

DOCUMENT RESUME

ED 440 615

IR 019 965

AUTHOR Chang, George Sheu-Ting; Chu, Clarence; Lee, Bosco Wen Ruey; Cornell, Richard

TITLE Recreating Technology Standards for Taiwan's Colleges and Universities.

PUB DATE 2000-02-00

NOTE 8p.; Paper presented at the Association for Educational Communications and Technology (AECT) International Convention (22nd, Long Beach, CA, February 16-20, 2000).

PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Academic Achievement; *Academic Standards; Educational Development; *Educational Objectives; Educational Planning; *Educational Technology; Foreign Countries; Higher Education

IDENTIFIERS Taiwan

ABSTRACT

This paper describes a project, currently in the planning stage, that is intended to provide definitive instructional technology standards for Taiwan's colleges and universities. The objective is that upon completion of this project, instructional technology quantitative and qualitative standards for colleges and universities in Taiwan will be developed, field tested, and, it is hoped, adopted by the Ministry of Education of the Taiwanese government. The description of proposed activities outlines: the methodology; academic and professional context; relevance of this proposal; significance of the proposed project to the field, the design team's professional development, and benefits to Taiwan; necessity for presence within the host country to complete this project; arrangements for national affiliation or collaboration; project timeline; language competence requirements; and dissemination of results. The paper contains a selected bibliography of 28 books and journal articles. (AEF)

Recreating Technology Standards for Taiwan's Colleges and Universities

By. Dr. George Sheu-Ting Chang
Dr. Clarence Chu & Dr. Bosco Wen Ruey Lee
& Dr. Richard Cornell

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

S. Zenor,

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

**U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)**

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Recreating Technology Standards for Taiwan's Colleges and Universities

Dr. George Sheu-Ting Chang, National Taiwan Normal University
Dr. Clarence Chu, National Taiwan Normal University
Dr. Bosco Wen Ruey Lee, National Taiwan University
Dr. Richard Cornell, University of Central Florida

AECT National Convention
Long Beach, California

Project Overview

This presentation will describe a project currently in the planning stage that is intended to provide definitive instructional technology standards for Taiwan's colleges and universities.

Description of Proposed Activities

Objectives

Upon completion of this project instructional technology quantitative and qualitative standards for colleges and universities in Taiwan will be developed, tested in the field, and it is hoped, adopted by the Ministry of Education of the Taiwanese government.

Methodology

Given the objective to examine both qualitative and quantitative elements related to the development of instructional technology standards for Taiwanese postsecondary institutions, the following research phases will be undertaken:

- I. A front-end analyses and needs assessment will be conducted between August, 1999 and July 2000. These tasks will involve interviews with key academic officers, faculty and students at selected colleges and universities in Taiwan in an effort to ascertain the specific needs related to the appropriate administration of their institution's instructional technology programs and support services. The institutions selected will be those currently exhibiting leadership in the area of Instructional Technology.
- II. A review of the literature will be conducted during this same time frame to determine current efforts being undertaken within selected technology-rich countries. It is anticipated that the review will entail a multi-disciplinary analysis, given the current diversity of entities that are performing instructional technology tasks across a broad spectrum of organizations within a given academic institution.
- III. Between August and October 2000, with phases II and I completed, a content outline will be developed. This outline will be shared with the stakeholders (chief academic offices, faculty and students) of the selected Taiwanese colleges and universities to determine the appropriateness of the document's direction and scope. Revisions will be made in light of feedback received.
- IV. Between October and December 2000, Phase IV will be spent writing a revised standards document with continual feedback solicited from the stakeholders. A draft version of the document will be distributed and field-tested by selected Taiwanese colleges and university chief academic officers and their directors of instructional technology. Revisions to the document will be made on the basis of feedback received.
- V. Once approval to implement has been received from the Ministry of Education of the Taiwanese government, it is hoped the document will be formally adopted within Taiwanese colleges and universities and it will become an integral element of the institution's strategic plan and operating policy.

Academic and Professional Context

In December of 1989, through a grant provided by the Ministry of Education of the government of the Republic of China, selected interviews were conducted with several college and university chief academic officers and their respective instructional technology/media directors in Taiwan. The institutions selected were representative of both urban and rural settings and reflected both large and more modest sized institutions.

An invitation had been extended to conduct the research in collaboration with the National Audiovisual Education Association of China. (NAVEA in Taiwan) The impetus for the project stemmed from prior leadership of a national project to develop standards for learning resources programs in American colleges and universities (Cornell and others, 1989).

In 1989, the major thrust of a postsecondary institution's instructional technology center was focused on the production and use of "audio-visual" media and the equipment related to it. Motion pictures, videotapes, audio recordings, slides, filmstrips, and overhead transparencies were the predominant media formats.

The standards developed by the Association for Educational Communications and Technology (AECT) were written to cover both qualitative and quantitative measures. Sections within the 1989 document included sections related to personnel qualifications, faculty and instructional development, equipment and software depreciation schedules, and a number of assessment instruments through which an institution might measure its relative "audio visual health."

During the time this document was being developed, a period of more than a decade, members of the NAVEA in Taiwan became regular participants in the annual meeting of AECT. When the final standards document was published, they asked if such a work might be adapted for use in Taiwan and it was agreed to begin work on this task.

Through a number of meetings in Taiwan, selected chief academic officers and their audiovisual directors were briefed as to the contents of the standards. A copy of the Standards document was provided to each institution. A steering committee within the NAVEA in Taiwan was convened and served as an expert panel. Their major goal was to analyze the standards document and, having done so, recommend specific sections that would require modifications, related to the differing culture, which prevailed.

The document served Taiwan well for many years. Due to many changes within the field, the standards are in need of major revision. The same may be said for this document within the United States.

A number of new emphases have emerged in the past decade, chief among them is the "computerization" of academia. Old media formats languish in closets and storage areas while computers are found on most faculty members' desks as well as in an increasing number of classrooms.

With the advent of computing there has also emerged an interesting turf-battle among the keepers of technology on many American university campuses. The question to be posed in this regard is who will be named the "director" of instructional technology in the coming millennium?

With new technological innovations bound to be developed in the coming decade or less, we envision other entities that see themselves with a vested interest as to who shall oversee technology administration, design, production, implementation and evaluation.

Increasingly we see a struggle ensuing between the Director of Instructional Technology/Learning Resources and the Directors of Libraries, Academic Computing, Faculty Development and Teaching, Distributive/ Distance Learning, Information Technology and others.

The extent to which this struggle for administrative oversight will arise within Taiwanese universities remains to be seen. Doubtless, tact, diplomacy, and cultural sensitivity will be required in addressing these issues with the stakeholders in Taiwan.

It is our intent to ascertain through in-depth on site interviews, the extent to which this unique phenomenon will replicate itself in Taiwan. If such is the case, then the standards document as written will adhere to the philosophy of focus on "instructional technology" as a fundamental element of the organization's strategic planning process. In doing so, we anticipate that there may well emerge a shared responsibility which, rather than combative in nature, will be one of positive collaboration.

Relevance of this proposal

For over a decade Richard Cornell served as chair of a national technology standards task force within the Association for Educational Communications and Technology (AECT). The work performed by his committee served as the basis for what is now being used by American and Taiwanese college and university instructional technology administrators.

A number of articles have been written that relate to the use of instructional standards in higher education (Albright, 1991; Albright; 1992; Cornell, 1988, 1989; Hazen, 1992; Higher Education Resources Alliance, 1995; Saettler, 1990; Wunsch, 1992).

Significance of the proposed project to the field, the design team's professional development, and benefits to Taiwan

Four years ago the current President of the Association for Educational Communications and Technology asked Dr. Cornell if he would again chair a Task Force to re-examine and revise the 1989 Standards document.

A graduate class at the University of Central Florida in the Administration of Instructional Systems took on this task and developed a draft version of the revised standards. At the 1997 and 1998 national conventions of AECT, hearings were held and input was solicited. Correspondence was exchanged between and among several national organizations in an effort to secure additional input. The efforts were terminated in late 1998 due to lack of additional input from the field.

In February 1999, during the Houston AECT convention, an inquiry was made by the representatives of the NAEVA in Taiwan, asking if revisions to the Standards were complete and if so, could such revisions be provided them for further adaptation within Taiwan.

It was acknowledged that work had stopped in late 1998 on this project but that interest remained high among many in the field, given the paucity of available resources and guidelines which instructional technology administrators had available to them.

There are general guidelines available from the Higher Education Information Resources Alliance (HEIRA) which serve as an "executive summary" of what such guidelines might be but they fall far short of being "standards" for the field. Instructional technology administrators want specifics, standards towards which they can build their own organizations and against which they might measure their performance. Such standards do not currently exist, either in the United States or in Taiwan.

Necessity for presence within the host country to complete this project

Our experience in adapting the 1989 AECT Standards to Taiwanese postsecondary education institutions proved beyond doubt, the necessity of conducting face-to-face interviews and on-site analyses of the issues and problems associated with adaptation of the document. Adaptation of a document created in the United States and to be used in Taiwan is, above all, a culturally sensitive undertaking. There are innumerable nuances, which may be missed entirely if one is attempting to create such a revision only by correspondence.

The Executive Board of the NAEVA in Taiwan has indicated a desire to assist in the design and implementation of this project through the provision of interpretations during requisite on-site interviews and in translating the document in Mandarin.

Additionally, the National Taiwan Normal University and the National Taiwan University have agreed to act as co-sponsors, together with the Taiwanese Ministry of Education, to insure access to key personnel and resources required assuring the successful completion of this project.

Arrangements for national affiliation or collaboration

Dr. Cornell has made seven different trips to Taiwan over the past thirteen months. During these trips alliances have been made and relationships formed which will greatly assist in completion of the proposed project. Relationships have been established with numerous postsecondary institutions, include, but are not limited to:

The Ministry of Education; National Taiwan Normal University; National Taiwan University; Hualien Teachers College; National Cheng Chung University; Tamkung University and the NAEVA in Taiwan.

Project Timeline

February 1999 - Initial discussions with officials of the NAVEA in Taiwan and Director of the Cultural Division, Taipei Economic and Cultural Office in Houston.

March 1999 – Discussions with Director, Division de la Culture ET de l'Education, Bureau de Représentation de Taipei en France, Paris.

May 1999 – Discussions continued with the NAVEA in Taiwan's Members of Executive Board, Taipei.

August 1999 – July 2000 – Conduct front-end analyses and needs assessment; conduct literature review. Visit to Taiwan in December to begin design of questionnaire to selected Taiwanese postsecondary institutions based on Ministry of Education recommended sampling procedures. Complete design and send to stakeholders. Receive same from the field.

July-August 2000 – Begin design of content outline for Standards.

October 2000 – disseminate content outline and first draft of document to stakeholders in Taiwanese postsecondary institutions and solicit feedback.

October - November 2000 - Revise Standards document in light of feedback received.

December 2000 – Distribute document for final revision and field test Standards at selected Taiwanese postsecondary institutions. Implement Standards upon final approval of Ministry of Education of the government of the Republic of China.

Language Competence Requirements

The NAVEA in Taiwan and personnel at both the National Taiwan Normal University and the National Taiwan University has assisted with translation services on numerous trips to Taiwan in the past. They have indicated an enthusiastic willingness to continue to do so throughout the duration of this project.

Dissemination of results

A report of tasks will be made to the Ministry of Education in the Republic of China, to the Executive Board of the NAVEA in Taiwan, and to the numerous stakeholder institutions throughout Taiwan. Additionally, the document will be translated to both English and Mandarin and distributed to these named entities as well as to the Association for Educational Communications and Technology in Bloomington, Indiana for subsequent dissemination to the field in the United States.

Selected Bibliography

Books

Albright, Michael J. (1992). The future of campus media centers. In Albright, M.J., and D.L. Graf (Eds.), *Teaching in the Information Age: The Role of Educational Technology*. New Directions for Teaching and Learning No. 51. San Francisco: Jossey-Bass Publishers.

Cornell, R.A. and Ingram, K. (Eds.) [1997] *An International Survey of Distance Education and Learning: From Smoke Signals to Satellite III*. A report given at the annual Media Week of the International Council for Educational Media in Berlin, Germany. Barcelona: International Council for Educational Media, 135 p.

Cornell, R.A. & Murphy, K. (Eds.) (1995). *An International Survey of Distance Education and Teacher Training: From Smoke Signals to Satellite II*. Paris: International Council for Educational Media.

Farkas, P. & Cornell, R. (Eds.) (1993) With Jeff Armstrong and Charles Saar. *An International Survey of Distance Education and Teacher Training: From Smoke Signals to Satellite*. Paris: International Council for Educational Media.

Cornell, R.A. & others. (1989). *Technology in Instruction: Standards for College and University Learning Resources Program, Second Edition*. Washington, DC: Association for Educational Communications and Technology.

Cornell, R.A., Heinz, R., Heinz, M., Leid, J. & Spears, R. (1986). *Technology in Instruction: Standards for College and University Learning Resources Programs, First Edition*. Washington, DC: Association for Educational Communications and Technology.

Cornell, R.A. & others. (1983). *Standards for College and University Learning Resources Programs*. Washington, DC: Association for Educational Communications and Technology.

Hazen, M. (1992). Academic computing: How to address the teaching and learning challenge. In Albright, M.J., and D.L. Graf (Eds.), *Teaching in the Information Age: The Role of Educational Technology*. New Directions for Teaching and Learning No. 51. San Francisco: Jossey-Bass Publishers.

Saettler, P. (1990). *The evolution of American educational technology*. Littleton, CO: Libraries Unlimited, Inc.

Chapters in Books

Cornell, R.A. & Martin, B. (1997). The role of motivation on web-based instruction. In Kahn, B. (Ed.). *Web-based Design*. New York: Educational Technology Publications.

Cornell, R.A. (1997). Program management - Its relationship to practice. In: Kaufman, R., Thiagarigan, S., & McGillis, (Eds.) *Guide to Organizational Improvement*. San Diego: Pfeiffer & Co. (in press).

Journal Articles - Peer Reviewed

Albright, M. J. (1991). A profile of the profession as we enter the last decade of the century. Proceedings of the annual spring conference of the Consortium of College and University Media Centers, Philadelphia, PA, May 1991.

Chang, G., Cornell, R., Lee, B. & McNamara, S. (1991). AECT's post secondary standards: Will they play in Taipei, Sydney, or Paris? *Journal of Educational Media and Library Science*, 28(4), 393-406. Tamsui, Republic of China: Tamkang University.

Cornell, R. A. (June 1997). Les Tendances de l'Education Assistee par Ordinateur Aux Etats Unis. Conference Proceedings. Le Conference O.R.M.E. Marseille, France: CNDP, Ministry of Education. (In Press).

Cornell, R.A. & Smith, K. (1997). A new paradigm for faculty involvement at the University of Central Florida *Educational Media International*, March 1998.

Cornell, R. A. & Martin, B.L. (December 1997). Instructional technology and educational change: An international perspective. Conference Proceedings. International Conference for Instructional Technology for the 21st Century. Hualien, Taiwan: Ministry of Education.

Cornell, R.A., Cortell, R., Stofan, J., & Street, W. (1994) Information highways: Future implications for education. *Educational Media International*, 31(3), 92-97.

Cornell, R.A. (1993). Editorial. (Issue editor). Design and delivery of a twenty-first century technology base for today's learners - International implications. *Educational Media International*, 30(1), 5-6.

Cornell, R.A. (1989). AECT's technology in instruction: *Standards for College and University Learning Resources Programs...How viable for the Chinese institutions of higher education?* *Journal of Educational Media and Library Sciences*, 26(3), 203-214. Tamsu, Taipei: Tamkang University.

Cornell, R. A. (1988). AECT's *Technology in Instruction: Standards for College and University Learning Resources Programs ... How viable for Australian institutions of higher education?* *The Australian Journal of Educational Technology*, 4(2) 137-145. Belconnen, Australian Capital Territory: AJET Publications.

Cornell, R.A. (1985). Scenario 1999 and beyond: In search of an intergalactic media center. *Journal of Educational Media and Library Sciences*, 22(4) 343-349, Tamsui, Taipei, Taiwan: Tamkang University.

Cornell, R.A., Sandoval, H. and others. (Eds.). (1979). Contributing factors to a professional self-concept or taking a look at yourself first! *Summary Report. The 25th Annual Lake Okoboji Educational Media Leadership*

Higher Education Information Resources Alliance. (1995a). *HEIRAlliance evaluation guidelines for institutional information resources*. Boulder, CO: Author.

Higher Education Information Resources Alliance. (1995a). *An example of the information technology environment at an information-resources-intensive institution*. Boulder, CO: Author.

Holzschuh, A. L. & Cornell, R.A. (1996). Annotated bibliography of trends in media. *Educational Media International*. 33(1), 9-15.

King, J.W. & Cornell, R.A. (1992). Tools for managing design and development of a twenty-first century technology base. *Educational Media International* 29(3), 153-161.

Silber, K.H. (1970). What field are we in, anyhow? *Audiovisual Instruction*, 15(5), 21-24.

Wunsch, M. A. (1992). Killing the old myths: Positioning an instructional technology center for a new era in higher education. *TechTrends*, 37(6), 17-21.

BEST COPY AVAILABLE



U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)



NOTICE

Reproduction Basis



This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.



This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

EFF-089 (3/2000)