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# Would student learning orientation impact upon preference of communication media usage?

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## ABSTRACT

Different students have different learning orientations. Some of them focus on learning, some of the focus on grade, and some focus on both. Students' learning orientations have been studies with students' attitudes towards educations, and their experience with higher educations. In this study, we would like to investigate in higher education, whether students' learning orientations have impact upon students' preference of communication media usage. Understanding students' media usage preference would help to establish the best way to communicate with different type of students. This is particular useful for identifying the strategy for hybrid/ online learning for different type of students.

### Keywords

Student learning orientation, communication media usag    LOGO, media synchronicity.

## INTRODUCTION

### Student learning orientation

Student learning orientation may have an impact on communication performance through different media.  Effectiveness of interaction and collaboration among students can influence students' performance in the courses either positively or negatively (Webb 1982; Baldwin et al., 1997).

Studies based on psychometric analysis and interviews    ve shown that there are two generalized types of educational orientation among students: a learning-oriented type and a grade-oriented type (Alexitch and Page, 1996; Katchadurian and Boli, 1985).  The former focuses primarily on values such as harmony, personal growth, the process of learning and intellectual competence.  This type of student espouses intrinsic values. The grade-oriented student primarily focuses on concerns such as grades, status, competition, and recognition.  These students are more interested in extrinsic values (Alexith, 1994; Rich, 1990, Stark, Bentley & Lowther, 1991). LOGO (Learning oriented and grade oriented) scale has been widely used for students' learning orientation. It was further developed into LOGO-II Scale.

The development of LOGO II (Eison, Pollio, & Milton, 1982) was the result of efforts to rectify original LOGO scale and to construct a more valid instrument. This was accomplished by enlarging the original set of 20 LOGO items to produce a pool of 60 statements. Of these statements, 30 concerned issues of attitude (e.g. I dislike extra assignments that are not graded) and 30 concerned directly reportable behaviors (e.g. I browse in the library even when not working on a specific assignment). Fifteen attitude and 15 behavior items were phrased to tap attitudes and behaviors thought to be characteristic of LO students while the remaining 30 were phased to tap characteristics of GO students. All statements were accompanied by a 1-5 rating scale with endpoints defined as strongly disagree and strongly agree for attitude items and never and always for behavior items.

Factor analytic procedures were used to select the final set of 32 questions comprising LOGO II. Part I of LOGO II contains eight statement tapping learning-oriented attitudes and eight statements assessing grade-oriented attitudes; Part II contains eight statements identifying learning-oriented behaviors and eight assessing grade-oriented behaviors.

Based upon their endorsement of LO and GO statements four distinct student groups can be formed: High LO/High GO; High LO/Low GO; Low LO/High GO and Low LO/Low GO. The first of these groups – High LO/High GO – would seem on rational, a priori grounds best exemplified by preprofessional students are assumed to be motivated both to learn and to achieve high grades; the former out of personal interest and avocation, the latter out of necessity.

A second major grouping – High LO/Low GO – would seem to represent the initial intuition concerning the LO student. The central focus of classroom attitudes and actions for students in this group would seem to be the pursuit of personal growth and educational enrichment. Although grades are acknowledged as a part of the classroom experience, they are not viewed as crucial to the educational process. For this group of students, grades serve neither as a relevant goal in their own right nor as a valid means of achieving different personal and educational satisfaction.

A third major type Low LO/High GO – likewise represents the initial intuition concerning the GO student. These students were assumed to view all aspects of the classroom experience in terms of their effects on a course grade. Instructional procedures and policies that make getting grades easier are valued whereas activities not related to course grades are viewed as an inconvenient waste of time and are ignored. For　　　students, grades are the major relevant incentives motivating classroom learning.

A fourth major type – Low LO/ Low GO – represents something of a conceptual enigma. Perhaps the most straightforward description of such a student is that both learning an grades are somewhat irrelevant and that the student's reason for being in school must be sought outside the context of both.　　　　it is possible to suggest that such students are in college to make contacts for later life, to have a good time, to avoid going to work immediately after high school, and so on.

**Communication and Media Synchronicity Theory**

Individuals in organizations rely heavily on communication with each other to accomplish tasks, and the information needed to complete those tasks is often communicated through　　　media (Galbraith 1977). The effectiveness of information transfer often depends on the communication medium used, since media vary in their ability to transmit different types of information (Zhang et al. 2008).　Regardless of the medium used, one of the primary goals of communication is to develop a shared understanding between individuals (Weick, 1985) in order to accomplish the task at hand.

Media synchronicity theory (MST) (Dennis et al. 2008)　　　that successful communication performance comes from the matching of media capabilities to the communication processes needed to accomplish a task.　MST proposes that there are two communication processes that are part of any task: *conveyance* and *convergence*.　Conveyance involves the transmission of new, relevant information.　Convergence involves the processing of information already received in order to agree on the meaning of that information.　Most tasks require both conveyance and convergence.

According to MST, conveyance and convergence benefit to different degrees from *synchronicity* in communication. Synchronicity is a state where actions move exactly together and at the same rate (Dennis et al. 2008).　Communication media vary in the extent to which they can support synchronicity. Some communication media, such as voice mail, are typically used asynchronously.　Other media, such as face-to-face communication, are synchronous.　Still others, such as electronic mail or instant messaging, can be used either synchronously or asynchronously.　In order to achieve synchronicity, communication partners must not only use a media synchronously, they must attend to the information at the same time, working together with a common focus.　*Media synchronicity* is the extent to which the capabilities of a medium enable individuals to achieve synchronicity (Dennis et al. 2008).　Based on media characteristics, Dennis and colleagues (2008) have assessed the media synchronicity of several commonly used media.　Face-to-face communication and video conferencing exhibit high level of media synchronicity.　Telephone　　　ng and synchronous instant messaging exhibit medium media synchronicity, while asynchronous email and voice mail exhibit low media synchronicity.

**THE RESEARCH QUESTION**

The research question of this study is: what is the impact of the student learning orientation on their preference of communication media usage.
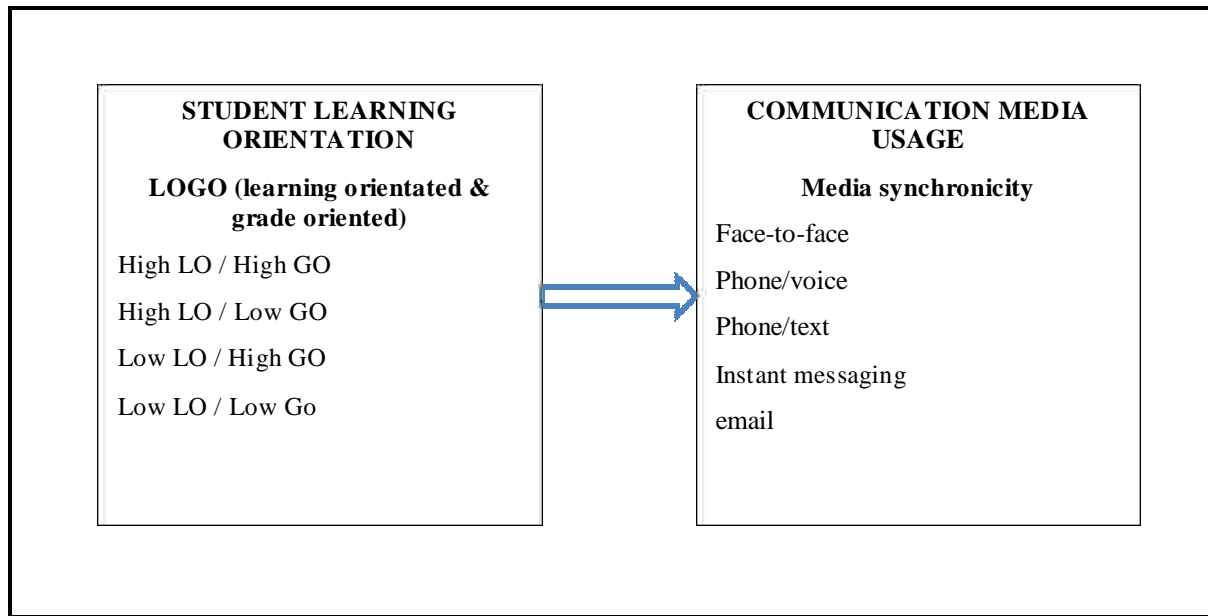
**Figure 1: the research framework for student learning orientation's impact on communication media usage**

**METHODS**

Survey methodology was used to gather data. Surveys are an appropriate method for the study when the major components of the research framework are from established research theories, but have yet to be tested in the larger scale studies. Surveys are also appropriate when empirical data is required i                              cause – effect relationships hypothesized.

The study sample was developed from several undergraduate information systems classes that require group projects. Students were asked to fill out a questionnaire as part of the project assessment. In order to accomplish the tasks required in each project, students often communicate with group members via different types of media.

Survey questions address:

1. Students' rating of the usage for each of the communication media.
2. Students' learning orientations.
3. Environmental factors (i.e. control factors).

The completed surveys are coded and entered into data analysis software. Descriptive and referential data analysis will be conducted to analyze the data. Appropriateness of the         research framework developed based on literature review in the earlier stage of the study will be tested using survey data, and will be modified where necessary based on the research findings.

The preliminary data analysis shows that students' learning orientations have significant impact on two of the communication media usage: face-to-face and email. Additional data analysis is to be completed to answer the research question and draw conclusions from.

**REFERENCES**

1. Alexitch, L. R. (1994). Undergraduate student expectations and perceptions of a university education in the 1990s. Unpublished doctoral dissertation, University of Windsor.

2. Alexitch, L. R. and Page, S. Winter (1996). Problems     Higher Education: Dilemmas for Canadian students in the Nineties. Education, Guidance & Counseling Vol. 11 Issue 2, p15, 4p.

3. Baldwin, T. T., Bedell, M. D., and Johnson, J. L. (1997). "The Social Fabric of A Team-Based M.B.A. Program: Network Effects on Student Satisfaction and Performance," Academy of Management Journal (40:6), 1997, pp.1369-1397.

4.  Dennis, A., Fuller, R. and Valacich, J.  (2008). Media, Tasks, and Communication Processes:  A Theory of Media Synchronicity, MIS Quarterly, Vol 32(3).

5.  Eison, J., Pollio, H., Milton, O. (1982). LOGO II: A user's manual. Knoxville, TN, Learning Research Center, The University of Tennessee.

6.  Galbraith, J. R. (1977). Organization design, Addison-Wesley, Reading, MA.

7.  Katchadurian, H. & Boli, J. (1985). Careerism and intellectualism among college students, Jossey-Bass, San Francisco.

8.  Rich, S. (1990). Students' intellectual orientation: Its relationship to social philosophy, careerism, and sociability, in the Annual Forum of the Association for Institutional Research, Louisville, KY.

9.  Stark, Joan S.; Bentley, Richard J.; Lowther, Malcolm  , Sum (1991). The Student Goals Exploration: Reliability and concurrent validity, Educational & Psychological Measurement, Vol. 51(2).

10. Webb, N. M. (1982). "Student Interactions and Learning in Small Groups," Review of Educational Research (52:3), pp. 421-445.

11. Weick, K. E. (1985). "Cosmos vs. Chaos: Sense and Nonsense in Electronic Contexts.  Organizational Dynamics (14:2), pp.51-64.

12. Zhang, X, Venkatesh, V. and Huang, B. (2008).  Students Interactions and Course Performance: Impacts of Online and Offline Networks, The Proceedings of the Twenty ninth         ational Conference on Information Systems (ICIS), Paris 2008.