Assignment 3: Applying Systems Theory to an Educational Setting

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#### Abstract

In this paper we apply systems theory to an educational setting; specifically, to CBe-learn, the distance education (DE) system of the Calgary Board of Education (CBE). In part 1, we identify the main features of the system and describe how it operates, identifying the components that make up the system, the processes involved, and the feedback mechanisms that operate for the system (as per assignment specifications). We then follow Cookson's approach (Cookson, 1998) to examine the system using two of the three models or lenses proposed by Banathy for describing educational systems: The Systems-Environment model and the Functions/Structure model. In part 2, we describe a situation within the CBe-learn organization and apply Checkland's soft systems analysis approach to the situation context. This analysis has seven distinct stages: 1) the problem situation unstructured is identified 2) the situation is analyzed using a rich picture 3) a relevant system and root definition are determined 4) a conceptual model is created 5) a comparison of stages two and four is conducted 6) a debate on feasible and desirable changes takes place, and 7) desired and suitable changes are implemented. Stages six and seven are not actually carried out, but we provide some insights into what we think might transpire in these stages. This analysis serves to demonstrate our understanding of Checkland's approach to soft system analysis.

# Part 1: CBe-learn - A System View

# Introduction

The motivation for the development of a general systems view (typified by the systems 'pioneers' in the 1950s) arose from a desire to distill the "unified nature of reality" (Banathy, 1995, p.2) from across disciplines and fields of study. Recognizing that the world was becoming increasingly complex, there was a desire to develop a unifying perspective that transcended yet remained relevant to all disciplines, to address the inherent order and interdependence manifest in the world (Banathy, 1995).

From these early beginnings systems theory continued to evolve over the decades, and is now widely embraced by a variety of disciplines, in a variety of forms. According to Banathy (as cited by Cookson, 1998, p.3) a system is a "set of relationally arranged and interdependent components organized as a definable entity in a given environment in order to attain its specified purpose". An open system interacts with its environment, and has a bias towards life and growth Littlejohn, 1997). Educational systems tend to be of this nature.

A distance education program is also an example of a human activity system (HAS), which is an organized set of activities carried out by people (Cookson, 1998, p.3). In this paper we explore CBe-learn, the distance education (DE) program of the Calgary Board of Education (CBE), from a systems perspective.

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#### **CBe-learn System Description**

This section provides information on how the CBe-learn system operates, including main system features, system operation, system components/subsystems, processes and feedback mechanisms. CBe-learn is an open system, for its philosophy and structure are premised on growth and continuous change in response to the environment; in fact, the operation of the system relies on them.

# **Main System Features**

As articulated in its website, the purpose of the CBE as a public education system is to make accessible, quality learning available to all students. As described in the CBe-learn website, a flexible and responsive learning environment, personalized learning opportunities, effective, timely support networks and collaboration with colleagues and students are features of CBe-learn's 'flexible and responsive programming'.

The CBe-learn system provides full online programming for junior and senior high school students in which they may participate on a full time or part time basis. It also provides various levels of support for homeschooling students. The system serves CBE students currently attending traditional schools, full time CBe-learn students, international and traveling students, non-CBE students from Alberta or elsewhere in Canada, and adult students.

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# **System Operation**

CBe-learn programs offer 'year round' registration and course access, however it is important to note that registration does not occur year round on a *continuous* basis. There are different categories of courses available to students, and each category is treated differently at the registration stage. For core courses, registration occurs following a regular semester schedule, with a few additional registration dates for controlled course starts between the regular semester starts; as such, there are five entry dates to these courses throughout the year. For Career and Technology Studies (CTS) courses, registration occurs at the beginning (verify) of each month, and the same is true for the Career and Life Management (CALM) course, which is required for graduation.

#### System Components/Subsystems

The CBe-learn system consists of several subsystems performing functions including registration, course design, teaching, student support services including counseling and advising, technical support, administration, handling general inquiries and providing feedback. There are also the senior high, junior high and homeschooling components. There may be overlap between subsystems as well, and many of them will consist of further subsystems. The homeschooling subsystem, for example, consists of the blended program and the home education program subsystems. Other subsystems will support homeschooling events such as open houses and learning plan workshops, as well as student field trips.

Expanding on the student support services function identified above, an extensive

network of subsystems support the CBe-learn course context. These include:

*Career Resource Centre / Career Services* - The career practitioner is available for individual appointments and drop-in inquiries. There is assistance for students to access career services online, investigate options, etc.

*Diploma Exam Preparation Classes* - For a fee students can enroll in these classes to obtain assistance in preparing for their upcoming diploma exam.

*Virtual Library* - The virtual library enhances learning and teaching by linking students to varied resources which provide information and activities in a variety of texts and contexts.

*Student Advocate* - This is an online resource person who assists students with navigational difficulties, organization and time management, study skills and motivation. The advocate's role is to troubleshoot and help students with problems they may encounter.

*Student Centre* - Students may work with each other online outside of their class, access the student advocate and interact with their instructors in the student centre. Data on student success and program satisfaction can also be found in the centre.

*Student Services* - Counselors and advisors are available to assist students with program advice, post-secondary requirements, learning strategies, scholarships, awards, financial assistance and/ or personal concerns.

# **System Processes**

Before registering for a course, students who wish to study online via CBe-learn must meet with a counselor or advisor to identify courses required to fulfill their graduation requirements. Prior to beginning their course, students are required to take "Fast Track to Online Learning". This course is a prerequisite to all CBe-learn courses and teaches students how to work in the Desire2Learn environment and send emails, post discussions and work in chat rooms, as well as how to prepare/post presentations so that others in the course can review them. Specific instructions are provided on how to contact instructors and find their grades, as well as on how quizzes are marked. Explicit instructions are provided along with student expectation guidelines. Upon successful completion students may proceed into the course of their choice. As they proceed through their course(s), students (and their parents) can provide feedback using a variety of mechanisms.

# **Feedback Mechanisms**

Course-related feedback mechanisms in CBe-learn consist of:

*Marks* - Grades are provided to students throughout the course term. Students provide instructors feedback concerning their perceptions and feelings about the marks they have achieved.

*Surveys* - Each online course contains an entry and an exit survey. This information is gathered and compiled to provide feedback on students' perceptions about the course both prior to and upon completing it.

*Progress Reports* - These are issued to students and parents seeking feedback on how the course and/or instructor have been working for the student.

*Parents' Online Group* - Online access is provided to parents of students under 18 years of age so that they can check their child's course progress/attendance on a regular basis.

*High School Counselors/Administrators* - Students who participate in CBe-learn may be concurrently registered in a CBE high school; feedback from counselors at their high school is both sought and welcomed.

The results of the above-mentioned surveys and progress reports are conveyed to the

subsystem responsible for course design. Other feedback mechanisms are also in place to convey

relevant inputs and outputs between related subsystems, to support effective on-going (and self-

regulating) system operation.

# **System Analysis**

Of Banathy's (1995) three models or 'lenses' that apply to social systems, we will use the systems-environment model and the functions/structure model to analyze the CBe-learn system.

# **CBe-learn Viewed Through the Systems-Environment Lens**

This perspective examines the interdependent parts of a system in the context of its general and systemic environments. CBe-learn is part of the Learning Innovation suprasystem, which in turn is part of the Calgary Board of Education suprasystem.

# General environmental factors pertaining to CBe-learn.

Both a general and a systemic environment surround CBe-learn. The systemic environment is the CBE environment, and the general environment is the context surrounding that. Factors comprising the general environment include geographic, demographic, economic, social, technological and cultural/ideological/political. These factors are now examined in turn and presented using the tabular format appearing in Cookson's analysis (Cookson, 1998, p.15) in Table 1 below.

Factors	CBe-learn
Geographic	CBe-Learn is located at 20 Springborough Blvd. S.W., Calgary,
	Alberta, Canada. Calgary's current population is 1,352,200. CBe-
	Learn 's primary service area is that of the parent organization
	(the CBE), but service also extends beyond this boundary to
	include a sparsely populated country with fairly large distances
	between cities and towns, as well as internationally.
Demographic	Attendees drawn (primarily) from a population which is subject
	to a mandatory level of government funded, formal education.
Economic	A relatively high standard of living; however, some disparity
	does exist, especially in poorer areas within large urban centers.
Social	A stable, supportive social environment providing flexible,
	personalized and alternative options to traditional school.
Technological	Educational applications can draw on a variety of
	communications technologies.
Cultural/Ideological/Political	These factors are largely favourable to the adoption and
	application of distance education. However, some disparity
	exists as technological limitations hinder level of access for
	some.

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These interrelated and continuously changing elements of the general environment have both a direct and indirect impact on the provision of distance education programs. If a distance education program is to remain relevant, vital and effective, distance educators must continually respond to this continuous environmental change (Cookson, 1998).

# Systemic environmental factors pertaining to CBe-learn.

As Cookson (Cookson, 1998) indicates, all systems have boundaries separating what is inside a system from that which is outside it. Open systems communicate with their environments by receiving inputs from them and passing outputs to them. Environmental responses to system output - to its nature or impact - are returned to the system in the form of input, thereby providing a feedback mechanism which allows for system regulation. Feedback from the environment is crucial to ongoing system evolution, and essential to system survival.

System inputs and outputs can be quite varied in nature. Cookson notes that among the inputs to a system are those factors which serve to define the system, including expectations, demands, policies, requirements, constraints and rules, as well as human and financial resources, information, knowledge, materials and facilities (Cookson, 1998, p.8-9). Systemic environmental factors are presented below in Table 2, again using the tabular format appearing in Cookson's analysis (Cookson, 1998, p.18)

Inputs	CBe-learn
Expectations	Primary goal of CBe-learn is to serve students who register in the courses offered.
Policies	Online courses are taught using Desire2Learn. Policies were set which
	allowed all courses to be offered using this platform.
Constraints	Implementation of an online / distance education program within a traditional
	school board setting.
	Approval for program was set at Superintendent level. Once approved and implemented, further changes were approved by CBe-learn administration with support from Superintendent and area directors.
People	Necessary staff were added as the CBe-learn system grew. Course fees are dependent on age of student and location.
Money	Money for setup of the program was supplied by the CBE. CBe-learn runs
	like a traditional school so funds are supplied by the CBE based on number of
	students. Administration is responsible for budgeting the money to cover
	salaries of all staff members.
Materials	Required text books are provided by CBe-learn and are signed out of the
	school bookstore on a rental basis. Materials required for students outside of the CBE are mailed.
Outputs	
Activities	Courses offered to students within CBE, Alberta, Canada and internationally.
	Students obtain credits for classes that they require for graduation.
Resources	Many students are already enrolled in traditional schools, so this is seen as a
	way to enhance their education.
Requests and	Requests for additional staff based on number of students registering for the
Requirements	courses. System money provided to staff CBe-learn at the necessary level.

Table 2: Systemic environmental factors pertaining to CBe-learn.

# **CBe-learn Viewed Through the Functions/Structure Lens**

Banathy provides another perspective to viewing the underlying structure of a system; the

Functions/Structure lens. This lens helps to reveal a system's nature, purpose, function,

organization, integration and responsiveness to environmental conditions.

# System image and purpose.

As indicated on the CBE's website, its purpose as a public education system is to ensure that quality learning is accessible to all students. The mission of the CBE is "Educating Tomorrow's Citizen Today". They believe that our future as democratic citizens is inextricably linked with the opportunity to learn and to be educated. Education is the basis upon which democracy is transmitted and strengthened. CBe-learn's mandate is to provide flexible, sustainable, affordable and highly accessible resources and learning environments within a public schooling environment.

# System specifications.

The system serves both those students who are taking courses through CBe-learn, and those who would like to. The system is responsible for facilitating the admissions and course registration process. It must also provide the required number of faculty members to facilitate courses that are offered. Again, using the tabular format appearing in Cookson's analysis (Cookson, 1998, p.23), Table 3 below summarizes system specifications for CBe-learn.

Specifications	CBe-learn
Clients	Include senior and junior high students (including CBE students currently
	attending traditional schools and full time CBe-learn students), homeschooling
	students, international and traveling students, and students from jurisdictions
	throughout Alberta and Canada (who are non-CBE students).
Ownership of	Shared by all faculty members and administration. Individuals in the system
the System	firmly believe in it.
System's	Courses are offered five times a year making it possible for students to pick the
<b>Responsibility</b> most appropriate time for them to take a course. Courses are avail	
	students anywhere with an internet connection.
Relation to	All courses are offered to clients using Desire2Learn. Registration is carried
Systemic	out by clerks with support from counselors. Courses are taught by teachers
Environment	who have been hired for the express purpose of teaching DE courses.
Response to	One constraint is the availability of enough instructors to serve an ever-
Environmental	increasing number of online students. In response to this CBe-learn limited the
Restraints	number of courses being offered and the number of students allowed in each
	course.
	Another constraint was the introduction of competition from schools within the
	CBE and the province through their offerings of online courses. CBe-Learn
	countered this constraint by offering some of its online courses to schools
	within the CBE and addressed the issue of competition from the rest of the
	province by offering the most complete, professional system available.
View of System	Perceived need of online courses was very high as can be seen from the ever-
Members	increasing number of students who register in the program.

Table 3: System specifications for CBe-learn.

# System functions and structures.

Students have access to several services while taking a course through CBe-learn. These include library services, financial aid and help desk; tutorials are also available to enrich the learning experience. Since the CBe-learn system relies on an internet communication and computer conferencing, technical support is both critical and available. The CBe-learn system is constantly adapting to meet the needs of the distance education community of which it is a part.

Timely, regular updates from administrative personnel informing students of course

registration deadlines are sent to all CBE schools and posted on the CBe-learn website. Teachers assigned to each course usually respond to student's concerns within a 24 hour period, and students rely on one another considerably in computer conferences and other forms of asynchronous and synchronous communication. Counselors are available for students who need assistance planning their program of study, and tutoring services are also available.

Table 4 below summarizes the functions of CBe-learn (Cookson, 1998, p.24).

Functions	CBe-learn
Interaction with other	Regular reporting occurs between CBe-learn administration and the
Systems	Learning Innovation Superintendent. Announcements for upcoming
	sessions / registration dates are forwarded to all system schools and
	posted on the CBe-learn website for potential clients to view.
Definition of System	Staff and Administration meet on a regular basis to discuss issues
Image and purpose	relevant to the system including marketing, addition of new courses
	and possible changes or alterations as to how business is conducted.
Subsystems within	Identified subsystems include but are not limited to course design,
CBe-Learn	course development, teaching, scheduling, student orientation,
	registration and fee collection, program promotion and program
	management.
Coordination with	Most coordination with other systems is conducted by the Principal
other Systems	with Assistant Principals adopting a back up role when required for
	their specific areas. Additional coordination occurs between School
	Support Services (technology unit) and the CBe-learn technology
	department.
Acquire and Maintain	The management subsystem is led by the Principal with the assistance
Resources	of the Assistant Principals. All policy decisions are made by this group
	with some feedback from the teaching staff. Instructional staff
	members are responsible for course development and teaching.
Student Utilization of	Courses offered five times a year. Students can complete the course as
Resources	quickly as they can move through the material. Students interact with
	their instructors and the CBe-learn help desk as necessary. Funding for
	instructors management advertising etc. comes from the CBE

Table 4 – Functions and structures.

#### Introduction

Educational organizations are complex human activity systems (Banathy 1995; Cookson 1998), faced with challenges to thrive and survive in today's fast paced, dynamic environment. Leaders dealing with problems arising in these organizations must approach problem solving with an open mind, and an awareness that soft systems analysis is an effective tool to examine, determine and resolve problem situations (Naughton, 1984). The Checkland soft system approach (Naughton, 1984, p.17) is an example of such a tool. Operating within the CBE, CBelearn is an educational organization which continues to struggle with rapid, continuous change. In this paper we examine a problem situation using Checkland's methodology, to provide CBelearn leadership with an "efficient, economical and illuminating way of summarizing [and] representing the situation in all its complexity" (Naughton, 1984, p.21).

# Background

CBe-learn is composed of three distinct systems; the high school and the junior high school distance education systems, and the CBE K-12 homeschooling system. The resulting entity is a school with a broad mandate to deliver educational services to a diverse student population. First, CBe-learn provides junior high school courses for students within the CBE. Second, CBe-learn has a mandate to provide flexibility, choice and options in education to the CBE school community and to students in other school districts. These consist of but are not limited to:

a) Students within Alberta (outside the CBE) who need more course options.

b) Students already registered in CBE and non-CBE schools (including those beyond Alberta borders), but needing more course options and/or flexibility in obtaining those courses, for various reasons.

Third, CBe-learn anchors the CBE homeschooling program, which is mandated to provide homeschooling services to students in the CBE and the province of Alberta.

The CBe-learn principal identified a problem situation in registrations, articulating it with the statement: "We need to review the registration process, providing more options for the High School students who come through the door". This problem situation in registrations has emerged as a result of the breadth of the CBe-learn mandate.

# Stage 1: The Problem Situation Unstructured

In Table 1 we apply stage one of Checkland's approach to the CBe-learn problem situation. It identifies the 'client' (who initiated the study), the 'problem solver' (who hopes to do something about the situation), and some possible 'problem owners' (to provide different perspectives on the situation). It identifies the problem situation as expressed by the client. Consultation with the client identified several possible individuals to interview, who are either involved in or responsible for the registration process.

Initial Problem Statement	"We need to review the registration process, providing more options for the High School students who come through the door".
Client	Karen Bird, Principal
Problem Solver	Karen Bird, Principal Monti Tanner, Assistant Principal Mark Anderson, Assistant Principal
Possible Problem Owners	Principal, Assistant Principals, Counselors, Clerical Staff, Students, Parents
People to Interview	Principal Assistant Principals Clerical #1 – admissions Clerical #2 – admissions Counselor #1 – High School Counselor #2 – High School

Table 1: The problem situation and people involved.

# Stage 2: Rich Picture, Issues and Primary Tasks

The second stage of Checkland's approach is to derive a 'rich picture' of the problem situation. In complex HASs like education, when exploring the problem situation it is critical to consider subjective aspects of the situation as well as cold hard facts. A Checkland rich picture uses both types of information and provides a means of summarizing all the information that we can gather about the situation. Structures, processes, relationships and personal interactions involved in the problem situation, as determined by in-depth information gathering followed by data analysis, are all recorded in the rich picture.



**Illustration 1: Rich Picture** 

# Stage 3: Relevant Systems and their Root Definitions

The third stage in Checkland's approach is the creation of a 'relevant system' description and a 'root definition'. Through this process we can develop a systematic view of the CBe-learn system. Upon examining our rich picture, we considered a few possible relevant systems:

1. A student retention system

2. A school enrichment system/opportunity

3. An education customization/personalization device

4. A system to promote student commitment to meeting high school diploma requirements

5. A system to increase the number of high school graduates

6. A system to increase the percentage of students graduating from high school in Alberta each year

Upon consideration, we decided to adopt number four as our issue-based relevant system:

"A system to promote student commitment to meeting high school diploma requirements".

Based on our relevant system we developed the following root definition:

"A system to promote student commitment to meeting high school diploma requirements by

reducing/eliminating reasons why students don't graduate, by providing flexible, customized and

option-rich, distance education alternatives to traditional high school".

# Examination of root definition using CATWOE criteria.

Customers: Canadian and International students with varied educational backgrounds. Some have extensive technological experience while others are novices. Most students take CBe-learn

courses while concurrently enrolled in a traditional school.

Actors: Administrators make decisions regarding the registration process. Content experts teach

the courses. Teachers have significant experience with the course content being delivered.

Transformation: To transform a rigid high school system into one which is flexible,

customized and option-rich, to better serve student needs.

Weltanschauung: CBe-learn is a leader in the design and delivery of DE courses, and it employs best practices for both design and delivery of these courses.

**O**wner: Calgary Board of Education

Environment: Constraints of the system include the capacity of current technologies used both by the system and individual learner; mandated units of study and content; professional standards, and issues of copyright.

#### Stage 4: Conceptual Model

The fourth stage involves building a conceptual model which depicts front line and backup activities, emerging from the root definition described in stage three.

#### **Illustration 2: Conceptual Model**



## Stage 5: Comparison of Conceptual Model with Rich Picture

Stage five of Checkland's soft systems approach compares and identifies similarities and differences between the real-world situation and the conceptual model created in stage four. This comparison prepares us for stage six, the debate with people involved in the situation. According to Naughton, "The purpose of the debate is to identify changes which are agreed by the participants to be *both* feasible and desirable" (Naughton, 2009, p.18).

One comparison between the conceptual model and the rich picture was conducted by examining the main and detailed activities in the conceptual model, and asking ourselves whether these activities existed in the real world situation, as depicted by the rich picture. The diagrams were placed side by side, and we looked for essential differences and similarities between them. When we did this, it became evident that certain main activities had not been depicted in our rich picture, so we went back and added them. Further discussion helped us realize that while most of the activities were covered in the rich picture (after all, the system *did* work reasonably well), some of them could be strengthened; please refer to the agenda depicted in Table 2 for further details.

Activity in Concentual Model	Drecent in	Comments	Include on agenda?
Activity in Conceptual Model	RW Situation	Comments	
Create DE Courses	Yes	For the most part done very well.	
Decide on courses to offer	Yes	Some courses are poorly developed /	
Convert existing courses	No	cumbersome to use and students	
Create new courses	Yes	don't want to take them.	
Maintain/evolve courses	Yes		
Recruit	Yes	Recruitment is limited to normal	
Teachers	Yes	staffing limitations within the CBE	
DE course designers	Yes	stanning minimutions within the CDL.	
Counselors/Advisors	Ves		
Find notential DE students	Ves	Advertising done on CBe-learn	Identifying potential
Identify potential students	No	website CBE website internet and	students should be on
Attract students	NO	word of mouth Notices of	the agenda
Attract students	105	uncoming registrations sent to all	the agenua.
		CBF schools	
		Attraction of students is sometimes	
		too successful as classes are full.	
	<b></b>		
Iransform into DE students	Yes	Fast track to Online Learning course	
Advise/inform re DE	Yes	is very successful in helping	
Guide students	Yes	students become successful DE	
		students.	
Coordinate	Yes	Registration is an issue. There are 5	Registration needs to
Schedule courses	Yes	distinct registration periods and if a	be on the agenda.
Schedule teachers,	Yes	student misses the "Start" date then	
counselors, advisors		they have to wait for the next	Balancing course
Register students	Yes	session.	capacity needs to be
Balance course capacity/	Yes		on the agenda.
availability with demand			
Distribute course materials	Yes		
Teach & Support DE courses	Yes	Courses are usually taught by	
Teach courses	Yes	experienced teachers who have a	
Support Students	Yes	strong background in that subject	
Receive Feedback	Yes	area. Student support is ongoing	
		during each course and student	
		feedback is constantly received and	
		given.	
Provide Technical Support to:	Vec	Technical support is very afficient	
Students in courses	Ves	When necessary they call on support	
Course designers	Ves	from the CBE technology	
Teachers	Ves	department (School Support	
A dministrators	Ves	Services)	
Admin Staff	Vac		
Counselors/Advisors	Vec		
Monitor and Control	Vac	Feedback is constant Processing	Timely processing of
Paceive and Process	Vec	feedback sometimes takes too long	feedback peeds to be
Foodbook	105	recuback sometimes takes too long.	an aganda
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# Table 2: Drawing up an agenda.

#### Stage 6: Debate with People Involved in the Situation

Summarizing the outcome of Stage five, we propose the following agenda for the Stage six debate which would include the principal, the two assistant principals, the two clerical staff involved in registration and the two counselors (plus, of course, ourselves):

# Agenda:

- 1. Overview of the soft systems analysis approach used for our study
- 2. Presentation and discussion of key findings concerning the problem situation:
  - a) The priority issue appears to be one of coordination. There are two key issues:

i) Addressing the need to balance course capacity/availability with demand.

ii) Determining possible methods to allow for a more flexible approach to registration.

## b) Secondary issues are:

- i) Identifying potential CBe-learn students.
- ii) Devising a method for more timely and effective processing of feedback.

Our intent is to conduct a structured debate in which we would present our ideas/findings concerning the above issues, and invite discussion/debate amongst participants. We would suggest potential changes to the problem situation, and strive to attain participant agreement to our ideas on the grounds of both systemic desirability and cultural feasibility. Ideas which are considered acceptable when assessed by both of these criteria would then be proposed for implementation.

# **Stage 7: Implementation of Agreed Changes**

Specific implementation ideas for the issues identified in the debate stage are as follows:

- 1. Addressing the need to balance course capacity/availability with demand. We propose that CBe-learn allow open registration for Career and Life Management (CALM) and Career and Technology Studies (CTS) courses; capacity can then be further increased by increasing class sizes. (The rationale for allowing open registration is that many students complete these courses in much less than the allotted time, freeing up 'marking capacity' the bottleneck with these courses that could be used to accommodate other students.) These changes are supported by recruiting a tutor to assist with marking, and an administrative staff member to handle the increased registration load. CALM is required for graduation; increased throughput in this course will help prevent the need for students to delay graduation.
- 2. Determining possible methods to allow for a more flexible approach to registration. We
- recommend that core courses be offered with a monthly start and a defined end date. This will increase the number of registration options through the year from five to eleven. Note that our approach to balancing course capacity/availability with demand (above) also involved changes to registration, which were described above.
- 3. *Identifying potential CBe-learn students*. To attract potential students to enroll in CBe-learn courses, we propose that CBe-learn send out 'advertising'/information to notify counselors and teachers of changes being made to course capacity and availability.
- 4. *Devising a method for more timely and effective processing of feedback.* We propose that administration have bi-weekly meetings with all involved, i.e. one assistant principal could

meet bi-weekly with teachers and the other, with the registration clerical staff. The purpose of these meetings would be to discuss the impact of the newly implemented changes and any other related issues. It would also be a great time to gather suggestions for changes that might help the system run more smoothly. We also propose that administration staff meet weekly to allow for discussion of feedback from these bi-weekly meetings. It is crucial that administration formulate responses to feedback gathered at bi-weekly meetings to share at subsequent bi-weekly meetings, to assure staff that their opinions are valued. It will also allow teachers to provide feedback they gather from students to administration in a timely manner, rather than waiting until the end of the semester. Students will still fill out evaluation forms at the end of the course, which will continue to be discussed between teachers and their respective administrative team member.

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