# **Current Communications**

# UCOL – Universal College of Learning

Submitted in partial fulfilment of the requirements for the degree of Master of Communications, Victoria University of Wellington

### Grant Warren Sherson July 1999

## Introduction

To analyse and evaluate communications within the Universal College of Learning (UCOL) we will look at its structure and function, its environment and the communication between them.

Every education system is set up to manage the acquisition of skills and knowledge. Managing knowledge requires mechanisms to gather, store, and manipulate that knowledge in order to accomplish the most effective use of the knowledge (De Diana).

Like all education systems, UCOL is an open system, where there is obvious interaction between the system and its environment. There are subsystems within UCOL that have few inputs and outputs, but ultimately some of every subsection influences the outputs dispatched into the environment.

This paper looks at the environment and the raw materials that provide the framework and function of UCOL. The paper identifies the flow of information or communication between the various components.

# The Community or Environmental Input

All of the information communicated to and from UCOL is established and modified by its environment. The type of lecturers and students choosing this environment provide the first level of information flow.

Every time a person arrives to study or work within the institution, they bring with them knowledge and information. The location of UCOL in the lower North Island city of Palmerston North, and its distinct surrounds, attracts a particular type of person. The concept that Palmerston North is called the 'Knowledge City' with over 46 percent of the city's population involved in the business of knowledge also influences the type of 'people input'

UCOL receives. The relationship with Rangitane Maori and that approximately 16 percent of the city population attend a church service in the city every Sunday, helps provide a cultural backdrop that has a significant impact on the information input provided to UCOL from its environment. Often this input is overlooked but in a strong community based institution like UCOL it is a distinguishing factor.

The new campus has been purposefully designed to encourage a strong student learning and social culture and in many cases the boundary between the institution and its environment is blurred. The significant number of part time lecturers who spend the balance of their time working in industry provides a vital input to the currency and practicality of the information communicated to, and within the institution. Purpose-built spaces that model the community such as the gymnasium, model playroom, x-ray labs, model retail shop, model office and a restaurant, 'Ambitions', which opens to the public for lunch and evening meals, all provide an avenue for communication with the environment. Other spaces set up as a hospital ward as well as trade workshops for automotive, carpentry, engineering and joinery provide a feeling of identity that encourages communication with the community. UCOL has as its mission "to provide the College's communities with applied education and training programmes, which are directly relevant to the 21st century work environment. These programmes integrate general education to enhance graduates' personal development and career potential" (UCOL, 1999).

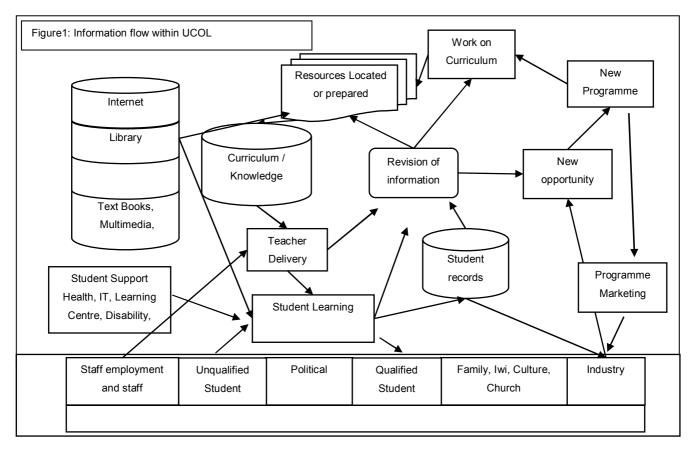
UCOL's core business focuses on vocational and community-based education so the communication between the community and UCOL is seen as having high value. The recent rebranding from Manawatu Polytechnic to UCOL Universal College of Learning was designed to realign the organisation to better meet the needs of its students, industry and the future of tertiary education (UCOL, 1999)

The communication flows supported by this focus on community based education, not only includes the staff and students but also their support structures of family, peers and iwi. Financial interest and control from the government brings in a further level of communication input into the system as does industry who at times subsidise UCOL through the donation of equipment, provide information input and also define parameters for some of the programmes. As explained by Stenerson, the environmental forces that may constrain or assure the goals include legal and budgetary policies (Stenerson).

## Internal Communication

The components or subsystems of an education system are teacher, student, content and context, and affect relations pertain to how these components are connected (Frick, 1996).

Within UCOL there are a number of subsystems making up the system. There is a delivery or teaching subsystem, a marketing subsystem a programme development subsystem, record keeping, resource and support subsystems. Information is communicated within and between each of these subsystems (figure 1).



### **Programme Development**

When a new programme is planned, a curriculum is developed and resources are collected or developed. The information may include traditional print material, in the form of textbooks, manuals and industry based reports, in-house workbooks, interactive software and links to web pages. One of the most popular activities in education is document managing that includes: exchange, use, publishing, (re-)editing, and sharing. Document management in education is about resource sharing: creating and maintaining better and more effective information access (De Diana). Resources may be purchased or received from other institutions as part of a collaborative qualification or simply as a self-contained add-on to UCOL's own qualification. Access to information becomes an economic factor for the institution. The amount of information can be limited by the economic commitment that the institution is willing to invest (Stenerson).

This building of the information is the first of the four main knowledge flows outlined by Italo De Diana. The second flow involves the storing of knowledge (De Diana). The programme

information, collected for a programme, is stored on the shelves in staff offices, the library, kept in the memory of staff and students, held in computer based storage such as shared drives and stored photographically or on videotape. The collective value of this stored information is the essence of the quality of the programmes. This storage includes the knowledge and experience of the staff in not only the subject matter, but also their teaching skills. This information is the programme.

### **Programme Delivery**

The third flow of information is the actual distribution of knowledge (De Diana). Often that knowledge is distributed by assembling relevant knowledge from different sources and distributing it to places of use (De Diana). When a curriculum is being delivered the built up resources and curriculum are communicated to the students. The format of that delivery is wide ranging depending on the content, the type of student, the experience of the staff member, the industry expectations and, last but not least, the government controls. In some cases, the communication of content is achieved by demonstration and role modeling. At other times or in other subjects the communication could be in the form of traditional 'chalk and talk', web based distance delivery, videotaped instruction or problem based learning. In any event, there is considerable communication going on between student and their teacher and also the student and other students.

Italo De Diana's last flow relates to the use of knowledge. It is suggested that knowledge is used when it is needed to apply it to work objects. Value is added by using knowledge to make products or to provide services. Here the value of knowledge is realized (De Diana). UCOL's vocational training focus allows the to students make use of their knowledge. The numerous practical programmes like hairdressing and fine woodworking provide a use opportunity that cements the learning in the mind of the student while at the same time communicating extra incidental knowledge not normally found in text books. The carpentry classes building a house and the catering students in their restaurant have an excellent opportunity to use their knowledge. There is an extra level of communication with the community at this point.

The quality of the delivery is affected by factors such as the quality of the information in stored form, the quantity of accumulation of stored information, how well the stored information is converted into to communicable form and how well the information is communicated to the student (Ottenberg)

The quality of the learning is affected by the student's readiness to learn, motivation to learn, reception of the communicated information, decoding of the communication into personally meaningful information, mental linking and integration of information and the storage of the information (Ottenberg ).

## **Evaluation and Record Keeping**

For an education system, the Zero level function is simply to take a student, give that student an "education" and then release the student back to the social environment (Ottenberg). There is significantly more communication within UCOL than just the delivery of information to the students. Figure 1 attempts to depict a more complete view of the communication and information flows. Having delivered the programme to the students there is a communication of how well the programme is running. Information from staff and students is collected and used to evaluate the success of the programme. Where changes are needed, an extra loop is included in the process allowing work to be done on the curriculum as well as the reviewing of resources for their accuracy, currency, and accessibility. No environment stands still and programmes that were successful last year are not necessarily successful this year. This Institution has to come to terms with the changing demographics of the student population and make certain modifications are made to match that change (Stenerson). Assessing the actual results of the students is also used to communicate the success or failure of the programme. It is important to monitor results in terms of goals and standards and incorporate dynamic changing of the educational program developed from discrepancies between goals and standards and obtained performance results (De Diana,). The analysis of the instructional subsystem, getting information about learning needs (gained through analysis activities), as well as administrative and governance input, enables the institution to produce better environments and opportunities for learners to learn (Reigeluth)

#### Resources

Within UCOL there is a trend toward a more resource based learning style.

This entails the acceptance that the instructor is no longer the only channel of knowledge in a class of passive learners. Instead, the students are active "apprenticeships" with the instructor guiding the students in acquiring knowledge with "diverse and rapidly changing content". The new pedagogical issues of distributed learning concern the ability of students to individualize the instructional process because of the amount of information available (Locatis and Weisberg quoted in Stenerson).

This raises the importance of the communication with the range of resources available to students. Figure 1 lists a few of the more obvious resources such as the library, visiting speakers, multimedia resources, a range of texts and of course the Internet. The Internet provides a huge database of reference materials and capabilities to communicate with people sharing the same research. It also enables the students to perform research at other libraries and institutions. There are also thousands of reference books providing a path to

knowledge (Stenerson). At UCOL there are a number of student studios, managed by the library, which allow for access to off site databases and Internet resources. The library is also well stocked with targeted material relating to the programmes offered. It is seen as the owner of the essential process to store and to disseminate knowledge and information as it relates to the instructional process (Stenerson). Without the information that these resources offer, the prorammes would only be able to rely on the staff member to be the source of information taking away the power of resource based learning. As an aside, the students make considerable use of the student studios for email

communication with each other and assignment preparation.

#### **Support**

There is significant information flow in the non academic support provided at UCOL. The health services, information technology helpdesk, disability support staff, learning centre staff and student union all provide essential communication that provides support for the student, in some cases on a daily basis. There is seen to be a direct relationship between support and instructional effectiveness (Stenerson).

The communication technology of UCOL, like any reasonable sized institution relies heavily on the network support. The basic level of this includes the telephone system but extends through to the more complex computer network, the virtual private network and the Internet. The computer based support is an essential component of the support supplied to both staff and students and requires a considerable amount of communication both from individuals and groups. The UCOL intranet, supported by the network, is used for document management and information sharing. It is not only for sharing of information but also to view UCOL's information including policies and proceedures. Intranets give organizations the possibility to build their own organizational InfoSpace. Intranets can connect all the actors within the organization and empower and facilitate work processes and work flow. The application of Intranets provides a variety of services for organizations such as: access mobility of users, fast and efficient information retrieval, and data warehousing. The perceived dynamism of InfoSpace can be embodied by Intranets as the basic process storage mechanism, if links between Intranet technology and Document Management / Information Sharing technology are made and if knowledge representation techniques are applied (De Diana).

#### Marketing

There is an essential communication flow within UCOL that is also communicated as an output. The information that is set up to market courses goes through an iterative process between several groups within UCOL before being published in any way. Accuracy of data is

essential as well as creative input. Student brochures, newspaper advertising, posters and other media advertising all participate in the communication process. Marketing research also influences the eventual output and includes even more communication with students, staff and industry.

# Conclusion

The information flow within UCOL and between UCOL and its environment is complex. Even the electronic system that controls the temperature of the buildings is controlled from Wellington. This paper only touches the more general types of communication and is not a complete analysis. It is naive to think that the only communication that is important for the success of a tertiary institution goes on between lecturer and student.

## References

- Bela H. Banathy, B.H., (Contributing Editor ). <u>Developing a Systems View of Education [On-</u> line] Available URL: <u>http://www.gwu.edu/~etl/banathy.html</u>
- Carla Lane , C., <u>Technology and Systemic Educational Reform.</u> [On-line] Available URL: <u>http://www.tecweb.org/eddevel/reform8.html</u>
- De Diana, I., and Aroyo, L., <u>Knowledge Management for Networked Learning Environments:</u> <u>Applying Intelligent Agents</u>. [On-line] Available URL: <u>http://projects.edte.utwente.nl/proo/italo.htm</u>
- Frick, T. W., (1996). <u>Educational Systems Theory.</u> [On-line] Available URL: <u>http://education.indiana.edu/~frick/edusys.html</u>
- Ottenberg, M. A., <u>NCOSE-94 -- Systems engineering in a social application: Designing an</u> <u>evolved system of education</u> [On-line] Available URL: <u>http://www.nhpress.com/nge/lib/papers/ncose94.html</u>
- Reigeluth , C. M., <u>The Proper Study of Instructional Technology</u> [On-line] Available URL: <u>http://uttc-med.utb.edu/6320/chapters/summary\_ch6.html</u>
- Stenerson, J. F., <u>Systems Analysis and Design for a Successful Distance Education Program</u> <u>Implementation [On-line]</u> Available URL: http://www.westga.edu/~distance/Stener12.html
- UCOL Universal College of education. [On-line] Available URL: <u>http://www.ucol.ac.nz/about/mission.htm</u>