviewer, thus it is wise to avoid questioning the integrity or intelligence of someone whose judgment you wish to challenge. Some authors' first reaction is to phone the editor to secure some promise of compromise. However, a written record of communications between an author and an editor is an essential element of any successful negotiation. Authors and editors are often friends and colleagues. A healthy relationship ensures the vigor of the peer review system. (ASCB.ORG, 2002)

The Editor as Steward

The editor of a journal should consider the journal's audience. An academic journal has several constituencies, and any one subscriber may belong to several of these groups at the same time. The most concerned constituency consists of the aspiring authors, who may need publications to keep their jobs or receive promotions. The unfortunate truth is that these victims of the "publish or perish" syndrome usually receive little credit for clearly communicating research results, and have little motivation to rewrite an article a dozen times just to make it understandable to more readers. (ncfr, 2004). Another constituent group consists of scholars and practitioners who want to keep up with research in the field. This group may have the training to understand some types of research, but not necessarily all types of research and theories. For a particular journal there may be an enormous range of theoretical models and statistical methods used. Few, if any, people are competent to understand all of the models and methods used in articles in this type of journal. (Hanna, 1996)

The editor should be faithful to the mission and purpose of the journal. The leaders of the organization sponsoring or publishing the journal usually have a vision of the organization. They may wish to serve the needs of academic researchers or practitioners or both. This vision should be transmitted very clearly to the editor and board of editors. Discussions of the purpose of the journal should be discussed periodically between the publisher and the editors. This vision/mission should then be shared with the board of Editors and reviewers.

In some cases, practitioners may have been dissatisfied with the organization's research journal because it does not meet their needs. There may be pressure for a journal to publish more applied or "how-to" articles, or practitioners may simply tolerate the organization's research focused journal without much enthusiasm. In some organizations, practitioners may stop reading the journal because they do not feel they benefit from the overly "academic" articles published in the journal. (Hanna, 1996; ncfr N.D.)

The Editor as Writer

One of the tasks of the editor is to make research articles readable. If the journal has the goal of making every article accessible to both scholars and practitioners, the editor should ensure that the board of editors and/or reviewers consists of both scholars and practitioners. It is the role of the editor to make it more likely that articles will be read by both academics and practitioners who often do not bother to read long, boring articles outside their narrow areas of specialization or interest (Hanna, 1996). Some ways to enhance readability are:

1. The length of articles should be carefully considered. Except in extraordinary cases, there should be no more than 6,000 words in the main body of a research article. Depending on the use of graphs and other figures, this will limit articles to 20 to 30 pages in the journal format. Often however, limitations of the publisher require shorter articles. The length of the various types of submissions (i.e. articles, commentaries, book reviews) should be discussed by the editor and the publisher and should be clearly specified in the instructions to authors. Practitioner oriented journal typically have a word length restriction much lower (i.e. 1,500 – 2,00 words).
2. Every theoretical model and statistical method should be explained in a way that any intelligent person can understand.
3. No numbers should be presented in the main body of an article unless they can be made meaningful to any intelligent person. All statistical results should be included in the manuscript submitted for review, but, with advice from the reviewers and the editor, more technical material would be included in endnotes and appendices. Particularly long tables might be listed as unpublished appendices available from the author. (ncfr, N.D.)
4. All important results should be described in clear language, and, where appropriate, illustrated graphically. The reader should not have to work to comprehend results from numbers or tables. The author should work hard, with as many revisions as necessary, to make the reader's task easier. (Hanna,1996; ncfr, N.D.)
5. Most of the technical details should be in endnotes or the appendix.

Editors as Educators

Editors should educate the reviewers by giving them examples of good & bad reviews. Give reviewers access to other reviews and any correspondence. This may assist in their personal development as a reviewer by seeing what other experts say.

One of the most difficult problems is language. Although each writer has a writing style that is unique, with electronic publishing and the internet, a journal is global in its effect. This means that many of the papers are sent from and read in countries where English is not the primary language. Difficulties in spelling, syntax, verb construction, and so forth often limit the readability of the article. In general, editors should recommend to authors whose English is their second language that they seek an opinion on their manuscript from someone who speaks English as a first language. In this situation, a reviewer has an even more difficult job. The guiding principle should be to see whether there is scientific merit in the work that may be hidden by the grammatical difficulties. Remember grammar can be improved but the science often cannot. (bmjjournals 2002)

II. RESPONSIBILITIES AND RIGHTS OF EDITORS (NCFR, 2004)

The person assuming the role of editor has a number of responsibilities and rights. These rights and responsibilities should be discussed and agreed upon initially and then reviewed annually (or as needed) for accuracy and for integrity. The following section is adapted from a Council on Scientific Editors Editorial Policy Statement appearing in *Science*, Vol 25 (6).

Editor's Responsibilities (ncfr, 2004)

- The Editor is responsible for establishing and maintaining the highest possible standards in the contributions that fill the pages of the Journal and for maintaining the integrity of the Journal itself.
- The Editor has total responsibility, authority, and accountability for editorial content of the Journal.
- The Editor will report annually to the Board of Editors and will be involved in Board discussions and decisions involving the Journal.
- The Editor is responsible for maintaining an Editorial Procedures for use by the Board and by future Editors.
- The Editor will not publish in the Journal during her or his term of office.
- The Editor is responsible for selecting an Editorial Board of qualified scholars who represent the professional diversity of the field.
- The Editor is responsible for ensuring that submitted manuscripts receive fair reviews by qualified reviewers.
- The Editor is responsible for ensuring that decisions regarding publication are fair, unbiased, and justified.
- The Editor should not have personal financial involvement in manuscripts considered for publication. An Editor should disqualify herself or himself from any decision-making role on a manuscript addressing a subject on which she or he has a potential conflict of interest.
- The Editor may disqualify herself or himself from evaluating submissions by students or by local colleagues or friends. In these instances, the Editor may ask a guest editor to oversee the review process and to make the final decision on the manuscript.
- The Editor is responsible for ensuring that issues of the Journal are published on time and that each issue is within the page limit set by the publisher and editorial board.

- The Editor will return reviews and make decisions in an agreed period beginning from the time the manuscript is received and sent out for review until the time of publication, except when there are extenuating circumstances. This time period should be discussed and agreed upon by the publisher, editor and editorial board.
- The Editor will act proactively and contact authors when decisions about manuscripts will be delayed.
- The Editor is responsible for summarizing the status of Journal operations (e.g., the number of submitted and accepted manuscripts, average time an author has to wait for an editorial decision and average time it takes for an accepted manuscript to be published). Ordinarily, this will be done during a meeting with the Editorial Board at the annual conference.
- The Editor will inform the publisher and the Editorial Board of any political, commercial, or other incidents that could impair the scientific credibility of the publication and will take measures necessary to ensure that such incidents do not affect the decisions that she or he is called on to make.
- The Editor will warn the publisher and the Editorial Board of any adverse consequences to be expected if her or his professional judgment is overruled and will ensure that proposed alternative actions do not impair editorial integrity.
- The Editor will not disclose confidential information unless authorized by the source of that information, unless allegations of ethical misconduct require access to that confidential information for proper investigation, or unless the Editor is required by law to disclose that information.
- The Editor will refrain from using confidential information for personal gain and shall take reasonable steps to ensure that such information is not used for the advantage of other parties.
- If the Editor becomes aware of a contravention of these guidelines, she or he will report it to the publisher and the Editorial Board.
- The Editor will assist the publisher or the Editorial Board in the education and training of new Editors.

Editor's Rights (NCFR, 2004)

- The Editor must be free to authorize publication of peer reviewed and other appropriate research reports, critical analyses, theory papers, and other materials, and must be free from unilateral, biased, or otherwise arbitrary interference that may detract from the long-standing tradition of a free scientific press. The publisher or Editorial Board is usually responsible for financial and other management issues, but they must always

recognize and accept the Journal's integrity and the editorial independence of the Editor.

- The Editor and the publisher or Editorial Board should enter into an agreement to ensure proper editorial freedom and responsibility. Such an agreement should identify the officers, committee, or other management group to which the Editor is primarily responsible. Furthermore, the agreement should state clearly the job description, reporting responsibilities, and performance measurements. These should include statements of scientific, editorial, and administrative expectations of all parties; terms of reference under which the Journal is published; the length of the contract; financial conditions; including operating expenses and remuneration (if any); and terms for termination by either party.

III. THE EDITORIAL REVIEW PROCESS

Upon receipt of an article submitted to a journal, it should be subject to the editorial process. Typically, there are seven steps to the editorial review process (NCFR, 2004):

1. Upon receipt of a submission, the editor notifies the author of its receipt and gives a brief overview of the review process and its length. Then, in a pre-review, the editor examines the paper to determine whether it is appropriate for the journal and should be reviewed. If not appropriate, the manuscript is rejected outright. The submissions rejected outright should be included in the number of rejected articles used to determine the acceptance rate of the journal.
2. If an article "passes" the pre-review, the editor then sends the article to a number of reviewers, typically two or three. These reviewers are usually selected from the journal's editorial board or review board. Other possible reviewers may be specialists in the subject matter represented by the article. The editor asks the reviewers to complete their review in a specified period of time, typically 2-4 weeks, and encloses the review form. The editor should ensure that the reviewers have access to the guidelines and criteria for reviews used by the journal. In addition to reviewing the submission using the process and criteria provided by the journal, reviewers often include suggestions for strengthening the manuscript. Comments to the editor are usually in the nature of the significance of the work and its potential contribution to the literature. (Faccioni N.D.)
3. The editor examines the reviews and determines the next actions to be taken with the manuscript, and notifies the author of the outcome of the review process. If revisions are necessary, the editor will invite the author(s) to revise and resubmit the manuscript, or seek additional reviews. In rare instances, the manuscript is accepted with almost no revision. Almost without exception, reviewers' comments (to the author) are forwarded to the author. If a revision is indicated, the editor provides guidelines for attending to the reviewers' suggestions and perhaps additional advice about revising the manuscript.
4. The authors decide whether and how to address the reviewers' comments and criticisms and the editor's concerns. The authors submit a revised version of the paper along with a cover

letter containing specific information describing how they have answered the concerns of the reviewers and the editor.

5. The editor may send the revised paper out for review again if agreed upon in the review process. Typically, at least one of the original reviewers will be asked to reexamine the article.

6. When the reviewers have completed their work, the editor examines their comments and decides whether the paper is ready to be published, needs another round of revisions, or should be rejected. If an article which has been submitted to the journal ultimately is not published, it should be counted as a rejected article in the determination of the acceptance rate of the journal.

7. If the decision is to accept it for publication, the article is included in the final compilation by the editor which is then submitted to the publisher. The format & process of this submission needs to be agreed upon between the editor and publisher. The length of time from submission by the editor to the publisher and when the article appears in print should be agreed upon by the editor and the publisher and stipulated in the instructions to authors. The journal's editor should read the submission for clarity and correct style (in-text citations, the reference list, and tables are typical areas of concern), clarity and grammar. Finally, the article appears in the pages of the journal publication and may be posted on-line.

8. Many referees appreciate feedback on their reviews. Like many other aspects of academia and research, reviewing is a learning process. The editor may consider sending each reviewer the same package sent the author, i.e., a copy of your correspondence with the paper's author, as well as a copy of each of the paper's reviews (including his or her own, in case the referee didn't make a copy). This makes the reviewer feel more a part of the process and gives valuable feedback. In addition, many referees are building tenure and promotion files. A written acknowledgment (not email) of the referee's help looks good in these files and is much appreciated. (Bieber, N.D.)

IV. BIAS & THE EDITORIAL PROCESS

Buela-Casal (2004), in a comprehensive article entitled *The "Peer Review" System For Assessing Quality: Advantages And Disadvantages*, discusses editor, reviewer and journal bias. He states that "The "Peer Review" system for assessing quality would appear to have many advantages: an "impartial" review given the anonymity of the authors, a review carried out by specialists in the field, thematic coherence, since the Editor and referees also decide on the suitability of the text for that particular journal, and so on. Nevertheless, detailed analysis of the process leads us to the conclusion that it also has some disadvantages." (Buela-Casal, 2004)

"Although each journal has a defined thematic field, the Editor always has some degree of freedom for favoring the publication of manuscripts on certain themes or areas, and thus for hindering that of others. An Editor influences to some degree or other the final decision on the publication of an article. The Editor's biases are implicit in the system, though this does not mean they invalidate the system.

Such bias is achieved by various means:

- a) One of these is the selection of the review committee: in some cases Editors select review committee members directly, and in others they at least have considerable influence over the committee's make-up.
- b) The Editor decides to which reviewers to send the work, in the knowledge that not all of them are equally strict, so that this decision has a clear influence on the manuscript's possibilities of publication.
- c) The final decision on publication of an article is taken by the Editor, who may have received different or even contradictory reviews of it, so that it falls to them to choose whether to send it to other referees or opt for some of those already received.
- d) Some journals frequently have more studies with favorable reviews than they can publish. Editors decide which of these suitable works to publish, and will undoubtedly have preference for certain topics over others.
- e) The "citation tornado effect", which refers to the fact that widely-cited authors have more likelihood of being published, since their articles will increase the degree to which the journal is cited. It should be borne in mind that the Editor does know the identity of the author, and this will undoubtedly influence his or her decision. For example, between a work of suitable quality by a well known author and an equally suitable one by an unknown author, Editors will surely opt for the former.
- f) The tendency to publish studies that find effects or correlations and to reject those that, while methodologically correct, do not obtain positive results."

V. *PUBLICATION BIAS*

Klassen, T.P. et. Al. (N.D.) also investigated bias issues and stated that publication bias toward studies that favor new therapies (substitute concepts or theories) has been known to occur for the past 40 years, yet its implications are not well studied in the professional field. The increased interest in meta-analyses has highlighted the need to identify the totality of evidence when addressing application questions. Klassen (N.D.) conducted a study to measure the percentage of randomized controlled trials (RCTs) presented at a major pediatric scientific meeting that were subsequently published as full-length articles, to investigate factors associated with publication, and to describe the variables that change from abstract to manuscript form. The conclusion as a result of the study was that "publication bias is a serious threat to assessing the effectiveness of interventions in child health, as little more than half of randomized controlled trials (RCTs). RCTs presented at a major scientific meeting are subsequently published. There is a need to institute an international registry of RCTs in children so that the totality of evidence can be accessed when assessing treatment effectiveness." (Klassen et. Al. N.D.)

Buela-Casal, (2004) stated that reviewers are not as qualified, independent and objective as it might be believed, as shown by the following:

“a) The selection of reviewers is by no means perfect. In some cases they are named directly by the Editor, and although the criterion of using specialists is adhered to, others also come into play, such as the reviewer’s prestige, friendship with the Editor, and so on. In other cases, such as that of the APA journals, advertisements periodically appear requesting applications from candidates who fulfill the following conditions: having previously published in journals with review systems, being a habitual reader of five or six journals in a field, being a specialist in an area and having sufficient time to work on reviews. In this latter case, it is clearly not the best possible reviewers who are selected, but rather those who apply.

b) Reviewers are not better qualified than the authors. Indeed, in some cases the authors are better known, as they have published more work than the reviewers, so that we can at least question the reviewer’s authority for judging the work of the author.

c) Reviewers are not better when they review than when they carry out research. If reviewers also perform studies, which are subsequently assessed by other "peers" and may be rejected, a contradiction arises: they are considered qualified to assess, but at the same time their work can be turned down.

d) Reviewers learn "by experience". They have had no previous instruction or training in how to review an article, so that they review manuscripts on the basis of their opinion and experience. When reviewers assess their first article, with what criteria do they do so? When and where did they learn?

e) Lack of reliability between reviewers. It is far from exceptional to find partial or total disagreement between different reviewers with regard to the same article.

f) Reviewer bias. Apart from the particular biases of each reviewer, the fact that they are specialists in the topic and conversant with the theories in a given field implies a certain bias towards accepting works in line with the current situation and rejecting innovative studies. This represents a restriction on the most creative researchers.

g) The anonymity of reviewers gives rise to deliberate, exaggerated or hostile criticisms. If reviewers are specialists in a field they will have published research in it. If a work submitted to critical review or its results are in total or partial contradiction to their work, reviewers will most likely tend to reject it, and this is made easier by the anonymity.” (Buela-Casal, 2004)

IV. *WHO SHOULD SERVE AS REVIEWERS?*

Buela-Casal (2004) went on to say that:

“Journal committees should be more carefully selected, as it would be advantageous to employ not only specialists in the field, but also experts in research methodology and

design. Each reviewer should receive a manual with the assessment parameters and criteria and how to apply them. This would undoubtedly increase the validity of assessment and the reliability between assessors. ... These committees would be made up of experts in the fields in which the journals are classified, experts in epistemology, and experts in research methodology and design. Courses could even be set up for the training of specialists in assessment of the quality of scientific publications. Assessment by these committees must be independent of the Editors of the journals and their boards, and have the authority to detect and assess bias in Editors and reviewers. This review by committees of experts would also make it easier to discover plagiarism and false reports, since the same experts would review all the journals in a particular field; such abuse could clearly not be totally eradicated, but would certainly be reduced. It would also be necessary to reconsider the issue of reviewer anonymity; although it brings certain advantages, it must be recognized that it also has important drawbacks, such as the fact that some reviewers take advantage of it to deal out harsh or exaggerated criticism. Such unnecessarily hostile criticism, as Sternberg (2002) argues, generates feelings of helplessness, especially in younger researchers, and makes no positive contribution to the process of assessment of scientific publications. Diverse studies have shown that reviews tend to be more specific and more constructive when reviewers put their signature to them. Anonymity is a "recipe" for lack of responsibility in critical reviews (Shashok, 1997). It would seem, then, that reviewer anonymity brings more disadvantages than advantages, so that in future it may be advisable to identify those who assess."

Buela-Casal (2004) also discussed the established parameters and criteria on the aspects to be assessed:

"Journals use review forms that are sent to referees together with the manuscript to be reviewed. The purpose of these forms is to establish the parameters and/or criteria to be followed in assessing the work. However, if we examine these criteria, it is clear that they do not totally ensure quality. For example, some of the most frequent are: relevance of the topic dealt with, methodological rigor, clarity of exposition, contributions of the study, correct use of language, appropriateness of the bibliography, and so on. But, with rare exceptions, there is no assessment of such important aspects as internal and external validity, utility, implementation, originality or innovation.

It is true that some of the parameters assessed in the review process, such as "relevance of the topic", "methodological rigor" or "contributions of the study", are necessarily related to the quality of the work. Even so, the problem is that they are assessed in a quite general way, and it is left to the reviewers' discretion to apply these parameters. Thus, the point is not that they fail to assess quality; the problem resides in the way the assessment is made, which is far too general, thus bringing reviewers' subjectivity into play.

The quality of an article should not be assessed only in relation to the impact or prestige of the journal in which it is published."

Sternberg (2001) and Buela-Casal (2002) propose 15 reasons why it is a mistake to give more importance to "where" an article is published than to the article itself:

1. It is easier to quantify citations or to make an assessment based on the publications cited in a work than it is to read the article, but the impact of the journal is not a substitute for critical evaluation of the work.
2. The conservatism of the most prestigious journals. Normally, the most prestigious journals are more conservative, so that reviewers tend to check more strictly that the work is in line with the most conventional norms.
3. Difficulties for the publication of interdisciplinary research. Bearing in mind that the most prestigious journals tend to be established within traditionally defined fields, it is difficult to find high-prestige journals that are interdisciplinary, so studies of this type are usually "penalized", since it is also difficult for them to gain acceptance by generalist journals.
4. Difficulties for non-paradigmatic research. Studies that do not fall into the conventional research paradigms have less likelihood of being published. Reviewers tend to be conventional in their approach to assessing scientific work, therefore researchers tend to work within the conventional paradigms, and those who fail to do so generally find it difficult to publish their reports.
5. Disadvantages of publishing in books and types of publication other than journals.
6. The self-fulfilling prophecy. This refers to the fact that articles published in prestigious journals tend to be more widely cited than articles published in journals of lower prestige, so there is a tendency for the prestige of the former to be increased or maintained.
7. The "Matthew Effect". "For unto every one that hath shall be given, and he shall have abundance; but from him that has not shall be taken away even that which he hath" (bmjjournals 2002 p. #). This is applicable to the fact that journals with high prestige tend to receive more and better articles than low-prestige journals.
8. Not all the articles published in a journal have the same "impact". An important criticism to be made of the different bibliometric indices is the attribution of the same "impact" to all the articles published in the same journal, given that the impact and prestige factors are calculated in a general way for the journal. Furthermore, it is clear that some articles receive more citations than others, and the system is so unfair that the articles which receive few citations penalize the widely-cited ones.
9. Authors' choice of the journal to which their work is sent influences the impact it will have. Let us imagine that there is an article of excellent quality, wholly acceptable for publication in a high-prestige journal, but that the authors decide to send it to a journal with medium prestige (this may occur for a variety of reasons: urgency of finding a

publisher, lack of knowledge of the system, the journal's field is more appropriate, etc.), and let us suppose that it is published. So, does the fact of its being published in that journal reduce its quality?

10. The "peer review" system does not guarantee quality.

11. Not all the articles rejected by a journal are of poor quality. There are cases in which journals receive many applications, so that there may be more acceptable articles available than can be published. The Editor is thus obliged to reject good work, which ends up being published in other journals that may have lower impact. But the loss of impact is a consequence of the quantity of available work, and not the quality of this particular piece.

12. Articles published in journals with "impact" do not even have a guarantee of truth. In the history of scientific publication there have been a not inconsiderable number of false (or at least partly manipulated) reports. And this affects journals of both high and low prestige.

13. The number of citations can be manipulated in various ways. There is a host of strategies through which the number of citations of a journal can be increased (which is the same as increasing the impact or prestige factor), independently of the quality of the articles published in the journal (like what?).

14. Whether or not a journal has an impact factor and prestige factor depends not only on its receiving citations; it is also necessary for the journal's Editor and the institution backing it to apply for its inclusion in these systems of citation statistics; indeed, there are many journals that have never carried out this application process, but this obviously has no relation to quality.

15. The language in which a journal is published influences the impact factor and prestige factor, since the language affects the number of citations an article receives. Currently, the majority of researchers read and publish preferentially in English, so that journals published in English will be more widely cited than those published in other languages; and clearly nobody would argue that the language of publication influences the quality of the research. Sternberg (2001), Buela-Casal (2002)

VII. AN EXAMPLE OF COMPONENTS OF A REVIEW FORM

The use of a standard review form is recommended to ensure that all reviewers base their determination on similar information and criteria of review. The components of a typical review form are as follow.

=====

Instructions to Reviewers:

Please answer the following questions on this document. Please use our manuscript evaluation form. It makes our job much easier!

Note that your answers to questions 1 through 7 are given to the author. An * indicates that your response to this question will be forwarded to the author(s).

Please make any editorial changes that you feel are necessary in the text of the manuscript to aid in the editorial process. These may include corrections to spelling, grammatical errors, and syntax changes. Etc. (see proof readers notes in the instructions to reviewers section of this journal provided on-line).

Please add lines or attach pages of comments or instructions to authors when necessary. (Bear, N.D.)

MANUSCRIPT #: _____

1. the topic of this manuscript important? If not, why?*
2. Does the manuscript provide sufficient information to make an evaluation? If not, what information is needed?*
3. What are the strengths and weaknesses of this manuscript?*
4. Do the authors achieve their stated contribution (see the submission form)? If not, what do they still need to do?*
5. Does this manuscript contain mistakes? If so, are they correctable? Would removing problematic sections be a solution?*
6. Is the stated contribution (assuming it was achieved) sufficient for publication? If no, why? (E.g., Is the topic interesting? Are the findings already known? Are the findings trivial?)*
7. Are revisions necessary? If so, what revisions need to be made? Please be as specific as possible.*

=====

8. What is your recommendation?
- Reject – a revision is unlikely to correct deficiencies in this manuscript
 - Reject but allow resubmission – allow a complete re-write and send it for review
 - Request more information – ask the authors to provide more information and answer your questions
 - Request major (risky) revisions – ask for revisions but warn the authors that revisions might be insufficient
 - Revisions – ask for specific revisions that are likely to make the manuscript publishable
 - Conditional accept – accept but request minor revisions
 - Accept "as is? Why?"

=====

9. OPTIONAL: If the authors claim to revise as you suggest, would you want to review the revision?
10. OPTIONAL: Does the manuscript's length match its contribution? If not, what should be "cut"?*
11. OPTIONAL: You may provide here any comments that you do not want the author(s) to receive.* (bear N.D.)

=====

Additional Sample Referee Forms - Here are some other examples of other referee forms:

HICSS'95 Minitrack on Hypermedia in Information Systems and Organizations

HICSS'96 Minitrack on Hypermedia Research

http://bear.cba.ufl.edu/centers/mks/marketing%20science/link02_Revised.pdf

Next is the actual letter and review form that were used by editors and reviewers for NCPEA CONNEXIONS

NCPEA CONNEXIONS SUBMISSION REVIEW FORM

Dear Colleague,

Thank you for serving as a *Peer Reviewer* of submissions for publication in *NCPEA CONNEXIONS*! Please read the information & follow the directions below. Return your evaluation to the domain coordinator/editor that sent this form to you. Please return by emailing this completed form to the email address given below.

PLEASE RETURN YOUR EVALUATION WITHIN TWO WEEKS OF RECEIPT!

Aim: The objective of *NCPEA CONNEXIONS* is to advance the level of knowledge regarding Research and “Best Practices” available to university professors of educational administration, providing information that will aid in the improvement of administrative practice and administrative preparation programs. See www.ncpea.net to review additional information regarding the NCPEA CONNEXIONS Project.

Criteria: The topic of submissions must have a focus on a specified Domain or Sub-Domain and a Module Type. Please judge the extent to which the submission adheres to the content of the domain and the structure and content of the Module type. Additional Submission Selection Criteria also includes: Technical Adequacy, Agreement with Theory, Contribution to Field, Significance, Originality/Innovation, User-Friendliness, Ease of Application and Readability.

Directions: Please review the submission & use your professional judgment regarding the extent to which the submission meets each of the criteria listed on the rating sheet given below. After giving your ratings on the review form, give your recommendation regarding whether the article should be included in *NCPEA CONNEXIONS* or not. Provide supporting comments for your choice.

Note to reviewers: Some manuscripts may not conform to some of the criteria but may make a significant contribution to the profession. Please use your judgment in applying the criteria. If needed, please attach additional comments in the space below.

Reviewer:

Submission Number: #18

Reviewer E-mail:

Domain: Site-Based Leadership

Date sent: 6/12/2006

Module Type: Key theories & ideas

Please return within two weeks from the date received.

Manuscript Title: Making Literacy the Priority: Things Secondary Principals Should Know and Do

Part 1: *Submission Evaluation:*

Please rate the submission using this 5-point Likert Scale, where “1” indicates that the submission does not meet that criterion at all, and a “5” indicates completely meeting that criterion. Use notes as needed.

Item	1	2	3	4	5	Comments & Notes:
Extent it is appropriate for the selected domain						
Extent it adheres to the guidelines for the selected Module type						
Technical Adequacy						
Agreement with theory						
Contribution to Profession						
Significance for policy and practice						
Originality/Innovation						
Readability						
User-friendliness						
Ease of Application						
Overall Quality						

Part 2 - *Overall Recommendation:*

Should this submission be accepted for publication in NCPEA CONNEXIONS?

_____ Accept

_____ Accept with minor revisions (give specific suggestions in comments below)

_____ Accept with major revisions & resubmission (give specific suggestions in comments below)

_____ Reject (give specific reasons in comments below)

Reviewer Comments:

Please return this Evaluation Form within two weeks of receipt to:

Thank you! We appreciate your efforts and please know that you will be listed in the NCPEA CONNEXIONS as a Reviewer.

PART 3. ADVICE TO A PEER REVIEWER

I. INTRODUCTION TO THE REVIEW PROCESS

Good peer reviewers play a crucial part in the advancement of a profession and are highly valued by journal editors, conference organizers and funding bodies. The essential goal of the peer review process is to maximize the quality of published research in a field of scholarly inquiry. A reviewer has obligations to three audiences: (a) the editor of the journal, (b) the author(s) of the paper, and (c) scholars and practitioners in the profession. (NCFR, 2004).

The editor of the journal relies on reviewers to be thorough, prompt, and fair. The editor expects to be provided with detailed but concise assessments of manuscript quality; a clear recommendation about whether the paper should be rejected, revised, or accepted; and feedback to authors that will be helpful in crafting a revision (or submission to another journal). The editor expects reviewers to extend their expertise--not every article sent for review will be squarely within primary area of specialization of the reviewer. (NCFR, 2004)

The authors rely on reviewers to be constructive, reasoned, explicit, and ethical. A submitted manuscript is confidential: Do not discuss it; do not copy it; do not quote it. Identify both the strengths and the weaknesses of the paper. When serving as a reviewer, be aware of your biases or preferences. Do not be superficial or dismissive. Focus on those limitations that are serious threats to the internal and external validity of the study. Think of yourself as an unpaid consultant to the authors. Consider how you can help them to improve their study and write in this spirit of constructive criticism. Above all remember the golden rule of reviewing: Do unto these authors as you would have them do unto you as an author. (NCFR, 2004)

Other scholars and practitioners rely on reviewers to maximize the quality of research published in their field. Journals are perhaps the single most important vehicle for dissemination of research findings. As a reviewer, you are helping to set the standard for quality. You have the opportunity to advance the quality of research in your field, to update your awareness of current research, and to learn new knowledge and skills. Being a manuscript reviewer is one of the best and most effective ways to continue your own education as a scholar. (NCFR, 2004)

From the perspective of both the editor and author, a perfect reviewer is rapid, impartial, and constructive (McCrary, N.D.). Unless you are already on a review board, being asked to review a paper is one of the most difficult tasks to face an academician. Few if any academicians have formal training or guidance in this area, and when a paper lands on our desks with a kindly note from the editor our first response is often one of horror, something akin to a visitation of the Black Death. Questions that usually spring to mind are: why me? And why didn't they cover this in my degree coursework? Once the shock wears off, the opportunity to review manuscripts can actually be a positive process both for the authors and the reviewer. For an experienced academician, being asked to review a manuscript should be an exciting proposition. To be selected for this role through professional respect in a particular field is an intoxicating mix. Although it may be a time burden, it is also a rite of passage in academia.

What then is the process of review and how can we improve our skills in this area? The following sections give guidance.

II. STEPS IN THE REVIEW PROCESS

Once the manuscript has been assessed through the editor's pre-review, a decision is made by the editor regarding who should be asked to serve as reviewers. Generally three reviewers are used for each paper or review for reasons that are outlined below. The reviewers are selected from various sources: authors' suggestions, the journal's reviewer database, and searches of similar recent articles, assistant editor advice, or known experts. When the paper is sent to the reviewer, it is usually a "blind" copy with no author names/institutional information provided. This is an attempt to make the process as fair as possible. A paper should be rightly judged on its merits; not on who wrote it! There are exceptional occasions when a paper needs author identification in order to be accurately assessed. A reviewer would have to make a fairly persuasive argument for the identity of the author to be revealed. (bmjournal, 2002)

Reviewers are then solicited by email to ascertain their availability for reviewing a particular paper. If they are available and willing, the manuscript is then sent to them either by mail or email. With manuscript tracking software, a prospective reviewer may receive the request along with the manuscript abstract to make a decision about their availability. Once the reviewers agree, the full paper is forwarded to them electronically.

It is generally the aim to turn around reviewer comments in a 2-4 week time frame. As can be readily appreciated, this is not always possible given the demands on academicians' time. This may be a particular problem in highly specialized areas of research where relatively few "experts" exist. Nevertheless, email reminders are initiated at pre-set standard times to attempt to achieve this deadline.

Once the reviewers' comments are known, the authors are notified. It is rare for a paper to be accepted without revisions. Those who publish regularly will realize that manuscript rejection is a normal part of the publishing process. Most of the papers require an extensive revision and resubmission, which requires the authors to revise the paper as suggested by the reviewers, and then the resubmitted manuscript goes back to the original reviewers for further assessment. In some cases, three or four major revisions are required to get a paper into a publishable shape. When this happens, the process may become protracted over many months. If the reviewers' suggestions are "minor"—for example, typographical errors—then the editor can notify the authors that their paper can be "accepted, pending revisions". Clearly the more timely the authors' responses to suggested revisions, the faster the publishing process.

The advent of electronic paper submission, electronic manuscript tracking and online reviews could help to minimize processing delays that occur during communication between the Journal, reviewers, and authors. If major debate occurs between the reviewers and the authors, we often use an impartial reviewer or "ombudsman" to determine the outcome of the paper. Fortunately this is rarely required, and most authors see the review as enhancing the final paper rather than a negative process. (bmjournal, 2002)

III. GUIDELINES FOR REVIEWING (NCFR, 2004)

“Here are nine things you should consider as you examine the manuscript and write your review:

1. Look for the "intellectual plot-line" of the article. You can do this from first skimming through the manuscript and then giving it a once-over read. As you do this, ask the five major questions that are central to the research review process:

What do the researchers want to find out?

Why is that important to investigate or understand?

How are the researchers investigating this? Are their research methods appropriate and adequate to the task?

What do they claim to have found out? Are the findings clearly stated?

How does this advance knowledge in the field? How well do the researchers place their findings within the context of ongoing scholarly inquiry about this topic?

Look at the organization of the article. Can you find answers to the above questions quickly and easily? Can you trace the logic of investigation consistently from the opening paragraphs to the conclusion?

Then go back to the opening paragraphs of the article. Are the research questions specifically stated? Is it clear what the authors want to find out? Do they make the case that this is an important area for research inquiry?

2. The next section is usually a review of the existing research literature on this topic. Do the authors present a convincing line of argument here--or does it appear that they are just name-dropping (citing sources that may be important, without a clear underlying logic for how they may be important)? Do the authors focus on ideas, or merely on discrete facts or findings? Have they given sufficient attention to theory--the cumulative attempts at prior explanations for the questions they are investigating? Are the research questions or hypotheses clearly derivative of the theory and the literature review? In short: How well do the authors set the stage for the research problem they are reporting?

3. The methods and procedures section is usually next; and this is where neophyte reviewers often start (unwisely) to sharpen their knives. The selection of methods by which the researchers collect data always involve compromises, and there are few studies that cannot be criticized for errors of commission or omission in terms of textbook criteria for research design and data collection procedures. You could focus on three questions here:

a. Do the authors clearly describe their research strategies? Do they present sufficient detail about the sample from which they have collected data; the operationalization of measures they have attempted to employ; and the adequacy of these measures in terms of external and internal validity? In addition, there should be no surprises here. The measures should be clearly matched to the research questions or the hypotheses.

b. Are their choices of methods adequate to find out what they want to find out in this

study? Would other methods provide a substantial improvement; if so, would employing these methods be feasible or practical?

c. Do they provide some justification for the methods they have chosen? Does this appear to be adequate?

4. The section presenting research results is surely the heart of the article--though not its soul (which the reader should find in the opening paragraphs and in the discussion section). Reviewers might consider four questions here:

a. Does the results section tell a story--taking the reader from the research questions posed earlier to their answers in the data? Is the logic clear?

b. Are the tables and figures clear and succinct? Can they be "read" easily for major findings by themselves, or should there be additional information provided? Are the authors' tables consistent with the format of currently accepted norms regarding data presentation?

c. Do the authors present too many tables or figures in the form of undigested findings? Are all of them necessary in order to tell the story of this research inquiry; or can some be combined? Remember that tables and figures are very expensive (from the standpoint of the journal) and that undigested data obscure rather than advance the cumulative development of knowledge in a field.

d. Are the results presented both statistically and substantively meaningful? Have the authors stayed within the bounds of the results their data will support?

5. The discussion section is where the authors can give flight to their findings, so that they soar into the heights of cumulative knowledge development about this topic--or crash into the depths of their CV's, with few other scholars ever citing their findings. Of course few research reports will ever be cited as cornerstones to the development of knowledge about any topic; but your review should encourage authors to aspire to these heights. Consider the following as you evaluate their discussion section:

a. Do the authors present a concise and accurate summary of their major findings here? Does their interpretation fairly represent the data as presented earlier in the article?

b. Do they attempt to integrate these findings in the context of a broader scholarly debate about these issues? Specifically: Do they integrate their findings with the research literature they presented earlier in their article--do they bring the findings back to the previous literature reviewed?

c. Have they gone beyond presenting facts--data--and made an effort to present explanations--understanding? Have they responded to the conceptual or theoretical problems that were raised in the introduction? This is how theory is developed.

6. Do the authors thoughtfully address the limitations of their study?

7. The writing style is important. Consider the three guidelines for successful communication--to be clear, concise, and correct---and whether the authors have achieved it:

a. Is the writing clear? Do the authors communicate their ideas using direct, straightforward, and unambiguous words and phrases? Have they avoided jargon (statistical or conceptual) that would interfere with the communication of their procedures or ideas?

b. Is the writing concise? Are too many words or paragraphs or sections used to present what could be communicated more simply?

c. Is the writing correct? Too many promising scientists have only a rudimentary grasp of grammar and punctuation that result in meandering commas, clauses in complex sentences that are struggling to find their verbs and adjectives or even nouns that remain quite ambiguous about their antecedents in the sentence. These are not merely technical issues of grammar to be somehow dealt with by a copy-editor down the line. Rather they involve the successful communication of a set of ideas to an audience; and this is the basis of scholarship today.

8. Your recommendation to the editor: Should this paper be (a) rejected for this journal? (b) or does it show sufficient promise for revision, in ways that you have clearly demonstrated in your review, to encourage the authors to invest weeks and months in revision for this journal?

9. Your bottom-line advice to the editor is crucial. Make a decision; state it clearly (in your confidential remarks to the editor on the page provided). Some reasons to reject a manuscript include: (a) The research questions have already been addressed in prior studies; (b) the data have been collected in such a way as to preclude useful investigation; (c) the manuscript is not ready for publication--incomplete, improper format, or error-ridden." (NCFR, 2004)

Most rejected articles do find a home in other journals. Don't tease authors with hopes for publication in this Journal if you feel it is not likely.

How is the author's writing style? Is it too "dense" to make sense? Does it keep the reader's interest? Is it too informal? Note that an informal style in itself sometimes is very effective in getting a paper's ideas across. Similarly, many authors use humor very effectively in research papers. Only if the informality or humor gets in the way, should it be discouraged. (On the other hand, there are certain fields which enforce very formal writing styles, in which an informal style is deemed inappropriate.) (Bieber, N.D.).

Whether to Have Reviewers Correct Grammar and Spelling

Proofreading includes checking for correct grammar, correct spelling and overall, that a paper "reads well." Spelling checkers may check neither grammar nor comprehension. Authors should have enough respect for the reviewers and the editors to submit a paper which has been thoroughly proofread. Authors who are not native English speakers (or whatever language the

forum allows) are responsible for ensuring that their submission is of the quality a native speaker would submit, even if they must pay someone to help in the editing process.

Nevertheless, as a reviewer you will often find small spelling or grammatical mistakes the author has overlooked (e.g., a typo within a correction made after employing a spell-checker). And of course you may be able to suggest better ways to phrase certain passages in the paper. In all these cases, it is up to you to decide the extent to which you edit the paper. You may decide to correct the first couple of pages, or the first couple of cases of a recurring problem. If the paper requires major corrections and you know a later draft will be reviewed again, you may suggest the author undertakes such proofreading as part of the revision process. (Bieber N.D.)

IV. RESPONSIBILITIES AND RIGHTS OF PEER REVIEWERS

Reviewer Responsibilities (NCFR, 2004)

“Reviewers are obliged to treat the author and the manuscript with respect. When reviewers have a bias against the researchers or the research, they must recuse themselves. When they have a conflict of interest with the research or its sponsors, they must make it known to the editors or recuse themselves.

Reviewers should provide an honest and constructive assessment of the value of the manuscript. An appropriate assessment includes an analysis of the strengths and weaknesses of the study; suggestions on how to make the manuscript more complete, relevant, and readable; and specific questions for the authors to address to make any revision of the manuscript acceptable and useful to the intended audience. Whenever possible, complete citations should be provided for important work that has been omitted.

Reviewers must maintain confidentiality about the manuscripts they review. Using the data from such manuscripts before they are published is inappropriate. Sharing the data with colleagues is equally inappropriate, as is reproducing the manuscript for any purpose. If reviewers wish to use information from a manuscript that has been accepted for publication, they should ask the Editor to contact the author(s) for permission.

Reviewers must not use the peer-review process as a means to further their own research aims, specifically by requiring authors to respond to questions that are interesting to the reviewers but that the study was not designed to answer or by suggesting that the editor reject work that contradicts or is in conflict with their own. Reviewers must also not use the peer-review process or recommend acceptance simply to further the careers of their students or colleagues.

Reviewers who receive invitations to review manuscripts with which they have a clear conflict of interest should decline the invitation and reveal the specific conflict of interest.

Conflicts of interest can be defined as sets of conditions (such as academic competition or particular philosophic values and beliefs) that could result in a biased or unfair evaluation of the manuscript. The Editor may deliberately choose a reviewer with a known stance on a particular issue in order to obtain a balanced review of the manuscript. Reviewers who have any questions in this regard should consult with the Editor.

Reviewers who have reviewed a manuscript before for another journal should inform the Editor before they complete the review. The Editor can then decide whether a re-review is appropriate.

Unless appropriate, reviewers should resist the temptation to use their reviews as an opportunity to suggest that their own published work be referenced.

Reviewers who receive a request to review a manuscript and cannot do so within the specified time period should decline the request.

Board members/reviewers are expected to complete 4 to 8 reviews annually and to do so in a timely manner. Those who consistently decline to complete reviews or who do not complete them on time, unless discussed with the editor, will be asked to leave the Board.

Reviewers who agree to review a manuscript must complete their reviews within the specified time period. If it becomes impossible to complete the review on time, reviewers should so inform the editorial office and ask for guidance about whether to decline to review the manuscript or to take an additional specified period of time.

“All reviews of board members and reviewers are scored on both timeliness and quality. High quality and timely reviews are essential to the Journal’s goal of publishing high quality work in a timely manner. Reviewers who complete high quality reviews in a timely manner are providing an essential service to the field and to the Journal, and they are likely to be asked to review again.” (NCFR, 2004)

Reviewer Rights (NCFR, 2004)

“Reviewers can expect to be informed of the Editor’s decision regarding manuscripts they reviewed for the Journal.

Reviewers can expect to receive the comments of the other reviewers for their edification.

Reviewers can expect to be thanked for the time they take to review manuscripts. A list of the members of the Editorial Board and Review Board will be published in each issue of the Journal. Ad hoc reviewers will be identified in a list of occasional reviewers published in the last issue of the publication year.” (NCFR, 2004)

V. THE PERFECT REVIEW

From the perspective of both the editor and author, a perfect review is rapid, impartial, and constructive. It should be an educative process for the author and result in an unambiguous recommendation for the editor. (bmjjournal, 2002; McCrory, N.D.)

The Reviewer as "Gatekeeper"

Some reviewers often see themselves as a "gatekeeper", trying to hold back the process by which authors seek to be published. Their comments may be based upon a self-determined level of quality for the journal. Such "hawks" often simply produce a list of negative comments. In many cases, although it provides the editor with a firm opinion, the review offers nothing to an author who may seek to improve his or her research or scientific writing. (McCrory, N.D.)

A good review is supportive, constructive, thoughtful, and fair. It identifies both strengths and weaknesses, and offers concrete suggestions for improvements. It acknowledges the reviewer's biases where appropriate, and justifies the reviewer's conclusions. (NCFR 2004) A bad review is superficial, nasty, petty, self-serving, or arrogant. It indulges the reviewer's biases with no justification. It focuses exclusively on weaknesses and offers no specific suggestions for improvement. (NCFR 2004) It is far more useful to make suggestions on how to improve the paper to enable the authors to understand the problems than to savage the paper in an uncompromising fashion. (McCrory, N.D.)

The truly obsessive reviewer not only carries out their own research or review of the literature, but also reanalyzes the authors' data and comments on the appropriateness of the conclusions drawn from this information. Unfortunately this is an extraordinarily rare and somewhat frightening phenomenon. (McCrory, N.D.)

One of the concerns in journal publishing is the fear of duplicate or redundant publications. A reviewer who is familiar with the topic under scrutiny is often familiar with similar publications that may need closer inspection. It is a good habit for a diligent reviewer to carry out a search of the topic or the authors' other publications to assist in this process. In many good reviews, the comments are not only constructive but they also point out recent research that may have been missed by the authors.

Examples of review comments of limited usefulness:

"I reviewed the submitted paper and started my list of deficiencies. After two pages I began to realize that there was no part of the manuscript that meets reasonable standards in terms of science, logic and even English expression". Such a damning response leaves the author little to go on (McCrory, N.D.).

"I find the paper totally non-contributory to any aspect of educational administration and not worthy of publication". In some cases, the entire review is a single derogatory sentence. To the journal (as well as the author), such a review is not worth the paper it is written on. Generally, such reviewers should not get asked to review further manuscripts.

This problem may relate to academicians' lack of training in this area. To be asked to review a paper for the first time is a little unnerving and the role as a reviewer is often unclear. Inexperienced reviewers feel the need to be excessively critical to try to justify their selection by demonstrating their academic teeth. Nothing could be further from the truth. If a paper is worth damning, then it should be rejected. It is the manner or style in which this is done that becomes the key element. Problems can be identified along with suggestions on how these may be overcome in the future. Some of the best express the reviewer's difficulties in assessing the paper. (McCrary, N.D.).

Don't allow the best to be the enemy of the good. The study may not be perfect but it may be the best that can be achieved under the circumstances. If the data are important but the study is flawed, it may still be useful to publish the paper. The authors should be asked to acknowledge any weaknesses in their study and the journal may wish to commission a commentary using the paper to highlight problems as a lesson in research methodology. (McCrary, N.D.)

You (the reviewer) can write the editor a separate, confidential, note if you wish. Be sure to mark it "confidential" so the editor doesn't forward it by mistake. Many refereeing forms have a specific area for confidential comments for the editor. Do not feel obligated to write things to the editor that you do not share with the authors. In general authors benefit from as much as you can tell them. (Bieber, N.D.)

In one superb review, the reviewer stated that he "agonized" over the manuscript and then attempted to annotate and rewrite much of the paper in order to show the authors how he thought it should be written. Although the paper was rejected, I am confident that the authors came away from that process empowered to improve their paper in a positive light. (McCrary, N.D.).

Reviewers need to remember that the review process is part of the wider education of an author. When academicians begin a research career, scientific writing is often the most difficult skill to develop. A good research knowledgeable supervisor or mentor can assist this process, but the process of publication helps us to refine these skills further, and good quality reviews are the key. (McCrary, N.D.)

To be a good journal reviewer is an educative process in many ways similar to that of the development of an author. A widely published author generally has experience of good and bad review comments and should be able to provide a fair and appropriate manuscript review. Nevertheless, reviewers need to hone their skills and perhaps their contributions need to be formally assessed to enable them to improve their future contributions. All journals attempt to make this process as fair and impartial as possible, but the vagaries of individual reviewers often surprise even experienced editors. (McCrary, N.D.)

The perfect reviewer provides the journal with rapid review turnaround, detailed analysis, helpful comments, an assessment of the current literature in this area, and an unambiguous recommendation. For the author, the reviewer should provide a constructive analysis of the paper, with a Medline review of any recent work omitted, and clear

recommendations on how the paper may be improved. Although guidelines may be suggested, finding perfect reviewers is difficult. (McCrary, N.D.)

“An article or journal that fulfils the following criteria (or at least the majority of them) can be considered as a quality article or journal, though it should obviously also meet other criteria related to formal and stylistic aspects.

1. Contributes surprising results that make sense in some theoretical context.
2. Contributes results of great theoretical or practical importance.
3. The ideas discussed are novel and interesting, and can give rise to a new approach to an old problem.
4. The interpretation made of the results is unequivocal.
5. Creates a new and simpler framework for results that were previously conceived within a more complex and convoluted framework.
6. Discredits previous ideas that appeared unquestionable.
7. Presents research involving an especially ingenious or novel paradigm.
8. The study has sufficient internal validity, thanks to appropriate design and methodology.
9. The study has sufficient external validity, given that the results and/or theory presented are generalizable.
10. The report provides an adequate description of the method and procedure so that other researchers can replicate them.
11. Theoretical or practical results have a high degree of implementation.
12. The study presents theoretical or practical results that are useful to society.” (Buela-Casal, 2004)

VI. *HOW TO SURVIVE YOUR EXPERIENCE AS A PEER REVIEWER*

If you feel that you are unable to serve as a reviewer, “suggest alternative reviewers if you can. Finding the right reviewers is one of the most difficult aspects of editorial peer review, so most editors will thank you for this.

If you agree to review, let the journal know and confirm the deadline. Ask for any additional information. If you are not familiar with the journal, ask the editorial office to send you a copy, and a copy of the instructions to authors. The journal is likely to provide you with some forms to complete, and some instructions for reviewers. Read these before embarking on your review.

Having agreed to review the manuscript, do everything you can to submit your report on time. If circumstances change and you are unable to review the paper on time, let the journal know as soon as possible.

Keep it confidential. While under review, the manuscript is a confidential document. Don't discuss it with others without prior permission from the journal. After reviewing the manuscript, return it to the journal or destroy it. Don't keep copies.

Don't contact the authors except with the journal's permission. Even journals that have an open reviewing policy may prefer to keep the reviewers' identities hidden until a decision on the manuscript has been reached. Most journals like to mediate between reviewers and authors rather than have them discussing things among themselves.

Do as you would be done by. Aim to be as objective, constructive, conscientious, and systematic as possible. These attributes separate the best reviewers from the rest.” (Psicothema 2003)

REFERENCES

- APA.ORG. (N.D). Surviving and Thriving in Academia, a joint publication of the Committee on Women in Psychology and APA Commission on Ethnic Minority Recruitment, Retention, and Training in Psychology, Retrieved from, <http://www.apa.org/pi/oema/surviving/research.html>
- Bengtson, V. L. & MacDermid, S. M. (N.D.). How to Review a Journal Article: Suggestions for First-Time Reviewers and Reminders for Seasoned Experts This document is adapted from a Council on Scientific Editors Editorial Policy Statement appearing in *Science*, 25(6) Page #s.
- Bieber, M. (N.D.). <http://web.njit.edu/~bieber/review.html> IS Department New Jersey Institute of Technology. Bogdan, R. C. & Biklen, S. K.. (1998) *Qualitative research for education: an introduction to theory and methods*. (3rd ed.). Boston: Allyn and Bacon., (LB 1028 B67 1998 EDUC c.1-3)
- Buela-Casal, G. (2004) Assessing the Quality of Articles and Scientific Journals: Proposal for Weighted Impact Factor and a Quality Index, *Psychology in Spain*, Vol. 8. No 1, 60-76
- Eichler, M. (1991). *Nonsexist research methods: a practical guide*. New York: Routledge., (H 62 E345 1991 HSS c.1)
- Epstein, S. (1995). What can be done to improve the journal review process? *American Psychologist*, 50, 883 - 884.
- (Faccioni N.D.) <http://www.faccioni.com/CITlectures/reviewarticle.PDF>. (N.D.). Retrieved from <http://www.google.com/search?q=cache:2nXkM8St8J4J:www.faccioni.com/CITlecture/s/reviewarticle.PDF+%22How+to+review+an+article%22&hl=en&ie=UTF-8>
- Hart, C.. *Doing a literature review: Releasing the social science research imagination*. London: Sage, 1998. (H62 H37 1998 EDUC c.1)
- Hanna, S. (1996). The editor's role; The editor's vision. *Financial Counseling and Planning*, 4(Vol#), 1-4. as Retrieved from <http://hec.osu.edu/people/shanna/editor93.htm>
- Hanna, S. (1996). The editor's role; The editor's vision. *Financial Counseling and Planning*, 4, 1-4.
- Hittleman, D. R. & Simon, A. J. (2002). *Interpreting educational research: An introduction for consumers of research*. (3rd ed.). Upper Saddle River, NJ: Merrill.(LB 1028 H537 2002 EDUC c.1-2)

<http://bjsm.bmjournals.com/cgi/content/full/36/2/80>

http://www.ncfr.com/jmf/review_journal_howto.htm

http://www.ncfr.com/jmf/guidelines_reviewers.htm

(11-20-02) http://www.ncfr.com/jmf/apastyle_guide.htm

<http://www.ncfr.com/jmf/>

<http://trent.library.ualberta.ca/ualib/guides/criticalreviews/index.cfm>
(11-4-03) http://www.bmjpg.com/chapters/0727916866_sample.pdf

http://ascb.org/news/vol25no5/ie/May-02_18.html

<http://www.hec.ohio-state.edu/hanna/editor93.htm>

(10-31-02) <http://aera.net/epubs/howtopub/writing13.htm>

(6-19-03) <http://www-lec.njit.edu/~bieber/review.htm>

<http://archpedi.highwire.org/cgi/content/abstract/156/5/474>
(1-26-04) http://ascb.org/news/vol25no5/ie/May-02_17.htm

<http://www.psicothema.com/psicothema.asp?id=400>
(11-5-02) <http://aera.net/epubs/howtopub/writing11.htm>

<http://bear.cba.ufl.edu/centers/MKS/forms/evaluationform.txt>
http://www.ncfr.com/jmf/edit_review.htm

<http://www.advancement.uh.edu/editorialstyle/pages/h.html>

http://archsurg.highwire.org/cgi/collection/journalology_peer_review_authorship?notjournal=archsurg.amajnl&page=10

<http://www.cambridgecollege.edu/student/upload/ILP%20hbk%206-03doc.pdf>

<http://www.ric.edu/socwk/pdf/BSW%20On-line%20Manual%202003.pdf>

(11-8-03) <http://www.istis.unomaha.edu/cmit/WITStatus.htm>

<http://www.transfinitum.net/nataliesolent/>

<http://www.journalismcareers.com/articles/proofreadingsymbols.shtml>

<http://www.aera.net/epubs/howtopub/writing12.htm>

<http://faccioni.com/CITlectures/reviewarticle.PDF>

<http://www.newforums.com/pdf%20files/authors%20guidelines.pdf>

Katzer, J.; Cook, K. H., & Crouch, W. W. (1998). *Evaluating information: a guide for users of social science research*. (4th ed.). Boston: McGraw-Hill. (H 62 K19 1998 HSS c.1)

Klassen, T.P. et. al. (N.D.). Abstracts of randomized controlled trials presented at the society for pediatric research meeting: an example of publication bias.

León, O.G. & Montero, I. (1997). *Diseño de investigaciones*. Madrid: McGraw Hill.

Meier, A. (1992) How to Review a Technical Paper Retrieved from
<http://eetd.lbl.gov/EA/Buildings/ALAN/PUBLICATIONS/how.to.review.html>

Matkin, R., & Riggat, T. F. (1991) *Persist and publish*. University Press of Colorado. Figure 6.4, p. 80

Montero, I. & León, O.G. (2001). Usos y costumbres metodológicas en la Psicología española: un análisis a través de la vida de Psicothema (1990-1999). *Psicothema*, 13, 671-677.

Montero, I. & León, O.G. (2002). Clasificación y descripción de las metodologías de investigación en Psicología. *Revista Internacional de Psicología Clínica y de la Salud/International Journal of Clinical Psychology and Health*, 2(vol#), 503-508.

(spell it out) NCFR. (2004) http://www.ncfr.com/jmf/guidelines_reviewers.htm Journal of Marriage and Family, National Council on Family Relations, This document is adapted from a Council on Scientific Editors Editorial Policy Statement appearing in Science, Vol 25 (6). These rights and responsibilities were approved on August 12, 2004.

McCrory, P. (N.D.). To review or Not to review, Centre for Sports Medicine Research and Education and the Brain research Institute, University of Melbourne, Melbourne, Australia.

(Reviewer Instructions 2005) American Medical Association 2005. All Rights Reserved. Retrieved from
http://manuscripts.archophthalmol.com/cgiin/main.plex?form_type=display_rev_instructions

(Rivara, F. P. et. Al. N.D.) As found in <http://archpedi.ama-assn.org/cgi/content/full/156/1/11> Reviewing Manuscripts for Archives of Pediatrics & Adolescent Medicine Peter Cummings, MD, MPH; Frederick P. Rivara, MD, MPH Arch Pediatr Adolesc Med. 2002;156:11-13.

- Shashok, K. (1997). Responsabilidades compartidas en la revisión de los originales por expertos. *Revista de Neurología*, 25, 1.946-1.950.
- Sternberg, R.J. (1988). *The psychologist's. A guide to scientific writing for students and researchers*. New York: Cambridge University Press.
- Sternberg, R.J. (2001). Where was it published? *Observer*, 14, 3.
- Sternberg, R.J. (2002). On civility in reviewing. *Observer*, 15, 3, 34.
- Sternberg, R.J. (2003). There is no place for hostile review. *Revista Internacional de Psicología Clínica y de la Salud. International Journal of Clinical Psychology and*, 3, 159-161.
- Sternberg, R. & Gordeeva, T. (1996). The anatomy of impact: What makes an article influential? *Psychological Science*, 8, 69-75.
- Tripodi, T., Fellin, P. & Meyer, H. J. (1983).. *The assessment of social research*. (2nd ed.). Itasca, Ill.: FE Peacock Publishing. (HV 11 T83 1983 EDUC c.2 HSS c.1)

Organizational Innovation And Entrepreneurship In Universities

Dr Alex Maritz

Australian Graduate School of Entrepreneurship

amaritz@swin.edu.au

and

Dr. Mehdi Salaran

Australian Graduate School of Entrepreneurship

Abstract

The importance of networking in fostering entrepreneurial and innovative activities has been widely researched over the last decade. There is however limited evidence of the association between these constructs in a knowledge based environment. As universities are under constant pressure to improve the productivity of academic staff, we examine the role of social interaction in fostering entrepreneurial activities. A web-based survey is implemented, facilitated by empirical analysis using correlation and multiple regression to probe the relationship between these constructs. Whilst it can be concluded that the constructs are all multidimensional, varying relationships were identified when statistically examining the interrelations. Overall, there is a significant relationship between networking and productivity.

Entrepreneurship also portrays such significance, albeit varying between dimensions of autonomy, innovativeness, risk taking, proactiveness and competitive aggressiveness.

Keywords: networks, networking, social capital, entrepreneurship, productivity

OVERVIEW AND CONSTRUCT DEVELOPMENT

The role of social interactions and networking has been investigated increasingly in recent years as a useful resource in the form of cooperative behaviour that is engendered by the fabric of social relationships. This concept has been applied to solve many problems in societies since its appearance in the literature, with applications such as education, public health, economic development, community life, youth behaviour problems and general problems of collective actions (Fukuyama, 1995; Coleman, 1988; Loury, 1987; Portes & Sensenbrenner, 1993; Woolcock, 1998; Putnum, 1993; 1995; Zahra, Yavus & Ucbasaran 2006).

Confronted with many questions in their field of study, organizational researchers applied this concept in different areas. The range of organizational issues which have been answered by social interactions has been broad and various, including career success (Gabby & Zuckerman, 1998; Burt, 1992), executive compensation (Belliveau, O'Reilly & Wade, 1997), procuring employment (Granovetter, 1995; Lin & Dumin, 1996), producing a pool of recruits for firms (Fernandez, Castilla & Moore, 2000), product innovation (Tsai & Ghoshal, 1998) and the creation of intellectual capital (Nahapiet & Ghoshal, 1998). In this study, we examined the role of networking in fostering entrepreneurial activities in an academic context; more specifically, how social interactions and networking available to academics fosters entrepreneurial activities and therefore improves their productivity.

Appropriate to this study, we elaborate on networking and discuss how it encourages entrepreneurial and innovative activities of academic staff and their productivity. We formulated hypotheses around these research constructs and subjected the hypotheses to empirical testing based on a survey conducted in five Australian universities located in Metropolitan Melbourne. Our findings provide support for the association among appropriate networking, entrepreneurship and productivity.

This study has investigated the people base of entrepreneurship in academic institutions by focusing on social relationships. Thus, this research contributes to the advancement entrepreneurship literature by proposing that social interactions and networking may foster entrepreneurship. The study is hypothesis lead, being a result of gaps we identified in current literature and previous empirical studies. What follows is a summary of the construct literature, together with hypotheses developed around the integration of the constructs.

LITERATURE REVIEW

Networking

Networking refers to social interactions and the existence of network ties. Granovetter (1992) used the term “structural embeddedness” to refer to networks in social structures, which is concerned with the properties of the social system and the network of relations as a whole. In other words, structural dimension describes the impersonal configuration of linkages between people or social units through which participants can gain access to resources. Nahapiet and Ghoshal (1998) argued that social interactions have three facets, including network ties, which is the absence or presence of network ties; network configuration, which describes the pattern of connections which can be measured by density of interactions, connectivity and hierarchy; and appropriable organization, being integration ties that can be used for different purposes. In the context of this study, social interactions and networking of academic staff is the time that they spend in social interactions with their contacts such as colleagues, business/industry contacts and various stakeholders.

Entrepreneurship in Organizational Settings

Entrepreneurial activities in organizational context has been widely touted by researchers as an effective means for revitalizing established organizations and improving their performance and enhancing nation’s competitiveness (Morris, Kurako & Covin, 2008; Covin and Slevin, 1991; Miller, 1983; Miller and Friesen, 1982; Zahra, 1993; Zahra & et al, 1999; Sathe, 2003; Kuratko & Welch, 2004). The implicit

logic behind this pervasive belief is that the main characteristics of entrepreneurship include inclinations toward taking risk, preparedness to seize the opportunities in the market and innovating new products and services, would enable firms to respond to uncertainties in their environment (Morris et al, 2008; Miller, 1983; Zahra et al. 1999).

The characteristics of entrepreneurship in organizations have been subject of research since its early appearance in the literature. Based on extensive research by Lumpkin and Dess (1996; 2001), entrepreneurship in organizations has five dimensions: autonomy, innovativeness, risk taking, proactiveness and competitive aggressiveness. We examined these dimensions from conceptualization to empirical analysis in the literature.

In addition to the above dimensions, one of the most important facets of entrepreneurship in organizations is *self-renewal* (Bolton & Thompson, 2004; Zahra, 1999). Covin & Miles (1999) have noted that renewal refers to changing and improving the relationship with external environment. In the context of this study, academic staff that are closely connected to the world outside of the university and enhance their relationship with the target industry exhibit entrepreneurial activities.

Cognizance is taken of the term intrapreneurship, indicative of entrepreneurial personalities and orientation of employees within organizational settings. Limited to certain constraints, intrapreneurship leads to entrepreneurial activities within such settings (Morris et al, 2008).

Productivity

The increasing pressures on universities to extend their services have made them focus on improving performance. As the provider of research services, academic employees play an important role in enhancing the performance of academic institutions and contribute to the decrease of pressures on universities. In academic communities, the most critical indicator of research productivity is publication. As the physical and conventional form of academia, publishing books and journal articles is the most fundamental social processes of communicating and exchanging research findings (Wood, 1990). In academic environments, publication brings precognition and promotion for both academics and their institutions. Also, as a unique criterion for obtaining competitive research funds, publishing is an

evidence of institutional excellence. Leading universities are expending a lot of time and money in publicizing the quantity of their number of books and articles. To this extent, we do not negate research income from competitive grants, but place emphasis on the link between productivity and research.

Association between Networks and Entrepreneurship

Empirical studies indicate that social interaction plays an important role in facilitating innovation and creativity (Ruef, 2002; Tsai & Ghoshal, 1998; Gabby & Zuckerman, 1998; Hansen, 1998). Network theorists have examined the association between access to networks and developing new ideas and creativity. For example, Burt (2004) noted that good ideas or alternative ways of thinking and behaving are disproportionately in the hands of people whose networks span structural inadequacies. Ruef (2002) examined the role of network ties in inducing conformity and sustaining trust, as well as novel ideas. He argues that people that are connected to groups beyond their own can expect to find themselves delivering valuable ideas, seeming to be gifted with creativity. Generally speaking, the propensity among entrepreneurs toward innovation is seen to be a function of the types of social relationships that those entrepreneurs have. There are empirical and theoretical studies that indicate the association between of social interaction and risk taking (Ouchi, 1979; Nahapiet & Ghoshal, 1996; Ring & Van de Ven, 1992).

Social communication results in proactiveness by helping in the detection and identification of environmental threats and opportunities as well as in taking action to exploit or neutralize environmental uncertainty (Kohli & Jaworski, 1990). Social communication makes it easier for organizational participants to transfer knowledge (Noanka, 1994). Utilizing social interaction within organizational contexts not only benefits participants but organizations will in addition gain advantage by reducing expenditure and timely response to environmental needs and demands.

Our two hypotheses were developed around these constructs:

H1: There is a positive relationship between networking and entrepreneurship

H2: There is a positive relationship between innovation and productivity.

Social relationships between people can improve the productivity of macro and micro identities. The association between social interactions and productivity has been the subject of focus of national and organizational level. Knack and Keefer (1997) provide empirical evidence that shows social interaction matters for measurable economic performance, using indicators of trust and civic norms from the World Values Surveys for a sample of 29 market economies. Putnum (1993) has argued that membership in formal groups is associated with efficiency and effectiveness at a national level.

Theoretically, there have been extensive arguments about the relationship between performance and entrepreneurship in organizations (Zahra, 1991; Covin & Slevin, 1991). However, few scholars examined this association empirically (Covin, 1991; Covin & Slevin, 1989; Zahra; Covin & Zhara, 1998; Zahra, 1996; Zahra, 1993). Most of these studies examined the association between entrepreneurship and the financial aspects of performance in the private sector. There is limited research among these constructs in the non-profit and social entrepreneurship sectors. Intrapreneurship activities in academic institutions however do not infer that academics are entrepreneurial within the business sense.

METHODS

The sampling frame of this study consisted of full time academic staff at universities in metropolitan Melbourne. The statistic population of 5695 academic staff embraced various levels of academic positions, ranging from Lecturer to Professor. Data was collected via electronic media, whereby academic staff were encouraged to participate in an online questionnaire via an email hyperlink. The online and electronic media survey approach as amplified by Dillman (2000) was adapted for the study. The questionnaire was designed as an integration of the constructs, using a variety of techniques and structures. We enhance the research methodology with a discussion of dependent and independent variables.

Dependant variables consisted of productivity and entrepreneurship. Since the purpose of the study was to decrease the output pressures on universities, productivity was the dependent variable. An index of research productivity (IP) was defined as the five sum of (3* the number of single or multi-author books) + (the number of papers published in refereed journals) + (the number of edited books) + (the number of chapters in refereed books). This index of productivity, like all others that attempt to provide a single measure of quantity of output that is applicable across different disciplines, is imperfect. It is, however, consistent with the more advanced measure reviewed by previous authors (Wood, 1990; Ramsden, 1994).

Independent variables consisted of networks and entrepreneurship. The network section comprised frequency of communications in a defined setting. The construct of entrepreneurship has been considered as a dependent and independent variable. The scale of entrepreneurship included operationalized innovativeness, risk-taking and proactiveness, self renewal. However, to adopt it into academic context, 18 items were developed and 7 items already in the literature were reconceptualised. Therefore, the questionnaire for the construct has 25 items. All questions measured these dimensions on a 5-point Likert scale.

The characteristics of the statistical sample such as gender, age, and experience in the field of study, experience in their institutions, function and position have served as *control variables*. One way analysis of variance (ANOVA) was used to examine statistically significant differences among groups classified by social interactions, entrepreneurship and productivity. Hierarchical and multiple regression techniques were implemented to test the hypotheses identified in the previous section.

RESULTS

To predict productivity, multiple regression analysis was undertaken. Two variables, including innovativeness and frequency of communication as independent variables and productivity as dependent variables are present in the model. This analysis has resulted in an equation with two independent variables and intercept. The other research constructs served as

independent variables and productivity as a dependent variable. The beta coefficients in the model indicate that each independent variable contributes to a predicted variable.

A standard multiple regression was performed between productivity as the dependent variable and networking and innovativeness as independent variables. Table 1 indicates the correlation between the variables, the unstandardized regression coefficients (B) and intercept, the standardized regression coefficients (beta), rs square, R square and adjusted R square. R for regression was significantly different from zero, $F(2, 206) = 20.523, p < 0.001$. For the two regression coefficients that differed significantly from zero, 95 % confidence intervals were calculated. The confidence limits for frequency of interactions (networking) were 0.221 to 1.692 and those limits for innovativeness were 1.046 to 2.262. These two independent variables contributed significantly to prediction of productivity as innovativeness 0.14 (rs Square) and frequency of interactions 0.027 (rs Square). The two variables in combination contributed another 0.113 in shared variability of the dependent variable. Altogether, 16.6 % of the variability of productivity was predicted by knowing the scores on these two variables.

[Insert Table 1 here]

To determine which of the variables in the model contributed to the prediction of the dependent variable, beta coefficients were inspected. Beta coefficients in Table 1 provide information regarding the level of contribution of each independent variable in predicting dependent variable. As the standardized coefficients column portrays, the largest beta coefficient is 0.346 which is for innovativeness. This means that this variable makes the strongest unique contribution to explaining the dependent variable. The beta value for frequency of communication is (0.165) indicating that it made less of a contribution. These two values are

coefficients for the variables in the equation. Therefore, there are two independent variables available to predict the dependent variable, productivity (PROD). To predict the academic staff productivity score, the available independent variable scores are multiplied by their respective regression coefficients. The coefficient-by-score products are summed and added to the intercept, or base line, value (A). Thus, the multivariate equation to predict productivity is as follows:

$$\text{Predicted productivity (Z)} = - 31.9 + 0.346 (Z1) \text{ Innovativeness} + 0.165 (Z2) \text{ Communication}$$

Hierarchical regression was employed to determine the combination effect of age, experience in the field of study, and experience in the institution.

[Insert Table 2 here]

To determine the combined effect of age, experience in the field of study and experience in the institution on the equation, sequential regression was employed. As Table 2 indicates, there are two Models. Model 1 refers to the first block of variables that was entered (Age, Experience in the Field of Study and Experience in the Institution), while Model 2 includes all the variables that were entered in both blocks (Innovativeness, Networking Age, Experience in the Field of Study and Experience in the Institution). In Model 1, the R square value after all control variables have been entered, the overall Model explains 3 % of the variance. After block 2 also has been included, the Model as a whole explains 19 % of the variance.

Furthermore, rs square value in Model 2 is 0.161 which explains 16 % of variance in the performance even when the effect of age, experience in the field of study and experience in the institution is statistically controlled. This is a significant contribution as indicated by the Sig, F change for this Model, with $F(5, 203) = 9.513$. Scanning the Sig. column for all independent variables, there are two variables that make a statistically significant contribution (less than 0.01

and 0.05). In order of importance they are innovativeness (beta = 0.352) and networking (beta = 0.145). Therefore, age, experience in the field of study and the experience in the institution did not make a unique contribution.

DISCUSSION

The findings indicate a strong and significant relationship between networking with other research constructs. The results signify a significant relationship between frequency of interactions (networking) and innovativeness, renewal and entrepreneurship after controlling for possible effects from other variables. The role of networking in fostering innovation and developing new ideas has been the focus of study in recent times (Burt, 2004; Ruef, 2002) and findings support this notion.

The benefit of access to networks in utilizing opportunities toward enhancing linkages between performance and entrepreneurship has been reflected in the literature (Burt, 2000; Adler & Kwon, 2002; Zahra, 1996; Lumpkin & Dess, 1996; Kuratko, 2005). The results have confirmed that productivity has a positive and moderately strong relationship with intrapreneurship. In the academic context, it indicates that those who have higher productivity scores have corresponding higher entrepreneurship scores. In general, consistent with literature in the field, strong relationships between entrepreneurship and performance have been acknowledged.

The results of regression analysis identified more parsimonies and complex conclusions. The predictability of productivity and entrepreneurship has been evaluated. Regarding the importance of improving the productivity of academic staff for academic institutions the equation for predicting productivity as dependent variables and independent variables was developed. Networking (frequency of communications) and innovativeness predict productivity as independent variables significantly. To make sure that these two variables still contribute significantly to predict productivity some variables such as age and experience in the field of study where controlled and the results indicate no change in the equation. Therefore, given the score of innovativeness and frequency of communication, productivity for each academic may be predicted by this equation.

Despite age and experience in the field of study not making a significant contribution, we accept H1 and H2. As such, there is a positive relationship between networking and entrepreneurship; together with a positive relationship between innovation and productivity.

CONCLUSION AND LIMITATIONS

This study examined the role of networking (frequency of communications) in fostering entrepreneurship and productivity. Particularly, the focus of the study was the question whether social interactions foster entrepreneurial activities and thereby improve the productivity of academic staff in universities. The results indicated that there is a positive relationship between these two research constructs. In addition a mathematical model was developed including two variables; networking (frequency of communication) and innovativeness that can predict productivity of academic staff.

The literature on entrepreneurship in organizations suggests that it is in the infancy stage and many factors should be examined to foster entrepreneurial activities. This research provided evidence that these constructs should be studied in more depth, and a foundation set for further research about their relationship and many other factors that need be investigated to advance theories and concepts.

Limitations are primarily based on the sampling frame in metropolitan Victoria, which in itself identifies an opportunity to extend the study to a wider sampling frame. Similarly, opportunities to research cross- institutional differences may identify trends in individual institutions.

REFERENCES

- Belliveau, M.A., O' Rielly, C.A. and Wade, J.B. (1996) Social Capital at the Top: Effects of Social Similarity and Status on CEO Compensation. *Academy of Management Journal* 39, 1968-1593.
- Bolton, B. and Thompson, J. (2004) *Entrepreneurs: Talent, Temperament, Technique*, edn. Great Britain: Elsevier.
- Burt, R.S. (1992) *Structural Holes: The Social Structure of Competition*, edn. USA: Harvard Business School.
- Burt, R.S. (2004) Structural Holes and Good Ideas. *American Journal of Sociology* 110, 349-399.
- Coleman, D. (1998) *Working with Emotional Intelligence*, edn. New York: Bantam.
- Covin, J.G. and Miles, M.P. (1999) Corporate Entrepreneurship and the Pursuit of Competitive Advantage. *Entrepreneurship: Theory and Practice* 23, 47
- Covin, J.G. and Slevin, D.P. (1991) A Conceptual Model of Entrepreneurship as Firm Behavior. *Entrepreneurship: Theory and Practice* 7-25.
- Covin, J.G. and Slevin, D.P. (1989) Strategic Management of Small Firms in Hostile and Benign Environments. *Strategic Management Journal* 10, 75-87.
- Fernandez, R.M., Castilla, E.J. and Moore, P. (2000) Social Capital at Work: Networks and Employment at a Phone Center. *American Journal of Sociology* 105, 1288-1356.
- Fukuyama, F. (1995) *Trust: Social Virtues and the Creation of Prosperity*, edn. London: Hamish Hamilton.
- Gabby, S.M. and Zuckerman, E.W. (1998) Social Capital and Opportunity in Corporate R & D: The Contingent Effect of Contact Density on Mobility Expectations. *Social Science Research* 27, 189-217.
- Granovetter, M.S. (1995) *Getting a Job: A Study of Contracts and Careers*, edn. Chicago: University of Chicago Press.
- Hanson, M.T. (1998) Combining Network Centrality and Related Knowledge: Exploring Effective Knowledge Sharing in Multiunit Firms, *Working Paper*, Boston: Harvard Business School.
- Knack, S. and Keefer, P. (1997) Does Social Capital Have an Economic payoff? *Quarterly Journal of Economics* 112, 1251-1288.
- Kohli, A. and Jaworski, B. (1990) Market Orientation: The Construct, Research Propositions, and Managerial Implications. *Journal of Marketing* 54, 1-18.
- Kuratko, D.F. and Welsch, H.P. (2004) *Strategic Entrepreneurial Growth*, edn. United States of America: Thompson, South-Western.
- Lin, N. and Dumin, M. (1996) access to Occupations Through Social Ties. *Social Networks* 8, 365-385.

- Loury, G. (1987) Why Should We Care About Group Inequality? *Social Philosophy & Policy* 5, 249-271.
- Lumpkin, G.T. and Dess, G.G. (1996) Clarifying the Entrepreneurial Orientation Construct and Linking It to Performance, *Academy of Management Review* 21, 135-172.
- Miller, D. (1983) The Correlates of Entrepreneurship in Three Types of Firms. *Management Science* 29, 770-791.
- Miller, D. and Friesen, P.H. (1982) Innovation in Conservative and Entrepreneurial Firms: Two Models of Strategic Momentum. *Strategic Management Journal* 3, 1-25.
- Morris, M.H., Kuratko, D.F., Covin, J.G. (2008). *Corporate Entrepreneurship and Innovation*, 2nd Ed. West Eagan, MN: Thomson South-Western.
- Nahapiet, J. and Ghoshal, S. (1997) Social Capital, Intellectual Capital and The Creation of Value in Firms. *Academy of Management Proceedings* 35-40.
- Nahapiet, J. and Ghoshal, S. (1998) Social Capital, Intellectual Capital, And The Organizational Advantage. *Academy of Management Review* 23, 242-266.
- Noanka, I. (1994) A Dynamic Theory of Organizational Knowledge Creation. *Organization Science* 5, 14-37.
- Ouchi, W.G. (1979) A conceptual Framework for the Design of Organizational Control Mechanism. *Management Science* 833-848.
- Portes, A. and Sensenbrenner, J. (1993) Embeddedness and Immigration: Notes on the Social determinants of Economic action. *American Journal of Sociology* 98, 1320-1350.
- Putnam, R.D. (1993) The Prosperous Community: Social Capital and Public Life. *American Prospect* 13, 35-42.
- Ramsden, P. (1994) Describing and Explaining Research Productivity. *Higher Education* 207-226.
- Ring, P.S. and Van de Ven (1992) Structuring Cooperative Relationships Between Organizations. *Strategic Management Journal* 13, 483-404.
- Ruef, M. (2002) Strong Ties, Weak Ties and Islands. *Management Science*
- Sathe, V. (2003) *Corporate Entrepreneurship: Top Managers and New Business Creation*, edn. United Kingdom: Cambridge University Press.
- Tsai, W. and Ghoshal, S. (1998) Social Capital and Value Creation: The Role of Intrafirm Networks. *Academy of Management Journal* 41, 464-476.
- Wood, F. (1990) Factors Influencing Research Performance of University Academic Staff. *Higher Education* 19, 81-100.

- Woolcock, M. (1998) Social Capital and Economic Development: Toward a Theoretical Synthesis and Policy Framework. *Theory and Society* 27, 225-250.
- Zahra, S.A. (1993) A Conceptual Model of Entrepreneurship as Firm Behavior: A Critique and Extension. *Entrepreneurship: Theory and Practice* 5-21.
- Zahra, S.A. (1996) Governance, Ownership, and Corporate Entrepreneurship: The Moderating Impact of Industry Technological Opportunities. *Academy of Management Journal* 39, 1713-1735.
- Zahra, S.A. (1991) Predictors and Financial Outcomes of Corporate Entrepreneurship: An Exploratory Study. *Journal of Business Venturing* 6, 259-285.
- Zahra, S.A., Covin, J.G. and Zahra, P.H. (1998) Organizational Structure, Corporate Entrepreneurship and Performance. *Journal of Enterprising Culture* 6, 111-146.
- Zahra, S.A., Jennings, D.F. and Kuratko, D.F. (1999) Guest Editorial: Corporate Entrepreneurship in a Global Economy. *Entrepreneurship: Theory and Practice* 24, 5
- Zahra, S.A., Yavuz, I.R. and Ucbasaran, D. (2006) How Much Do You Trust Me? The Dark Side of Relational Trust in New Business Creation in Established Companies. *Entrepreneurship Theory & Practice* July, 541-559.

Table 1 Predicting Productivity by Networking and Innovativeness

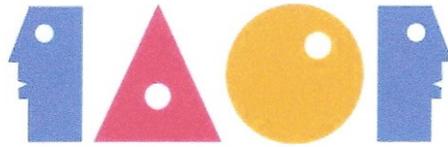
Variables	Productivity	Frequency of communication	Innovativeness	B	Beta	rs(square)
Networking	0.223			0.957**	0.165	0.027
Innovativeness	0.374	0.167		1.654**	0.346	0.140
Intercept = - 31.9						
Means	15.54	17.19	18.74	R Square = 0.166 Adjusted R Square = 0.158		
Standard Deviation	20.07	3.47		R = 0.408** 4.20		

**p<0.01

Table 2 Hierarchical Regression of Innovativeness and Networking on Productivity

Variables	R	R Square	Adjusted RSquare	rs (Square)	F	Sig. F Change
Dependent Variable						
Model 1	0.170	0.029	0.015	0.029	2.026	0.111 df (3, 205)
Age						
Experience (Field of Study)						
Experience (Institution)						
Model 2	0.436	0.190	0.170	0.161	9.513	0.000 df (5, 203)
Innovativeness				Beta		Sig.
Networking				0.352**		0.000
				0.145*		0.027
Age				-0.055		0.604
Experience (Field of Study)				0.119		0.260
Experience (Institution)				0.103		0.191

**p<0.01
*p<0.05



International Journal of
Organizational Innovation

A Study On The Development Of Compensation Communication

I-Ming Wang
Chang Jung Christian University
Email: jackwang@mail.cjcu.edu.tw

Hsiu-Fang Lin
Chang Jung Christian University
Email: lele@mail.cjcu.edu.tw

Abstract

A survey by questionnaire on Taiwan-invested enterprises in Taiwan Industry Park in Shang-Dong Province of China and the analysis of quantitative data was conducted in the study. The study analyzed: if individual attributes impact the cognition on mechanism of compensation communication and performance of compensation communication; then, the effects of individual attributes and mechanism of compensation communication on performance of compensation communication were detected. Finally findings and conclusions were further addressed.

Keywords: Compensation, Communication, Strategy, Value Orientation

Introduction

The so-called "compensation communication" means the process of interactive communications of compensation information and thread, which is expected to achieve the understanding between the managers and staff, and the strategic objectives of the enterprise. It refers to the activities that in the design and decision-making of the compensation strategic system, the enterprises fully communicate with their staff about various compensation information, including the compensation strategy, compensation system, compensation level, compensation configuration, compensation value orientation, the investigation of the staff's satisfaction and their reasonable suggestions.

The compensation communication can encourage the staff and point out the struggling orientation for the staff. It is an indispensable part in the compensation management of the enterprise. It is also a very important content of the enterprise motivation mechanism. In fact, when the enterprises begin to design and develop the compensation scheme, they should consider how to communicate with the staff about the scheme. In conventional practices, the compensation communication is carried out very early, long before the enforcement of the new compensation strategy, and it should exist in the whole life cycle of the scheme.

Literature Review

Compensation Payment

Definition of compensation. Compensation includes pay, incentive and benefit. And pay includes wage and salary. The former is calculated according to labor time, but the latter is offered in given time, such as weekly or monthly pay. Incentive is the reward to encourage the staff with extra efforts, such as bonus and commission. However, benefit is for all members of

the organization, regardless the performance (Xie, 1996). Milkovich and Newman (1993) held that as part of the industrial relations, compensation refers to all the tangible financial compensation, material service and benefit. They assorted compensation into two types. One is paid directly in cash (such as basic salary, incentives, and the adjustment about living cost) and another not in cash (such as pension, vacation and various insurance).

The basis of compensation payment. The role the compensation system plays on management should not simply be the compensation for services. The compensation design should also be an important instrument for the enterprise to influence the behavior of the staff ([Santiago and Domingo, 2005](#)). Gomez-Mejia and Balkin (1992) assorted the variable compensation into two payment modes, mechanic and organic. The former has a formal standard and process, which makes the compensation payment policy generalized and conformably used in the organization. The latter is highly sensitive to the variable environment, incidental events, and the personal situation. And the skill-based compensation is measured by the sorts and number of the applied skill the staff possess, or by the staff's knowledge.

Measures to Conduct Effective Compensation Management

Streak and Berger (1999) suggested the followings for effective compensation management.

- (1) Effective compensation scheme should consider the possession of capacity for changing the working behavior.
- (2) The compensation scheme should be designed according to the market research such as the internal fairness and the comparison on the external compensation market.
- (3) Use different payment in different situation based on the performance evaluation of individual, group or both together.
- (4) Measure the items you want to know.

Compensation Communication

Liu (2003) suggested elements for both communication and management of compensation: (a) to bring the compensation system to light; (b) to keep the staff informed of any adjustment; (c) to convey information with common language. The size of developing middle and small businesses is small and their organizational configuration is simply with fewer layers. Therefore the managers with the mindset of “just informing the staff of the pay day would be OK” may overlook the importance of the intact and reasonable distribution system.

As U.S. businesses shift from individual rewards toward more aggregated pay systems, they must address the issue of reward allocation within groups. Although the compensation of each staff is usually not open, it is hoped that the information of the distribution system and compensation policy should be disclosed, transparent and communicated (Barber & Simmering, 2002).

Wang (2002) said that the philosophy of compensation connects the compensation with posts, and links the raises with the performance. Additionally the year-end elimination system creates the performance culture which awards the advanced and punishes the lag in the company. Chen (2004) addressed that if the money distribution is an art, the enterprises are the artists of money distribution. Money distribution is also a process to notify the staff the strategy and orientation of the company, and the self value, advantages, disadvantages and future development of the staff. Therefore, the compensation is just a kind of communication, and maybe it is the most powerful communication tool inside the company.

Li (2002) found that the compensation satisfaction would be affected by factors such as the perception of compensation fairness, the methods to determine the performance, the amount of compensation, the acquaintance with the compensation system, the annual salary, and so on. The compensation system and the work performance mutually influence each other prominently. If

the former is not based on the latter, the latter would abate greatly and can not lead to satisfaction (Tekleab, Bartol & Liu, 2005)

As discussed above, the three variables, Individual Attributes, Mechanism of Compensation Communication and Performance of Compensation Communication, were chosen for the study. The study was to analyze how Individual Attributes impact cognition on Mechanism of Compensation Communication and Performance of Compensation Communication. Also, how the dimensions of Individual Attributes and those of Mechanism of Compensation Communication affect Performance of Compensation Communication were detected.

Methodology

Research Framework and Hypotheses

The dimensions of the variable, Individual Attributes, were defined as Age, Gender, Education Level, Marital Status, Number of Family Raised, and Post Level. Those of the variable, Mechanism of Compensation Communication, included Communication Orientation, Communication Media, Communication System, and Data Collection. Besides, the variable, Performance of Compensation Communication, had the two dimensions, Evaluation and Feedback. There were four hypotheses below for the study.

Hypothesis 1: Individual attributes show a significant difference in cognition on the mechanisms of compensation communication.

Hypothesis 2: Individual attributes show a significant difference in cognition on the performances of compensation communication.

Hypothesis 3: Individual attributes show a significant effect on the performances of compensation communication.

Hypothesis 4: The mechanism of compensation communication shows a significant effect on the performance of compensation communication.

Research Tool, Scale and Sample

In this study, cases were chosen by way of random sampling. The survey by questionnaire to collect data was carried out. The questions from the literature discussed above were modified and then adopted for those of the questionnaire for the study. The 5-point Likert Scale was used to scale the questions. Taiwan Industry Park in Shang-Dong Province of China is a location near the coast and also a typical economic development area with higher income for employees, which has been bringing workers from inland flocking to. Therefore, the bosses, superintendents and staffs of the Park were chosen for sampling to fill out the questionnaires. 720 questionnaires were resumed for further study.

Data Processing

The internal consistence of each Scale was assessed by detecting Cronbach's α . Pearson correlation analysis was applied in detecting the relations between each two variables. Independent t-test was used to detect if the Gender Dimension and the Post Level Dimension impact the cognition on Mechanism of Compensation Communication. As for the rest dimensions of Individual Attributes, one-way ANOVA were applied to test if they impact the cognition on Mechanism of Compensation Communication. The same approach was applied for that on Performance of Compensation Communication. The effects of Individual Attributes and Mechanism of Compensation Communication on Performance of Compensation Communication were measured by multi-regression analysis, respectively.

Results and Discussions

Reliability Test of Scale

Cronbach's α of Evaluation dimension is 0.84 and that of Feed-back Dimension is 0.89 for Scale for Performance of Compensation Communication. Cronbach's α of different dimensions for Scale for Mechanism of Compensation Communication are 0.89 (Communication Orientation), 0.88 (Communication Media), 0.87 (Communication System) and 0.87 (Data Collection).

Cognition on Mechanism of Compensation Communication

This was to test if Individual Attributes show any difference in cognition on Mechanism of Compensation Communication.

On communication orientation.

(a) Independent t-test

Gender Dimension shows significant difference in cognition on Communication Orientation (t-value -2.151, $p=0.032$, d.f. 718). This means that male and female staffs have significantly different cognition on Communication Orientation. Post Level Dimension shows no significant difference in cognition on Communication Orientation (t-value 0.884, $p=0.377$, d.f. 718). This means superintendents and non-superintendents have no significant difference in cognition on Communication Orientation.

(b) One-way ANOVA (sample size 720)

At a significant level of 0.05, the other four dimensions of Individual Attributes show a significant difference in cognition on Communication Orientation, which include Age Dimension ($p=0.000***$), Education Level Dimension ($p=0.000***$), Marital Status ($p=0.000***$) and Number of Family Raised Dimension ($p=0.000***$).

On communication media.

(a) Independent t-test.

Gender Dimension shows no significant difference in cognition on Communication Media (t-value -1.602, $p=0.110$, d.f. 718). This means that male and female staffs have no significantly different cognition on Communication Media. Post Level Dimension shows no significant difference in cognition on Communication Media (t-value 1.021, $p=0.307$, freedom 718). This means superintendents and non-superintendents have no significant difference in cognition on Communication Media.

(b) One-way ANOVA (sample size 720)

At a significant level of 0.05, the other four dimensions of Individual Attributes show a significant difference in cognition on Communication Media, which include Age Dimension ($p=0.000^{***}$), Education Level Dimension ($p=0.000^{***}$), Marital Status Dimension ($p=0.000^{***}$) and Number of Family Raised Dimension ($p=0.000^{***}$).

On communication system.

(a) Independent t-test

Gender Dimension shows significant difference in cognition on Communication System (t-value -2.146, $p=0.032$, freedom 718). This means that male and female staffs have significantly different cognition on Communication System. Post Level Dimension shows significant difference in cognition on Communication System (t-value 1.990, $p=0.047$, d.f. 718). This means superintendents and non-superintendents have a significant difference in cognition on Communication System.

(b) One-way ANOVA (sample size 720)

At a significant level of 0.05, the other four dimensions of Individual Attributes show a significant difference in cognition on Communication System, which include Age Dimension

($p=0.000^{***}$), Education Level Dimension ($p=0.000^{***}$), Marital Status Dimension ($p=0.000^{***}$) and Number of Family Raised Dimension ($p=0.000^{***}$).

On data collection.

(a) Independent t-test

Gender Dimension shows no significant difference in cognition on Data Collection (t-value -1.515, $p=0.130$, d.f. 718). This means that male and female staffs have no significantly different cognition on Data Collection. Post Level Dimension shows no significant difference in cognition on Data Collection (t-value 1.497, $p=0.135$, d.f. 718). This means superintendents and non-superintendents have no significant difference in cognition on Data Collection.

(b) One-way ANOVA (sample size 720)

At a significant level of 0.05, the other four dimensions of Individual Attributes show a significant difference in cognition on Data Collection, which include Age Dimension ($p=0.000^{***}$), Education Level Dimension ($p=0.000^{***}$), Marital Status Dimension ($p=0.000^{***}$) and Number of Family Raised Dimension ($p=0.000^{***}$).

Cognition on Performance of Compensation Communication

This was to test if Individual Attributes show any difference in cognition on Performance of Compensation Communication.

On evaluation.

(a) Independent t-test

Gender Dimension shows significant difference in cognition on Evaluation (t-value -2.276, $p=0.023$, d.f. 718). This means that male and female staffs have significantly different cognition on Evaluation. Post Level Dimension shows no significant difference in cognition on Evaluation

(t-value 0.946, $p=0.344$, d.f. 718). This means superintendents and non-superintendents have no significant difference in cognition on Evaluation.

(b) One-way ANOVA (sample size 720)

At a significant level of 0.05, the other four dimensions of Individual Attributes show a significant difference in cognition on Evaluation, which include Age Dimension ($p=0.000^{***}$), Education Level Dimension ($p=0.000^{***}$), Marital Status Dimension ($p=0.000^{***}$) and Number of Family Raised Dimension ($p=0.000^{***}$).

On feed-back.

(a) Independent t-test

Gender Dimension shows significant difference in cognition on Feed-back (t-value -5.030, $p=0.000$, d.f. 718). This means that male and female staffs have significantly different cognition on Feed-back. Post Level Dimension shows significant difference in cognition on Feed-back (t-value 3.468, $p=0.001$, d.f. 718). This means superintendents and non-superintendents have a significant difference in cognition on Feed-back.

(b) One-way ANOVA (sample size 720)

At a significant level of 0.05, the other four dimensions of Individual Attributes show a significant difference in cognition on Feed-back, which include Age Dimension ($p=0.000^{***}$), Education Level Dimension ($p=0.000^{***}$), Marital Status Dimension ($p=0.000^{***}$) and Number of Family Raised Dimension ($p=0.000^{***}$).

Effect of Individual Attributes and Mechanism of Compensation Communication on Performance of Compensation Communication

Pearson Correlation Analysis was applied in detecting the relations between variables, and then Multi-regression Analysis was used for further understanding of the relations.

Pearson's correlation analysis.

(a) For Performance of Compensation Communication

Both Evaluation Dimension and Feed-back Dimension have a significantly positive correlation with three dimensions, Communication Orientation Communication Media and Communication System, of Mechanism of Compensation Communication (as shown in Table 1). This means that the higher cognition on both dimensions of Evaluation and Feed-back the staffs have, the higher level the organizational commitment, the job devotion and the job satisfaction could reach.

Evaluation Dimension is in significantly positive correlation with Gender Dimension, Marital Status Dimension and Number of Family Raised Dimension of Individual Attributes, but in significantly negative correlation with Age Dimension. As to Feed-back Dimension, it shows a significantly positive correlation with dimensions of Individual Attributes, such as Age, Gender, Marital Status and Number of Family Raised, but in a significantly negative correlation with Post Level Dimension. (As shown in Table 1)

Table 1
Pearson's Correlation Analysis

Performance	A	G.	Personal Attributes				Performance	
			E.L.	M.S.	NOFR	PO	E	F
E	-0.194**	0.085*	-0.017	0.087*	0.112**	-0.035		
F	0.111**	0.185**	0.007	0.374**	0.176**	-0.128**		
Mechanism	A	G.	Personal Attributes				Performance	
			E.L.	M.S.	NOFR	PO	E	F
CO	-0.177**	0.080*	0.049	0.206**	0.151**	-0.033	0.529**	0.398**
CM	-0.164**	0.060	0.075*	0.243**	0.166**	-0.038	0.527**	0.404**
CS	-0.182**	0.080*	0.069	0.257**	0.161**	-0.074*	0.500**	0.406**
DC	-0.166**	0.56	0.78*	0.254**	0.157**	-0.56	0.512**	0.408**

Personal Attributes: A=Age, G=Gender, EL=Educational Level, MS= Marital Status, NOFR= Number of Family Raised, PO= Post Level.

Performance: E=Evaluation, F=Feed-back.

Mechanism: CO=Communication Orientation, CM= Communication Media, CS= Communication System, DC=Data Collection

(b) For Mechanism of Compensation Communication

It can be seen from Table 1 that Communication Orientation Dimension is in a significantly positive correlation with Gender Dimension, Marital Status Dimension and Number of Family Raised Dimension of Individual Attributes, and in a significantly negative correlation with Age Dimension. Communication Media Dimension is in a significantly positive correlation with Education Level Dimension, Marital Status Dimension and Number of Family Raised Dimension of Individual Attributes, and in a significantly negative correlation with Age Dimension. Communication System Dimension is in a significantly positive correlation with Gender Dimension, Marital Status Dimension of Individual Attributes, and in a significantly negative correlation with Age Dimension and Post Level Dimension. Data Collection Dimension is in a significantly positive correlation with Education Level Dimension, Marital Status Dimension and Number of Family Raised Dimension of Individual Attributes, and in a significantly negative correlation with Age Dimension.

Multi-regression analysis.

It can be seen from the above correlation analysis that there is a correlation of some extent between variables of the study. For further understanding the mutual effect between variables, multi-regression analysis was carried out.

(a) Effect of individual attributes and mechanism of compensation communication on the evaluation dimension of performance of compensation communication

As shown in Table 2, Age Dimension, Gender Dimension, Marital Status Dimension, Communication Orientation and Communication Media all show an effect of significance on Evaluation Dimension of Performance of Compensation Communication, of which, both dimensions of Age and Marital Status show a significantly negative effect, and the rest all show a significantly positive effect. The prediction or explanation degree on the variance of Evaluation Dimension reaches 34.0%.

Table 2
Effect of Individual Attributes and Mechanism of Compensation Communication on Evaluation Dimension (R Square=0.583, Adjusted R Square=0.340)

Model	Standardized Factor Beta	t-test		Collinear Statistics	
		T-value	Significance	Tolerance	VIF
Constant		7.827	0.000		
Age	-0.149	-4.451	0.000	0.836	1.197
Gender	0.069	2.105	0.036	0.864	1.157
Marital Status	-0.080	-2.197	0.028	0.694	1.441
Number of Family Raised	0.025	0.756	0.450	0.882	1.134
Communication Orientation	0.247	4.385	0.000	0.292	3.420
Communication Media	0.307	3.462	0.001	0.118	8.467
Communication System	0.084	1.087	0.277	0.157	6.380
Data Collection	-0.061	-0.536	0.592	0.073	13.729

(b) Effect of individual attributes and mechanism of compensation communication on the feed-back dimension of performance of compensation communication

As shown in Table 3, Age Dimension, Gender Dimension, Marital Status Dimension and Communication Orientation all show a positive effect of significance on Feed-back Dimension of Performance of Compensation Communication. The prediction or explanation degree on the variance of Feed-back Dimension reaches 32.8%.

Table 3
Effect of Individual Attributes and Mechanism of Compensation Communication on Feed-back Dimension (R Square=0.572, Adjusted R Square=0.328)

Model	Standardize	t-test		Collinear Statistics	
	d Factor Beta	T-value	Significance	Tolerance	VIF
Constant		1.357	0.175		
Age	-0.185	5.499	0.000	0.836	1.197
Gender	0.077	2.324	0.020	0.864	1.157
Marital Status	0.326	8.832	0.000	0.694	1.441
Number of Family Raised	0.051	1.562	0.119	0.882	1.134
Communication Orientation	-0.004	-0.085	0.932	0.524	1.907
Communication Media	0.162	2.843	0.005	0.292	3.420
Communication System	0.129	1.443	0.149	0.118	8.467
Data Collection	0.115	1.475	0.141	0.157	6.380

Conclusions and Suggestions

Seen from the value chain “value creation → value evaluation → value distribution creates → more value”, each link is equally important, but in practical, the value distribution is more important. Especially for the technicians, their compensation and treatment demand is different with that of the sales personnel. If the sales personnel are dissatisfied with their compensation, they would bargain with the bosses, even threaten them with job-hopping. But the technician may put the dissatisfaction on the bottom of their heart, and after it runs up to a certain degree, they may directly choose to leave. In another word, if you want to retain the personnel, for the sales personnel, you still have the chance of bargaining. But for the technician, you may have no chance of negotiation. You could only keep them under observation constantly, understand their demands in advance and get rid of their dissatisfaction. A scientific, reasonable,

and tried and true compensation communication system is to encourage the staff and realize the win-win phase between labor and capital. This study suggests the followings:

To Collect Associated Information about the Compensation Communication

If the compensation system is intact directly affects staff application such as recruitment and selection, training, and retaining of the talents. Thus, it is very important to collect the internal and external information of the organization. The former is mainly collected from all members of the organization, which refers to the members' evaluation of the current compensation system, and their expectation to the future reform of the system. It could increase their organizational commitment with the feeling of respect and participation. The latter is collected from other enterprises in the same region or of the same industry, which refers to the compensation level, compensation configuration, and compensation value orientation, etc.

To Nail Down the Orientation of the Compensation Communication

Staff likes discussing the compensation. If there is no necessary information for them, they may invent the truth. Such a situation is not expected and allowed. The companies should try the best to make the compensation system transparent, which the contents and the objectives of the compensation communication are clearly and accurately defined. The contents of the communication include factors such as compensation strategy, compensation system, compensation scheme, performance management system, and the criteria for performance evaluation. The objectives of the communication could be summed up: firstly, to make sure that the staff fully understand every aspect of the compensation planning system; secondly, to change the long-existing attitude of the staff toward the compensation decision-making mode, and to

attract and retain the talents; thirdly, to lead the staff to adjust the personal objective consciously, to make it in accordance with the organizational strategic objectives, and to achieve win-win; fourthly, to help the staff find out the advantages and disadvantages in their work, and to encourage them to make more efforts under the new compensation system. And through the transfer of the information about the compensation system, the staff can be acquainted with two basic questions: why am I in such a compensation level? And what should I do to acquire higher compensation?

To Establish Special Compensation Communication Organization

This refers to the establishment of a standing compensation communication office with regular or irregular special training about the compensation communication and management for the office's members. In the past, compensation management and communication was managed together by the financial division or the human resources managing division. Such modus operandi should be changed due to the lack of expertise. The compensation communication office should be made up of senior managers of the enterprise which include human resources managers, compensation management experts, employee representation, etc. Its major functions are composed of the followings:

(1) To convey the new compensation strategy, the compensation scheme, the compensation system, and the compensation philosophy of the enterprise to all members. (2) To play the role of advisory committee. It gives suggestions to the compensation reform of the enterprises, and provides the senior managers with advisory service about compensation information, compensation management knowledge, and the compensation policy. And it is a good teacher and helpful friend of the staff to answer the questions about compensation, performance. (3) To investigate and study the compensation information for the establishment of compensation

mechanism, to help carry out the compensation communication mechanism, and to become the lubricant between enterprise and staff. (4) To monitor and evaluate the process and result of the compensation communication for further recommendations.

To Choose Proper Media for Communication

Concretely the communication media required by the enterprises include: (a) Audio-visual media, such as the lantern slide, VCD, video conference, etc. ; (b) Printing media like the compensation handbook, memo, internal publication, compensation guide etc., which could be spread to a lot of staff in a limited time; (c) Interpersonal media, which is one of the most effective compensation communication modes and could realize the interpersonal interaction; (d) The electro-media, which is based on the computer and Internet, such as the e-mail system, special network etc., and is also shortcut, convenient and important communication means. Whatever media will be used, written materials should be prepared well in advance for further application. Klimoski (1991) stated that while there is no substitute for critical and analytical thinking, it is argued that many potentially good notions fail to get the attention just because of weak or ineffective writing. The most efficient communication means should provide a lot of face to face interaction chances for conducting communication, and could fully provide individualized information to meet with the specific demands of individual or group, with which the compensation communication could take their effects into full play.

To Create Institutionalized Communication Channels

Effective communication should be two-way, so should the compensation and incentive. Enterprises should encourage the staff to express their thoughts and feelings, and help them improve constantly. Then the effective two-way communication and feed-back could be

established, which is good for the stepwise perfection of the compensation system and enhances the staffs sense of being regarded and their feeling of belonging to the company.

For example, IBM has four institutionalized ways under the communication channel: (1)

Executive interview. This is carried out by the senior managers, whose rank is usually higher than the line managers and may be the managers of your manager or the managers in different division. The identity of the interviewee is kept secret. The topic of the interview can be anything individuals are interested in, and the contents of the interview are not revealed. The questions raised in the interview can be classified and solved concentratively. Tendentious suggestions and mass concerned questions should be hand over to the department in charge. (2) Employee opinion survey. The survey is opening termly on the earning question of the staff. IBM can understand by consultation what attitude and suggestions the staff have toward the management level, compensation and treatment, the salary, and so on. (3) Speaking up. The opinions of common staff may be sent to the post box of the director-general. The staff can receive the reply without the intervention of their direct superiors. His identity is kept secret and needs not to worry about the risks after saying his say. (4) Open-door policy. At first, the staff could communicate with their direct superiors. If their problems could not be solved or they consider that the topic is not proper to chat with the direct superior, they can allege to the manager of the enterprise, the human resource manager, general manager, or any representative of the headquarters through the open door. The appeal of the staff would be investigated and carried out by the suitable superiors. If the reason for resignation is payment, the human resource department would try the best to retain the employee, and have a talk with him to find out various affairs and causes.

To Monitor the Evaluation and Feed-back of the Communication Effect

The company should conduct evaluation and feed-back of communication with both the data collected and the information acquired. In fact, the evaluation and feed-back of the compensation communication exists through the whole communication process. By the evaluation and feed-back the company should find out and solve the problems in time, which results in a more intact, scientific, reasonable, and effective compensation communication mechanism.

To Improve the Skills of Interview

When carrying out the communication with the staff, the manager should make proper evaluation and explanation for the staff's performance and compensation, and provide necessary performance guide. At the same time they also need listen respectfully and carefully to the staff's opinions and suggestions to touch their mind. It can be seen that the first step of the communication should start with the staff. When conducting communication, the managers should not consider too much about the details. On the contrary, they should consider more about how to make the staff recognize the information conveyed. If the information can be recognized, it will go to all staff of the organization.

Since 2003, the Taiwanese enterprise Fu Xing Corp. has pursued the theme of "communication from the heart on". At first, it establishes a system that after lunch on every Friday, the director-general, vice-director-general, and the general managers in each district are asked to invite staff for communication with coffee. At that time managers or above and the staff invited to communication are asked to disregard their family names and ranks, and call each other with the name. It can be seen that the idea of management based on the people is getting regarded in the business circles. Another example is the famous "Hewlett-Packard (HP)

practice”, which is to respect each staff, acknowledge the achievement of each staff, and respect the individual dignity and values. The people-oriented corporate culture, which is characterized by the interactive communication, would certainly become a motivation to promote the development and perfection of the compensation communication mechanism, and realize the harmonious development of both the enterprise and staff. On the other hand, the compensation communication would also promote the construction of the people-oriented corporate culture.

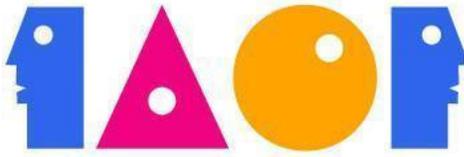
References

- Barber, A. E. & Simmering, M. J. (2002). Understanding pay plan acceptance: The role of distributive justice theory. *Human Resource Management Review*, *12(1)*, 25-42.
- Chen, W. H. (2004). Study on determinants of corporate compensation. *Taipei Bank Quarterly*, *29(2)*, 29-35.
- Gomez-Mejia, L.R. & Balkin, D. B. (1992). *Compensation organization strategy, and firm performance*. Cincinnati: South Western Publishing Co.
- Klimoski, R. (1991). Theory presentation in human resource management. *Human Resource Management Review*, *1(4)*, 253-271.
- Li, Z. X. (2002). The relevant factors on and the efficiency of performance reward system. *Taipei Bank Quarterly*, *27(3)*, 28-35.
- Liu, X. (2003). *Compensation management*. Beijing: China People University Press.
- Milkovich, G. T. & Boudreau, J. M. (1987). *Personnel: Human resource management*. (pp.705-720). Texas: Business Publication.
- Mikovich, G. T. & Newman, J. M. (1993). *Compensation* (3 ed). New York: Richard D. Irwin, Inc.
- [Santiago, M. G. & Domingo, V. T.](#) (2006). Is there more than one way to manage human resources in companies? . *Personnel Review*, *35(1)*, 29-50.
- Streak, L. A. & Berger, D. R. (1999). *The compensation handbook* (4th ed., pp.42-50). USA: McGraw Hill.

Tekleab, [A. G.](#), Bartol, [K. M.](#) & [Liu, W.](#) (2005). Is it pay levels or pay raises that matter to fairness and turnover?. *Journal of Organizational Behavior*, 26(8), 899-908.

Wang, Z. M. (2002). *Study on the relation between design factor of compensation and organizational efficiency*. Unpublished doctorate's dissertation, National Taiwan University, Taiwan.

Xie, A. T. (1996). *Personnel Management* (3 Ed). Taipei: Author Press.



**Student Perspectives of Self-Access
in a Multimedia English Learning Center**

Wen-wen Cheng

*Department of Applied English Language
Shih Chien University Kaohsiung Campus, Taiwan
wenda42@yahoo.com.tw*

Mei-ling Lee

*Department of English
National Kaohsiung First University of Science and Technology, Taiwan
meiling@ccms.nkfust.edu.tw*

ABSTRACT

Driven by the world trend of fostering learner autonomy for modern education, many universities in Taiwan are experimenting with self-directed learning through a self-access learning center. To reflect the trend, National Kaohsiung First University of Science and Technology (NKFUST) set up its Multimedia English Learning Center in 2003. The center's mandate is to provide a self-access learning program and create a facilitating environment so students have the opportunities to access a rich collection of English learning resources and learn to manage their own learning beyond the classroom settings. As the center has now been operating for 5 years, we conducted a program evaluation to investigate students' attitudes and experiences with self-directed learning in the center. Two hundred and seventeen students from NKFUST were recruited to respond to the questionnaires designed for this study. Major findings revealed that while most students consider autonomy to be an important ability to develop, about half of them reported that to train self-directed learning skills in school is a difficult task. Implications for EFL learning are also discussed.

Key words: Learner Autonomy, Self-directed Learning, Self-access, Program Evaluation

INTRODUCTION

Autonomy, involving the active responsibility for one's own learning (Dickinson, 1992), is a natural product of practicing self-directed learning (Benson, 2001). Benson pointed out that

“the key innovations to the provision of opportunities and support for self-directed language learning were the self-access resource center” (2001, p.8). Bearing this idea in mind, many universities and institutions around the world have thus established self-access language centers to experiment with or provide opportunities for self-access language learning. Following a similar trend, the idea of self-directed learning has sprung up throughout Taiwan over the past decade. As a result, numerous self-access language centers or resource centers are being successively set up to reflect this belief. For example, the three most notable centers for fostering autonomy in Taiwan are, the Language Teaching and Research Center in National Chiao Tung University (2002); the Language Center in Soochow University (2002), and the Multimedia English Language Center at National Kaohsiung First University of Science and Technology (2003, NKFUST hereafter).

Among the above-mentioned universities, it is worth noting that NKFUST is the first school to integrate self-access into its formal General English (GE hereafter) curriculum. To provide support for the GE program, NKFUST set up a Multimedia English Learning Center (MELC hereafter) through grants from the Ministry of Education in 2003. The purpose of this project is to create an effective learning environment for students to experiment with self-directed learning and its major responsibility is to enhance students’ English proficiency and to integrate self-access with GE to cultivate autonomy beyond classroom instruction. Currently, the MELC has made a wide range of learning resources available to the students, including various kinds of multimedia learning software, four levels of graded learning materials, custom-made multimedia dialogues, and more than 300 recommended learning websites addressing the diversified needs of the students.

However, most of the students at NKFUST, probably like those in other universities, are used to and rely heavily upon the traditional teacher-centered instruction. Though the university has tried hard to create an ideal self-access learning environment, we are not sure how students would respond to the concept of autonomy and self-access. Moreover, conducting self-directed learning via computer with multimedia resources is a novelty to most of the students before entering NKFUST. Whether students consider technology-based self-access learning a good way to learn English is still unknown.

Major Research Questions

Though in recent years there is an increasing number of self-access learning centers being established in Taiwan, very few universities have conducted a thorough and systematic evaluation on the effectiveness of such centers from learner perspectives. Not surprisingly, most self-access program providers are not clear about the needs and attitudes of the learner as well as the difficulties involved in practicing self-directed learning. Therefore, the focus of the current paper aims to investigate students' attitude and experiences with self-directed learning in a multimedia English learning center (See Cheng, 2006 for a complete and thorough evaluation of the MELC from multiple perspectives). Accordingly, two major research questions will be addressed.

1. What are students' viewpoints and attitude toward English self-directed learning?
2. Are students familiar with the on-line learning resources offered by the MELC?

Literature Review

Inspired by the prospect of developing self-directed learning skills within institutions, many language researchers and scholars, in the West as well as in Asia, have thus undertaken a large array of studies with regard to learner autonomy over the past two decades. To meet the

purpose of this study, the following review of previous findings is divided into four subtopics, which are deemed indispensable for understanding the contemporary research on learner control: (1) Definitions of Autonomy; (2) The Learning Resources; (3) CALL and Autonomy; (4) Culture and Learner Autonomy.

Definitions of Autonomy

Despite the widespread recognition on the importance of autonomy, the uncertainty about its meanings and applications for language learning is opened to debate. Perhaps a specific and concrete definition for “autonomy” is difficult to find because of its multidimensional forms. Benson (2001) states autonomy presents itself in different forms in different individuals and in different contexts. Not surprisingly, scholars have tried to define the concept of autonomy from various aspects. For example, Holec defines “autonomy” as “the ability to take charge of one’s own learning,” (1981, p.1) while Hunt, Gow and Barnes consider “autonomy” is “the decision-making process involved in identifying problems and making relevant decisions for their solution through access to sufficient sources of information.” (1989, p.209) Furthermore, Littlewood defines “autonomy” as a capacity about how to make a decision, the skills about how to carry out the decision, and willingness to take responsibility for the choices required (1996, p.428).

The Learning Resources

For the past two decades, “self-access resource centers are the most typical means by which institutions have attempted to implement notions of autonomy and independence.” (Benson and Voller, 1997, p.15) As Gill Sturtridge states (1997), future language learners are more and more relying on the resources in an increasingly technological world. In other words, self-access modes of learning are likely to be the criterion in future language education. Since self-access centers have become the crucial means for experimenting with various new modes of

self-directed learning, the purpose-designed facility with various learning resources should be made readily available to learners. According to Benson (2001), learners could develop skills associated with control over learning plans and selection of learning materials through processes of experimentation and discovery through freedom of choice. Therefore, in addition to containing modern facilities like audio, video, computer workstation, multimedia software, Internet and a variety of learning materials, a successful center should integrate the learning resources with self-access properties so that they are available conveniently, directly and appropriately to learners. In order to facilitate students' self-directed learning, learning resources are usually designed to possess such characteristics as interactive, individualized, authentic, communicative, and enjoyable education. (Benson, 2001)

CALL and Autonomy

Computer-Assisted Language Learning (CALL) is widely accepted as a term referring to “the area of technology and second language teaching and learning” since 1983 (Chapelle, 2001, p.3). In the latest development, CALL features the multimedia and interactive technologies to develop integrative skills over selections of materials and strategies of text interpretation (Benson, 2001). By accessing rich linguistic and non-linguistic input from those media, learners foster autonomy through interaction with technology. As Motteram states, “There has always been a perceived relationship between educational technology and learner autonomy.” (1997, p.17) To support this statement, Benson reviewed ten technology-based projects between 1994 and 1997 to show that “interaction with the technology is seen to be supportive of autonomy.” (2001, p.136) In recent literature, Meich, Nave and Mosteller (1996) examined 22 empirical CALL studies between 1989 and 1994 and reported that CALL can greatly improve learning achievement in comparison with traditional instruction (cited in Beatty, 2003, p.197). For self-

access learning, students can benefit from computers through drills and interactive exercises that are designed purposefully for language learning. As CALL plays an important role in self-access centers, understanding its benefits and going further to make good use of it will be significant when planning self-directed learning programs.

Culture and Learner Autonomy

Over the past decades, whether “autonomy” is cultural-specific has long been the subject of controversy. Some researchers consider that autonomy is a concept with ethnic cultural features, while others think that different cultures interpret autonomy diversely. For example, Ho, Crookall (1995) and Littlewood (1999) would consider that autonomy is not so appropriate for Chinese students who are used to respecting teachers’ authority and are dependent on teachers’ instruction. However, Pierson (1996) suggested that autonomy is an age-old idea in Chinese culture and Kennedy (2002) went on to remark that Confucius had frequently mentioned individuality in learning. Therefore, when teachers promote autonomy in school settings, they should consider some social-cultural characteristics in language learning from different perspectives and try to take the advantage of those merits unique to a specific culture.

To sum up, though the definitions of autonomy appear to be highly diversified and uncertain as depicted in the literature, the future direction for the development of self-directed learning will continue to center on such critical factors as the provision of meaningful learning resources via self-access centers, greater learner involvement through interaction with technology, and the impact of social-cultural characteristics on learners of various ethnic heritages.

METHODS

The research questions that we have brought up in this paper mainly concern students' attitudes and viewpoints toward English self-directed learning in the MELC. To assemble the opinions of a large number of students, a questionnaire survey is employed as our major research design. Specifically, the questionnaire contains attitude questions that include multiple choices designed for eliciting in-depth responses and comments from the participants. To avoid overlooking the possible responses, the option "others" is included in the alternatives to specify the answers. Furthermore, individual comments are welcomed in the blank space provided by the questionnaire.

Participants

The student participants for this study were recruited from College of Foreign Languages, College of Management, and College of Engineering at NKFUST. In total, 217 students were randomly selected to participate in this survey, comprising 65 females and 152 males. It is noteworthy that all of the participating students were required by the university to either conduct self-directed learning or take part in the English counseling program provided by the MELC during the regular semester. As for students' previous experience of English learning and self-access, the majority of the students have learned English for over 6 years; however, only a few of them had had the experience of English self-directed learning before they enrolled in NKFUST.

Design of the Questionnaire

As stated, the main purpose of this study is to explore the attitudes of the students toward self-directed learning and their experiences with the learning resources in the MELC. To collect the information, we designed a questionnaire mostly consisting of attitude questions with a five-point Likert-type rating scale. Students were instructed to mark their opinions in this scale to

indicate the extent to which they agree with each of the designed statements. To help answer the two research questions, the survey aims to find out if students consider self-directed learning as an important ability (Item 1); students' viewpoints toward the purpose of self-directed learning (Item 2); if students sustain the promotion of self-access program from school and teacher involvement (Item 3); if it is advantageous to cultivate self-directed learning ability through the MELC (Item 4) or through the multimedia English learning courses and the Internet resources (Item 5); if students will like English more through the training of self-directed learning (Item 6); and if students think self-directed learning an easy or difficult task as summarized in Table 1. Additionally, to investigate if students make use of the online English learning resources offered by the MELC after class or during their free time, we asked students to specify the reasons for not using the resources and the best way to familiarize with such resources from their perspectives. The following section will turn to an in-depth analysis of the results.

RESULTS

Data Analysis and Major Findings

In order to analyze the questionnaire for the trends of students' attitudes and viewpoints, descriptive statistics are used to summarize data. Specifically, the gathered data were being computed and tabulated with application of SPSS 10.0 (Statistical Package for the Social Science). To answer the first research question, the data set is being transformed to numbers and percentages by descriptive analysis. The result in Table 2 indicated that as many as 72.5% of the participants agreed that English self-directed learning is an important learning ability, while 4.7% disagreed. Moreover, 68.7% of the students reported that they have a clear concept about the main purpose of English self-directed learning, and 9.8 % disagreed. Regarding cultivating

English self-directed learning ability through the MELC, 47.2% of them agreed that it is helpful, and 22.4% of them disagreed. 53.7% of the students agreed that it is helpful to develop English self-directed learning skills by taking multimedia English learning courses and using the Internet resources, while 13.9% disagreed with the idea as shown in Table 4.

To discover if cultivating English self-directed learning ability is easy or difficult, Table 3 indicated that 45.8% of the students responded that it is easy to develop self-directed learning ability in school; however, 50.9%, slightly over half of the participants, reported it is difficult to do so.

As indicated in Table 4, for the top three reasons why students think to cultivate their English self-directed learning ability is easy, students rank “English self-directed learning is relaxing and without pressure” as the main reason (129 points), “I like to learn English at my own pace” as the second (100 points), “It’s nice to study weekly and regularly” as the third (55 points). On the contrary, the top three reasons for ‘cultivating English self-directed learning ability is difficult’ are “I am too busy to do self-directed learning weekly,” (106 points) “I do not like to learn English through computer because it is boring and ineffective” (66 points) and “The content of the multimedia learning materials is quite boring” (61 points) as outlined in Table 5. To sum up, students, who think to cultivate English self-directed learning ability is easy tend to perceive self-directed learning as relaxing, promoting control over learning pace and forming positive and regular learning habits. Whereas, students who consider cultivating English self-directed learning ability is difficult are likely to view self-directed learning as time-consuming, ineffective with computer learning and tedious with the multimedia learning materials.

As to the second research question, Table 6 presents the results concerning the frequency of using the online resources by students after class or during their free time. To our surprise, as

many as 37.8% of the students responded that they have never used the online English learning resources offered by the center even though the university strived to promote among students when the center began to operate. For those who have used the online resources or learning web sites, 37.3% said they have ever used them; 18.4% sometimes use them, and 6.5% often use them.

When asked to specify the reasons, students choose the top three reasons for not using the resources as follows: “I don’t have any information about them,” (23.0%) “I don’t know how to use them” (11.1%) and “My English is not good enough to use them” (7.4%) as shown in Table 7. As to the best way to know the online English learning resources, students ranked the top three efficient ways to get the information are “Through teacher introduction,” (59.4%) “Through the official website of the MELC,” (40.1%) and “Through freshman’s orientation programs” (38.7%) as shown in Table 8.

DISCUSSION

The results of this study suggested that roughly half of the participants (50.9%) think to develop English self-directed learning skills in school is a difficult task while the other half (45.8%) consider the same task as being easy. Based on the findings, it is clear that most of the student participants in this study acknowledged that self-directed learning is an essential ability even though they barely had any experience with self-access before they entered NKFUST. From the analysis of students’ background, we found an extremely high percentage of the respondents (98.2%) reported that practicing self-directed learning in the MELC is a whole new experience to them. It implied that when they were first introduced to the idea of self-directed learning and visited a beautiful language learning center with modern aesthetics, most of them felt excited and thought it a novel idea to conduct independent learning outside the classroom. Moreover, they

might have high expectations of this new learning mode and thus develop positive attitude toward it.

According to the reasons students chose to explain why independent learning is difficult as described above, we believe that students need to be shown why English language skills are indispensable for their professional growth in the workplace and arduous learning in school will greatly benefit their career development throughout their entire life. Furthermore, the current learning materials offered by the MELC appear to be not attractive enough for students. Some students responded that the content of the materials is quite boring and sometimes the on-line resources are disconnected and cannot be accessed. What is more, not all the students are fond of learning English through computer. Therefore, the major learning activity provided by the MELC--learning English through computer--fails to appeal to some students who prefer learning English through interaction with teachers or peers. To address the needs of students with different learning styles and preferences, the MELC should try to include diversified learning activities in the future so that students will be more willing to involve themselves in self-directed learning. Another important reason that might have influenced students' attitude toward self-directed learning is that the academically lower-level students possibly rely heavily on teachers' instruction and do not have the confidence to learn independently. As a result, they might perceive self-access as difficult due to the absence of a teacher's supervision just as Scharle and Szabó stated (2000), that some students may find self-directed learning distressing and uncertain without a teachers' assistance. To sum up, though half of the students think self-access is difficult, most of the students still regard self-directed learning as an important ability to develop in school. This viewpoint is similar to Gardner and Miller's findings in 1997, which revealed at least some Asian learners responded positively toward self-directed learning.

When it comes to the findings of the second research question, from the reasons students reported about why they were not using the resources, it is clear that most students lacked such basic information. What's more, even when they have the information about the learning resources, they are not trained in how to use them. To increase student involvement in online learning, GE teachers and school authorities should find ways to trumpet the functions and the advantages of the online learning resources to the students so that they will be more willing to use these resources. Another possible reason is that some students may not have the confidence to study independently without help from a teacher, especially when selecting study materials from among such a large quantity of computer resources. Thus, they need proper guidance and training before they can direct their own learning. Finally, the lack of peer support may hamper students' desire to use the learning resources. According to the above-mentioned reasons, students' lack of familiarity with the on-line learning resources revealed the ineffective promotion by the school. To address this problem, the staff of the MELC needs to actively involve GE teachers in boosting the on-line resources and provide various training courses to teach students how to take advantage of these resources. For example, a learning bulletin board for students to exchange information and experiences to learn from each other would be a good way to improve their English.

Conclusion

The promotion of self-directed learning through a self-access learning center is by no means an easy undertaking. To attract learners to start experimenting with this new mode of learning, both teachers and school authorities should propound the purposes and benefits of self-directed learning to all students and encourage them to foster such ability by studying regularly in the MELC. In the future, self-access program providers should pay more attention to understanding

the factors involved in building a positive learner attitude toward self-learning beyond the classroom. According to the findings of the current study, factors such as learner attitude, cultural difference, and meaningfulness of material all have a significant impact on the success or failure of a self-access center. Moreover, students need proper training and guidance before conducting self-directed learning in a resource-based center. Helping students to become familiar with the learning resources they need in learning will also greatly reduce the unpleasant experiences resulting from the lack of necessary knowledge. Just as Shetzer and Warschauer (2000) put it, a successful self-access center should be “in the position to teach students valuable lifelong learning skills and strategies for becoming autonomous learners” (p. 176).

Acknowledgements:

We would like to express our sincere gratitude to the two anonymous reviewers as well as the editor, Dr. Frederick L Dembowski, for the special issue.

References

- Beatty, K. (2003). *Teaching and Researching Computer-assisted Language Learning*, London: Longman.
- Benson, P. (2001). *Teaching and Researching Autonomy in Language Learning*. London: Longman.
- Benson, P. & Voller, P. (1997). *Autonomy & Independence in Language Learning*. London: Longman.
- Chapelle, C. A. (2001). *Computer Applications in Second Language Acquisition*. New York: Cambridge.
- Cheng, W. W. (2006). *Learner Perspectives of Self-access in the Multimedia English Learning Center at NKFUST*. Unpublished master's thesis, National Kaohsiung First University of Science and Technology.
- Dickinson, L. (1992). *Learner Autonomy 2: Learner Training for Language Learning*. Dublin: Authentik.

- Gardner, D. and Miller, L. (1997) *A Study of Tertiary Level Self-access Facilities in Hong Kong*. Hong Kong: Management Committee, Evaluation of Student Experience Project, City University.
- Ho, J. and Crookall, D. (1995). Breaking with Chinese cultural traditions: learner autonomy in English language teaching. *System*, 23 (2): 235-243.
- Holec, H. (1981). *Autonomy and Foreign Language Learning*. Oxford: Pergamon.
- Hunt, J., Gow, L. & Barnes, P. (1989). Learner self-evaluation and assessment - a tool for autonomy in the language learning classroom, in V. Bickley (ed.). *Language Teaching and Learning Styles Within and Across Cultures*. Hong Kong: Institute of Language in Education, Education Department, 207-217.
- Kennedy, Peter. (2002). Learning cultures and learning styles: myth-understandings 108 about adult (Hong Kong) Chinese learners, *International Journal of Lifelong Education*, 21 (5) (September- October): 430-445.
- Littlewood, W. T. (1996). Autonomy : an autonomy and a framework, *System*, 24 (4): 427-435.
- Littlewood, W. T. (1999). Defining and developing autonomy in East Asian contexts, *Applied Linguistics*: 427-435.
- Motteram, G. (1997). Learner Autonomy and the Web”. In V. Darleguy et al. (eds) *Educational Technology in Language Learning: Theoretical Considerations and Practical Application*. Lyons: INSA, 17-24.
- Pierson, H. D. (1996). Learner culture and learner autonomy in the Hong Kong Chinese context. In R. Pemberton et al. (eds). *Taking Control: Autonomy in Language Learning*. Hong Kong: Hong Kong University Press, 49-58.
- Scharle, Å. and Szabó, A. (2000). *Learner Autonomy: a guide to developing learner responsibility*. Cambridge: Cambridge University Press.
- Shetzer, H., & Warschauer, M. (2000). An electronic literacy approach to network-based language teaching. In M. Warschauer & R. Kern (eds.), *Network-based language teaching: Concepts and practice* (pp. 171-185). New York: Cambridge University Press.
- Sturtridge, G. (1997). Teaching and language learning in self-access centers: changing roles?. In P. Benson and P. Voller (eds) *Autonomy and Independence in Language learning*. London: Longman, 66-78.

Website References
Self-Access Learning Centers Referred in the Text

Language Center. Soochow University. Retrieved Jun. 1, 2008 from
 <<http://www.scu.edu.tw/language/index-2.htm> >
 Language Teaching and Research Center. National Chiao Tung University. Retrieved
 Jun. 1, 2008 from <http://ltrc.nctu.edu.tw/home/LTRC_home/news.php>
 Multimedia English Learning Center. National Kaohsiung First University of Science and
 Technology. Retrieved Jun. 1, 2008 from
 <http://elearning.cge.nkfust.edu.tw/index_1.php >

Table 1. Items for Students' Belief and Attitude toward Self-directed Learning

-
1. I think that English self-directed learning is an important learning ability.
 2. I think that the main purpose of English self-directed learning is to develop the habits of independent learning.
 3. I think it's a good idea for school and the GE teachers to promote the English self-directed learning curriculum.
 4. I think it's helpful to foster English self-directed learning skills through training in the Multimedia English Learning Center.
 5. I think it's helpful to develop English self-directed learning skills by taking multimedia English learning courses and using Internet resources.
 6. I think I will like English more by developing English self-directed learning skills.
 7. Overall, I think that to develop English self-directed learning skills in school is a (an) _____ task for me.
-

Table 2. Analysis of Students' Attitude toward English Self-directed Learning

Items	AGREE		NC	DISAGREE	
	SA	A		D	SD
1. I think English self-directed learning is an important learning ability. (N=214)	72.5%		22.9%	4.7%	
	16.4%	56.1%		2.8%	1.9%
2. I think that the main purpose of English self-directed learning is to develop the habits of independent learning. (N=214)	68.7%		21.5%	9.8%	
	18.2%	50.5%		7.9%	1.9%
3. I think it's a good idea for school and the GE	50%		34.9%	15.1%	

teachers to promote the English self-directed learning curriculum. (N=212)	9.9%	40.1%		11.8%	3.3%
4. I think it's helpful to foster English self-directed learning skills through training in the MELC. (N=214)	47.2%		30.4%	22.4%	
	8.4%	38.8%		16.8%	5.6%
5. I think it's helpful to develop English self-directed learning skills by taking multimedia English learning courses and using Internet resources. (N=214)	53.7%		31.3%	13.9%	
	10.7%	43.0%		12.1%	1.8%
6. I think I will like English more by developing English self-directed learning skills. (N=212)	27.8%		42.9%	29.3%	
	6.1%	21.7%		20.8%	8.5%

SA = Strongly Agree, A = Agree, NC = No Comment, D = Disagree, SD = Strongly Disagree
N= Number of Valid Responses

Table 3. Student Response to the Question “Overall, I think to cultivate English self-directed learning ability in school is Easy/Difficult to me.”

Response	Number	Percentage
Easy	98	45.8%
Difficult	109	50.9%
Others	7	3.3%
Total	214	100.0%

N= Number of Valid Responses

Table 4. Ranking of Reasons for Considering to Cultivate Self-directed Learning Ability is Easy

Rank	Easy	Point
1	English self-directed learning is relaxing and without pressure.	129
2	I like to learn English at my own pace.	100
3	It's nice to study weekly and regularly.	55

Table 5. Ranking of Reasons for Considering to Cultivate Self-directed Learning Ability is Difficult

Rank	Difficult	Point
1	I am too busy to do self-directed learning weekly.	106
2	I do not like to learn English through computer because it is boring and ineffective	66

Table 6. Student Response to the Question “Have you ever used the online English learning resources offered by the MELC?”

Response	Frequency	Percentage
I have never used them.	82	37.8%
I have ever used them.	81	37.3%
I sometimes use them.	40	18.4%
I often use them.	14	6.5%
Total	217	100.0%

Table 7. Reasons for Not Using the On-line Resources in the MELC

Rank	Reasons	Count	Percentage
1	I don't have any information about them.	50	23.0%
2	I don't know how to use them.	24	11.1%
3	My English is not good enough to use them.	16	7.4%

Table 8. The Best Way to Know the On-line English Learning Resources

Rank	Effective ways	Count	Percentage
1	Through teacher introduction in class	129	59.4%
2	Through the official website of the MELC	87	40.1%
3	Through freshman's orientation programs	84	38.7%