Evaluation of Educational Management Systems:
A Critical Approach for Empowering Online Communications

Abstract

The main purpose of this article is to generate a functional model of evaluation that EMSs can be able to empower online communications characterized by imperative decision making task. The evaluation process of EMSs must merge the multicultural strategies of the theory of *Media Richness*, and the ethical concerns of the critical approach. *Media Richness Theory* can empower online communications that resolve ambiguity, negotiate varying interpretations, and facilitate understanding. A critical approach can provide online communication designers with the information in detail that elucidate concerns, issues, needs and expectations raised by stakeholders. Therefore, this paper discusses the naturalistic and critical stages of this evaluation process by introducing a critical perspective on *Media Richness Theory* to provide exact directions for EMSs.

Introduction

For diverse imperatives, such as technological mandates, public dissatisfaction with Educational Management Systems (EMSs), influence of responsible online communication workers, and the usefulness of evaluation results through a critical approach is being performed not only with increasing frequency, but also with growing quality in empowering online communications. Besides, any EMSs are made a good deal of evaluation process in sophistication of meticulous analyses before they are broadly adopted. Not only must EMSs address practical and technical issues, but also they must concentrate on the philosophy of interactive online communications by critically revising ultimate goals and also objects of online programs. Needless to say, the evaluation of EMSs is a complex process, and can be effort-wasting and time-consuming business easily. In this context, online communication workers are capable of clearly understanding that "*...curriculum is what we teach; education is how we teach it; and evaluation guides the process...* (Howell, Fox and Morehead, 1993, p.1)". According to these issues, any EMSs must provide online learners with interactive communications rather than concentrate on the promotion skills and knowledge. Consequently, the exact evaluation of EMSs can deal with three issues to generate dynamic online communication tools: 1) the specification of global and diverse variables, 2) the determination of accountability for support effective programs, and 3) the multicultural flexibility of democratic concepts and generic actions for providing reliability, validity and credibility.

This paper introduces a critical approach to evaluate EMSs that use of this approach can result in improvements of existing EMSs, establishments of new and better systems, greater accountability of online communication workers to public and wiser decisions by stakeholders. These concerns can help professionals improve online communications successfully. Unfortunately, many of the traditional evaluation methods for handling these issues are oversimplify that the results of their use can be catastrophic. To understand the new online communication styles, changed attitudes, outcomes and also needs toward the cutting-edge technologies, the evaluation of EMSs must cover a more active process. Therefore, this paper focuses on pitfalls, strategies and practical experiences for policy formulations, judgments and decision makings, and planned changed related to the evolution process as well.

Purposes

Planning a successful evaluation process on complex EMSs must reduce the limitations of time and space, and allow online communication designers to collaborate with each other in different countries from around the world. However, a continuous inquiry into the value of cutting edge multi-methodological approaches to conducting how to implement effective multicultural evaluation in this area has yet to be undertaken. This paper, therefore, tries to make a unique contribution to complex evaluation process through EMSs by providing a comprehensive overview on this investigation. The main goal of this study is to discuss the philosophical foundations and theoretical backgrounds of EMSs by addressing with various methodologies in a complex evaluation process. Also, this paper deals with the pragmatic features of the data collection and analysis of problems of this evaluation process to generate new EMSs and also improve the existing ones effectively. In this context, there are three research questions:

1. What skills are required to conduct evaluation to build and support a milieu that focuses on working collaboratively with colleagues and global partners in EMSs?
2. What advantages does EMSs offer participants to promote excellence through continuous process improvement and the creative pursuit of new ideas and systems in complex decision making?
3. What does it mean to do ethical evaluation to plan, communicate, motivate, manage, and lead effectively in professional development and lifelong learning endeavors in EMSs?

The world is rapidly becoming more technologically complex. As a result, learners need to be taught differently than they have been in the past. Universities must prepare learners to become active members of this changing society, and to adapt to these transformations as they occur. EMSs, therefore, must help not only learners think and solve problems critically, but also online communication workers explore and discuss the main characteristics of doing evaluation on complex decision making to promote their critical learning skills. Based on these concerns, to improving the usefulness of evaluation results though a critical approach, any EMSs must deal with:

1. engaging learners in multicultural communication projects that must be realistic, intriguing and relevant to real life experiences,
2. modeling how theory and philosophy translate into practice on complex decision making,
3. proposing situate learning in authentic contexts by engaging learners think deeply,
4. taking ownerships and responsibilities for their online communication process, and
5. encouraging learners independence in thinking critically.

Based on the main purpose of this research and the concerns discussed above, EMSs must help online learners to become engaged citizens, informed individuals and dynamic members in an online society. This study is bringing new ground by addressing these key questions about interactive online communications that evaluation is an active process to obtain, evaluate and produce knowledge. In short, this paper will provide a marvelously rich array of ideas about conducting ways to do evaluation for online communication workers, and enriching the analysis and practice in the area of EMSs.

Theoretical Background of the Study

There is a need for investigating clearly how to build collaboration among online professionals, community and global resources with EMSs (Lessing, 2001). Also, focusing on how to negotiate the meaning and usability of flexible e-contents is very important for online communication designers in assessing their understanding founded on culturally shared interactive online communications that construct new diverse schemas in their minds encourage. Online participants, therefore, can interact a wide range of viewpoints by reverencing individual cultural differences and giving more attentions to diversity issues via EMSs. Evaluation of EMSs can help online communication designers understand how to manage their role tasks, give careful attentions to diverse online community, and understand their important roles to integrate new digital technologies in their activities via EMSs. However, involving people to become evaluation process is often difficult. Therefore, this article addresses the *Media Richness Theory* as the theoretical and philosophical foundation of the evaluation of EMSs. This theory can help online communication workers be aware of the strengths and limitations of EMSs.

The Basics of Media Richness Theory through Evaluation of EMSs

Media richness theory is based on contingency theory and information processing theory (Galbraith 1977). First proponents of the theory were made by Daft and Lengel (1984).The theory of *Media Richness* is one of the most widely used media theories. It argues that task performance is improved when task information needs are matched to a medium's richness or its "…*capacity to facilitate shared meaning* (Daft, Lengel and Trevino, 1987, p. 358)." *Media Richness Theory* points out that media vary in certain uniqueness that affects personal ability to communicate rich information. According to Daft and Lengel (1986), information richness can bee defined as the ability of information to change understanding within a time interval, and also media capable of sending *rich* information are better suited to tasks with equivocal information. Moreover, they mentioned that this theory theorizes which media should prove most effective in what situations. Based on this concern, theory does not focus on conjecturing how managers *choose* media. According to Daft and Lengel (1986), the theory of Media Richness explains the impact of various types of media that these are the basic foundations of interactive online communications. According to this theory, the various communications media differ in richness. Rich communications media allow the transmission of a multiplicity of cues, provide immediate feedback, allow communication with both natural language and numbers, and facilitate the personal focus of messages.

Kydd and Ferry (1991) highlight that existing communications media can be viewed on a continuum of rich to lean, with face-to-face communication being the richest, followed by electronic meeting systems, video-conferencing, and audio-conferencing, with electronic mail, voice mail, and computer conferencing being the leanest. In other words, it is vague that the use of richer media improves the performance of equivocal or uncertain tasks. Empirical researchers of Media Richness Theory have not been terribly convincing, particularly for *new media* such as computer mediated communication (Burke and Chidambaram 1999; Dennis and Kinney 1998; Ngwenyama and Lee 1997), However, it is quite clear that the Internet-based new technologies generate radical revolutions in the area of EMSs that build not only multi cultural and but also interactive online communications democratically. In short, EMSs-based communications provide people with dense communications

milieus than face-to-face ones both technically and socially. The Media Richness Theory, in this article, helps online communication workers concentrate on significantly decreasing the boundaries of time and space in EMSs that the media richness of a channel is concerned about examining four main aspects:

1. its capacity for immediate feedback determined by the amount and the promptness of the feedback the receiver can give to the sender (Timm and Detienne 1995),
2. its ability to support natural language regarded to have the ability to support natural language if the sender can structure and send the message in the most intuitive manner or as if it were in a conversation (Chua and Ngee, 2001),
3. the number of cues it provides by the channel includes both verbal and non-verbal cues such as tone of voice, hesitation, facial expressions, vocal cues, dress and posture that help the individuals to interact more effectively (Parks and Floyd, 1996) and
4. the extent to which the channel creates social presence for the receiver provided by a channel influences individuals' motivation to engage in interpersonal communication (Williams and Rice, 1983)..

The evaluation of and EMSs must be viewed as a primary means for solving interactive online communicational problems. The theory of Media Richness can play a vital role in developing and implementing successful EMSs to provide a foundation for decision making and policy formation and to accredit the program as well as to define achievement strategies and boundaries. Besides, as pointed out by Worthen and Sanders (1987), there are three important reasons for planning and conducting evaluation of EMSs: 1) planning procedures, programs and products to contribute decisions about program adjustments; 2) improving existing procedures, programs and products to contribute decisions about program installation; 3) justifying existing or planned procedures, programs and products to contribute to the understandings of basic social and communicational processes. Evaluation must answer questions about a wide variety of EMSs to build interactive online communication that there is a need an effective plan and perform the improvements of EMSs in a systematic way. Chua and Ngee (2001) provide an eight-question instrument to determine the media richness of diverse communication channels that identify needs, select the strategies from amongst available alternatives, monitor changes and measure the impacts of these changes. Based on these questions, in this paper, the researcher discusses to improve the usefulness of evaluation process through a critical approach. When using the channel to interactive online communications via EMSs, learner must be able to

1. raise questions and receive prompt responses to share and exchange knowledge in online communications,
2. provide accountable feedback to each other via diverse media selections,
3. collaborate through communication channels in a language they find natural and intuitive to discover multicultural categories and stages,
4. process knowledge of appropriate richness to elucidate ambiguity,
5. use the Internet-based icon language to express themselves to understand characteristics of EMSs versus perceived environmental vagueness,
6. vary the tone and volume of their voices through the multicultural channels to reflect on the collective efforts of online societies, and
7. give guidelines for learners selecting communication media to allocate technological and pedagogical disputes.

The Basics of a Critical Approach through Media Richness Theory

Employing *Media Richness Theory*, a critical pedagogy approach can facilitate the social awareness of online social communications toward evaluating the usefulness and successfulness of EMSs. Moreover, the failures of EMSs can be alleviated by employing richer media. Based on these concerns, online communication workers appraise the quality of online communications whereas they decrease ambiguity about authentic practices. In this context, Figure 1 shows that empowering online communications through the proper selections of communication media for EMSs based on the core of evolution process.

Figure 1. The Basics of a Critical Approach through Media Richness Theory

The critical pedagogy approach can decrease ambiguity through the theory of Media Richness for empowering online communications. As highlighted by Kahai and Cooper (2003), empowering online communications as richer media can have significantly positive impacts on evaluation quality that effects of participant deception can be mitigated by employing a critical pedagogy approach through the theory of Media Richness. To improve the usefulness of evaluation results based on the approach and theory investigates the potentials and impacts of EMSs for diverse online communications, evaluation must

1. integrate the basic concepts of online communications and interactions with the best contemporary knowledge,
2. process information of appropriate richness to reduce uncertainty and clarify ambiguity,
3. provide background knowledge needed to understand the communication processes related to democratic and multicultural elicit issues,
4. use media richness model applied to message equivocality, contextual determinants, media symbolisms and media selections,
5. elaborate on the specific of decision making processes to explain how different views of learners results in different views of online communications,
6. focus on how various critical thinking and decision making processes can be empowered through diverse forms of online communications,
7. explain extensive coverage of the process of online communications and learning by providing specifics about presenting strategies for well-designed decision making,
8. explore the assured functions and models of online communications to generate set of suggestions related to the indispensable features, skills and knowledge of learners,
9. give guidelines for learners selecting media by emphasizing decision making over sober reflections to provide exclusive online communication opportunities both asynchronously and synchronously, and
10. provide learners with technological and pedagogical support services to successfully empower eligible online communication utilities that address accountable knowledge sharing milieus.

Evaluation is more than testing and measuring, and also online communications is more than the expressions of ideas (Table 1). The usefulness of evaluation results for EMSs depends on the sophisticated and judgment-driven decision making activities. As mentioned by Isaacson (1985), planning, transcribing, reviewing and revising are the four stages of online communications that these evaluations must consider diverse and multicultural factors taking account of dynamic social frameworks and contexts.

Table 1. The Evaluation of EMSs

The Foundations of Evaluation through Online Communicative Actions

The foundations of evaluation through online communicative actions are the process of conducting an evaluation for the purpose of making critical decision making. The purpose of this process is to provide online communication workers with information regarding what EMSs must be determined the online communication status and powers. As suggested by Howell, Fox and Morehead (1993), evaluation, therefore, must be a thoughtful process and a professionally challenging activity that can be empowered online communications as EMSs thinking matured. Online communicative actions based evaluation must be conducted by using the most sophisticated ways. Therefore, all arrangements must begin with the specification of not only democratic but also multicultural online communication outcomes. In this context, as indicated at the Table 2, it can be made seven open and flexible foundations: clarity, completeness, contextually, truthfulness, diversity, flexibility, and accountability. These foundations help online communication workers address eligibility that highlights the value of evaluation results for EMSs.

Table 2. The Foundations of Evaluation through Online Communicative Actions

The foundations of evaluation can be able to help these professionals empower online communicative actions. Therefore, EMSs must be designed according to diverse views and multicultural insights which inquire about elucidating how online communications within *societies*, which have a more formal political meaning, and *cultures*, which are more informal and related to daily life. The theoretical background which is developed herein presents online communicative actions as being responsible for guaranteeing democratic and multicultural preeminence and protecting the legality of wide-ranging circumstances of the production of EMSs in the critical decision making process of evaluation. As strongly mentioned by Brosio (1994), EMSs, therefore, can help online communication workers in its accumulative process, and serve the interests of the wider society with regard to its associates' perceived and authentic needs.

Results and Conclusions

This article discusses that the evaluation process of Educational Management Systems (EMSs) profoundly engages interactive online communications. One of the most crucial aspects related to these social interactions is the types of EMSs developed based on the theory of *Media Richness* that evaluation must concentrate on investigating learner, online communication designers, and technology performances successfully. As mentioned by Irani (2005), a similarly imperative dynamic to consider is online communication potentials and the ability of the system design as well as communication milieus to enhance main educational tasks and provide adequate communication opportunities among online communication designers, learners and community.

It is apparently important to expose what is meant by the evaluation of EMSs. Online communication workers must consider about the judgments of authorities about the EMSs, the opinions of program development staff, and comparisons executed programs with its communicational design. To employ diverse and multicultural principles under the Evaluation Model, online communication designers must consider the development and implement stages of program evaluation to decide

whether EMSs must be continued or terminated. This must be based on the value of the products and outcomes of EMSs, the success of its development operations and process achievements, the availability of appropriate resources and also the technological adequacy of the collection and interpretation of EMSs-based data. The evaluation model of EMSs must help online communication designers establish democratic and multicultural standards that aim at philosophically involving in Media Richness Theory.

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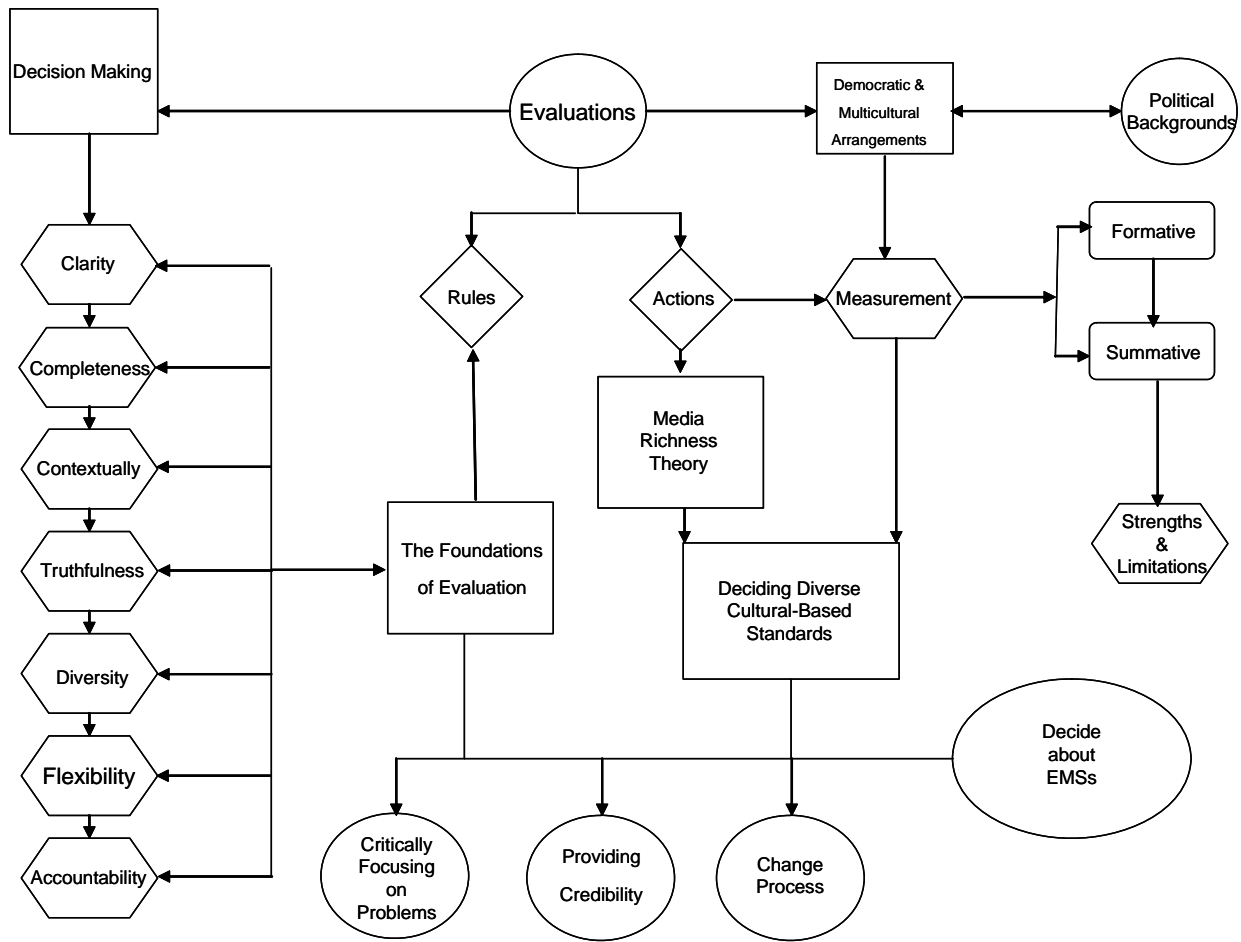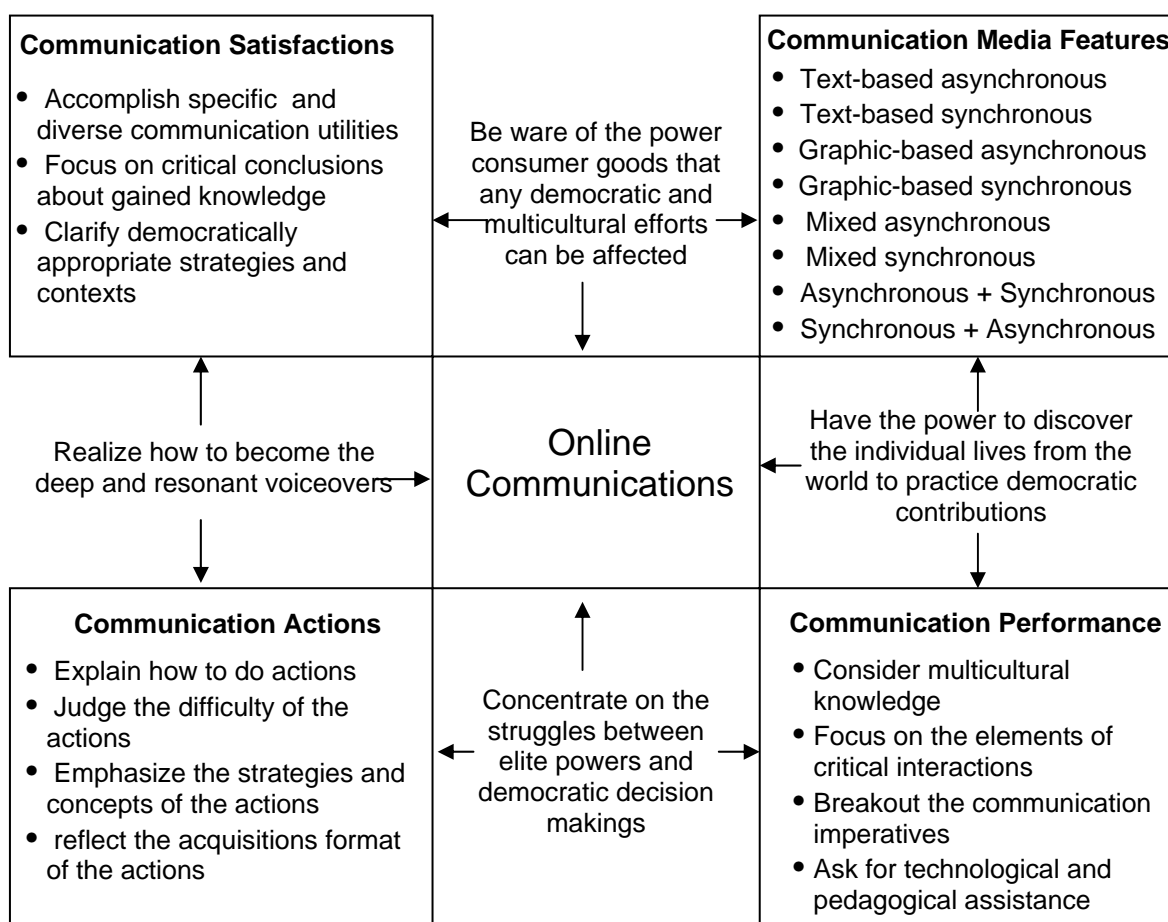
Table 1. The Evaluation of EMSs

Communication Satisfactions		Communication Media Features

Communication Satisfactions

- Accomplish specific and diverse communication utilities
- Focus on critical conclusions about gained knowledge
- Clarify democratically appropriate strategies and contexts

Be ware of the power consumer goods that any democratic and multicultural efforts can be affected

Communication Media Features
- Text-based asynchronous
- Text-based synchronous
- Graphic-based asynchronous
- Graphic-based synchronous
- Mixed asynchronous
- Mixed synchronous
- Asynchronous + Synchronous
- Synchronous + Asynchronous

Realize how to become the deep and resonant voiceovers

Online Communications

Have the power to discover the individual lives from the world to practice democratic contributions

Communication Actions
- Explain how to do actions
- Judge the difficulty of the actions
- Emphasize the strategies and concepts of the actions
- reflect the acquisitions format of the actions

Concentrate on the struggles between elite powers and democratic decision makings

Communication Performance
- Consider multicultural knowledge
- Focus on the elements of critical interactions
- Breakout the communication imperatives
- Ask for technological and pedagogical assistance

Figure 1. The Basics of a Critical Approach through Media Richness Theory

Foundations	Online Commutative Actions
Clarity	Use clear language that affect attitudes and regulate online activities
Completeness	Focus on learners' technology skills at online communications to indicate their interaction progressing
Contextually	Realize the imperatives of online contents and structures on meaning that influence online communication quality
Truthfulness	Judge the difficulties of online communications by taking learner responds, feelings and recommendations
Diversity	Consider the social and cultural backgrounds, knowledge and skills of learners by altering variables, such as disabilities, learners at risk, etc.
Flexibility	Allow learners to allocate needed concentration to the decision making stages of online communications
Accountability	Be carefully controlled in order to gain useful information in democratic manners

Table 2. The Foundations of Evaluation through Online Communicative Actions