Example of a student-centered distance education system: Instruction is largely self-directed; it is more focused and purposeful; and it employs the appropriate level of tutor mediation.



Ensuring Quality in Distance Education

Introduction

Effective tutors use a variety of means, some formal and others informal, to determine how much and how well their students are learning. A framework for managing quality in a distance learning program must accommodate all aspects of it. Evaluators need to account for:

- "Products: the learning materials and courses, the output (e.g. number of graduates, assessment outcomes such as examination pass rates, performance of competencies or practical skills)
- Services: registration and advisory services, tutoring, and counseling, feedback and guidance on learning, support for progress as a learner, career advice, provision and management of study centers;
- Processes that support Product and Services: delivery systems, record keeping, scheduling, warehousing and stock control, quality assurance procedures;
- General philosophy: policy and mission statements, ethos and culture of the organization, attitudes of staff and levels of commitment" (Robinson, 1995, para.8)

Evaluation overview

Gunawardena, Carabajal, Lowe and Wood (2000) stipulate that the adoption of a solitary method for evaluating the quality of online learning is unsatisfactory. Using one method only provides one moment in time, one perspective (p. 487). To ensure a more well-rounded analysis, distance education administrators should to employ both formative evaluation and summative evaluation (Gunawardena, Carabajal, Lowe & Wood, 2000, p. 485).

Formative Evaluation

Formative evaluations are ongoing throughout the instructional process, and are generally administered to ensure that the course will achieve its stated goals. In the distance learning environment, an instructor might have an online evaluation form that focuses on the course strengths to leverage and opportunities for improvement, technical and delivery concerns, and content areas in need of further coverage. Formative evaluations will identify major gaps in the instructional plan or the need for minor adjustments. "Formative evaluations facilitate course and content adaptation and enable the instructor to improve instruction on an ongoing basis. Formative evaluations can be distributed via electronic mail, telephone, surveys and questionnaires" (National Education Association, 1995, p. 1).

Summative Evaluation

"A summative evaluation is accomplished upon course completion to determine the overall effectiveness of the class. The focus is on student performance, course relevancy, learner approaches toward delivery methods, and the instructor's teaching methods and efficiency" (National Education Association, 1995, p. 1). Although they will not help current students since they are conducted upon course completion, summative evaluations allow the instructor to develop a revision plan in order to improve the next instructional delivery by providing information for designing a new plan, program, or course (National Education Association, 1995, p. 2).

Summative data survey questions may include items such as:

- List three to five weaknesses and strengths of this instructional unit.
- What did you think would be covered in this course, but was not?
- Would you recommend this course to a friend? Why or why not?

Model for quality control

What are the existing or emerging strategies for quality assurance of technology-mediated distance learning programs?

Four key aspects of quality assurance:

- "Faculty Credentials, Selection, and Training" Quality assurance in many programs concentrates greatly on review of faculty credentials, selection procedures for new faculty, and faculty training (Merisotis, Phipps & Wellman, 1998, para. 16).
- "Time-on-Task Measures
 Focus on time-on-task measures, including minimum weeks for courses and monitoring
 of course "log-ins," is common in distance learning programs. Students are expected to
 spend a minimum amount of time per week for study and homework assignments and
 interaction with faculty is mandated" (Merisotis, Phipps & Wellman, 1998, para. 17).
- "Student Support Services and Consumer Information" Focus on adequate student support as an essential element of teaching and learning may be one of the most distinctive features of quality control in distance learning environments (Merisotis, Phipps & Wellman, 1998, para. 18).
- "Goals and Outcomes" Quality assurance in distance learning is distinguished by a strong emphasis on program goals, and assessment of results or outcomes in the context of these goals. (Merisotis, Phipps & Wellman, 1998, para. 19).

Conclusion

Effective evaluation of teaching is essential for reflective practice. An effective model for quality assessment will account for an adaptable, resourceful, complete dissection of the course and its effect on the leaner. This can be accomplished by consistently utilizing both formative and summative evaluations, and applying the collected data to future distance education courses.

The Quality Wheel Model Diagram

The Quality Wheel Model Diagram consists of four concentric circles illustrating the components that surround and support the quality of learning experience. The outermost circle is labeled ethos and values. The circle within this is labeled logistics systems. The third circle is split into thirds by three arrows pointing to the innermost circle from the outer two. These are labeled:

- Learning materials and courses
- Administration
- Learner support services

The innermost circle is labeled quality of learning experience (Robinson, 2002).



APPENDIX

Introduction

A system is a set of elements that operate together as a whole to realize a common goal. Subsystem components exist within a system and the interdependent relationship between those components is what adds the value to the system (Betts, 1992, para. 5). A distance education system provides an educational structure, in which various components, or subsystem elements, exist. It has a foundational boundary and presents in a specific environment (Banathy, 1995, para. 15).

A distance education system has inputs, provides transitional paths for those inputs, and produces certain outputs. The following is a listing of various interdependent inputs and outputs. All of the factors in the input column affect in some way the output variables (Moore & Kearsley, 1996, p.17).

Distance learning system inputs	Distance learning system outputs
 "Student characteristics Instructor or tutor experience Competence of administrative staff Efficiency of course development Student access to resources Response time Local site coordination Institutional cooperation and support Reliability of evaluation" (Moore and Kearsley, 1996, p.15) Money (Keegan, 1996 p. 155) Existing course materials and information (Keegan, 1996, p.155) New participants (Keegan, 1996, p.155) Resource equipment (Keegan, 1996, p.155) 	 "Student satisfaction ratings Student achievement scores Student completion rates Total enrollments Quality assessments Accreditation Costs and revenue Staff turnover" (Moore and Kearsley, 1996, p.15) Educated participants (Keegan, 1996, p.155) Materials for use by other institutions (Keegan, 1996, p.155) Drop-outs (Rumble, 1992, p. 53)

This essay will identify and describe four specific sub-systems contained within a distance education system.

Four functional sub-systems of a distance education system

The learning and student support sub-system

Definition

The function of the learning and student support sub-system is to provide "arrangements and resources by which the learner can master learning tasks" (Banathy, 1993, p.33). The learning sub-system is primarily concerned with the needs of the student.

Purpose

The learning sub-system provides a transitional path where the participant is admitted, allocated to courses, and tutored and counseled as required (Kaye & Rumble, 1981, p. 232). Financial assistance is provided for within this sub-system. The learning element also makes certain that

students receive course materials, ensures the assessment and examination process, issues certificates to students who have been successful, and maintains students' records (Kaye & Rumble, 1981, p. 232). This element monitors and controls a student's progress.

Moore and Kearsley (1996) discuss learner autonomy, where each individual learner can take charge of his or her own independent learning (pp. 204-205). The level of learner autonomy depends upon the individual learner's sense of personal responsibility and self-directedness.

While learner autonomy is important, it is also essential to provide a solid support system for all learners. The student support system addressed within the learning element includes lending advice, tutoring in groups or one-on-one, facilitating peer group support, providing career guidance, as well as supplying problem solving support (Tait, 1996, p. 235).

The inputs for the learning element include new students and repeat students. The outputs for the learning element include graduates and drop-outs (Rumble, 1992, p.50).

The instructional sub-system

Definition

The function of the instructional sub-system is to "define the content and method of instruction" (Banathy, 1993, p.33). This subsystem is used to form a set of courses, learning content and resource materials, as well as deliver them.

Purpose

The information in a distance education course that will be taught and learned comes from various sources. Those sources, or inputs, can include external sources like subject matter experts, organizational experts and other students, as well as the valuable resources contained within existing literature, theory, history, philosophy, contemporary practice and problems (Moore & Kearsely, 1996, p.8). The major output is the course materials (Rumble, 1992, p.50).

Instruction and delivery are entwined when looking at the responsibilities of the facilitator. In their study, Miller and Hussman (1996) point out that "diversity of teaching styles, innovation in presenting materials, and taking the time to deal with learners on an individual basis were all considered important to improve instruction" (para. 19). The facilitator should be mindful of his role in providing immediate feedback for assignments and comments, as a lack of this will lead to learner frustration (Holmberg, 2003, pp. 57-60). Managing the interactions between learners and between learners with strong leadership and direction is considered essential to a successful educational experience.

Effective distance education delivery involves presenting material, which addresses the needs of all learning types: kinesthetic, audio and visual; taking initiative to plan and distribute information prior to class modules; addressing participants by name to establish a certain immediacy and comfort level; encouraging interaction through the use of various questioning techniques; and being available for advising participants.

The administrative sub-system

Definition

A strong administrative presence is required to ensure the coordination of all functions within a distance education system (Kaye & Rumble, 1981, p. 243).

Purpose

The function of the administrative sub-system is to "set the goals of instruction, define the instructional content and method, and provide directives for the use of resources" (Banathy, 1993,

p.33). This subsystem is concerned with marketing initiatives, human resource processes, financial obligations, some institutional policies and procedures, and management of the relationship between external partnerships and alliances.

According to Kovel-Jarboe (1990), the administrative sub-system includes "issues of finance and economics, management practices, division of labor (staffing) and internal policy makers" (p. 23).

This subsystem contains "logistical activities which procure and replenish the resources required by the enterprise. These activities include purchasing, maintenance, and repair of buildings and equipment, and staff recruitment, induction, training and motivation" (Kaye & Rumble, 1981, p. 232).

The inputs for the administrative element include resources such as information, finance, staff and equipment (Kaye & Rumble, 1981, p. 233). The outputs for the administrative element then nourish the learner-centric sub-system (Kaye & Rumble, 1981, p. 233).

The governance sub-system

Definition

An effective system requires management across all its functions. The governance sub-system provides stated regulations to help ensure quality programs, and a foundation of rules by which the system can be managed. It is essential that both learning and facilitating are monitored against a set of standards so that a dynamic, quality product is achieved.

Purpose

The function of the governance sub-system is to "define policies and regulations, and mandate uniform curriculum and instruction" (Banathy, 1993, p.33). The governance sub-system encompasses "the higher management functions of planning, financial management, project control and evaluation" (Kaye & Rumble, 1981, p. 232). This element deals with "regulating activities, relates operating activities to each other, logistical activities to operating activities, and the activities of the organization to its environment" (Kaye & Rumble, 1981, p. 233).

Quality-oriented processes are provided for in the governance element. To guarantee a successful distance education experience, administrators need to make the quality of learning content a high priority, endorse the participation of quality distance education instructional designers, and ensure the continuing revision of course content.

"The adoption of quality as an organizing principle for distance learning systems and institutions seems to offer considerable potential for mobilizing people and resources. It enables the various policy and procedural strands relating to the management of quality to be brought together at an institution-wide level, within a structured framework and in a systematic way" (Robinson, 1995, para.12).

Quality assurance regulations focus on operational processes and systems in the following way:

- Provides set standards for a product or service
- Organizes the development of a product or provision of a service so that the stated standards are consistently met
- Develops, as a consequence, reliable and consistent procedures for essential activities (Robinson, 1995, para.14)

Conclusion

A distance education system is essential to the facilitation and management of distance education. It provides a standardized foundation and framework where a participant can interact with his fellow participants and instructor, while learning autonomously, and where a facilitator can provide the appropriate amount of support and encouragement, while teaching effectively.

An approach towards systems thinking allows for the study of distance education holistically, while the system itself is made up of interdependent elements. "As organizations become more understanding about the benefits of adopting a total systems approach to distance education, there will be impact on teachers, learners, administrators, and policymakers and significant changes in the way that education is conceptualized, funded, designed, and delivered." (Moore & Kearsely, 1996, p. 18)

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