Columbia College Foundations Document (June 2025)

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Vision Statement

To be a highly respected international leader in innovative, game-changing, high-quality education and training, that is recognized for outstanding learner outcomes and graduate employment success.

Mission Statement

Columbia's graduates will achieve exceptionally high graduation rates; external exam rates; and employer satisfaction rates in their final practicum. Students will rate their program, faculty, and staff support as outstanding in their field. Employers will be extremely satisfied with our graduates' technical and professional knowledge, skills, attitudes, and professional behaviors

Goals Statement

The following items outline Columbia College's goals.

1. To be a highly respected learner centered institution which engages in research.
2. To develop relationships with leading industry practitioners and professional bodies who work with the College to continually improve the quality of our graduates.
3. To be internationally recognized for the competency and quality of our faculty and staff and to provide them with a rich working and learning environment.
4. To prepare learners primarily for professions, careers, and occupations in which employers recognize them for their outstanding level of knowledge, skills, attitudes, and behaviours.
5. To help learners develop strong learning-to-learn competencies that will enable them to continue to learn throughout life.
6. To be primarily focused on adults who have historically been underrepresented in colleges and universities. This includes groups as older adults; working adults; lower income adults; adults from visible minorities; adults with disabilities; adults with children; and adults with a lower education.
7. To prepare learners in an accelerated learning environment to achieve above average academic results on professional body exams, graduate exams, and other internal and external exams that measure academic and skill-based competencies.
8. To create a learning culture where learners are actively and collaboratively engaged in on-line, blended, and classroom activities as well as, labs, clinics, and field based cooperative education.
9. To provide experiences that take learners far beyond simply learning theory and fact, to developing a range of skills that enable learners to effectively question, assess, analyze, synthesize, evaluate, and solve real everyday problems/challenges.

The following list of College-wide learning objectives outlines the knowledge and skills, as well as attitudes and behaviors that are considered important in preparing adult learners for new careers and continued learning as professionals. The descriptors under each learning objective describe the important components that will be considered when incorporating learning objectives in a specific department and each of its courses.

1. **Workplace Behaviour**
    - Approaches work in a professional, pleasant, co-operative, and positive way and presents a professional appearance regarding dress and hygiene.
    - Treats others in an equal, fair and just manner regardless of race, gender, or cultural origin and speaks to others in a sincere, respectful, and polite manner.
    - Displays an appropriate level of self-confidence and offers support, assistance, and help to others when appropriate.
    - Maintains a positive attitude, energy, drive and motivation to continually learn, grow, and adapt to a changing world.
    - Handles constructive criticism in an appropriate manner and learns from it. Displays appropriate behaviours related to such areas as absenteeism, punctuality, productivity, quality of work, completing assignments on time, seeking additional assessments, and contributing to an effective work culture
    - Effectively deals with change and unexpected situations as well as handles stress in an appropriate manner.
    - Deals with negative situations in an appropriate manner (conflict resolution). Demonstrates physical ability to keep up with the demand of work and maintains a properly organized work area.
    - Demonstrates behaviour that contributes to a safe and secure work environment.
    - Displays genuine interest in the needs of customer/patient, etc.
    - Selects most appropriate tools (equipment, devices) to complete a task and uses supplies and resources in an appropriate manner.
    - Functions well with a limited level of supervision yet understands own limitations and seeks appropriate assistance.
    - Supports and/or contributes to continuous improvement and is committed to quality and takes pride in own work.
2. **Computer Literacy**
    - Uses computers to effectively communicate, manage data, and process information.
    - Demonstrates competence in the use of occupation-specific technologies which operate on computers.
    - Applies computing skills to new situations and environments
3. **Communication**
    - Uses appropriate vocabulary, concepts, numbers, symbols, and charts that are appropriate to the occupation/position.
    - Communicates effectively using written, spoken, visual and/or media formats that are appropriate to purpose, situation and audience needs.
    - Displays effective interpersonal skills through listening, establishing rapport, and monitoring non-verbal signals while demonstrating respect for self and others.

4. **Group Effectiveness**

- Communicates effectively in a group setting by actively listening as well as giving and receiving feedback in a proper manner.
- Accepts and demonstrates personal responsibility for the success of a group.
- Personally displays the ability to be an effective group member by being open, flexible, respectful of others and accepting of diversity.
- Demonstrates an understanding of group processes by participating in specific group tasks and by building relationships to support group success.

5. **Information Retrieval and Evaluation**

- Identifies what information is required in a given situation and then identifies where it will be found.
- Identifies relevant sources of information and generates search methods in order to complete an effective search.
- Evaluates the quality of the information acquired (source, currency, accuracy, authenticity) and organizes it in order to assess its completeness. In addition, notes the sources of the information using a recognized format.

6. **Problem Solving and Decision Making**

- Identifies and considers underlying beliefs, values, and parameters when assessing a situation or problem.
- Reviews current knowledge and then analyzes and evaluates this information in order to conclude a worthwhile, innovative and/or creative solution to a problem or challenge.
- Breaks down a complex problem into its basic elements and examines connections to the elements.
- Achieves goals using objective thought processes to solve problems and overcome obstacles.
- Identifies and weighs alternatives in order to make an appropriate decision that is defensible.

7. **Ethical Reasoning**

- Demonstrates awareness of own values and beliefs and recognizes and understands others have a right to their own values and beliefs.
- Accepts diversity and diverse points of view from a wide range of individuals. Examines various assumptions and connections among beliefs, decisions, actions and consequences from a variety of perspectives (individual, community, national, and global).
- Analyzes and discusses issues from ethical perspectives and applies ethical principles and frameworks in making a decision.

8. **Communicating Learning Objectives**

- The College Academic Calendar and website introduces students to the College- wide learning objectives. This information is briefly reintroduced to students during their orientation activities.
- Faculty members list in their course syllabus those College-wide and specific program learning objectives formally assessed and measured during course delivery. Faculty also discuss these learning objectives when they review their course syllabus during their first class. They also share with students how these learning objectives will be measured.

In addition to Columbia College having a set of College-wide statements describing its mission, goals, and learning objectives, each department within the College has a mission statement that is supported by goal statements and related student learning objectives. It should also be noted that each College program within the departments has a mission statement. This mission statement is supported by a goal statement(s) and specific program related learning objectives. Each of these statements will soon be found in its specific section of the College Academic Calendar.

The College's mission, goals, and learning objectives are updated by the President and Board of Directors from time to time as a result of input from faculty, department heads, and other College personnel. These reviews normally include input from program Board of Advisors, professional bodies, government officials, employers, graduates, and the community at large. In most cases a Department Chair will initiate a review of a program's mission, goals, and learning objectives by presenting draft changes to stakeholder groups and seeking their feedback. The result of this activity will be followed by recommended changes to the President and Board of Directors. Following formal approval, the Department Chair will, with the active participation of faculty, identify any needed changes to program curriculum, curriculum design, and student assessment. This process will result in overall program improvement.

Mission Statements

Mission statements at Columbia College are holistic or broad visions of our purpose, values, and philosophies. Department and program mission statements are consistent with that of the College. Each mission statement is clear and easy to understand. Some mission statements include a history of the program, while others describe the types of students being served and/or type of professional training provided. All the mission statements at Columbia College describe a very clear emphasis on learning versus teaching, service to the community, and the characteristics of graduates. The current mission statement for Columbia College is described in the College"s Academic Calendar.

Goals Statements

Goal Statements at the program level are consistent with any goal statement(s) at the department level as well as those at the College level. Goals Statements at Columbia College are broad general statements that describe the knowledge, skills, and values that students will acquire. These statements will be more descriptive at the department level (where applicable), and most specific at the program level. For example, at the program level students should know discipline related principles, and concepts (knowledge); students should demonstrate effective communication, computer, and interpersonal skills (skills); and students should value and respect the scientific approach to understanding natural phenomena (values). Columbia's goals statements are presented in the Academic Calendar.

Student Learning Objectives

Student Learning Objectives at Columbia College, like most Universities and Colleges, are a set of statements at the institutional, program, and course levels that describe what knowledge, skills, and/or competencies as well as what values, attitudes, and behaviours, a student is expected to clearly demonstrate prior to graduation that meets the stated mission and goals of the institution and program.

Columbia's student learning objectives are neither too specific as to be trivial or too general as to be vague. For example, a learning objective might be that students can apply or analyze experimental result(s) and through evaluation determine an appropriate conclusion. Another learning objective at the College may state that students will demonstrate the application of ethical standards when providing services to patients, clients, customers, etc.

Developing Goals and Learning Objectives

In a traditional teacher-centered institution faculty determine what they will cover in a course. For example in a course in developmental psychology a faculty member may choose to include topics such as cognition, personality, and motor skills from youth to adulthood. However, at Columbia College where we follow a student-centered model of education the same course will be approached from the student‟s perspective. In other words, it will be based on what a student should be able to do as a result of taking a course in developmental psychology. For example students will not only be able to describe changes in cognition, personality, and motor skills from youth to adulthood but will be able to explain these changes; recognize when their development requires intervention; and will be able to apply what they have learned to organizational policies and recommended parenting practices. In other words our faculty do not simply teach theory and expect students to memorize it, but they expect students to demonstrate how theory can be applied in a working environment or professional setting.

Our faculty think of their course in terms of what the students will learn and how they will demonstrate it, rather than what the faculty member will teach or lecture at the front of the class. The more traditional view of the faculty member standing in front of the class and presenting a lecture for the class period is essentially non-existent at Columbia College.

This means our faculty develop lesson plans that actively engage students in learning by helping them practice the desired skills. It also means that a course grading procedure places the greatest emphasis on students demonstrating they can apply what they have learned.

This also means that Columbia's student learning objectives are focused on knowledge, skills, and values. In other words, what students should know; what students should be able to do; and what students should value. Our learning objectives are based on active verbs such as describe, explain, use, apply, evaluate.

The College's learning objectives are found in the first section of the Academic Calendar and each specific program learning objective is presented in its specific section of the Academic Calendar.

Department Chairs at Columbia College will normally engage faculty and other stakeholders in the following activities as a means of achieving consensus and developing (or reviewing) the goals and learning objectives for each specific program.

First, they try to separate institution-wide goals from discipline-specific goals. Figure 1.1 below presents an example of these developed by Allen, Noel, Deegan, Halpern, and Crawford, 2000.

Figure 1.1
Possible Learning Objectives

Institution-Wide Learning Objectives	Program Learning Objectives
• Civic responsibility, values, and ethics. • Communication skills. • Critical thinking skills and habits. • Information literacy. • Intellectual flexibility. • Interpersonal and teamwork skills. • Knowledge integration across the disciplines. • Lifelong learning skills. • Multicultural understanding. • Problem-solving skills. • Quantitative skills.	• Understanding the theories, concepts, and research findings of the discipline. • Using appropriate methodologies to develop knowledge and to examine questions within the discipline. • Applying what was learned to relevant phenomena. • Being aware of ethical issues and adopting ethical standards within the discipline. • Being aware of and adopt major values that professionals within the discipline share.

Most of Columbia College's goals and learning objectives are included in each department and program goal and learning objective; therefore a review of a program's goals and learning objectives will include a review of the

College's goals and learning objectives. This review will also include a review of the employability skills a student will need to demonstrate to achieve long term success in a career or profession.

Most Department Chairs at Columbia will review the learning objectives of similar programs in other institutions as they complete this review process. They will also review the requirements or best practices presented by professional organizations. This review may go so far as reviewing the instructional materials from other institutions such as syllabi, assessments, texts, etc. The most important review Department Chairs at Columbia engage in is to ask employers to describe the knowledge, skills, and values they are looking for in their best new employees.

In order to ensure their learning objectives, describe the depth of knowledge and skills required, Columbia College Department Chairs encourage faculty and other stakeholders to refer to Bloom's (1956) Taxonomy. Allen (2006) describes the taxonomy as:

- Knowledge – To know specific facts, terms, concepts, principles, or theories.
- Comprehension – To understand, interpret, compare, explain.
- Application – To apply knowledge to new situations, to solve problems.
- Analysis – To identify the organizational structure of something; to identify parts, relationships, and organizing principles.
- Synthesis – To create something, to integrate ideas into a solution, to propose an action plan, to formulate a new classification scheme.
- Evaluation – To judge the quality of something based on its adequacy, value, logic, or use.

Allen (2006) goes on to state that, ''the depth of processing increases as we ask students to go beyond knowledge into comprehension, application, analysis, synthesis, and evaluation.'

Many different course learning objectives can be written for the same program learning objective, and they can vary in depth of processing. For example, here are possible course learning objectives at each of Bloom's levels for the following program learning objective: 'Students will understand the major theoretical approaches within the discipline.

- Students can list the major theoretical approaches of the discipline. (Knowledge)
- Students can describe the key theories, concepts, and issues for each of the major theoretical approaches. (Comprehension)
- Students can apply theoretical principles to solve real-world problems. (Application)
- Students can analyze the strengths and limitations of each of the major theoretical approaches for understanding specific phenomena. (Analysis)
- Students can combine theoretical approaches to explain complex phenomena. (Synthesis)
- Students can select the theoretical approach that is most applicable to a phenomenon and explain why they have selected that perspective. (Evaluation)

Faculty should consider different levels of performance and write their course learning objectives to be consistent with the level of performance they desire.

Course learning objectives should be stated using active verbs that clearly communicate the depth of processing. Verbs that describe outcomes at different levels of Bloom's taxonomy are presented in Figure 1.2, and many faculty have found such lists helpful as they delineate course learning objectives. For example, if faculty want students to be able to apply their knowledge, they can use the verbs apply, solve, interpret, or demonstrate. If they want students to demonstrate their attitudes or values, they might select verbs such as choose, decide, judge, or value. These verbs clarify the depth of processing and guide faculty as they examine the curriculum and develop assessment strategies.

Figure 1.2 Relevant Verbs					
Knowledge	**Comprehension**	**Application**	**Analysis**	**Synthesis**	**Evaluation**
cite	arrange	apply	analyze	arrange	appraise
define	classify	change	appraise	assemble	assess
describe	convert	compute	break down	categorize	choose
identify	describe	construct	calculate	collect	compare
indicate	defend	demonstrate	categorize	combine	conclude
know	diagram	discover	compare	compile	contrast
label	discuss	dramatize	contrast	compose	criticize
list	distinguish	employ	criticize	construct	decide
match	estimate	illustrate	debate	create	discriminate
memorize	explain	interpret	determine	design	estimate
name	extend	investigate	diagram	devise	evaluate
outline	generalize	manipulate	differentiate	explain	explain
recall	give examples	modify	discriminate	formulate	grade
recognize	infer	operate	distinguish	generate	interpret
record	locate	organize	examine	manage	judge
relate	outline	practice	experiment	modify	justify
repeat	paraphrase	predict	identify	organize	measure
reproduce	predict	prepare	illustrate	perform	rate
select	report	produce	infer	plan	relate
state	restate	schedule	inspect	prepare	revise
underline	review	shop	inventory	produce	score
	suggest	sketch	outline	propose	select
	summarize	solve	question	rearrange	summarize
	translate	translate	relate	reconstruct	support
		use	select	relate	value
			solve	reorganize	
			test	revise	

Adapted from Gronlund (1991).

Cohesive Curriculum

Each program at Columbia College has been designed by department personnel to give students the opportunity to synthesize, practice and increasingly develop their knowledge, skills, and competencies over the course of the program. This means that important learning objectives will be introduced early in a program in one course and will be elaborated on in subsequent courses which will allow students ongoing exposure and further opportunities to develop important knowledge, skills, competencies and/or values, attitudes, and behaviours.

For example college-wide learning objectives such as written communication skills, computer literacy, information retrieval and evaluation, decision making, problem solving, group effectiveness, and team work skills should be integrated into most every course possible and, wherever possible, a component of each class. Continued attention to these learning objectives by faculty will enable students to develop and strengthen them throughout their program of study. The same is done with many program specific learning objectives. As students proceed through their program, they are expected to acquire more complex abilities and skills and more is expected of them.

Each program at Columbia College has developed a matrix such as the sample below which demonstrates how it has aligned the college-wide learning objectives and program specific learning objectives with its courses. Most learning objectives in a four-year degree, for example, are introduced in junior level courses, reinforced in intermediate courses and demonstrated in either intermediate or senior level courses. The chart below demonstrates where institution wide and program specific learning objectives may be introduced and reinforced.

Curriculum Alignment Matrix									
Course	Inst Obj 1	Inst Obj 2	Inst Obj 3	Inst Obj 4	Program Obj 1	Program Obj 2	Program Obj 3	Program Obj 4	Program Obj 5
100	X					X		X	
125	X	X					X		X
200	X	X	X		X		X		
210	X	X	X	X		X			X
300	X	X	X	X			X		X
350	X	X	X	X	X			X	
400	X	X	X	X	X				X
465	X	X	X	X		X		X	
483	X		X				X		X
491	X		X				X		X

Columbia's Learning Objectives

Seven college-wide learning objectives have been identified by members of the College community as the seven key learning objectives that we want all learners in each program to achieve. Under each heading the College lists a number of specific statements that describe the behaviour that students should display upon graduation

from a diploma program. Students enrolled in a certificate program or pre-career program will not be expected to demonstrate the same breadth or depth of behaviour upon graduation but should be introduced to most College learning objectives. This will be determined by each Department Chair.

In addition to the list of College-wide learning objectives, each department has developed its own department-wide list of learning objectives. Each department has also developed a specific list of learning objectives for each separate program.

Program specific learning objectives are normally assigned to one or more courses where faculty will assist learners in acquiring and demonstrating their objectives as part of a course requirement. While some courses may introduce a learning objective, other courses will expand or broaden the learning objective.

- Faculty should, wherever possible, incorporate each College-wide learning objective formally as well as informally in their specific course(s) curriculum plans. For example, faculty should, if possible, approach their behaviour in a classroom much the same as a supervisor would at work. For example, a faculty member will inform his/her students that each of them will approach classroom related activities much as they, acting like professionals, would conduct themselves in a professional workplace. The faculty member would display the behaviour of a positive, supportive, and engaging supervisor who coaches, mentors, guides and assists those with whom they are working, while the students would accept support and supervision from their faculty member while working together with fellow team members in an active and collaborative manner. (1.Workplace Behaviour)
- Faculty may, where reasonable, ask students to complete assignments using a computer. (2. Computer Literacy)
- Faculty would encourage students to use effective communication skills while communicating with others. (3. Communication)

- Faculty would encourage students to work collaboratively and cooperatively with other students as they interact inside and outside the classroom. (4. Group Effectiveness and Team Work)
- Faculty would create opportunity for students where needed, to gather, review, and evaluate information. (5. Information Retrieval and Evaluation)
- Faculty would introduce students to problems or situations where they need to apply newly acquired knowledge, concepts, and skills. (6. Problem Solving and Decision Making)
- Faculty would introduce students to situations where they learn more about the proper morals and ethics that are demonstrated by professionals in the field they are preparing to enter. (7. Ethical Reasoning)

As a result of incorporating learning outcomes in their courses, by applying effective facilitating techniques that focus on student learning, and by adapting effective student assessment (testing, measuring, and assessing learning), graduates will demonstrate the desired knowledge, skills and values in these areas.

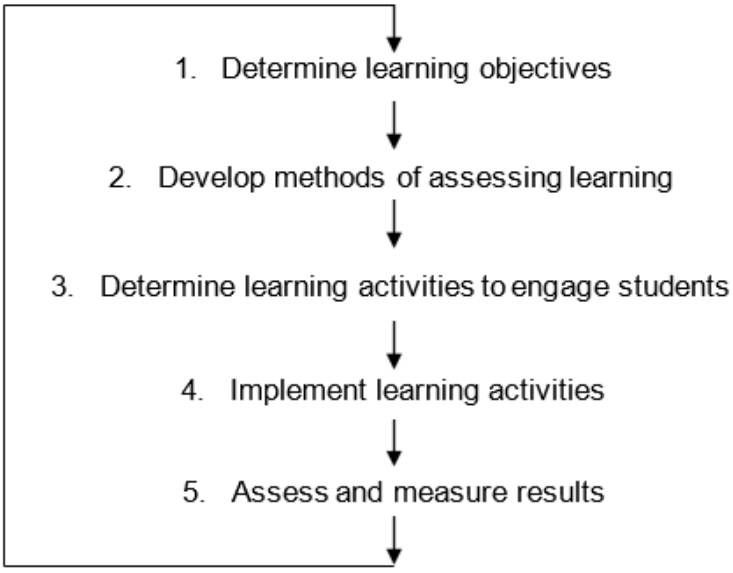
In summary, College learning objectives describe the essential knowledge, skills, and values the students need to acquire as they complete all their courses and graduate from a program.

Learning Objectives and Assessment

The following diagram demonstrates that to develop an effective learning environment the first step is to determine the most desirable learning objectives. This is followed by the development of an appropriate means of objectively assessing students to determine if they have acquired a learning objective. Almost at the same time, faculty determine what learning activities they will engage students in that will give them an opportunity to acquire the learning objectives. Students are then given an opportunity to experience the learning environment and activities after which the faculty member assesses their performance, measures their outcome and records the results. They then reflect on what happened and use this learning to determine if they will make any changes to this loop the next time they are helping learners acquire the learning objective. They may also use this to modify their approach to other learning objectives involving this current group of students.

This open-ended cyclical approach to facilitating and learning enhances the continued improvement of student learning and increases their potential for success.

Learning Objective and Assessment Feedback Loop



The following statements describe the principles and philosophy of higher education at Columbia College. The College has clearly expanded the traditional college focus of a younger more traditional student body of eighteen- to twenty-two-year-olds to include a much larger number of previously under-represented learners such as older adults and immigrants. This section begins with a broader interpretation of intelligence than conventionally viewed by traditional educators.

- At Columbia College we believe that intelligence is what is acquired when we either formally (in school) or informally (out of school) acquire more knowledge and/or skills or modify our current attitudes or behaviors.
- Intelligence not only relates to mental knowledge but also relates to physical skills as well as artistic skills, talents, gifts and abilities. For some people, acquiring some forms of intelligence occurs more naturally. However, for most people the ability to acquire intelligence develops more gradually inside and outside of the classroom. It will occur best, however, when the individual feels supported, comfortable, respected, valued, stimulated, and challenged to grow. In this regard we believe at Columbia College that one's physical, psychological, and experiential surroundings greatly influence learner development and, therefore, the development of intelligence. The development of intelligence at Columbia College will also be affected by access to quality facilitation as well as support inside and outside of the classroom in the form of guidance, coaching, counseling, and mentoring.
- Everyone will develop and demonstrate different forms of intelligence in different ways. This will be determined or affected by the nature of the environment the individual is exposed to and the degree the environment recognizes, values, and respects the various forms of intelligence. Western society, and especially the western education system, tends to view intelligence as a mental ability. Children in western societies learn quickly that education is primarily focused on mental ability and those who perform well in this environment are highly valued. Children who do not do well in this environment tend to form lower self esteem that can affect their development and performance throughout life. A greater number of individuals will grow up and develop a more positive view of themselves when the society in which they live values and respects the various forms of intelligence. We at Columbia College recognize the various forms of intelligence.
- Individuals are born with the innate desire to learn and therefore develop their intelligence throughout life. We further understand at Columbia College that each of us learns throughout life and develops in different ways and at different rates. At times individuals find some knowledge and/or skills harder to acquire and others easier, even if the new knowledge and/or skills seem very similar to that which was just acquired.
- Some individuals may blame themselves for not acquiring new knowledge and skills when this could have been caused by such external factors as a teacher, parent, employer, or as a result of a particular situation. It is, therefore, important for those responsible for education at Columbia College to question themselves as well as their methods and approach to facilitating learning when one or more individuals are not successful.
- Although some individuals learn better by hearing sounds, a greater number learn better by seeing the world around them. However, most individuals learn and develop best when they are able to engage more of their senses, by doing or experiencing things for themselves. At Columbia, our faculty create learning environments that engage learner senses by actually doing and experiencing.
- We at Columbia College believe that individuals will enhance their knowledge and skills as a result of interaction with others through cooperative and/or collaborative learning. This interaction will occur inside or outside a formal learning environment such as a classroom. Often this interaction allows individuals to experience, apply, adapt, modify, reinforce, strengthen, solidify, and retain specific concepts and/or critical thinking skills. These more in-depth experiences may increase the individuals" ability to move what they have learned from less useful short-term memory to more valued long-term memory.
- At Columbia College these experiences often take the form in classrooms of personal reflections, discussions, presentations, role playing, debates, simulations, group work, panels, and especially case

studies. They may also be experienced in labs, computer simulations, field trips, practicums, service learning, community activities, tutoring, and student exchange programs.

- We believe at Columbia College that knowledge and skills are more effectively understood, acquired and retained when the learner is more motivated to learn. This motivation tends to increase when the learner moves from more passive learning environments such as listening and note taking to more interactive learning environments such as case study discussions, role plays, and debates which allow the learner to be in more control of what they are learning. This will allow them to gain more personal and, therefore, more relevant experience. Still greater depth and appreciation of new knowledge and skills is realized when it is used to assess and analyze a situation (preferably a real problem) and an effective solution is identified.
- The more personally authentic the situation or problem is to each learner the more motivated they will be to learn and the more meaningful the experience will be.
- Faculty at Columbia College are therefore encouraged to have learners draw on real life situations when trying to understand a concept or when learning to apply new knowledge and/or skills. It is through the process of problem based and experiential learning that learners are able to take theory and put it into practice that provides the most deep seated meaning to an individual, and may be retained by them the longest.
- Learning and growth are recognized as being achieved at Columbia College when the individual is able to demonstrate he/she is able to consistently apply new knowledge and/or skills in a meaningful manner to solve a variety of new and preferably real world problems or challenges. This is referred to, by some, as outcome-based or competency-based learning.
- Student learning is often influenced at Columbia College by such matters as the students‟ cultural or civil beliefs or practices. It may also be affected by their familial, emotional, physical, psychological, social, financial, or maturational matters. Some of these influences may affect learning for all or a considerable portion of ones‟ life. Our faculty do their best to understand how these factors influence each student separately.
- Learning can be inhibited or severely impaired when a learner is placed in an environment where he/she is not able to adequately function at the level he/she desires or the level expected of him/her by the authority such as a facilitator. This inhibition or impairment may be further exacerbated by the negative reaction of his/her peers. Therefore, great care is taken by Columbia’s admission advisors to
- assess a learner’s readiness to be admitted to the College. It must be ascertained if he/she has the necessary entry level language, communication skills, cultural skills, academic knowledge and abilities, and motivation to be successful in this learning environment at this time.
- A fundamental principle of Columbia College is that when a student fails, the College also fails, and when the student succeeds then so do we. One of the purposes of this College’s faculty and staff is to ensure that it is structured to respond to the different learning needs of each individual that will enable him/her to succeed.

In summary, the most preferred learning situation will occur at Columbia College when each learner is placed in a learning environment that is structured to accommodate his/her learning style, interests, abilities, and skills. It will be more effective when he/she is able to progress at a speed that is challenging yet manageable to him/her, and the College will be most successful when each learner receives continuous feedback, encouragement, and stimuli that allows him/her to successfully acquire learning outcomes that can be applied in his/her personal life and/or workplace.

While the field of higher education can trace its roots back to Plato some 2500 years ago, the primary method of instruction hasn't changed much from Plato's simple lecturing approach. However, in 400 BC few books existed and those that did were handwritten as the printing press wasn't to be developed for some 2000 more years. Up until just over a hundred years ago the only higher education institutions that operated were private institutions and most were established by churches which tended to be the center of the community. In fact, the first universities in the world were established in about 1000 AD in Italy and Germany. The Italian university model followed essentially a broad liberal arts approach where learners studied a wide range of subjects, and the belief was that any topic of study was valuable. On the other hand, the German model focused more on a single subject, and accounting was the first degree issued in that state.

Shortly after the United States was formed in 1776, its leaders decided they needed their own universities and after studying the Italian and German models, they developed a model that essentially blended the two. Students in undergraduate degrees would normally spend the first half of their education studying liberal arts courses in order to broaden their knowledge base and conclude the remainder of their degree concentrating in a field of specialization.

This model was also adopted by Canadian universities. Once this model was agreed on, several of the private high schools of the day began to establish universities. Some of the first private universities were Harvard, Princeton, and Yale.

As the world moved into the Industrial Revolution in the 1800s, industry began to grow and realized it needed a more educated workforce, one that would require a lot more skilled workers than the private universities were graduating. This led to the establishment of publicly funded post-secondary institutions.

Following the Second World War in 1945 and the return of hundreds of thousands of soldiers, the United States passed the GI Bill which enabled soldiers to enter post- secondary institutions. As many of them lacked high school education, they enrolled in small technical colleges which were few in number. This created a ground swell of activity around the colleges and acted as a major catalyst for growth during the 1950s. The baby boomers created another ground swell of activity in higher education starting in the mid sixties and extending to the early eighties.

During this same period (1970s and 80s) considerable change was occurring within the university community as it tried to respond to the wider ranging needs of younger as well as older learners, and for the first time specific programs were developed by a number of universities aimed at addressing the unique needs of an older student population. While most university programs continued to address the needs of high school graduates (18 to 22 year olds), a few programs were established to attend to older adults (generally age 25 and over). A few smaller institutions actually modified their entire method of operation institution and began to focus all their attention on what is now commonly referred to as 'adult education', meaning they are attempting to focus the majority of their attention on learners who are older than 22 years of age.

Columbia College was established in 1986 with the intent of focusing its attention primarily on adult learners. With this in mind, the College has no football field or inter- collegiate sports programs. It has no bar, bands, dances, or intramural programs. Its students are more focused on their spouse, children, part-time jobs, completing assignments, and returning to the workplace as quickly as possible with a highly recognized education that will ensure meaningful employment, advancement, job security, and a higher income.

Although the percentage of adult learners enrolled in American colleges and universities was quite small in 1950, it has grown steadily. By 1994 it consisted of forty-four percent of college and university enrollment (National Center for Educational Statistics 1998).

It is expected that the two year diploma, or associate degree as it is commonly called in the United States, will soon replace the high school diploma as the basic entry to employment (Maehl 2000, p.4). As this phenomenon continues to take place, enrollments in colleges like Columbia College should continue to increase. That is assuming Columbia continues to modify and improve the quality of its programs to address the changing needs of industry, society, and adult learners.

Setting the Stage

With the exception of the Department of Academic Upgrading and the Faculty of Education, it is estimated that 99 percent of all faculty in colleges and universities in North America have no formal training in adult education. In fact, most faculty in Academic Upgrading and Education were trained to teach children (age 5 to 18) and young adults (age 18 to 22) or at least they worked in an institution established primarily to teach one of these two groups. This would mean that very few faculty members in an adult based institution like Columbia College have been formally trained to teach adult learners (age 23 to 63 plus). This would mean that most faculty who work in adult education have this one thing in common. It should also mean that although faculty were hired to teach a specific course, for example, in Criminal Justice or Practical Nursing, they have a lot to learn if they wish to be successful in the classroom.

Can you imagine a doctor treating a patient for a disease without first trying to understand who that patient is and what symptoms they are experiencing? Certainly a doctor can prescribe penicillin if a patient says he/she has a fever but that may not be the correct prescription and it may do more harm than good. Therefore, the doctor needs to first take more time to get to know the patient. In this same manner, a higher education teacher or faculty member can prescribe a bunch of lessons for students enrolled in his/her course but if those lessons don't result in educational learning then the faculty member would not have succeeded.

At Columbia College we want all of our students to succeed and we want all our faculty members to succeed. We also know that we can hire faculty members with the foremost experience in their field (e.g., accounting or social work) in the world, but that doesn't mean they will be highly effective or successful at helping students to learn the subject at hand. To create a win-win-win situation for our instructors, students, and the institution, three things have to occur. First, the College has to create a working/learning environment that provides the proper supports for our faculty members and students.

Faculty members need assistance in order to acquire the skills needed to be effective in helping students learn. This assistance is provided through the College's Centre for Learning, Facilitating, and Assessment. While learners need to have a learning environment that actively and not passively engages them in each class and provides additional support outside the classroom, learners also need clear orientation to the program as a whole and each course internally, an opportunity to develop learning to learn skills; learning resources such as computer; library and learning resources, and an instructor/facilitator who does not lecture (talk) most of the time but instead is skilled at actively and collaboratively engaging students who do most of the talking during each class.

To create this win-win-win environment requires a strong commitment on the part of each new faculty member to learn all he/she can about 1) who are the students enrolled in their course and what are their learning needs, 2) what does engagement of students in active and collaborative learning mean and how can they develop the skills, 3) what is their role as a faculty member both inside and outside the classroom and how can they develop the skills needed to work with other faculty and administrators to ensure their students, the College, and themselves are highly successful.

This section is designed to introduce new faculty to the field of education and the phenomenon called learning. Hopefully from the introduction it may be understood that the ingredients of education (teachers, students, programs, courses, textbooks, classrooms, libraries, etc.) are one thing while the effective acquisition and demonstration of knowledge and skills on the part of the learner are something quite different. You could have the former without the latter (referred to as institution centered system) and you could have the latter without the former (called learning in spite of the system). However the most successful results occur when the proper attention and development of the former results in clear demonstration of the latter. This is referred to as a student centered system. At Columbia College our commitment is to developing a student centered learning system. It is a system where all the members of the College community work together as a team focused on one simple thing and that is creating a learning environment that ensures each learner is successful, and when they are successful then we are successful. It is a system that understands that if one student fails then we have all failed and quite simply, we don't want to fail.

This section will introduce the concept of intelligence and its relationship to learning, aging, and student success. It will then spend some time discussing memory, cognition, and factors that stimulate and inhibit the brain from

learning. From this the reader will then be introduced to a number of theories about learning followed by a section on different approaches to learning both in North America and other cultures in the world.

Intelligence and Aging

At this point we could go into an intense discussion of what intelligence is and what it measures. For example, we could discuss the findings of early researchers such as Spearman (1904, 1927) and Binet (1916) who attempted to understand intelligence. We could also discuss the controversy that arose over cries of racism and inferiority when the first massive use of intelligence tests was administered to men entering the U.S. army in World War One. We could also discuss more recently developed IQ tests such as the Wechsler Adult Intelligence Sale (WAIS III) which appears to assess verbal and reasoning ability related to formal schooling (Deary 2001; Sternberg et al., 2000). We could also discuss Gardner's theory of multiple intelligences which measures not only the standard academic ones such as linguistic, logical-math and spatial but also bodily- kinesthetic and music, two personal intelligences involving a fine-tuned understanding of oneself and other; and naturalist intelligence (Gardner 1993, 1999b). Unlike certain researchers which limited intelligence to more traditional academic abilities such as reading and math, Gardner proposed a much broader view. He further believed that an individual can be highly competent in one or more areas and less competent in others.

This went against the notion that people should be given a simple I.Q. test and told they are overall highly intelligent or less intelligent as expressed by a single I.Q. score (Gardner 1999a). Gardner's work has been well received by educators at the primary, secondary and post-secondary levels. It has also been adopted by numerous corporations. One key statement made by Gardner relates to the world of work. In this regard he states, 'what is important is whether people can do the job, not what particular intelligences they happen to be applying' (Gardner 1999b pg. 198).

In relation to this, Columbia College looked at the standardized student admission test which broadly measures an adult's academic abilities. However, it decided to create its own student application assessment tool for each program of study. To do this the College did an analysis of the academic requirements of each program and designed a tool to determine if the student demonstrated the necessary basic academic skills in high school math, English, science, etc. needed to be successful in the program. It then began using these tools to assess each program applicant.

Other researchers have also questioned the traditional view of intelligence which they refer to as 'academic intelligence' and come up with a definition that includes problem solving in everyday life. They contend that the problems found in everyday life bear little resemblance to the formal knowledge and skills acquired in most classrooms (Sternberg et al., 2000 p. 32). These views strike home to faculty at Columbia College especially when the College's primary focus is on delivering occupationally focused programs and it wants to be recognized for its students" abilities to become effective practitioners after graduation. It is for this reason that Columbia College requires all students enrolled in professional programs to take at least one cooperative education course during each year of academic study. Its faculty also do their best to include relevant case studies within each course lesson where they vigorously attempt to connect academic knowledge and skills to every day work and life.

It is for this reason that the College maintains a low number of full-time academic faculty in each program of study and instead has chosen to hire a larger portion of highly qualified part-time core faculty who, for the most part, are active practitioners in the field. The College does its best to match the formal education and experiences of our faculty with the course(s) they are assigned to teach. For example, practicing lawyers, accountants, economists, and human resource specialists are assigned to related courses where their formal education and experience match the assigned course(s).

Aging and Activity

Although the average age of an adult learner at Columbia College is about 38 years old, our student body extends from about age 20 to 60 plus. So the natural question some learners may have is: does a 60-year-old have the same capacity for learning as a 20-year-old? Another more recent question is: does physical activity affect an individual's mental ability to learn?

Researchers have not conclusively agreed that our intellectual ability remains the same regardless of our age.

However, this seems more due to such factors as agreeing on the definition of what intelligence is, agreeing on what constitutes aging, and agreeing on which tests actually measure intelligence. What they seem to agree on is that intelligence seems to remain stable throughout almost all of life and may actually increase in some functions. This seems to depend on a person's educational level, experiences in life, and health (Merriam, et al., 2007).

This all seems to be good news for older adults attending Columbia College. What is even better news is the effects exercise has on the brain function and performance. In his 2008 book 'Brain Rules', John Medina shared a number of more recent research findings. Put simply, if your lifestyle is more sedentary, then your brain tends to not function as well as others who are more physically active. In addition, the more you exercise, the lower your risk of heart attacks and strokes.

Medina, who is professor of bioengineering, further states that exercise dramatically improves long term memory, reasoning, attention problem solving, and so called fluid- intelligence (e.g., reasoning quickly, and abstract thinking) (pg. 14).

He went on to state that two to three periods a week of 45 minutes of aerobic strengthening exercises is more ideal but that simple daily walks are of definite value. Medina went on to state that regular aerobic exercise reduces the odds of dementia by almost 50 percent and Alzheimer's by more than 60 percent (pg. 16).

These findings indicate that not only should our faculty and staff engage in regular physical exercise but so should our students. These activities may be as simple as regular daily walks but may also suggest that faculty may want to introduce a few minutes of exercise each hour of class. The College may even want to set up regular classrooms with exercise bikes and have students slowly operate the bike while engaging in an academic lesson. Exercise will benefit faculty, staff, and students who engage in it.

Further, regular exercise will reduce student stress which will enable them to relax and focus on mental work more effectively. It will actually improve short and long term memory. It will even reduce depression and the likelihood of common colds which can interfere with learning. One study even showed that adults who were experiencing high stress actually performed 50 percent poorer on certain cognitive tests than adults with low stress (Medina, pg. 178). So how much better would students do on quizzes, final exams and National Exams if they learned to relax? How would this affect learning in a classroom, lab or workplace and what could we do to create a more relaxed and less stressful learning and working environment at Columbia College?

Memory and Learning

To assist adults in their ability to retain new knowledge, faculty members may engage in many different activities. These include things as simple as presenting new items on an overhead in the form of a chart, picture, or diagram (minimal written sentences). It may also be valuable to present a brief outline of the lesson and then refer back to it and check it off as the lesson proceeds. Faculty may use mnemonics and rehearsal strategies as well but the best thing to do is give learners an opportunity to discuss and apply new knowledge as soon as possible. This will allow new items to sink more deeply into long-term memory. Learners should also be encouraged to take notes that are relevant to them for later review. Bee and Bjorklund (2004 pg. 145) found the activity of making lists while studying also improved recall.

It should always be kept in mind that the real purpose of education is not to repeat memorized facts on an exam in order to pass a course and then forget it, but it is to gain new knowledge, skills, and attitudes that will assist the learner to perform responsible function and activities in their life as members of society and members of the workforce. It should also be understood that the human mind does not remember lists for very long before the list is forgotten. However, it does well at remembering new items if it is given an opportunity to apply the new information to solve a problem (preferably a real problem). This may give learners an opportunity to relate new items to their memory of existing items and an opportunity to replace or fit new items into existing memory.

Over the years a number of tools have been developed to assist learners to understand their styles of learning with the intent of improving memory. These include the Allison and Hayes Cognitive Style Index, Aptar's Motivational Style Profile, Vermont's Inventory of Learning Styles, Myers-Briggs‟ Type Indicator, and Kolb's Learning Style Inventory.

However, it was reported by Cassidy (2004) and later by Della Porta (2006) that all of these instruments required further empirical work in order to meet tests of research reliability and validity.

It should further be noted that a great deal has been written over the years about our brains being divided into two

neat halves. Where the left brain is the seat of logic, the right brain holds our creative and artistic abilities. The reality is that this is simply a myth. The brain is a very complex and dynamic structure and like our fingerprints, no two brains are alike (Medina 2008).

Traditional Learning Theories

Philosophers have been writing about learning theory since Plato and Aristotle. Plato believed that physical objects have corresponding abstract forms. He further believed that we can come to know them through introspection or self-analysis. Aristotle, on the other hand, believed that all one"s knowledge comes through his/her senses. In the last century a number of learning theories have been developed. This section will introduce the five leading traditional learning theories that clearly present different assumptions about learning, beginning with the Behaviorist Orientation and concluding with the Constructivist Orientation.

Behaviorist Orientation

John B Watson developed the Behaviorist Theory. Contributors to this work included Thorndike, Tolman, Guthrie, Hull and Skinner (Ormrod 1995). These investigators basically held three basic assumptions about the process of learning. This first is that learning is evident through a change in behavior. Secondly, they believe that what an individual learns is a result of what they experienced in the environment around them. It is not a result of their own thinking. Finally, they believe that the shorter the time interval between two similar events, as well as any means that will increase the likelihood that an event will occur again (reinforcement), will increase learning (Grippin & Peters 1984).

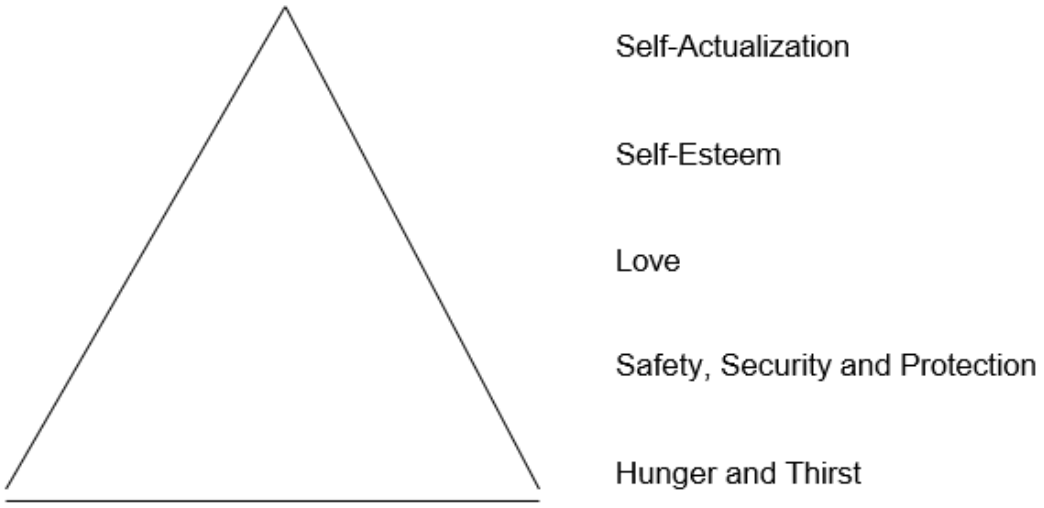
Thorndike developed a concept he called connectionism or stimulus – response theory. This theory holds that learning will eventually occur when sufficient stimuli begin to consistently elicit the desired response. Pavlov added the concepts of reinforcement, conditional stimulus, and extinction to Thorndike’s basic notion. Skinner contributed operant conditioning to this list of learning theories.

Behaviorist orientation is the philosophy that most underlines adult career education, technical and vocational education, and human resource development. For example, vocational education identifies memory skills needed to perform an occupation and then teaches those specific skills. Human resource development focuses on skills needed to improve performance. Competency-based instruction follows the behaviorist orientation.

Humanist Orientation

Humanists have the opposite view of behaviorists, in that they refuse to believe that behavior is simply predetermined by one’s environment. Instead they believe that learners have the ability to choose their own destiny. They believe that learners are free to become what they choose to become and have the potential to grow and develop without external influences (Rogers, 1983; Maslow, 1970). These are among the tenets that most adult learning theory is based on.

Maslow is considered the founder of humanist theories. He believed the goal or purpose for humans to learn is self-actualization which is at the top of his list of what motivates learners. His hierarchy, describing why people are motivated to learn, is presented below, starting with the most primary motivation related to hunger and thirst.



Maslow"s Hierarchy of Needs

Sahakian (1984 p. 439) outlined a list of ten other learning goals that Maslow identified:

1. *The discovery of a vocation or destiny*
2. *The knowledge or acquisition of a set of values*
3. *The realization of life as precious*
4. *The acquisition of peak experiences*
5. *A sense of accomplishment*
6. *The satisfaction of psychological needs*
7. *The refreshing of consciousness to an awareness of the beauty and wonder of life*
8. *The control of impulses*
9. *The grappling with the critical existential problems of life*
10. *Learning to choose discriminately*

Carl Rogers (1983) developed a client-centered theory that is very similar to the principles of student-centered learning which Columbia College follows today. Client-centered theory is concerned with personal growth and development and has the following characteristics (pg. 20):

1. *Personal involvement: The affective and cognitive aspects of a person should be involved in the learning event.*
2. *Self-initiated: A sense of discovery must come from within.*
3. *Pervasive: The learning 'makes a difference in the behavior, the attitudes, perhaps even the personality of the learner.'*
4. *Evaluated by the learner: The learner can best determine whether the experience is meeting a need.*
5. *Essence is meaning: When experiential learning takes place, its meaning to the learner becomes incorporated into the total experience.*

In closing, it should also be noted that Malcolm Knowles" andragogy theory (1968) and his view of self-directed learners (1975) are also grounded in humanist theory and are foundational to the design, development and delivery of all programs at Columbia College.

Knowles first advanced his theories in the late sixties. They consisted of four assumptions:

1. *As a person matures, his or her self-concept moves from that of a dependent personality toward one of a self-directing human being.*
2. *An adult accumulates a growing reservoir of experience, which is a rich resource for learning.*
3. *The readiness of an adult to learn is closely related to the developmental tasks of his or her social role.*
4. *There is a change in time perspective as people mature – from future application of knowledge to immediacy of application. Thus, an adult is more problem centered than subject centered in learning. [Knowles, 1980, pp. 44-45]*

Later Knowles introduced a fifth and sixth assumption:

5. *The most potent motivations are internal rather than external (Knowles & Associates, 1984, p. 12).*
6. *Adults need to know why they need to learn something (Knowles, 1984).*

Cognitive Orientation

A Gestalt Psychologist, Bode criticized the behaviorist theories as being too concerned with external forces to explain learning. Instead, Gestaltists view learning as looking at the whole rather than specific parts. They look for patterns as opposed to single isolated events (Hergenhahn and Olson, 2005). The Gestalt views have come to be known as cognitive (or information-processing) learning theories. Two key features of this orientation are that the human memory system activity processes information and that prior knowledge plays a critical role in learning. Cognitivists believe that one's perception and insight are critical to giving meaning to a subject. Humans don't simply respond to stimuli; they interpret their senses and reflect on their experiences. In essence they are primarily in control of what they learn. They will often reorganize and experience after reflection in order to make sense of it. They will come to see a solution to a problem after cognitively thinking about all the factors associated with it and considering various solutions (Hergenhahn and Olson 2005, p. 273). This focus on the thought processes of the individual is central to the cognitive orientation and very important to faculty at Columbia College.

This is a critical reason why Columbia College has adopted a facilitational model where faculty are constantly asking the learners questions regarding what they are thinking.

We encourage them to make observations, question what they don't understand, share their feelings and contribute their own thoughts. We want students to be actively (mentally) engaged in the learning process not simply receptacles receiving information. At Columbia our faculty want learning to be meaningful to learners. Ausubel (1967) distinguished meaningful learning from rote learning. He states that meaningful learning occurs when something being learned can be connected to a concept which already exists in one"s mind (cognitive structure). In contrast, rote learning is something that does not connect with an existing concept and is easily forgotten. Therefore, to make learning more meaningful, faculty at Columbia College try to help learners to connect new concepts with knowledge, skills and experiences that currently exist with learners. To achieve this students are often engaged in case studies, activities, labs, or cooperative education experiences, where they have an opportunity to experience new knowledge through application, observation, discussion, reflection, synthesis, and evaluation (Bloom's Taxonomy).

Smith (1982, Smith and Associates 1990) explored in considerable depth the importance of 'learning how to learn' and its relevance to adult learning. Smith contends that learning how to learn consists of possessing or, if needed, acquiring the knowledge and skills needed in order to be a more capable learner and therefore a more successful learner. Columbia College's faculty feels so strongly about the importance of these skills that it makes free learning-to-learn courses available to learners prior to starting their programs. The course is worth one credit and is a required course in most programs at Columbia College.

Social Cognitive Orientation

Social Cognitivism posits that each of us learns from observing other people and therefore this occurs in a social environment. We acquire knowledge, skills, attitudes, and behaviors by observing and listening to others. We learn about the appropriate use of certain behaviors by watching others and deciding whether to model their behavior based on our expected outcome (Schunk, 1996 p. 102).

Bandura moved this theoretical orientation from a social context to a social cognitive context when he focused a lot more on the cognitive process than on just behavior. He contended that one can learn from behavior without initiating it (Lefrancois, 1999).

Bandura's views are of importance to adult learning and therefore Columbia College since it recognizes that the environment influences the learner and the learner influences the environment. In this regard social cognitive theory and behaviorist theory have some connectivity. Bandura (1986) sees learning as a three-way interactive model that includes the individual, the environment, and learning.

This is why Columbia College faculty encourage learners to share their thoughts with one another and work together in a collaborative manner. This collaborative interaction may occur while studying a case, sharing views, discussing solutions, and making decisions. It may occur in or out of the classroom, lab, tutorial, cooperative education placement, or in the community.

Constructivist Orientation

According to constructivist theory, learning is basically a process in which one constructs meaning from what one experiences. Some constructivists view learning as an individual process while others see it as a social process. Regardless of where one stands, all constructivists view learning as an active process where learners are engaged actively on their own or with others in learning as opposed to passively acting as a receptacle (e.g., sitting at a desk listening to a lecture). Consequently, learning is a result of collaborative and/or cooperative dialogue. 'One learns through engaging, incorporating, and critically exploring the views of others, and new possibilities of interpretations are opened through the interaction' (Gergen 1995, p. 34).

Experiential learning and transformational learning are two examples of constructivist learning theories. Both are discussed in greater depth in this document. Other forms of constructivist learning include reflective practice, communities of practice, and situated learning.

Our faculty at Columbia College strongly support the constructivist orientation as noted earlier. They are also supportive, in many respects, of the humanist, cognitivist, and social cognitive orientations. The behaviorist orientation receives support related to skill development and some elements of human resource training.

The following chart that compares the five learning orientations was presented by Merriam et al in Learning in Adulthood (2007).

Table 1

Five Orientations To Learning

Aspect	*Behaviorist*	*Humanist*	*Cognitivist*	*Social Cognitive*	*Constructivist*
Learning theorists	*Guthrie, Hull, Pavlov, Skinner, Thorndike, Tolman, Watson*	*Maslow, Rogers*	*Ausubel, Bruner, Gagne, Koffka, Kohler, Lewin, Piaget*	*Bandura, Rotter*	*Candy, Dewey, Lave, Piaget, Rogoff, von Glaserfeld, Vygotsky*
View of the learning process	*Change in behavior*	*A personal act to fulfill development*	*Information processing (including insight, memory, perception, metacognition)*	*Interaction with and observation of others in a social context*	*Construction of meaning from experience*
Locus of learning	*Stimuli in external environment*	*Affective and developmental needs*	*Internal cognitive structure*	*Interaction of person, behavior, environment*	*Individual and social construction of knowledge*
Purpose of learning	*To produce behavioral change in desired direction*	*To become self-actualized, mature, autonomous*	*To develop capacity and skills to learn better*	*To learn new roles and behaviors*	*To construct knowledge*
Instructor's role	*Arrange environment to elicit desired response*	*Facilitate development of whole person*	*Structure content of learning activity*	*Model and guide new roles and behaviors*	*Facilitate and negotiate meaning-making with learner*
Manifestation in adult learning	• *Behavioral objectives* • *Accountability* • *Performance improvement* • *Skill development* • *HRD and training*	• *Andragogy* • *Self-directed learning* • *Cognitive development* • *Transformational learning*	• *Learning how to learn* • *Social role acquisition* • *Intelligence, learning, and memory as related to age*	• *Socialization* • *Self-directed learning* • *Locus of control* • *Mentoring*	• *Experiential learning* • *Transformational learning* • *Reflective practic* • *Communities of practice* • *Situated learning*

Experiential Learning

Many educators have emphasized the significant value that is derived by the learner when they have an opportunity to personally experience something. Learning by experience tends to engage learners not only mentally but also physically and emotionally. We tend to construct meaning from our experiences individually as well as collaboratively with others. The more real life the situation the more meaningful the learning. Learning that is more meaningful is reflected upon more deeply, it changes ones views and behaviors, and it is retained by the learner for a longer period of time.

To go further, John Dewey (1938) postulated that 'all genuine education comes about through experience' (p. 13). Kolb and Kolb (2005) studied, among others, the writing of John Dewey, Jean Piaget, and Carl Rogers and developed six propositions of experiential learning. First, they

stated that 'learning is best conceived as a process, not in terms of outcomes' (p. 194). Second, 'learning is relearning' (p. 194). This requires getting students to share and discuss their current views and then, if needed, modify them. Third, learners need to move between dialectically 'opposing modes of reflection and action and feeling and thinking' (p. 194). Fourth is the fact that learning is holistic and not just mental. The fifth proposition states that learning consists of interactions between each learner and his/her surrounding (environment). Sixth is the fact that learning is by nature constructivist.

Faculty Role

Experiential learning is a critical underpinning at Columbia College where faculty are referred to as facilitators and not instructors. This is because their job is to help students understand a subject and related concepts by interacting, experiencing, and ideally emotionally feeling what they are learning. Ideally, this is done best by experiencing it in action. It is not done by listening, writing notes and repeating what was stated in a lecture. Our faculty want students to discuss what they are experiencing with others.

They want students to take the time to reflect on what they are experiencing in a trusting and open environment. Our faculty also act as catalysts who involve students in role- playing, simulations, demonstrations, presentations, debates, discussions, and many problem-based activities, often associated with solving cases (case study) or dilemmas. By actively engaging learners to use as many of their six senses as possible we are creating a holistic environment that fosters greater breadth and depth of learning and therefore greater value and meaning. Our faculty also act as coaches and mentors.

Whereas coaching is normally associated with learning specific skills, mentoring typically tends to be guiding (Fenwick, 2003 p. 117). When faculty are not engaging in personal interactions with learners, they may be found cheering them on and celebrating their successes. Our faculty also take on the role of evaluator and assessor. Whereas, evaluation may include quizzes, tests, exams, demonstrations, and reporting; assessment may include portfolios, presentations, journals, learner self-analysis, and peer evaluation.

Our faculty may assist a group of learners involved in cooperative education (or professional practice) to discuss what they are being challenged by and collectively come up with relevant solutions. Fenwick (2003) refers to this as a community of practice. Through community of practice our faculty are able to help students who become stuck or immobilized to move forward.

There are times when faculty at Columbia assist students who are encountering unconscious blocks to learning (Dirkx, 2001a, 2001b). Faculty do this by encouraging students to pay close attention to dreams, behaviors, and unusual images that come to their minds. Faculty listen and compassionately try to help them deal with their emotions.

Our faculty also try to assist learners whose development is being impeded by the effects of power or abusive relationships in their lives. This is often a most delicate and challenging situation as it may be culturally, religiously, or familial based. Students are often referred to experts in the field when these situations are experienced.

Faculty Procedures

Most of the experiential learning literature focuses on procedures that practitioners use. This section describes two of them in more detail: reflective practice and cognitive apprentice.

First, reflective practice allows individuals to draw conclusions or make decisions from complex or murky situations that are based on prior knowledge and experience. ‘Reflective practice is a deliberate pause to assume an open perspective, to allow for higher-level thinking processes. Practitioners use these processes for examining beliefs, goals, and practices, to gain new or deeper understandings that lead to actions that improve learning for students.

Actions may involve changes in behavior, skills, attitudes, or perspectives within an individual, partner, small group, or school’ (York-Barr, Sommers, Ghere, & Montie, 2001, p. 6). Quite clearly the expected result of reflection is to gain better understanding and insight, and as a result, make a more effective decision that will lead to a successful conclusion.

York-Barr et al. (2001) developed a four stage process to guide the development of reflection. First, an individual must select an event and ask ‘what happened’. Second, the individual needs to analyze and interpret the event. For example they need to ask why things happen the way they did. Why did they and others act the way they did? Did other previous experiences affect their or my behavior? Did the context of the event have an effect on the outcome? Third, individuals need to try to make sense of what they experienced (the event). To do this they need to ask the following types of questions. Exactly what did they learn from the event? What could they do differently or better that would improve the outcome? How could this affect their future situation, relationship, outcome? Forth, individuals need to think about the implications for the future. In this regard they need to ask such questions as what are they going to think about and do the next time the event occurs. What could they do to ensure they

handle this type of event more effectively in the future?

The other procedure that is most relevant to faculty at Columbia College is the cognitive apprenticeship method. 'Cognitive apprenticeship methods try to enculturate [learners] into authentic practices through activity and social interaction in a way similar to that evident – and evidently successful – in craft apprenticeship' (Brown, Collins, & Duguid, 1989, p. 37). As a result of the cognitive aspect of an apprenticeship (for example, a cooperative education field placement), learners are expected to think in much different ways about what they are learning or skills they are developing. According to Fenwick (2003), learners are treated as 'independent reflective contractors of knowledge' (p. 152).

Brandt, Farmer, and Buckmaster (1993) developed a five phase model of cognitive apprenticeship (see Table 2).

Table 2

Cognitive Apprenticeship Phases

	Role of Model	***Role of Learner***	***Key Concepts***
Phase 1: Modeling	*Model real-life activity that learner wants to perform satisfactorily. Model states aloud the essence of the activity. He or she can include tricks of the trade. .*	*Observe performance of total activity, not merely the individual steps. Develop a mental model of what the real thing looks like.*	*Articulation, domain-specific heuristics*
Phase 2: Approximating	*Provide coaching to the learner. Provide support when needed.*	*Approximate doing the real thing and articulate its essence. Reflect on the model's performance. Use self-monitoring and self-correction.*	*Scaffolding, coaching*
Phase 3: Fading	*Decrease coaching and scaffolding.*	*Continue to approximate the real thing. Operate in increasingly complex, risky, or ill-defined situations. Work individually or in groups.*	*Fading*
Phase 4: Self-directed learning	*Provide assistance only when requested.*	*Practice doing the real thing alone. Do so within specified limits acceptable to profession and society.*	*Self-directed learning*
Phase 5: Generalizing	*Discuss the generalizability of what has been learned.*	*Discuss the generalizability of what has been learned.*	*Generalizability*

Source: Brandt, Farmer, & Buckmaster, 1993, p. 71.

In phase one the model demonstrates the activity to the apprentice (student). In phase two the learner attempts to perform the activity while the model provides feedback, support and encouragement. In phase three, the model clearly removes supports while learner works in less defined situations. In phase four the learner performs his/her specified duties independently and only receives support from the model when requested. Finally, in phase five the generalizability of the skills are reviewed and the learner is encouraged to apply them in other situations or environments.

Columbia College has added a sixth phase to this model. It is an evaluations phase. During this phase various stakeholders (including the employer and student) are normally asked to provide written feedback to the apprenticeship (lab, simulative experience, or cooperative education). Faculty members may also discuss these apprenticeships in class as students are moving through each stage of development.

Learning from Story Telling, Narratives, Journals, and Role Playing

A narrative is basically a story. It is 'the oldest and most natural form of sense making' (Jonassen & Hernandez-Serrano, 2002, p. 66). It is a tool that helps the writer make sense of what he/she has observed or experienced. Narrative learning is like spiritual learning in that it is non-scientific. 'Narrative knowing … is concerned more with human meaning than with discrete facts, more with coherence than with logic, more with sequences than with

categories, and more with understanding than with predictability and control' (Rossiter 2005, p. 419). Narratives may be divided into four types. They include cultural, familial, individual and organizational.

A journal is a form of narrative (Kerka, 2002, p. 1). A diary may be considered a more structured form of a journal (Rosenwald 1993). Kerka (2000, p. 1) provided the following assumptions about journal writing from an educational perspective:

- Articulating connections between new and existing knowledge improves learning.
- Writing about learning is a way of demonstrating what has been learned.
- Journal writing accentuates favorable learning conditions – it demands time and space for reflection, encourages independent thought and ownership, enables expression of feelings, and provides a place to work with ill-structured problems.
- Reflection encourages deep rather than surface learning.

Storytelling is another form of narrative. It is a valuable way to help others learn. Students may engage in storytelling as might faculty. In Columbia's multicultural classrooms it can be a most valuable method of making learning meaningful. It is argued by Jonassen and Hernandez-Serrano (2002) that stories presented in the form of case studies are a valuable facilitational technique. Baumgartner & Merriam (1999) state that storytelling may be modified and come in many forms such as role-playing, critical incidents, case studies, and examples from work. Faculty at Columbia College will often share stories from their professional experience and use them to help students better understand a concept or theory. This is one of the reasons why Columbia College attempts to employ primarily part-time core faculty who are current practitioners.

Jonassen and Hernandez-Serrano (2002) cite several studies that speak to the value of this practice. They state that *'stories can function as a substitute for direct experience, which novice problem solvers do not possess. Supporting learning with stories can help students to gain experience vicariously'* (p. 69). Students may also learn from the experiences of other students. A student's life experience can often become a valuable learning experience. It becomes a valuable way to understand by seeing a situation from another person's perspective.

Sometimes the only way to help an individual to understand or learn from a situation is to engage him/her in role reversal, where he/she is asked to try to see a situation from another perspective. Often faculty at Columbia will set up a role-playing situation and have students take the role opposite their own view. This experience often forces them to see a situation from a perspective they had not considered and as a result changes their minds or at least affects strongly held views. Once they complete the role play situation, they are often asked to share how it affected them personally and their views regarding the topic at hand.

In one form of role playing or role reversal students will be asked to take on the role of the facilitator and to present a specific topic to a group of students. For example, in a lab one student may be asked to present a newly acquired technique or procedure while other students will ask questions for understanding and clarity. Once concluded they may be asked to rate the presenter informally or by using a structured evaluation tool. In some cases, students will be divided into smaller groups and take turns playing the role of presenter. Once this exercise is completed the class facilitator will ask the class what they learned from the situation and how it could have been improved. By getting students to take on a more formal evaluative role in the classroom, Columbia's faculty help students to grow mentally and see things from many perspectives. They learn that teaching and/or evaluating others requires them to better know and understand the subject matter themselves. A group of learners, who are told that they may be asked to present a specific topic to another group of learners in class, will take a whole different view of their work assignment than one who expects to simply write a quiz and participate in one or more case study discussions.

Columbia College – a Multi-Cultural Institution

While Columbia College prides itself on the quality and caliber of its faculty and staff, it also prides itself on attracting learners from many cultures. Columbia represents the Canadian mosaic. Its students are like the United Nations. They come from around the world and speak over 57 languages. They bring with them their language, dress, food, music and cultural practices. They enrich our institution and the lives of everyone they touch and

contribute to our growth as members of society. They chose Canada and Columbia College, and we thank them for this decision. They are here to learn, get an education, and wish to become more effective members within their family and leading members of our society. Our responsibility is to help them strengthen their language skills (reading, writing and speaking) and understanding of Canadian culture (not only dress, music, and language but norms, behaviors, beliefs, practices, and mannerisms). We need to do this in a manner that is informative and beneficial while at the same time we need to honor and respect their cultures. We need to learn about them and where they came from just as we need to help them learn about us and the ways of Canadian society.

So to be an effective facilitator and/or staff member at Columbia College requires that we not only bring a vast array of talents, knowledge, and skills but also means we understand that our role is not simply to complete the roles and responsibilities listed in our position descriptions. Our primary role is to help others we come into contact with to succeed, and one of the best ways to help others succeed is to better understand them.

This section is designed to help us understand how many of our students were indoctrinated in the learning environment. It will help us appreciate, for example, that many Asian students do not speak out or pose questions in class (or at work) because it may cause the teacher (or supervisor at work) to lose face. Instead they have been culturally taught to speak to their teacher (or supervisor) in a more private setting outside class.

The Islamic Perspective on Learning

To begin with the word Islam originally came from three Arabic letters (SIM, LAM, and MIM). The root word for Islam therefore means to be in peaceful submission, to surrender, obey and be at peace. Islam is a way of living which emphasizes education and knowledge seeking. There are some differences between the Islamic perspective on learning and that of western cultures. For example, in the first verse of the Qur‟an,

states ‘Read! In the name of your Lord, Who has created (all that exists). Read! And your Lord is the most generous. Who has taught (the writing) by the pen. Has taught man that which he knew not’ (Qur‟an 96:1-5).

For Islamics, learning is considered to be a sacred and obligatory act for all individuals. The purpose of education is to bring men and women closer to God and His creation, and as God is ‘the source of knowledge, by knowing more they felt they were drawing near to God’ (Husain & Ashraf 1979, p. 11). Muslims therefore believe in the lifelong pursuit of knowledge. They believe that people should learn not for themselves but to help other people in their community. To do this one should constantly seek out, reflect on and then share knowledge with others. They also believe that age, gender and ethnic background should not be a barrier to learning. People who share this faith should show a great deal of respect for the teacher who is the keeper of knowledge. Therefore, the student-teacher relationship is sacred to Islamics.

The Confucian Perspective on Learning

According to Confucius (551-479 BC) the purpose of education is to enlighten people and to show love to people (Sung, 1991c). It is also needed to reach ‘the highest excellence’. According to Sung, in order to reach the highest excellence the following steps are required: to investigate things, to extend knowledge, to demonstrate a sincere will, to correct the mind, to cultivate personal life, to regulate the family, to achieve national order, and to support world peace.

Confucians believe quite simply we need to ‘learn’ in life. We need to learn from others, we need to learn from nature, and we need to enjoy learning from our daily experiences. Like a young bird flapping its wings, we need to learn from practice and learn from our experiences in life.

Sung (1991c) goes on to state that learning is a holistic approach involving self reflection through meditation and spiritual study. It also involves commitment and continuous effort. For Confucians the focus of learning is on spiritual development and not vocational development or skill acquisition. Sung (1991c) also states that learners will learn on their own and with peers. He goes on to state that teachers are highly revered by society and students are to show respect for their teachers. In fact, according to Confucianism education today in China, Korea and Taiwan, teachers are to be held in the same high regard as parents and kings.

These views of Confucianism should help Columbia College faculty and staff better understand the behavior of Asian students in our classrooms and group meetings such as student orientations where they show a reticence to speak out or ask questions.

Through years of cultural training they have learned that such behaviors may cause their teacher to lose face. Instead they have been taught that questions should be asked privately before or after class. Where westerners see silence as a sign of weakness, shyness, or trouble, East Asians see it as a sign of strength, power, and disagreement (Liu, 2001, p. 190). Wang (2006) goes on to state that when a Chinese student states something that is private and personal, it is actually a sign of weakness, or it may be an attempt to seek help, or simply poor manners.

African Indigenous Learning

A major tenet in African indigenous knowledge systems is that to learn is the basis of living a useful and happy life with oneself and one's family. It also means living a useful and happy life in one's community and society. Finally, it means living happily with the spirits of one's ancestors (Magagula and Maziboku 2004).

The African indigenous way of learning was informal and consisted of oral methods of instruction. It also consisted of learning as a collective or group. Some learning was achieved as a result of a vision or dream. For example, some Herbalists in Botswana became knowledgeable about certain medicines as a result of a dream.

Maulte (2001) learned that some forms of assessment in Botswana consisted of judging individual characters by watching them perform in groups and that real graduation only occurred when the next group had been successfully initiated. For example a group would graduate when they had successfully taught another group how to properly build a cattle corral. In oral societies like Africa every individual was a teacher, productive worker, and learner.

In the African indigenous society, locally acquired knowledge is learned through observing situations, experimenting with solutions, and modifying previous solutions to adapt to changing environmental forces. Participatory education is achieved as a result of ceremonies, rituals, and spiritual activities. Knowledge is also acquired as a result of storytelling, music, dance, and poetry. It is retained in cultural artifacts, religious beliefs, taboos, myths, and folklore.

The purpose of African indigenous education is to help people achieve the highest societal value they call botho or humanism. People who achieve this are honest and willing to share or help others. They are accommodating to others and committed to saving lives. They also show respect to others including the young and old.

The Hindu Perspective on Learning

Like other non-western religions the Hindu religion is focused on the mind and body becoming united. It is a religion that places great value and respect on the teacher, historically referred to as a guru. This religion began some 4000 years ago and historically had an apprenticeship structure where each teacher had one student. The teacher had a deep devotion to the learner who had utmost respect for his/her teacher. In past days a lot of learning took place through storytelling, music, dance, and meditation. Much cultural learning today still takes place without the use of textbooks but through family members passing on stories.

The purpose of learning for a Hindu is not simply to acquire knowledge and skills but a life-long process of becoming a unified being. This is played out in the last stages of life for many Hindus who give up all their worldly possessions and begin a pilgrimage leading to true enlightenment which is the uniting of mind and body. By following this path one is led to liberation and enlightenment which allows individuals to gain a more holistic view of the universe and their connection with it.

Even today, much of the Hindu religious values and beliefs such as the laws of cause and effect or Karma are taught orally through storytelling by parents and grandparents who pass it on from generation to generation.

Exercise and Learning

A great deal of research has been conducted, especially since the 1990s, that has demonstrated that individuals who are more active perform better mentally than those who are less active. In many cases the performance of individuals, whether they be students or employees, is significantly better. What is amazing about the findings is that

even low levels of physical activity will bring very positive results. For example those who exercise physically, on a regular basis, have better 'long term memory, reasoning, attention, problem solving, even so called fluid intelligence' (Medina 2008, p.14). While the ideal level of activity seems to be 30 minutes of aerobic exercise two to three times a week, along with muscle strengthening activities, researchers have found that a low level of physical activities such as taking a 5 to 10 minute walk two to three times a day is not only a real boost to an individual's mental performance but will actually reduce the chances of heart disease and stroke. In fact, exercise not only improves mental performance of students and employees, it also reduces stress and even depression (Penninx, B.W. et al, 2002).

So, what does all this mean to Columbia College and what can we as faculty do to improve the performance of our students?

Since the human mind seems to slow down when we are sedentary for long periods of time, some faculty make sure students get a five minute physical break each hour.

Others structure classroom activity where students are placed in situations where they are required to get up and move around the classroom. For example, they are placed in small groups to work on a project requiring them to stand up and move desks around, or they are asked to participate in a role playing situation or demonstration at the front of the class. They may be asked to come to a certain part of the room to observe a simulation or presentation. Some faculty have even gone so far as to ask students to stand and participate in several minutes of physical exercise. It has been suggested that the College set up a regular classroom with stationary bikes and the faculty member then delivers his/her lesson plan while each student pedals a bike at a slow speed throughout the class. Naturally it may take some time for students to feel comfortable with this situation, but the results may be most interesting and could have a very positive effect on student performance. Maybe in the future Columbia's dress policy will require students and faculty to wear gym clothes throughout the day.

The Effects of Attention on Learning

When we are asked to describe the best teacher or instructor we ever had, most of us would remember a certain individual. And when asked what made them good, certain attributes would come to mind. Most of them would include their ability to seek, get and retain our attention for long periods of time. Such things would come to mind as their level of excitement about their subject, their degree of knowledge, their method of presentation, their obvious respect for us as learners, and their ability to emotionally engage us in the learning process both actively and collaboratively.

On the other hand, when we are asked to describe the characteristics of poor teachers we would often include such statements as disconnected, uninteresting, confusing, dry, and boring lectures.

The fact is that if faculty want to help students learn they must attract and retain their attention for long periods of time without students becoming bored and mentally checking out. To help achieve this Medina (2008, p. 79) suggests we take note of four factors. They are emotions, meaning, multitasking, and timing.

1. Emotions

First of all, emotionally arousing activities tend to be remembered much longer than non- emotional activities. They also tend to be remembered with much greater accuracy.

Medina (2008, p. 81) states, 'Regardless of who you are, the brain pays a great deal of attention to these questions:

- ‘Can I eat it? Will it eat me?’
- ‘Can I mate with it? Will it mate with me?’
- ‘Have I seen it before?’

These three basic human traits are within all of us and are critical for the very survival of the human species. Our brain is exquisitely tuned to identifying opportunities to reproduce; therefore, we quickly identify individuals or things we consider very attractive or intriguing (for example, Princess Diana or a shooting star). We also very quickly identify situations that are physically threatening to our safety (for example, an object falling towards us). Finally, the human brain is terrific at identifying patterns in our environment (for example, what number will follow 21, 31, 41…). We are quick to remember things that we think we saw before (Medina, p. 82).

A faculty member will quickly get the attention of his/her students if he/she uses any of these stimuli as part of an introduction to a statement.

2. Meaning

Medina (p. 83) describes the second human characteristic as a tendency to remember the ‘gist’ of an event or experience before we start to remember the details. We also tend to forget the details before we start to forget the ‘gist’. Most humans will tend to only remember detail when it is mentally placed in their mind in association with a larger picture (the ‘gist’). In fact, we increase our ability to remember facts by some 40 percent when we put them in a logically organized structure (or association) that is easy for us to remember. We are more capable of remembering facts when we clearly understand what they mean. In other words, as faculty members if we want students to remember certain concepts or terms, we need to help them first understand what each new fact or term actually means, and second, help them understand what logical association or relationship it has with other concepts or terms they have already learned. When we help students to see where certain concepts or terms fit into a larger picture such as a profession or occupation, they are much more capable of seeing its association with other concepts and terms. This will allow them to connect these concepts or terms together in a more meaningful way and they will be better understood and therefore retained longer as important knowledge within a discipline.

3. Multitasking

Although a human can walk and talk at the same time, this is not what is meant here about multitasking. In this context multitasking refers to the human brain simultaneously engaging in two separate thought processes at exactly the same time and it is simply not humanly possible (Medina, p. 85). Although we can shift from one thought to another and back again, it takes the human mind a few seconds to a few minutes to re-focus itself. This is why we will say, ‘Now where was I’, after being interrupted from something we were focused on. Research has shown that people can take up to 50 percent longer to complete a task when they have been interrupted. They can also have up to 50 percent more errors than individuals who were not interrupted. This can be very costly and even dangerous while at work or when we are driving a car. It can also affect us when we are trying to listen to a faculty member make a presentation and something distracts our attention. It can also be difficult for us to keep our mind concentrating on a tedious presentation or boring lecture, and this is why Columbia College strongly encourages faculty to actively engage students in learning activities and keep lecturing to an absolute minimum.

4. Timing

One of the facts that faculty members who are experts in their particular fields must constantly remind themselves is that their students are novices in their field and as a result can very easily become lost, confused, frustrated, and disengaged when introduced to a term or concept. It is therefore critical that they take the time to move students from the introduction of a term or concept to its meaning, its relevance to the field of study, its various applications, opportunities to experience it in a meaningful way, and finally reflect on and evaluate what was experienced.

It is therefore important for faculty to not simply force feed students by pushing too much at them on a constant basis, but instead to allow them adequate time to comprehend, internalize and appreciate fewer concepts very well than lots of concepts very poorly.

The Ten-Minute Rule

Research indicates that 10 minutes is the length of time that the human mind can concentrate on something; therefore it is important for faculty to make sure they are not engaged in one activity for longer than 10 minutes. A shorter time period would be even better. This basic fact should be kept in mind when developing a lesson plan and delivering it.

To effectively re-engage students" interest for the next 10 minutes Medina (2008) developed what he called 'hooks'. He found that the best hooks followed three principles:

1. Emotion must be a key part of the hook whether it be joy, fear, excitement, laughter, or even a strong narrative.
2. A hook should be relevant, to the point, and on topic. It can't simply be an entertaining interlude or joke.
3. A hook can either become a conclusion or summary to a ten-minute period. It could also be an introduction and a look at the ten minutes to come. Above all, the hook cannot be a boring thing.

Memory and Learning

Although it may go without saying, a critical component of learning is memory. What we learn, whether we are conscious of it or not, is actually placed in our memory system or brain (encoding) and remains there for either a short or long term period until it is recalled (decoding). The challenge we have as educators is understanding that how we present information to students will have a profound effect on whether it even goes into our students" memory systems or not and how long it will be stored there.

The following points are meant to help faculty create a more memorable learning environment for students (Medina, 2008).

1. First, how a new piece of information is 'introduced' to learners in the first place actually has a profound effect on whether it will even be remembered at all. Therefore, the more exciting, elaborate, interesting, or stimulating the introduction the better.
2. Second, people remember something best when they understand what it means. So, make sure learners understand the meaning behind the information, concept or term. The better individuals understand what something means to them, the better they will remember it. Expecting students to simply learn something by memorizing it in order to regurgitate it on a test has no real value at Columbia College because they will not be able to remember it at work or apply it in some meaningful way.
3. Third, one of the best ways to provide meaning to new information is to provide 'real world examples'. Studies have shown that providing two or more examples significantly increased student memory more than one example did.
4. Fourth, the better the student can 'relate' this new information with information that already exists in their mind the better it will be remembered (pattern matching). As faculty, we need to encourage this to happen.
5. Fifth, new information will be better understood and therefore better remembered if learners have an opportunity to experience it. This often involves using it or applying it in some meaningful way. In our classrooms at Columbia College this may involve using it to solve a problem (such as in a case study). In our labs this may involve putting it into actual use. In either case students should be asked to share what they are experiencing, observing, assessing, and discussing. They should also be asked to share what this means in a real life situation.
6. Sixth, to move something from short term memory to long term memory can take a good deal of time. The key to establishing something in long term memory is to repeatedly use and/or apply it again and again. The more often this occurs the better it will be remembered. This means we should try to spend most of our time focusing on the course's specific learning objectives and not bombard students with tons of theories and concepts that will be forgotten shortly after they have written an exam.
7. Seventh, to create a learning environment that has real meaning for students we need to constantly ask

them ‘questions’ regarding what they just read, heard, saw, or did.

Questions like: So, what do you think about this, how do you feel, what would you do, what does this mean, where would you use it and when, where would you not use it and why, etc. This questioning process will cause them to internalize and think about what they just learned. The more they think about something the more it establishes itself in their memory. This questioning technique should occur at each of the preceding stages.

Rest and Learning

It may sound somewhat silly, however, a considerable volume of research indicates that not only do human beings (that is adults as well as children) need a proper night’s sleep but people of all ages need an afternoon nap (Medina, 2008).

To support this statement Medina (2008) provides the following examples specifically related to adults. First, more traffic accidents occur in the mid-afternoon when drivers tend to nod off than at any other period of the day. Scientists have also learned that loss of sleep for one night will reduce cognitive skills by 30% and a subsequent drop in subject performance. Researchers have estimated that people who are deprived of sleep cost Canadian businesses over 10 billion dollars per year. It has also been found that when people are presented with a problem and then allowed to sleep on it (i.e., allowed at least one night’s sleep) their ability to find a solution increases by three hundred percent.

It has been concluded that lack of adequate sleep at night and lack of a nap during the day can seriously impact our ability to properly think. It affects our ability to maintain our concentration (e.g., listening to others, or working at a task), it impairs our problem solving and creative abilities, it negatively effects our memory, and it can change our mood or emotional state. It can also impair our quantitative skill, logical reasoning ability and basic math skills. Finally, it can impair our manual dexterty and fine and even gross motor skills. Clearly, sleep is intimately related to our mental functioning and our ability to learn.

So what can be done to help people to be more effective mentally? First we should encourage people to get the amount of sleep at night they need to function effectively, keeping in mind that children need more sleep than adults and that younger adults need more sleep than much older adults. Second, people should be encouraged not to leave work or school assignments to the end of a course and then work late into the evening the night before or through the night expecting to do a good job. Third, people should be encouraged to take a mid-afternoon nap for a period of fifteen minutes in order to allow their brains a chance to rest. Although this is common practice in some countries, it certainly is new to Canada and Columbia College. It is also something that may take some time to establish within various departments, work areas, and classrooms but it is something that deserves a lot of discussion and possibly a number of different approaches. Although it may be too late in the day, it may even be valuable for faculty and students in late afternoon classes to take a fifteen minute period to lay their leads down within the first hour of class in order to let their minds rest.

It would be expected that if people get a better night’s sleep as well as get an afternoon nap they will be able to think more clearly and maintain their attention for longer periods with greater ease. They will also be more creative and more effective problem solvers. Their memory will improve and their mood will remain more positive. They will reason better and perform quantitative skills such as math better. Finally, their fine and gross motor skills will improve.

Effect of Stress on Learning

Part of understanding the effects of stress on learning is to first understand what stress is. To begin with, stress can be both beneficial and it can be dangerous. It’s not that easy to identify when people are experiencing stress. According to Medina (2008), ‘An aroused physiological state is characteristic of both stress and pleasure’ (p. 173).

Kim and Diamond (2002) developed a definition of stress which consisted of three elements. They stated that if all three elements are present at the same time then a person is experiencing stress. First, a person must feel aroused physiologically.

Second, the stress must be something the person wants to avoid. Finally, the person must feel they cannot control the situation (stress) they are experiencing (they feel helpless). This third element is probably the most critical. As people experience stress their pulse rate increases, their blood pressure increases, and their body

releases a high amount of adrenaline which increases their energy. The more the stress, the greater the body responses. This causes people to react by either taking flight or standing to fight, either of which can be harmful. As we begin to feel stress our body not only reacts by dumping adrenaline into our system but shortly after this it also starts producing a body relaxant called cortisol which is designed to help us relax. The challenge is that our body can only produce so much cortisol in a given period and if we are working or learning in an environment that puts us under constant high stress then we may use up all our cortisol and eventually be unable to relax.

If our stress is at a low level we actually can learn better, solve problems more effectively and retain information better (Medina, 2008). The reality is that each of us responds differently to the same stress. While some people respond more favorably, others respond more negatively. Our job as faculty members and supervisors is to carefully monitor the response or stress levels of our students and employees and then take appropriate corrective action.

Chronic stress is stress people experience that goes on for extended periods of time. The effect of severe or chronic stress is that people get sick a lot more often. Over a prolonged period they may experience a heart attack or stroke. It may also affect their immune system which could impair the body from fighting infections. It can also cause an individual to go into depression.

The Center for Disease Control and Prevention states that stress is behind much of the lost work days and is related to some 80 percent of all medical expenditures. It has also been found that marital stress in the home affects people's ability to learn and perform at every age level.

In order to help reduce stress at Columbia College we first have to observe the behavior of our staff and students and listen to them. We can help them by identifying the causes of stress and work with them to try to reduce their stressors. Certainly good physical exercise, proper diet, and adequate sleep can help reduce stress. So can finding ways to help people get more in control of their learning or work environment. Part of this may include helping them to know what they will be experiencing so it doesn't come as a surprise. It may also include helping them to more clearly know what is expected of them and to give them the tools to do their job most effectively. It may also include giving them more than one option for how they approach a task or telling them to take whatever path they need to follow and then assess the outcome rather than the process. It may include offering to meet with them in private to discuss their issues and concerns, or offering extra time, classes, or tutorials. It may include evaluating their performance using alternate means such as developing a portfolio, making a presentation, writing a paper, or doing a test verbally instead of in writing. It will include showing care and compassion and talking to them as responsible adults instead of children.

Since a lot of our staff and students have young children and since they experience a lot of stress trying to get them to daycare or school in the morning and picking them up in the evening, Columbia College is establishing a daycare service on its premises to help reduce the stress.

Another way to reduce stress is to include people as much as possible in decision making. This allows them to feel and be more in control. Stress is also reduced when people feel they are being treated more fairly using objective approaches versus subjective approaches.

To help students reduce stress Columbia College established the college foundation course. The course is designed to give students such basic skills as how to use a computer, develop study skills, learn how to do basic research and properly write a paper, learn how to set realistic goals and manage time effectively, etc. The College also established a Centre for Learning, Facilitating, and Assessment to help faculty and staff perform their duties more effectively.

Engaging our Senses to Learn

The most common method of instruction in North America has been for faculty to lecture to students. This is not only the students" least preferred method of learning but, based on research, the least effective. Richard Mayer has conducted extensive research on different methods of learning and has found dramatic results just by moving from the use of one sense to two. For example, Mayer (1997) found that when faculty utilize students" hearing and sight, their creative solutions to problem solving increased by 50 percent.

They also had more accurate recall, better resolution, and it lasted longer. He further found that when touch is added to visual stimuli, recognition learning increased by almost 30 percent more than with touch alone. The results of Mayer's research and that of other cognitive psychologists clearly indicates that the more our senses

are engaged in learning the more we learn and the better we perform.

For example, when faculty choose to include multimedia equipment in their presentations they should consider the following principles developed by Mayer and presented by Medina (2008, p. 210):

1. Multimedia principle: Students learn better from words and pictures than from words alone.
2. Temporal contiguity principle: Students learn better when corresponding words and pictures are presented simultaneously rather than successively.
3. Spatial contiguity principle: Students learn better when corresponding words and pictures are presented near to each other rather than far from each on the page or screen.
4. Coherence principle: Students learn better when extraneous material is excluded rather than included.
5. Modality principle: Students learn better from animation and narration than from animation and on-screen text.

At Columbia, our faculty attempt to engage as many of our students" senses as possible during a lesson. Their lessons will both actively and collaboratively stimulate learning. Such activities will cause the students to participate in a variety of activities where they may be engaged in simulations, presentations, manipulations, operations, situations, demonstrations, and applications of new concepts or items being studied.

Vision

Among our senses researchers have learned that the most powerful of all, when it comes to learning, is our sense of vision. They have learned, for example, that we are able to better remember pictures than text. The more visual the input the better humans are at recalling it (Medina 2008, p. 233). In fact, scientists discovered that when shown 2500 pictures for about 10 seconds each, subjects could remember over 90 percent of them several days later and about 63 percent of them a year later.

What scientists have learned is that pictures are actually much more effective at aiding learning than either oral presentations (lectures) or texts (traditional PowerPoint presentation) (Medina 2008, p. 234). Even more interesting, scientists have learned that when people are given something orally (a lecture) and then tested 72 hours later they remember about 10 percent of it. However, when they are presented with something using both oral (lecture) as well as pictures (graphs, charts, tables, etc.) retention rates increased to 65 percent. We actually tend to stop and visualize (or see in picture form) when we read or when we are told something. This mental process greatly aids in memory retention. However, students need to be allowed time for it to occur.

Medina (2008) also noted that:

1. We pay more attention to color than black and white
2. We pay a lot of attention to orientation
3. We tend to pay a lot of attention to size
4. We especially take note of things that move in our field of vision
5. We are attracted to animation (even very simple animation)

Based on this, faculty members should review their PowerPoint presentations and either completely eliminate text or reduce it to as little text as possible. They should constantly include colorful visuals to help make each important point, and they should be creating a learning environment full of visual stimuli that attracts and holds learner attention and increases learner memory retention ratios.

Learning from Experience

From the time we are born we have an innate desire to explore the world around us. We use all of our senses to study new objects by observing them, listening to them, touching them, manipulating, tearing, tossing, smelling and tasting them. By nature, we want to look around, investigate, try out, and analyze the world around us and we learn from those experiences.

It is not surprising, then, that when we enter school we want to continue to explore and discover our world by experiencing it. This is why it is unfortunate that much of the education system has been structured into a highly mechanized assembly line with specific start and end dates, isolated subjects, grade levels, classrooms with row upon row of desks with students told to sit up straight in their seats, speak only when they are asked to speak, and tested on what they have been able to memorize using paper and pencil methods. Although the modern assembly line educational system is economically efficient there are serious questions about just how effective it is.

Many leading educators have offered alternative approaches to the modern traditional approach (list of references) that include problem based learning, experiential learning, and competency based learning. What is common about these approaches is that they are attempting to be more learner centered rather than system centered. They encourage the establishment of learning environments where students are actively and collaboratively engaged in learning rather than passively engaged receptacles. Probably the best example of a modern day educational program is the medical school where students learn from faculty members who are practitioners. Students spend a great deal of their time learning in class from these practitioners; however, they also spend a great deal of their time in a live learning environment called a hospital where they observe, interact, and begin practicing their profession.

This is that environment where they can engage all their senses in learning and the type of environment that each program at Columbia College is doing its best to emulate by highly educated and experienced practitioners who actively and collaboratively engage students in classroom learning and where students are placed in cooperative education environments where they will be able to learn from and work with professionals who will be future peers.

The Four Stage Learner-Centred Model

Based on the various research findings and views of leading educators presented in the preceding sections, the following model (see Table 3) was developed to describe the fundamental stages that faculty at Columbia College follow in designing a learning environment that will support the introduction of new knowledge, skills, attitudes, and behaviours learners need to acquire.

The facilitator will help learners to be actively and collaboratively engaged with other learners, as well as themselves, before, during, and after each class as it relates to the subject being studied during each of the four stages.

Table 3

The Four Stage Learner-Centred Model

Stage	Instructor/Facilitator Approach	Learner Activities
1 Introduction	Ensure new knowledge, skills, attitudes, and/or behaviours are introduced and explained.	Read, write, study, share, observe, question, discuss, reflect, and listen to others.
2 Example	Ensure learners are provided with relevant and meaningful examples of new concepts and skills.	Listen, question, note, assess, share, relate, recall, and compare personal example(s) with that of others and instructor/facilitator.
3 Apply	Engage learners individually or in small to large groups in the application of new concepts and skills by such methods as problem based learning or experiential learning.	Use, demonstrate, role play, discuss, apply, observe, assess, question, listen, analyze, solve, synthesize and describe.
4 Assess	Facilitate the evaluation, measurement, assessment, and reporting of learning outcomes at each stage of this model.	Review, study, recall, observe, measure, record, compare, question, listen, analyze, share, evaluate (self, peer, or group), at each stage of this model and report on the acquisition of new concepts or skills.

In the first stage (introduction) the facilitator will identify and ensure that learners are introduced to the new knowledge, skills, attitudes, and/or behaviours. The facilitator will also determine what activities the learners will be engaged in at this stage. For example, learners may be asked to read material prior to class. They may be directed to a website and observe and reflect on what they have learned. They may be asked to interact and listen to other learners using such tools as Moodle. They may be asked to write about their experiences and share them in class.

During the second stage in The Four Stage Learner-Centred Model, learners will be provided with examples that relate to what they are learning. These examples may be experienced prior to their class as part of their homework assignment, as well as during their class. The facilitators will do their best to ensure the examples are as relevant to the learners as possible. The more relevant each example is, the more meaningful it becomes to each learner. During this stage the facilitator may ask the learners to provide their own examples related to the subject they are learning about.

During this stage the facilitator will also do his/her best to ensure learners are able to share with others, listen to others, ask questions of others, and take notes about what they are learning. The facilitator may also ask learners to recall and compare personal experiences with others to help solidify what is being learned.

The third stage of this model is referred to as the ‘apply’ stage. At this point learners will have been introduced to new knowledge, skills, attitudes, and behaviours as well as have received and shared examples for these. It is now time for learners to experience the subject by using or applying it in selected situations or simulations. This may occur prior to class as part of homework; however, will normally occur during class. It may occur after class.

The facilitator will often divide the class into smaller groups and then have each group go through one or more experiential exercises. Often the group will be faced with a problem or case. They will then be asked to experience, study, assess, analyze, and resolve their challenge. During this stage, learners may be engaged in role playing, demonstration, discussion, observation, presentation, debate, analysis, and synthesis. Small groups may be asked to share their views with the larger class. During this stage learners may be asked to assess, evaluate and provide feedback to others based on what they observed. These observations may be presented in written form, verbal form, or both.

The final stage of The Four Stage Learner-Centred Model is called the ‘assess’ stage. Although it is listed as the fourth stage it is actually a range of activities the facilitator will formally and/or informally engage in during each stage of this model. During this stage the facilitator will be observing, monitoring, assessing, analyzing, and determining how effectively learners are acquiring their new knowledge, skills, attitudes, and behaviours, and the related learning objectives he/she is trying to help learners achieve. Based on his/her ongoing assessment of the situation, the facilitator may modify his/her lesson plan in order to improve the students‟ learning outcomes.

Facilitators will actively engage learners in many forms of activities throughout the model including reviewing material and observing; recalling what they learned; measuring, recording, and comparing; analyzing, synthesizing, sharing, listening, evaluating, concluding; and reporting on what they learned.

The facilitator may ask learners to observe, assess, and evaluate others. He/she will ask learners to share what they have learned in a meaningful, caring, and respectful manner that assists others to learn and grow from constructive and not destructive feedback.

The Four Stage Learner-Centred Model of Education has been adopted by Columbia College and is applied in each of its professional programs. The model also applies, wherever possible, in pre-career programs and courses. Table 4 presents ‘The Four Stage Learner-Centred Model’ as it has been adapted by Columbia College for classroom instruction.

Table 4

The Four Stage Learner-Centred Model
Applied in Columbia College Classrooms

Stage	Instructor/Facilitator Approach	Learner Activities	Columbia College Classroom Application
1 Introduction	Ensure new knowledge, skills, attitudes, and/or behaviours are introduced and explained.	Read, write, study, share, observe, question, discuss, reflect, and listen to others.	Students are normally introduced to new knowledge and skills by completing homework assignments. Students prepare written questions for class and prepare to write a quiz in class or demonstrate what they have learned in a lab.
2 Example	Ensure learners are provided with relevant and meaningful examples of new concepts and skills.	Listen, question, note, assess, share, relate, recall, and compare personal example(s) with that of others and instructor/facilitator.	Students hand in written questions; discuss answers to their questions which often includes examples of how new concepts and skills are applied; write, mark and discuss quiz results related to new knowledge or observe, assess, and evaluate a demonstration of new skills.
3 Apply	Engage learners individually or in small to large groups in the application of new concepts and skills by such methods as problem based learning or experiential learning.	Use, demonstrate, role play, discuss, apply, observe, assess, question, listen, analyze, solve, synthesize and describe.	Students experience and explore new knowledge, skills, attitudes, and behaviours by using it or applying it to solve problems in a classroom and/or lab. It may also be used or observed in a workplace (i.e., cooperative education placement).
4 Assess	Facilitate the evaluation, measurement, assessment, and reporting of learning outcomes at each stage of this model.	Review, study, recall, observe, measure, record, compare, question, listen, analyze, share, evaluate (self, peer, or group), at each stage of this model and report on the acquisition of new concepts or skills.	During each stage of this learning model the facilitator will be formally or informally testing, assessing, and/or evaluating the learners" success in acquiring and applying the new knowledge and skills. This may also entail having students assess their own progress and that of others.

Table 5 presents an example of The Four Stage Learner-Centred Model that may be applied to Columbia College's internet-based learning. It should be noted that many different technologies will be utilized at each stage of The Four Stage Learner-Centred Model. Exactly what technology will be used will be determined by such factors as the knowledge and skills of the learners, the nature of the curriculum, the learning objectives being delivered, the size of the population of learners, the geographical location of learners, government and/or industry requirements, the nature of the competition, and the financial resources available at the time. A number of programs at the College will combine elements of the classroom model with various internet technologies presented in Table 5. These programs may be referred to as blended programs.

Table 5

The Four Stage Learner-Centred Model
Applied to Internet Based Learning at Columbia College Classrooms

Stage	Instructor/Facilitator Approach	Learner Activities	Columbia College Internet Application
1 Introduction	Ensure new knowledge, skills, attitudes, and/or behaviours are introduced and explained.	Read, write, study, share, observe, question, discuss, reflect, and listen to others.	Carefully crafted story telling (custom-made media): using a film clip, animation, comic strips, video games, etc. Require students to go search the internet for articles and videos describing the topic, submit to instructor, who will select the best ones and refer the class to them.
2 Example	Ensure learners are provided with relevant and meaningful examples of new concepts and skills.	Listen, question, note, assess, share, relate, recall, and compare personal example(s) with that of others and instructor/facilitator.	Exposure to carefully selected and specific example material. Content may include typical media as mentioned earlier (film clip, animation, etc.). All questions (and answers) are noted/ documented for later application use.
3 Apply	Engage learners individually or in small to large groups in the application of new concepts and skills by such methods as problem based learning or experiential learning.	Use, demonstrate, role play, discuss, apply, observe, assess, question, listen, analyze, solve, synthesize and describe.	Students may collaborate with work submitted from previous cohorts. Use a "Wiki" concept of group-collaboration to produce updated materials, examples, etc., of the course content. Students are expected to complete tasks to use the concepts shown. May include puzzles/video games or other media.
4 Assess	Facilitate the evaluation, measurement, assessment, and reporting of learning outcomes at each stage of this model.	Review, study, recall, observe, measure, record, compare, question, listen, analyze, share, evaluate (self, peer, or group), at each stage of this model and report on the acquisition of new concepts or skills.	Assessments may be conducted through: Quizzes/Exams (could be automatically generated and administered through the Internet). Through instructing the same content to the subsequent cohort (instructing could be through newly produced videos, animations, etc., or through classic methods. May now benefit from earlier notes on the questions their cohort asked when in the example stage.

The Columbia Learner Centered Classroom

Background

The greatest criticism of educators and educational institutions over the last half century is that they do not teach students how to think and solve problems. What educators are accused of in a classroom based course is creating a learning environment where students listen, take notes, study (which often means memorizing what they heard), and repeating what their instructor (or a noted expert) said either in a test or paper.

It should be noted that, at Columbia, students may be placed in several different learning environments, the most common of which is a faculty led classroom. Another type of

learning environment at Columbia College is the tutorial. This environment is set up for students to meet with a faculty member or subject specialist in order to review and/or discuss specific subjects or topics presented in their textbooks or classroom that they are having difficulty understanding. The tutorial may be optional or students may be required to attend. Another type of learning environment that is more common to skill based programs such as nursing or dental health is the lab. These learning environments are set up for students to develop hands-on skills that usually relate to their theory courses. A common lab based course related to most programs at Columbia College is the computer lab. The final type of course set up by Columbia is the co-operative education course. Unlike most universities and colleges in North America, Columbia College requires students in all professional

programs to enroll in this credit based course. At Columbia, it is the eleventh course in an academic year of study that normally consists of ten courses at a traditional institution. This course places students into real world settings where they have an opportunity to observe, assess, apply, and demonstrate the knowledge and skills they have acquired. This exposure can bring real meaning to theories, concepts, and values studied at the College.

It should also be understood that when we speak of facilitating at Columbia College we are usually speaking about the behaviour of our faculty in the classroom. We are speaking about the various activities they engage in which support student learning.

These activities include a wide array of behaviours that move learners from being passive receptacles absorbing traditional lectures, to learners who actively participate throughout each class period. Student participation at Columbia comes in many collaborative forms such as sharing, questioning, listening, discussing, applying, debating, observing, understanding, analyzing and evaluating with classmates.

Regardless of the form, the key factors that make this unique at Columbia is that the student‟s mind is not simply passively listening to a lecture but instead is being challenged to actively think, engage in problem solving, and collaborate with fellow students to resolve questions being posed by the instructor. We at Columbia College formally call our instructors, facilitators. Our faculty are strongly encouraged to not speak or lecture in class for more than twenty-five percent of the class period. The resulting void creates a lot of active and collaborative student centered learning time.

Introduction

Part of Columbia’s approach to classroom instruction is based on a classification system developed in the late 1950s by Benjamin Bloom and a group of educational

psychologists. It is called Bloom’s Taxonomy and it is as relevant today in higher education as it was a half century ago. Bloom found that over 95% of test questions students experienced required them to think only at the lowest intellectual level. Put simply, they were asked to recall facts and terms by labeling, defining, matching or selecting. Although this demonstrated their ability to recall information, it did not indicate whether the students really understood the knowledge they had recalled. Nor did it demonstrate they could apply it to solve problems, and certainly, it gave no indication they could analyze or evaluate it when applied to a certain situation.

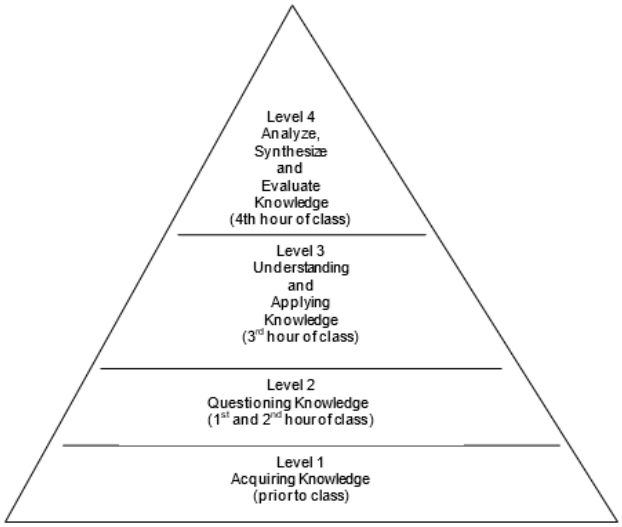
Given these shortcomings the following approach to classroom learning was developed by Columbia College. It not only includes the various levels of cognitive thinking posed in Bloom’s Taxonomy, but it also outlines an approach to learning that is much more learner centered than that typically found in universities and colleges across North America.

The pyramid presented below is adapted from Bloom’s Taxonomy. It indicates that the first stage of learning is for the student to acquire knowledge. At Columbia College this commonly occurs prior to class. Level two is a questioning stage where students begin a class by discussing questions they identified prior to class. This is followed by writing a quiz which demonstrates their ability to recall simple facts and knowledge. During the third level the facilitator normally presents a case or activity where students are expected to demonstrate their understanding of newly acquired knowledge by properly applying it to solve a problem posed in the case or activity. This may require students to demonstrate their understanding by explaining, inferring, summarizing, or demonstrating. They may also be asked to apply, construct, or indicate how they can make use of something by experimenting with it.

Wherever possible, the final hour of a class shifts focus when the facilitator starts asking students to analyze, synthesize, and evaluate what activities they have just completed (level 4). This may involve giving and defending opinions, making judgments, analyzing choices, justifying, and proving or disproving a position. In most

professional programs at Columbia a classroom period, at least for a theory course, is four hours long.

Adaptation of Bloom's Taxonomy at Columbia College



(Level One) Acquiring Knowledge

Providing students with knowledge is critically important. At Columbia College most of our students" first exposure to new knowledge comes when they complete their homework assignment such as reading handouts, and/or reading Chapter X and/or Y in their textbook. It may also come from completing questions 1 and 2 at the end of a chapter or reviewing the key points from their readings in order to prepare to write a quiz near the beginning of their next class. It may further come from visiting websites, watching internet demonstrations, experiencing a simulation, interacting with their peers, or working outside of class with an assigned group. Acquiring new knowledge is the first step in the learning process but certainly not the last. Next they must understand what they have learned.

(Level Two) Questioning Knowledge

Once learners have acquired new knowledge it is important they are able to at least retain it in short term memory for a limited period. To accomplish this, they need time to think about what they just learned. They need to determine if it makes sense in light of their existing knowledge. They need to have time to question what they have learned in order to make sure they understand it. They need to take the time needed to process their thoughts in order to identify any questions they need to have answered so they feel more comfortable with what they just learned. This period of review and reflection, which we refer to as Questioning Knowledge, is critical in the learning process.

To help ensure this process takes place Columbia College, students are expected to write two to three questions they want answers to, related to their newly acquired knowledge. They are also expected to review their homework material sufficiently enough to write a ten to fifteen minute quiz based on their assignment.

The quiz will be designed to allow the students an opportunity to demonstrate that they have completed their homework assignment and at the very least retained what they learned as basic facts, terms, and/or concepts. They will be asked to label, list, name, define, choose, select, or match their newly acquired knowledge through completing the quiz.

As they enter the classroom, students are expected to submit their written questions to the facilitator who begins to read the questions privately. As the facilitator reads each set of questions, he/she tries to look for questions related as closely as possible to the lessons" learning objective(s). This enables the facilitator to determine which questions will be discussed at the beginning of the class period. After greeting the class and outlining the lesson plan for this class, the facilitator begins by sharing the first question with the class and asking them to help answer

this question. It is not important who actually wrote the question so that is normally kept private. This questioning approach causes the minds of every learner to begin to think and search for an answer to the question. As learners begin to openly share their thoughts with others, their minds also start to more deeply internalize the new knowledge they have learned. This in turn starts to move knowledge from short term to medium and long term memory.

The students continue to share their thoughts on the question until they arrive at a sort of group consensus. The facilitator's role is to do his/her best to ensure all the students have an opportunity to participate and that learners show respect for each other's opinions whether they agree or not. The facilitator's role is also to ensure the item being discussed is viewed from different perspectives and, as a result, is more fully understood by learners. The facilitator may also need to add one or more points about the item in his/her summation to ensure the students acquire more complete understanding.

One of the unique benefits of this approach to learner-centered education is that what is being discussed in class is what learners don't understand rather than what they may already know.

This process of sharing and discussing questions will take the first portion of the class period or up to one hour of class time. A typical class period at Columbia College is four hours. During this first hour the facilitator may have sufficient time to have the class discuss three to six written questions. It should be kept in mind that, in a class of thirty students, about forty or more unique questions tend to be submitted at the start of class, and if only four to six are discussed before a quiz, then a number of others could be discussed at appropriate times during the remaining portion of the class or after class.

The quiz is normally written just prior to a class break. This allows those who finish early an opportunity to take a longer break. It also allows those who need additional time an opportunity to complete the quiz during the break. As each student goes for his/her break, he/she gives his/her quiz to the facilitator.

When the break is over the facilitator randomly hands the quizzes back to the students. The facilitator then provides the answers to the questions, the students mark and score each other's quizzes and then return them to the facilitator who records their marks. To help ensure privacy for those who want it, some students may create a fictitious name that is shared only with the facilitator. The quizzes are handed out to their owners who then review what answers they got right and wrong. This action presents another opportunity for students to learn since most tend to focus their attention on what questions they got wrong and not what they got right. It is not unusual for students to ask why a response was wrong. This gives the facilitator an opportunity to ask the students if they can help their peer not only understand why his/her answer was wrong but what response was correct and why it was the better answer. This opportunity to learn through collaboration reinforces the new knowledge being acquired once again and continues to move this knowledge to longer term memory. To help the students better understand what they are discussing, skilled facilitators may create role playing situations, demonstrations, share personal stories, or encourage students to participate in a debate, etc.

This collaborative approach to student-centered learning again focuses student attention on what they don"t know rather than on what they do know. It should be noted again that the facilitator encourages as many students as possible to become active learners and the facilitator spends as little time as possible speaking. In bringing a conclusion to the discussion, the facilitator tends to either summarize the points that students raised or identify any missing points.

To assist facilitators in creating the proper climate in the classroom for student interaction, Columbia College developed a document that has been posted on the wall in each classroom and lab. It is titled 'Ground Rules for Interacting with Others'. It is presented below to assist faculty in creating and maintaining a proper classroom climate. Faculty should review this material with new students prior to their first-class discussion. They may also find it necessary, from time to time, to remind students of specific ground rules and encourage them to review this document on their own.

Ground Rules for Interacting with Others

The following list of items was prepared to assist individuals in understanding the basic ground rules that all individuals should follow when learning or working with others in a group whether that be in a classroom, at work, or in the community. The group is encouraged to read through and discuss this list before beginning to work together.

As some individuals may be less familiar with the following behaviours it may be helpful, from time to time, for other members, the group leader, or the facilitator to share examples of what may be considered more appropriate and less appropriate behaviour.

- When individuals come together or meet, they need to be clear about the group's purpose, topic of discussion, activity, responsibility, or problem/challenge.
- Group members need to be on time (preferably early) so they don't hold the group up. They also need to have completed any assigned homework or pre-meeting work. Finally, they need to bring all related paperwork, equipment, etc. so they can participate effectively.
- All communication devices such as cell phones should be turned off. Private personal discussions need to cease as do other activities that will distract members from their work. Group member attention needs to be given to the subject at hand.
- If a group leader is present, then group members should follow his/her direction. If no group leader is present or identified, then the group needs to decide if it wishes to informally select an interim leader.
- There are a number of housekeeping items the group needs to discuss before it starts to work on a specific task such as: how long will it spend on a specific item; when should it meet and how often; what specific steps, if any, will be followed in the discussion; how will the group work together or apart (in smaller groups); what role will
- different members play; who will record the group's decision, where will it be stored, and who will be informed about it; what information should be kept private and confidential; etc.
- All members of a group have opinions. They need to be allowed reasonable time to share their opinions. All participants need to show respect for the opinions of others even if they do not agree with what is being said. Group members need to be courteous, polite, and should encourage or assist others to contribute to the discussion.
- Group members need to actively listen to the views of other individuals and need to ask respectful questions in order to better understand what is being shared. This will help them better understand how others see things differently than them. Group members need to allow other members of the group to complete their thoughts by not interrupting them.
- Many different tools, techniques, and procedures may be used by a group to problem solve and/or decision make.
- Depending on the issue, it may also be very beneficial for group members to review relevant documents and reports, investigate, and/or conduct research. They may invite stakeholders, consultants, and other relevant parties to assist them as they move forward. The best solution is usually found when all members participate, cooperate, and show respect in a solution-oriented, caring and logical manner.
- Group members should help keep the discussion and activities on topic. They should try not to repeat what has already been said. They should help to ensure the process goes smoothly by being part of the solution and not the problem.
- Negative criticism and debates with others is discouraged; however, positive constructive criticism is encouraged and critical to the best outcome. Keep in mind some people can be offended when other group members disagree with them, so please be diplomatic. Participants need to keep in mind that how group members speak or present something (e.g., tone of voice, body language) can have a greater impact on the position of others than what they actually say.
- Never make fun, joke, ridicule, threaten, yell, or put others down. This behavior can impair

communication, reduce group effectiveness, and destroy relationships. It is also very discourteous and unprofessional.

- To arrive at a group decision or recommendation, it should be understood that not all members of a group will agree. However, it is important to do ones best to find solutions that everyone can live with. The group needs to predetermine the level of agreement that is needed in order to make a decision or develop a recommendation.
- In some group decision-making processes, it needs to be understood that the group's role is to be an advisor to a higher authority such as an elected official, supervisor, manager, president, board, owner, etc.

(Level Three) Understanding and Applying Knowledge

At this point the learners should have a pretty clear understanding of what new terms, concepts, and values are being introduced, so now it is time for the facilitator to move to the next stage in this model and give students an opportunity to gain better understanding by applying their knowledge.

In almost all classes students will be presented with a case or activity to review, discuss, and solve. The case or activity may come from the text or other instructor resource material. The best cases or activities are ones that are the most identifiable to the students. The more the case or activity relates to the students the more meaning it will have. To accomplish this, faculty often have the students role play situations from the case or actively participate in an activity. At the very least as an example, students will be asked to share their solutions to the case by thinking about themselves as one of the characters in the case. This active engagement gives students an opportunity to apply newly acquired knowledge in order to better understand it.

It may take the third hour of class to discuss one or possibly two cases or engage in one activity. The critical factor here is not how many cases or activities are experienced but the quality and depth of engagement especially through the use of newly acquired knowledge.

Faculty may also choose any number of other facilitating techniques to help learners grow. These could include debates, panels, presentations, demonstrations, and simulation activities. In skill based programs Columbia College has also set up labs where students have a greater opportunity to acquire hands on skills.

(Level Four) Analyzing, Synthesizing, and Evaluating Knowledge

At this point in a class period (lesson plan) students have had an opportunity to question and discuss what they learned prior to class. They also wrote, marked in class, and discussed any questions raised by their quiz results. Thirdly, they were introduced to one or two cases or activities, became involved in understanding the case(s) or activity, discussed what they experienced, and shared thoughts about the most effective solution or application to the case or problem presented using their newly acquired knowledge.

This leads them to the final portion of the class period. During this period the facilitator will lead the class through analysis, synthesis, and/or evaluation activities. The primary intent here is to get students to first study a situation, problem, or challenge. Often students will be asked to review the case or activity they just experienced but from a different perspective. In their review they could be asked to examine their discussion or decision and analyze, dissect, inspect, classify, and/or categorize it by breaking it into its parts and identify motives or causes. Getting students to question a situation or position will cause them to think more deeply about what they experienced and question their actions thus far. These activities will either strengthen a discussion or cause an individual or the group to change its position. Often a facilitator will break the class into a number of smaller groups and have each group go through this process separately.

They will then be brought together to share, discuss, and defend their position.

Based on the topic being dealt with and class time available a facilitator may have students go through a process or synthesis. This may find students looking at the information they are studying (or case they are solving) in a different way by combining elements into new patterns or even proposing different solutions. This may involve constructing, creating, imagining, inventing, formulating, or making up new approaches or solutions. Again the primary goal here is to get students to question what they have done, to reassess a decision made, and to consider alternative solutions that may be more appropriate.

Once students have completed their analysis and hopeful synthesis, it is time to ask them to sit back and evaluate their position and/or the position of others. This process may include judging, justifying, interpreting, explaining, prioritizing, comparing, proving or disproving, deducing, estimating, and/or valuing material in front of them. The facilitator may introduce various tools that could be used by students to study the topic of discussion.

This level of activities is considered the most important as it causes students to think more deeply.

During this final portion of the class students should, from time to time, have an opportunity to evaluate each other's position on a subject. By properly engaging students in peer evaluation (sometimes referred to as peer review), they gain valuable experience that can be used in their future workplace.

The Assessment of Individual Student Learning and the Assessment of an Educational Program

Introduction

This section was developed to assist faculty in determining how to assess (or measure) what individual students are learning in their specific course(s). It was also developed to assist the same faculty and their Department Chairs to determine how to assess how effective a cohort of students over a number of years has been in preparing for future employment and/or obtaining further education.

As a result of effective assessment of individual learners and groups of learners, faculty members will be able to improve learning that is taking place in their course as well as contribute to the overall success of their students in their program of study.

Most faculty at Columbia College, like most faculty in universities and colleges throughout North America, are subject or discipline specialists. Their formal education is in a discipline like nursing or criminal justice and most of their experience has been in their field of training and not in the field of education.

Therefore, it is not unusual for this group of people to be anxious when they learn that a critical part of their responsibility as a faculty member is to both assess their individual students as well as to take the necessary steps to contribute to the assessment of all the learners enrolled in their program.

The intent here is to assist those faculty members who have a formal degree in education and typically facilitate in a pre-career program at Columbia College. It is also to assist faculty members who do not have a formal degree in education but have other specialized degrees or training, such as a master"s degree in social work and facilitate in a professional program at the College. The former group should find this information a valuable review while the latter will hopefully find this a good introduction.

There are two types of programs in higher education (at the college and university level). One type of program is referred to as an accredited program while the other is non- accredited. Institutions that offer accredited programs tend to attract more students.

Accredited programs tend to be more recognized by employers as well as higher education institutions. This means their graduates have more employment and further education opportunities in their future. Columbia College wants its graduates to be successful in the workplace as well as in further education. Therefore, it wants all of its programs to be accredited either by the government or a recognized accrediting body. At this point some programs at Columbia are accredited while others are seeking accreditation. One of the key requirements of accrediting bodies is that faculty are effectively engaged in both the assessment of their individual course learners as well as in their overall program.

It should be understood that almost all accrediting bodies are looking for evidence that programs are learner centered and not faculty centered. A faculty centered program is one in which faculty are primarily focused on what topics they will cover in a specific course, whereas a learner centered program is one in which faculty are primarily concerned with what the student(s) learned as a result of taking each specific course in the program.

For means of clarity, a course at Columbia College, like most post-secondary institutions normally consists of some 40 hours of classroom work that is led by one facilitator (faculty member) and often concludes with a final

exam, paper, or some other form of assessment. For example, a course may be titled Introduction to Psychology 101. However a program, such as a Diploma in Human Services will consist of 22 courses, one of which will be Psychology 101.

It is important that faculty understand that their course does not stand alone but is actually an important part of an overall program. It is one of their responsibilities to make sure they clearly understand what knowledge, skills, and attitudes students should acquire while completing their course and how this contributes to the overall development of each learner as he/she acquires additional knowledge, skills and attitudes that result in a well rounded and competent graduate who is capable of becoming an effective member of a work group or is capable of furthering his/her education.

While the assessment of student learning by individual faculty members occurs throughout the length of each course in a program, it should be understood that a Department Chair at Columbia College will lead faculty through a multi-year (3 to 5 years) assessment of a program. Each year is usually devoted to a more in-depth assessment of one or more specific program learning objectives. The primary focus of the assessment is to answer the question, “Are students learning, how is their learning being measured, and is what they are learning relevant to the discipline, occupation or profession?”

Different Approaches to Assessment

Although standardized assessment terms have not been agreed upon in higher education, the following 7 terms are used at Columbia College. A description of each is included. By looking at individual test or assessment results in a course we can assess the performance of a student, yet by looking at an entire group of students" test or assessment results in a program we can assess the effectiveness of a program.

1. Traditional and Performance Measures of Assessment. Whereas traditional measures of assessment are based on multiple-choice and true-false exams, performance measures require students to demonstrate what they have learned such as measuring the heart rate.
2. Authentic Measures of Assessment. An authentic assessment involves real world demonstration of what a student has learned. At Columbia College this is usually demonstrated at an employment site while the student is enrolled in a cooperative education course.
3. Development Assessment Measures. This set of assessments will help us to track the development of individual students over the course of the program. Students may be required to meet specific standards in one assessment in order to continue to the next level of the program. For example, Columbia"s Practical Nurse Program requires a student to successfully complete one semester of training before continuing on to the next.
4. Direct and Indirect Measures of Assessment. In order to conduct direct measures of assessment, students must demonstrate they have achieved something. Indirect measurements are often based on one"s opinion. This area is very large and important and therefore will be presented in greater detail in another section.
5. Assessments That Result in Quantitative or Qualitative Data. Whereas quantitative data is based on numerical scores that indicate how much was learned (eg., exams, papers, projects), qualitative data are usually described verbally or in writing (eg., interviews, focus groups, or open-ended surveys).
6. Assessments Involving Value-Added or Absolute Judgments. A value-added assessment is an assessment that demonstrates the learner has acquired more knowledge or skills than when he/she started. An absolute assessment will be used to demonstrate that each learner has acquired a predetermined set of knowledge or skills. Absolute assessments are most common at Columbia.
7. Assessments May Serve a Formative and/or Summative Purpose. A formative assessment will provide feedback (including advice, counsel, guidance) to the learner to help him/her improve, whereas a summative assessment gives the student a final grade or specific statement of what he/she achieved. At Columbia College faculty provide formative assessments to students while they are taking a course. This normally takes place during each daily class. Faculty provide summative assessments at the end of the course.

Path to Academic Excellence

One of Columbia College's goals is to produce graduates who are assessed by employers and receiving institutions as above average to excellent performers both in their understanding of academic subject matter (concepts and theory) as well as their ability to perform in the workplace (problem solving, skills, team work, professional approach, productivity, etc.). This is a challenging goal and one that receives a high level of commitment from our faculty, staff, and students and one we are continuously trying to improve on.

To achieve this goal the College has taken action in the following areas:

Faculty and Staff

Faculty and staff are hired who demonstrate five criteria. First, they are well educated in their discipline. For example, ESL and Academic Upgrading faculty have at least a Bachelor of Education Degree and formal certification to work with foreign language students. Professional program faculty who are facilitating in degree bound programs must have at least a master"s degree from a recognized institution. This will ensure students are being led in the classroom by highly educated professionals.

Secondly, more than half the faculty in professional programs will be current practitioners in the discipline or subject matter they are assigned to facilitate. As such, they will be part time core faculty assigned to a number of relevant courses. For example, practicing professional accountants will facilitate accounting courses and practical and registered nurses will lead nursing courses. This means students will be learning from highly educated faculty members who are actively engaged in the field. These professionals will help the students learn the most relevant concepts. They will also help students understand what they mean and how to apply it in a real world situation.

Faculty and staff will be hired because they are passionate about helping students to 1) successfully complete their program and courses, 2) graduate from their program, and 3) achieve employment in their field of training. Their commitment must be about doing everything they can to assist, support, counsel, mentor, advise, listen to and help students deal with their barriers and challenges. While some students may find certain concepts and skills easier to acquire, they may find other ones more difficult. To assist them faculty will spend extra time inside and outside class to work with them and help them succeed. The commitment of our faculty and staff is to do everything they can to make sure every student is successful. They believe that when one student fails then they too have failed and failure is not an acceptable position. Faculty and staff realize that 80 percent of their time will be spent assisting 20 percent of our students.

The vast majority of our faculty and staff will be hired not because they have an education degree but because they have specialized training in the profession or occupation the program is designed around. As such, they understand that they will need to spend a great deal of time understanding the structure and operations of this educational institution. They will also need to read, attend workshops, and participate in faculty and staff development activities designed to assist them in becoming highly skilled educational professionals.

Finally, our faculty and staff will take on active roles as members of the College community and engaged members of their program and/or department. As professional team members they will contribute to the development of the College, its departments, and educational programs. They will work with other members of the College community in a caring and respectful manner, and assist them in the successful completion of their roles.

Student Success

The ultimate success of Columbia College rests on the success of our key customers, our students. Their success is our success, and their failure is our failure which can lead to our ultimate demise. As stated earlier, when we define student success we are really talking about the percent of successful graduates, the percent of students who passed their national exam (where applicable), the percent who are

employed in their field of training, and the percent who applied for further education and were accepted.

To help ensure student success, the following measures have been taken:

- All students in our pre-career, certificate, diploma, and degree bound programs are required to complete an academic assessment. Columbia has developed a unique academic assessment for each program. The purpose of the assessment is to determine if the student has the prerequisite academic skills (eg., math, English) needed to complete the program he/she applied to.
- Students who score low on the assessment are required to upgrade their skills. To assist them the College offers free upgrading courses in math, English, science, etc. These courses are offered throughout the year and once the student achieves the academic marks needed he/she is referred back to his/her student services admissions advisor to complete the enrolment in his/her program.
- Since many of Columbia College's students are older and more mature adults (average age 35) and tend to lack many of the basic learning to learn skills such as computer skills, writing skills, study skills, test taking skills, etc., the College has developed a college foundation course that most professional programs require students to take prior to program start.
- Students also go through program orientation activities designed to help them understand their program related roles and responsibilities. They are also told about the structure of the program, method of delivery, and expectations of their performance and the various supports available to help them succeed inside the classroom, in their program and within the College. Next, students are shown a weekly planner designed to help them understand how they should manage their time between classes, labs, cooperative education, and homework. The course syllabus for their first semester course and textbook are handed out and reviewed. Students are also made aware of their homework assignment due for the first class and the fact that they will be given a formal evaluation, such as a 10 to 15 minute test related to that assignment. They will also be told to bring up to 3 written questions related to their assigned readings that will be handed to the faculty member upon entering the class.
- Students will further learn during orientation homework that during their theory classes they will normally be expected to read assigned chapters in each course text before each class as part of their homework. To help them and their faculty member assess their acquisition of knowledge, students will be formally evaluated within the first hour of each four hour class. This evaluation will normally consist of a 10 to 15 minute test. This will be preceded by up to one hour of discussion and activities related to the written questions students will bring to class. Since each course normally consists of 10 four hour classes (40 instructional hours), students will experience a test during each class and a final exam (or related assignment). As the classes proceed, faculty members will be able to quickly identify at risk students based on their daily test results. They will then meet privately with each student in order to determine what the student can do and what the faculty member can do to help mitigate the situation. If this first level of intervention does not work, they may also seek assistance from peers, their department administrators, staff, and other specialists within the College.
- In addition to writing, marking, and discussing questions related to tests, each of which helps to acquire new knowledge, faculty will actively and collaboratively engage students in almost every class by having them review, discuss, and solve a case that relates to the application of newly acquired knowledge. In solving the case faculty may have students role play, debate, discuss in small groups, present, demonstrate, simulate, observe, evaluate, and reflect on what they are learning. These activities will strengthen students" understanding of new concepts and move it closer to long term memory.
- Faculty will also encourage students to relate these new concepts to their personal experiences in life or at their workplace (e.g., cooperative education). To assist students the College offers workshops on various topics, web based presentations and additional resources. While some services will be optional, others will be required for students at-risk or students on academic probation.
- To prepare students for employment the College requires all students in professional programs

as well as most students in pre-career programs to take a cooperative education credit course during specified academic years of study. This is in addition to 10 or more academic courses per academic year in degree transfer programs. Student Services personnel and/or other designated leaders meet with students early in their program and assist them in preparing to contact suitable employers. Students may be assisted in establishing a cooperative education worksite. Once an agreement is signed by the employer, student, and College representative the students will either work volunteering or be paid to work between 5 and 15 hours per week. College representatives will assist our students and their employers with issues as they arise and will ask the employer to complete an evaluation of student performance at the end of each academic year. The evaluation will be used as part of the final grade for this course.

- College personnel will also assist students in obtaining employment upon completion of their program. In fact, the College"s goal is to have every student employed in his/her field of training prior to his/her program graduation. To date over 90% of graduates are employed in their field of training.
- Students enrolled in regional or national programs that include external examinations will be supported in establishing peer study groups. They will also be encouraged to study on their own and be encouraged to attend study sessions offered by program personnel. To date over 95% of Columbia College students have passed national exams.
- As an institution the College established a goal to have 70% of the students who enroll in a program graduate. To date the College, as a whole, maintains over a 90% completion rate.
- Some programs at the College have asked students with high academic standing (or achieving a specific benchmark) to share their educational experiences while attending Columbia with others. This may take the form of a paper, product, or emotional experience. This sharing may be on special days when classes are cancelled, or at special events (e.g., graduation ceremony). This may include video clips, individual or group presentations, activities, or demonstration.
- When Columbia College begins its degree programs, students will be required to complete a culminating activity. This may include one of or some combination of the following:
    - A capstone course
    - A comprehensive exam (already required by nationally accredited programs) A research paper
    - A portfolio
    - A project or product
- To assess student engagement and satisfaction with each faculty member and the program as a whole, the College asks them to complete structured surveys. Each survey requires a written response and plan for improvement. As of 2011 the College will start asking students to complete an International Survey of Student Engagement. Each of these documents is designed to improve the quality of Columbia's programs and learning environment and assist students as they move down their paths to academic excellence.

Admissions and Supporting Students

At Columbia College we have created a roadmap designed to help ensure students succeed. This map is intended to communicate to students what is expected of them and what success looks like.

The roadmap begins when a prospective student makes his/her first contact with the College whether it be direct contact with an Admission Advisor or by accessing the College website. Prospective students are invited to an Information Session designed to introduce them to the College and its unique approach to education.

The College Admission Advisors are not salespeople trying to sign up new students, but instead they are professionals who receive calls and are there to listen to questions and either answer them or find the right answer. Their role is to help make sure prospective

students get all the information they need to make a more objective and informed decision. If an individual chooses to apply to the College, Admission Advisors put on their other hats and proceed to take the prospective student through the College's admission process.

Once admitted to a program, prospective students receive additional information about their roles and responsibilities as students at Columbia College and what is expected of them. Much of this is shared at a program orientation that is normally offered several days before classes begin.

By the start of classes, current students are asked by program personnel to provide peer support to new students in order to further help break the ice and make them feel more comfortable. In most programs, new and current students also receive classroom visits from the Department Chair (or designate) on a weekly basis near the start of classes.

This social visit demonstrates more personal interest and support to learners and faculty members alike. Often questions are answered that need clarifying and more conflicting issues get nipped in the bud before they become bigger challenges. This also gives department personnel an opportunity to assess classroom climates and student stress levels. Students and faculty are treated with equal respect which reinforces the family culture within the College.

One of the unique aspects of the College is its genuine commitment to educating non- traditional learners. One of the realities of this population is the fact that most non- traditional learners have not completed high school. This could create some real challenges for both the learner and faculty members if learners were simply enrolled regardless of academic background. However, this is not the case. Students are required to write academic assessments in the subjects relevant to their program. They must demonstrate during these assessments that they have sufficient academic skills (e.g., math, English, science) to master program material and assignments. If their skills are too low in one or more areas, they are directed to the appropriate College department for upgrading. Once a prospective student's academic deficiencies are addressed, they are formally accepted into a program.

In addition to non-traditional learners being required to meet their program's academic skills requirement, many of them actually lack the self-confidence needed to complete their programs. Most of them feel they cannot compete with younger students who recently graduated from high school. This lack of confidence is one of the greatest barriers to non-traditional learner success. It will cause them a lot of stress and could lead to course failure unless faculty and staff recognize this and help students understand that, more focused mature learners actually do better academically in college and university than high school graduates because of their maturity and determination to succeed.

At Columbia College our faculty and staff take on the added roles of cheerleaders, supporters, and coaches. This will start to come after these learners see their marks on unit tests and assignments. This will also come as a result of students" determination to improve their life, their determination to complete their education, their willingness to work hard, and their attentiveness to their homework assignments. It is this set of emotionally laden behaviours that eventually turn most non-traditional learners into successful graduates. It is also this set of emotions that generally distinguishes older non-traditional learners from younger traditional learners.

Even though Columbia has eliminated a high school diploma as a formal entrance requirement, it has determined a specified level of competence in high school math, English, and science courses for each professional program. The College also maintains a higher expectation for graduation than most traditional institutions. This means that it expects its faculty to set higher standards of academic achievement for its students. It also means faculty will have to work more closely with students to ensure greater academic results. This is the primary reason that class sizes are much smaller at Columbia College than at traditional institutions. Columbia College's maximum class size is 32 students, while public colleges and universities have many undergraduate classes of 50 to 100 to 500 students.

Columbia College believes that when you put determined students together with highly skilled and competent faculty in smaller classrooms, it has created a recipe for greater success. And our students prove it when they write national exams and achieve results much higher than the national average.

In order to assist our students on their paths to success, the College has incorporated a number of additional supports. First of all, Columbia has developed a college foundation course that all students are required to successfully complete. This additional course covers a wide range of topics such as study skills, time management skills, computer skills, research skills, writing skills, note-taking skills, etc.

The College also flags at-risk students early in their programs and meets with them to assess their challenges and to offer solutions. Some programs offer additional tutorial services or courses to assist students on their paths to success. Many faculty put in extra time meeting with individual students or small groups to assist them.

As a result of the various interventions, attrition rates between first and second year are less than 10% and program graduation rates are over 90%. However, this is not good enough in a culture that believes that when a single student fails, we have failed, and none of us want to fail.

Students are expected to invest more time in a Columbia College education. For example, rather than the traditional ten courses per academic year, Columbia requires its first-year students to complete 12 courses in their program and 11 courses in their second and subsequent years.

Columbia College is committed to not only graduating students with academic educations, but our intent is also to prepare our students to be responsible professionals in their fields of employment. In this regard, the College requires all students to enroll in practicum courses where they can experience what they are learning firsthand. To help prepare them for their profession, the College hires academically qualified faculty who are, in most cases, practicing professionals. To go one step further, Columbia College expects its students to behave in the same professional manner in class as they do in the workplace. Finally, to assist students to better understand theory, the College faculty provides stories, case studies, and other relevant examples of how to put theory into practice. Our desire inside and outside the classroom is to move students from a position of dependency to one of independence.

Faculty, Staff and Student Relations

Introduction

There are many activities that our faculty, staff, and administration engage in that help forge the unique learning environment that students experience at Columbia College. The following describes some of those activities.

Institutional Approach

As opposed to traditional university practice and regardless of the number of degrees this college will eventually offer, it is and will always pride itself as a teaching institution. This means that faculty concentrate their professional time and energy on keeping up to date in their disciplines and becoming more effective facilitators of student learning. The success of this institution, therefore, will not be measured in the amount of published research its faculty produce but in the degree of success its graduates experience in finding employment in their fields of training and in being enrolled in further education at accredited post-secondary institutions. We are committed to graduating responsible, knowledgeable, and skilled individuals who, like us, believe in the importance of continuous improvement, life-long learning, and who contribute morally and ethically to the welfare of mankind.

Columbia College encourages faculty, staff, and students to be both learners as well as teachers. We encourage our faculty to experiment with new pedagogies in the classroom to more actively engage learners. We are excited when we witness our students applying their newly acquired knowledge and skills to solve problems and challenges they will experience in their future occupations or professions.

To help students further connect their classroom activities with their future work, each student in our professional programs must complete one or more cooperative education courses. These courses are designed to give our students an opportunity to observe, interact, question, discuss, apply, experience, and better understand what is being taught in the classroom.

Columbia's faculty are highly educated professionals in their fields of training. They have a vast array of experiences in industry that makes them valuable resources for our students. However, what most new faculty tend to lack is a clear understanding of how to create an exciting and meaningful classroom learning experience in which our students will benefit the most. To assist them in creating this experience, Columbia College has established a Centre for Learning, Facilitating, and Assessment. The Centre not only consists of resource materials and handbooks but also offers workshops on facilitating techniques, learning methods, use of technology in the classroom, and methods of assessing learning. Among other services, Centre staff are available

to observe faculty in their classrooms and provide them with feedback and advice on activities that could improve their effectiveness. The Centre places a great deal of emphasis on helping faculty understand how people learn, what creates a more effective learning environment, how to motivate, stimulate and reward learners, and what techniques enhance knowledge and skill acquisition. From these, faculty are able to better understand and develop more effective teaching methods and a greater range of student evaluation techniques.

To assist in faculty development, students are asked to fill out a faculty evaluation at the end of each course. These evaluations are summarized and a report given back to the faculty member after course grades are submitted. Faculty are asked to respond to the report with a plan of action they will take in order to improve their performance. This plan is given to their Department Chair or designate for review and possible discussion and then placed in their personnel file.

Toward the end of each academic year of study students are also asked to complete a program evaluation which is summarized and shared with all department faculty. The Department Chair then seeks input and advice from faculty in order to develop a written plan of action that will be followed in order to improve the program. This report is reviewed with the President for approval and further action.

To enrich our student learning experiences a number of programs at Columbia College offer daily or periodic tutorials or enrichment classes led by faculty or student peers.

These classes allow students to review class sessions and discuss topics of interest. They provide learners with an opportunity to share their views, better understand new concepts and become more comfortable with a subject. Some Department Chairs set up special workshops or classes related to a specific course where students have historically experienced difficulty. Special classes may also be extended to computer and clinical labs where the issue relates to acquiring specific skills or getting more hands-on experience to build confidence. Nationally accredited programs also have structured faculty and/or peer led study sessions for graduates who are preparing to write national exams.

In addition to all this our faculty make themselves available to individual students by coming to class sessions early and remaining after class to assist students with their course related questions. Most faculty also provide students with their email address to answer questions between classes.

To assist students and faculty the College has established a maximum class size of 32 students. This keeps the average class size small and allows much more face-to-face interaction to occur. This contributes significantly to the quality of our College’s learning environment.

Getting students to memorize facts and regurgitate theory has some value at Columbia College, but its value is limited. Instead, our faculty challenge our students to expand and develop their minds in broader and deeper ways as investigators, inquirers, questioners, analyzers, evaluators, hypothesizers, collaborators, team members, tutors, mentors, and writers.

Assessment of learning at Columbia College goes well beyond simply reciting theory on exams. It may involve any number of the following: solving problems presented in cases, demonstrating skills, applying theory to real life situations, evaluating the behaviors of others, designing new methods or procedures, preparing portfolios, completing logs and self analysis. It may also include systematic assessment of authentic student learning such as that which takes place in the cooperative education course(s).

Faculty are also encouraged to accept different types of evidence of student learning, for example, the creation of a product, model, mold, tool, software program, device, form or procedure. It is hoped that the item developed is one that may be used in an actual workplace. In some courses students are asked to recommend the method that faculty will use to assess student learning. In other courses students may assist in developing and administering the assessment tool that will be used by peers to assess each others" learning in a course. Columbia believes that the more students can be engaged in developing evaluation techniques and participating in assessment activities, the better they will understand what is being taught, why it is being taught, how people learn and retain knowledge, and how objective measurement tool may be designed. This experience may then be transferred by them to their future professional work. This broad based approach to assessment increases student-faculty interactions and also promotes active and collaborative learning.

Faculty Practices

At Columbia College our faculty consider themselves equal to students and staff. Although our faculty have

different roles and responsibilities than the other two groups, they realize that the best way to approach their work is to present themselves in a personal manner as a member of a team. They are committed to delivering the best educational services possible to assist other members of the group achieve their educational and employment goals. This attitude creates a learning and working climate of mutual respect and cooperation in which all partners take more time to listen to other members of their team, try to understand their needs, and work together to assist them in meeting their needs.

Our faculty play multiple roles including skilled facilitator, career counselor, coach, advisor, mentor, model, cheerleader, confidant, administrator, monitor, evaluator, assessor, as well as caring and supportive supervisor. They take on a holistic learner centered approach to their work by trying to understand each learner's background, learning challenges, learning goals, and career ambitions. Their center of attention, therefore, is not simply on their assigned course and related professional experience but is on how they can help their students effectively acquire the learning objectives associated with their program of study as a whole, as well as the specific course they are teaching. They recognize that coming to class and simply lecturing to students is the least effective method of student learning and, therefore, minimize their use of this method of instruction. Instead, they adopt a facilitation style of instruction that engages learners actively in classroom activities. They also adopt an instructional style that collaboratively engages learners with other members of the class in discussions, debates, presentations, observations, analyses, syntheses, and evaluation activities.

Our faculty recognize that students better understand and retain a new concept when they are able to relate it to something from their personal life. It is for this reason that they attempt to help students connect their personal life experiences to the new theories, concepts and skills being taught. They further realize that one of the keys to retaining students in their program of study is to have the most experienced and skilled faculty teach first year courses where many students have the most difficulty in adjusting to the educational environment, their new learner roles, and their ability to acquire foundational subject knowledge and skills.

To further assist students, many faculty rely on email and voice messaging to connect with students out of class. Faculty encourage students to submit papers and then provide numerous feedback statements to help the student learn. They record a grade for the paper and then assign the class to rewrite the paper using the feedback provided. Students are expected to then hand in both papers so the facilitator can compare the two and provide further feedback as they grade the second paper. Feedback is respectful but very direct and given in such a way as to reinforce the high expectations faculty have of student performance.

While many universities and colleges have developed specific seminar courses designed to engage students in developing their listening and speaking skills related to their course of study, our faculty at Columbia College have been encouraged to integrate this practice into each of their specific courses.

Our faculty often experiment with new instructional approaches designed to further engage students in active and collaborative learning. One approach that some faculty find useful is to help students learn how to objectively evaluate one another in class. Assigning a student the role as an evaluator of his/her peers is a new and challenging experience for most students. Initially it can be an uncomfortable situation for the student being evaluated as well as those assigned to evaluate. It can also be challenging for the facilitator. Rubrics are developed to assist in the evaluation and are provided to the student when an assignment is given. This approach to education often puts students in a position very new to them and challenges them to experience and see a learning situation from a whole new perspective. One of its most challenging aspects is to help the evaluator not just learn to assess or rate a peer, but even more challenging, to help them learn how to give and take constructive feedback.

In some classes faculty rearrange the tables and chairs to allow students to work more effectively in small groups with their peers. This allows students to discuss topics in small groups, work on projects together, contribute their views to a discussion, listen to the views of others, develop a group consensus, and prepare to share their thoughts with the larger class. At times the facilitator may assign selected students to go around the class, listen in, and evaluate what is going on. It is not unusual for the facilitator, in some classes, to not only evaluate the groups on what they have presented as a project but to also have each group evaluate other group presentations as well as evaluate the performance of members of their own group. Again, facilitators use rubrics as an evaluation tool where groups and individuals are not only evaluated on the degree of involvement in activities but more importantly on the depth and breadth of the content they present.

Many faculty also incorporate electronic technologies for students to use both inside and outside the classroom. By using appropriate instructional technologies faculty encourage students to utilize many more resources than simply the textbooks assigned to the course. These additional experiences help the learner to recognize that a

great deal of resources and materials are available in the library, in periodicals and journals, on the web, and in other forms that provide more depth and breadth to their learning.

Often students spend considerable time utilizing these resources and these experiences strengthen their learning by allowing new concepts to move from short to long term memory. By incorporating multimedia in the learning process, faculty provide more opportunities for students to practice and apply new concepts and skills. For example, by using digital technology, students are able to access subject materials in far away locations.

Columbia's faculty do whatever they can to help students learn and grow. This ranges from providing clear detailed homework assignments including a lot of reading and writing, to private meetings before and after class, to clear written notes on assignments and papers being handed back. They communicate with students on a first name basis and are always warm, cordial, respectful and informed. Their investment in student success further stimulates students" personal effort to do better and work harder. Their feedback tends to always be constructive, relevant, and meaningful, and often relates to how this will affect the student as a practicing professional. Constructive feedback is often accompanied with worthy notes of praise and encouragement.

In addition to students receiving evaluation feedback from their facilitator, they may also receive it from their peers and cooperative education employers, as well as engage in self evaluation. Faculty may also encourage or expect students to tutor other students inside or outside the classroom. This activity is not only beneficial to the one being tutored but helps the tutor as well to more thoroughly understand a subject.

Our faculty along with our staff and administration work in a culture where all decisions are made in the best interests of students, where administrators, faculty members and staff go out of their way to listen to, understand and try to help each other as well as each student, and all work together to create the best working/learning environment we can make. And our diverse student body contributes greatly to our unique culture of learning.

Supporting Learners

The relationship that develops between our faculty, staff, and students is very special because our College representatives are caring, supportive, and sincere individuals who interact with students on a first name basis. Our faculty go out of their way both inside and outside the classroom to assist students. They act much more as mentors and advisors than teachers. Both faculty and staff get to know students more personally and still maintain a professional relationship. Most faculty provide students with their contact information. Most faculty are part time core faculty members who take their work, their teaching, and their students seriously. They normally come to class fifteen minutes early to set up and talk with students regarding their future careers, their educational plans, employment related challenges, program concerns, and course related questions. Many faculty play an unofficial student advisor role. Faculty also talk with students during breaks and after class.

In some programs students meet regularly with the program coordinator, assistant chair, or program chair while in other programs they may be assigned to a specific team member who meets with them as a program advisor.

Our faculty and staff believe that it is important to develop meaningful relationships with Columbia's students, and this is a critical ingredient in the College's high quality education. Our goal is to produce highly competent graduates and therefore we set high standards of performance for our students. However, we communicate this in a respectful manner and then do our best to help our students achieve greatness, and when our students see how much we care about their success it makes them work even harder to achieve it.

Our faculty members realize how important it is to our students to get prompt feedback on assigned papers and reports. As a result, they return these documents within one week and rather than a simple grade, provide students with written constructive comments designed to help them improve.

Some faculty members will also meet outside class to discuss specific questions from a reading, class activity, or grade assignments. Much of their focus both in and out of class is to help students become independent thinkers who can assess a situation from many sides and become effective problem solvers in an occupation or profession. It is not unusual for faculty members to assist students with future employment possibilities and provide professional references for employment.

From time to time, program chairs, faculty, and staff will invite students to a focus group and encourage them to provide advice on areas where programs and services can improve. Students are also asked to complete evaluation surveys on faculty at the end of each course. They are also asked on a semi-annual basis to complete a program satisfaction survey. Each of these instruments is designed to help faculty and department personnel

identify areas needing improvement. From time-to-time students in focus groups will be asked to provide recommendations on alternative courses of action that could be followed by members of the College community. This involvement of students helps to develop mutual respect and trust between the College and its student body.

To assist students in communicating with faculty members, staff and other students email addresses are encouraged. Students are also engaged with faculty and other students through use of other electronic means such as using Moodle. In some programs, each student receives a mobile device in order to increase their interaction with the world around them and better prepare them for the world they will soon be entering.

Establishing A Supportive Learning Culture

Most students attending Columbia College are individuals referred to as non-traditional learners. Whereas the traditional college student is an 18- to 22-year-old high school graduate, this is not the case at Columbia College. At Columbia, students normally range between 22 and 62 years old. The average student is close to 35 years old. Most have children and home mortgages. Over seventy-five percent of our students are new Canadians with both language barriers and the challenge of understanding a new culture. The vast majority of these learners have not completed high school, but they make up for their academic shortfall in their maturity, life experiences, determination to succeed, and willingness to work hard.

Columbia's administrative personnel, faculty, and staff recognize what makes our students unique learners and realize the moral and educational obligation they have in helping these learners achieve their educational goals. They further realize the College's intent is not to lower its academic standards but to provide the necessary systems and supports needed to ensure a strong academic success for its non-traditional students. In fact, Columbia's history has been not to graduate students who perform poorly academically, but students who perform above average on regional, national, and international exams.

In order for our students to achieve high academic standards, Columbia's administrative personnel, faculty and staff provide additional supports prior to the start of classes and during the first year of studies, both inside and outside the classroom, and where needed, prior to the students writing external exams. Columbia has a strong culture of support for its learners.

Our administration, faculty, staff and students have mutual respect that is displayed through their positive attitudes and spirit of collaboration. We have created a caring community for students in this learner-centered organization. Our commitment is to help each other and our students to achieve our primary goal: their academic success.

Each new member of the College community is chosen based on the alignment of his/her philosophy, values, and attitudes with the College's mission, philosophy and educational purpose. Each student is primarily chosen based on his/her motivation to succeed and his/her commitment to work hard.

Leadership at Columbia College is shared among administrators, faculty, staff, and, at times, students. Interaction among this group is both formal and informal with discussion constantly focused on individual student success as well as collective student success. Issues and problems are seen as challenges and opportunities to grow, learn, and modify systems and procedures that increase students" motivation to learn and opportunity for success. Effective recruitment of faculty and staff at Columbia is achieved when their values, educational philosophies, and pedagogical skills match our students" needs and learning styles. Columbia is proud of the diversity in its faculty and staff. For example, our Student Services team speak more than 25 languages and our faculty close to the same.

Our administration, faculty, and staff work together as a team, identifying students" needs, sharing insights, considering alternative approaches, and agreeing on specific actions in order to help students succeed. This is not an environment for individual decision and action but instead, it"s a place for collaboration, cooperation, communication, consultation, and concentrated actions intended to increase student success. Although formal positions of authority exist, they are filled with leaders who share authority, as much as possible, and who often as not lead from behind through coaching, mentoring, modeling, counseling, and advising team members. So when it is time to take credit for student success, such as during the convocation ceremonies, all members of the College community who contributed to the students" success are encouraged to stand on the stage and congratulate graduates as they receive recognition. Likewise, when students are not doing well, each member of the team stands ready to do his/her part in assisting students to acquire the skills needed to achieve his/her success. This may involve numerous activities such as one-on-one tutoring, small group work, special meetings, coaching, guiding, counseling and advising students as they seek solutions to their challenges.

It is clearly understood that our goal at Columbia College is to help each student achieve success (i.e., graduate and obtain sound employment in his/her field of training). Our intent is to help each student achieve his/her goal through as much independent action (vs. dependent behaviour) as possible. As each student is uniquely different, we realize that some students need more hands-on support in some areas and less hands-on support in other areas. It is our responsibility to understand the unique differences in each learner. It is further our responsibility to provide as much support to each learner as is needed to achieve his/her education goal. And finally, it is our responsibility to encourage learners to step beyond their comfort zones in order to develop new skills and thereby learn and grow. Part of this is to challenge students to take responsibility for their own learning and in so doing, to develop a life-long learning attitude, which is critical for life long success in an ever changing world. For example, most programs require students to complete at least one cooperative education/practicum placement per academic year of study. These placements go from observing current practitioners in the workplace to performing specific duties and responsibilities. Wherever possible, each student is encouraged to actually become a part-time employee in a position related to his/her education. This causes the employer to see him/her as something more than just a student but actually an employee who must perform real tasks in a meaningful and productive way each day or stand to lose his/her job. This co-curricular approach to learning helps students see real connectivity between theory and practice, causes them to be more committed, and results in greater accountability than would be found in a volunteer cooperation placement.

At Columbia College students are encouraged to help and support other students starting from the time they make their first contact with each other during student orientation activities. This assistance may take the form of assisting, mentoring, coaching, advising or supporting others inside and outside the classroom. Students are encouraged to see each other as members of the same team, working together to ensure success.

The College encourages students to study together, work in groups, complete group assignments and perform other activities where they learn the value of teamwork, cooperation and collaboration. Students are often engaged in a wide variety of classroom activities where the classroom facilitator creates opportunities for them to work together. These activities may include case studies, small group discussion, presentations to large groups, debates, role playing and some 60 other such activities designed to put students in problem solving situations where they have an opportunity to apply concepts and theories presented in their readings and classroom facilitation.

Students may informally tutor others inside or outside the classroom and even in the community. They are also asked to critique the work of other students by providing constructive feedback and recommendations for improvement. This form of activity, if set up properly by the facilitator, can provide a great learning opportunity for students. To assist faculty and students, the College has prepared a poster on ground rules for group discussion and placed it in each classroom. In this regard students hold one another accountable for learning. This helps students to realize they too have something to contribute to the learning of others. It also helps to prepare them for the work world where they may find themselves trying to help others learn on the job. They clearly realize that they must not only know what they are talking about, but also must find an effective way to present it to others. Departments are encouraged to get students involved in department committees where actual decision making takes place. This helps students gain meaningful experience related to committee work and decision making.

Each program at Columbia College is committed to its students" success. This is demonstrated both inside and outside the classroom. Faculty assess and measure student learning at every class through daily tests as well as by observing their participation and behaviour in case studies, group work, and contribution to class discussion. When needed, students who are experiencing difficulty are often given extra attention and support within the class or at selected points during the semester. These students are flagged by the faculty member, department chair, or student services personnel. Special sessions are arranged one-on-one or in small groups to assist students who need additional support. This support may relate to academic or social issues.

All support to students is given in a positive, constructive, and encouraging manner that serves students with specific and wide ranging needs. Academic standards are not compromised. Columbia College has set reasonably high levels of academic achievement, and all students are in the end expected to meet them.

The message we constantly give to the students is that we believe in you, and we know you are capable of learning anything and achieving success (Expectancy Theory). We further understand that, at times, learning can be difficult, so we may need to allow you additional time or an opportunity to approach it from a different perspective, and we are here to understand and help you succeed because failure is not an option. This ethic of care and commitment is the glue that binds together the many different aspects of support found throughout all the units, programs, and departments within this College.

In addition to free part-time upgrading in such academic areas as high school math, English, and science, Columbia College also provides prospective students with a wide array of services such as in-depth workshops designed to help prepare them for academic rigor. These workshops cover such areas as computer operations, searching the internet, doing research in the library, preparing papers, studying for exams, organizational skills, stress management, etc.

In the future, more advanced students who have completed the foundation course are encouraged to attend these workshops as peer tutors. More advanced students are also encouraged to provide support to first year students as administrative mentors. These students may meet with new students during their orientation, attend or host social gatherings throughout the first year, and meet with new students individually or in small groups to help them better understand the College and/or their specific program requirements. Support also comes from the department head, faculty members and student service personnel, in essence, providing a network of competent supporters providing good, timely advice, guidance, social, and where needed, emotional support.

It is ingrained in the culture of this institution that we are all here to help each other succeed and we do not succeed until those around us succeed. At the first sign of difficulty, any member of the College community may initiate an action that may involve several other team members, including student mentors to support an individual.

Columbia's Commitment to Diversity

Columbia College has been highly committed to diversity since it was first established. For example, it prides itself in offering an employment training program since 1987 to adults who are mentally challenged. It has offered English as a Second Language and Academic Upgrading to adults from diverse backgrounds since the mid 1990s. It is proud of the fact that close to eighty percent of its students are new Canadians who speak approximately fifty-seven languages. About sixty percent of the College's students are from visible minorities and are considered economically disadvantaged.

Most students are mature adults with an average age of thirty-five. They tend to have children, homes, mortgages and part-time jobs.

To support such a diverse population the College provides many supports and services to help them achieve their educational goals. For example, many faculty and staff speak multiple languages and are also new Canadians. To assist students in preparing for a professional program at the College, it established a College Prep department that offers free academic upgrading to students in many subjects including English, math and science. The College also offers a free Orientation Week consisting of numerous modules. The modules cover a wide range of subjects including introduction to computers, writing skills, study skills, time management skills, managing stress, etc.

While some programs regularly offer free extra workshops and tutorials to assist students, others offer free daily tutoring services.

New faculty and staff are made aware of the College's commitment to diversity when they first enquire about employment. The College's Diversity Statement (presented below) is included in orientation documents, the College's Academic Calendar, and on the College's website.

Diversity Statement

We believe the differences in opinions and diversity of cultures and customs among our students and staff challenge each of us to better understand our fellow man. This often-difficult process increases our understanding and acceptance of others and makes us stronger citizens, more compassionate learners, and more effective future leaders in our community and the world. In this regard, we at Columbia College welcome, value, celebrate, and respect individuals of all races, ethnicity, gender, age, disability, and religion. We are committed to treating all persons with dignity and respect in an honest, open, fair, and friendly

manner. We are committed to the highest standards of civility and decency toward all. We are committed to promoting and supporting a learning community where all people can learn and work together in a safe and secure atmosphere free of fear, bias, discrimination, and other negative treatment. We affirm the right to freedom of thought and expression of opinion within the bounds of courtesy, sensitivity, responsibility, and respect to others with different views. We seek to foster understanding and respect among individuals and groups through education and constructive approaches for resolving misunderstandings and conflict. We are committed to the laws of our country and to the development and enforcement of policies, programs, and practices that promote the fulfillment of these principles.

To assist students in better understanding each other as well as understanding those from diverse backgrounds, many programs at the College include topics or units of study where diversity issues are properly introduced and addressed. Some of the programs require students to participate in community-based activities where they provide services to economically and/or culturally disadvantaged individuals. Fundraising events occur at different times during the year to raise money that is either donated to local, national or international aid agencies or is donated to Columbia Learning Society. The Learning Society was set up in 2000 by Columbia College to support adults and children who wish to attend Columbia College but who do not have sufficient funds to cover part or all of their tuition.

Once a year the College assists students to organize an International Day where a large number of students present their music, dress, language, and cultural artifacts to other students, staff, faculty and invited guests. This event started in 2005 and has been an annual showcase where faculty, staff, and students learn more about other cultures.

Both in class and out of class activities provide opportunities for students to have serious conversations with others from very diverse backgrounds. They learn about different religious beliefs, political opinions, social and business practices, philosophies, and values. This exposure to other cultures has created exceptional opportunities for faculty, staff, and students to learn to appreciate the views and beliefs of other people much different from themselves and has enriched their educational experience.

Columbia College is committed to multiculturalism and globalism and encourages its faculty to infuse diverse perspectives in lesson plans. It also encourages the hosting of events and activities such as brown bag lunches where faculty and staff can discuss diversity issues with students. Further, it encourages lunch hour round tables to be set up where students, faculty, and staff can discuss local, national, and international current events. To bring cultural awareness closer to home, faculty, staff, and student exchanges are encouraged where a family from one culture is invited to spend a weekend with a family from another culture. Finally, and most importantly, class size is kept small (maximum class size 32) so faculty can spend more time with each student.

Columbia's Commitment To Continuous Innovation

At Columbia College we are committed to continuous improvement through continuous innovation. This commitment is not only on an individual basis but also on a department and institutional basis as well. We achieve this by constantly asking questions of our students, boards of advisors, employers, professional bodies and other relevant stakeholders. Some questions come in the form of surveys while others are based on face-to-face discussion.

We are not satisfied with annual outcomes and hold ourselves to a higher standard of performance. Our faculty and staff are entrepreneurial, energetic, and enthusiastic risk takers who are open to constant change and challenge themselves and those around them, including students, to stretch themselves. They know by doing this they will tend to fail more than succeed, but they also realize that they will learn far more from their failures than do others who sit on the fence and play it safe. This environment of constant experimentation by collaborating group members has created a state of perpetual learning, growing, developing, and enables us to achieve greater success than would otherwise be possible.

Our intent is not to mimic other educational institutions but to outperform them. This normally involves using non-traditional means. We want to deliver a much better quality of education at a much lower cost. In education, quality of results is primarily measured in the classroom and Columbia is highly focused on helping our faculty develop greater and greater facilitational skills. This means our faculty receive more training and support than

their counterparts. What goes on in the classroom is central to our college's future.

We constantly measure student academic progress, student satisfaction, and student issues. From this we develop interactive approaches to support learners. These are referred to as mastery learning supports. Mastery Learning is an approach to learning at Columbia College which states that we will do everything we can to ensure students master each subject they are being taught.

We realize our financial and human resources are limited and find more cost-efficient ways to achieve more effective student outcomes. Our team members constantly ask themselves how they can do things easier, faster, better, safer, and at less cost. They are constantly observing, assessing, analyzing, and collaborating with other internal and external stakeholders daily. They are reading, researching and studying our competitors as well as leaders in the field as they prepare to innovate.

They have a can-do approach in their nature and believe that failure for themselves and those around them (including students) is not an option. They believe that they will not succeed until those around them succeed. This has created a work and learning environment where everybody sees his/her role as becoming a helper to those around him/her. Columbia's culture is therefore one of sincere cooperation. It is one where internal competition is frowned on! In this institution's knowledge is shared openly and willingly. So is process, product and everything else. People (whether staff, faculty, or student) are treated as equals regardless of position, gender, race, sexuality, or ethnicity. Although we may have different roles and responsibilities, we realize that first we are all simply human beings.

Supports to the Community

Columbia College is a responsible citizen that supports its community. For example, all programs at the College have a Board of Advisors. Each Board consists of a group of individuals from the community, made up of leading professionals and practitioners, as well as professional body representatives (where applicable). The primary role of our Boards is to help program leaders and faculty members keep in tune with the changing nature of the occupations and professions students are being trained to enter. Their input affects the educational content of each program.

The College also feels an affinity to the broader community and provides its citizens with support and services. These include access to the College library and facilities for individual or group use. The College also offers free tutoring to school aged children and adults on the weekend. Free workshops and courses are also offered to members of the community on a regular basis. For example, Columbia's Dental Assistant Program offers dental services (x-rays, polishing and fluoride) at a nominal fee and its students perform dental health education services to community members. Other programs also require their students to engage in one or more service-learning experiences where students are voluntarily able to apply what they are learning in support of the community. In this way Columbia is forging partnerships within the community to address real issues that affect the quality of life, both in the community and on campus. This provides an opportunity for the institution to cultivate mutually beneficial connections with the community.

The College has altered the more traditional learning space to enhance the interaction between faculty and students. This includes putting a ceiling on class size of 32 students which means classes tend to average about 25 students. The College has clearly stated that lecturing is to be kept to an absolute minimum (i.e., no more than 25% of a class period), and that faculty will follow a facilitational delivery model that focuses on students" active and collaborative participation in discussions, case studies, debates, presentations, etc. In most programs students complete their program as a cohort. This allows them to get to know each other better, develop relationships, and reduce feelings of anonymity. In fact, students are encouraged to respect each other's differing views and help each other succeed.

Academic Freedom

The common good of our society relies on the honest search for knowledge and the freedom to express one's

opinion. It is for these reasons that academic freedom is essential at Columbia College.

Academic freedom includes the right, regardless of prescribed doctrine, to carry out scholarly activities and research. It includes: the freedom to disseminate and publish research supported documents, the freedom to produce and present creative works, freedom from institutional censorship, and freedom to facilitate learning discussions which help others and serve the community.

Columbia's faculty, staff, and students enjoy freedom of thought, expression and, therefore, academic freedom. They have the right to contribute to social and organizational change through freely expressing their opinion about the College and its administration, policies, and practices. Therefore, they will not suffer penalties for exercising such rights.

However, academic freedom carries with it the responsibility to use that freedom in a manner that is consistent with scholarly obligation, which is to base research and facilitation on an honest search for accurate knowledge. This includes recognizing and allowing the same equal rights of other faculty members, staff, and students to express their opinions while being tolerant of different points of view.

Integrity In Scholarship and Research

Building on the work of Eugene Rice, it was proposed by Ernest Boyer in 1990 that colleges and universities move beyond the age-old debate of research versus teaching and expand the definition of scholarship to include not only original research but also synthesis as well as the integration of knowledge, professional practice, and teaching. This means that scholarship can take place not only in the lab but also in the classroom and the community. Diamond (2004) went on to state that an activity will be considered scholarly if, for example, it requires a high level of discipline-related expertise; if it has clear goals, adequate preparation, and appropriate methodology; if the activity or work has significance beyond the individual context, breaks new ground, or can be replicated or elaborated.

It is now generally recognized that there are three forms of research. They include pure research, applied research, and scholarly activity. While all three types may be present at Columbia College, as a teaching institution the primary form of research will be scholarly activity.

Campus Alberta Quality Council has developed a list of scholarship, research, and creative activities that it has placed on its website (www.caqc.gov.ca). The following statements have been taken from that website.

Scholarship is a multi-faceted activity involving the creation, integration and dissemination of knowledge. Scholarship can take many forms including the following:

- Staying current and maintaining competency in the content and methodology in one"s field and related fields
- Inquiry and reflective practice Innovation in pedagogy
- Knowledge translation and reformulation for new applications Composition, creative activity and performance
- Publication
- Presentation at scholarly conferences or expert groups
- Independent or collaborative research across the full spectrum (basic, applied, educational, policy, quantitative, qualitative, etc.)
- Applied scholarship through problem solving practices, innovation, product development (tools, handbooks, manuals, software, etc.) Technology development, patents, technology transfer and commercialization
- Developing standards, guidelines, and best practices

Columbia College is committed to faculty research, scholarship, and the dissemination of new knowledge which is

central to its mission as an institution committed to learning and to academic freedom.

In order to ensure our students, receive the most current knowledge and skills in their fields of training, Columbia College supports and encourages all of its faculty to engage in scholarly activities. This activity should not be limited to their professional discipline but also should include scholarly activity that relates to learning, facilitating and assessment methods.

To support its faculty in each of these areas, the College has established The Centre for Learning, Facilitating, and Assessment. The College has also set aside professional development funds and scholarships to help cover some of the costs. Centre staff will also counsel faculty on scholarship activities.

The ongoing development of the Centre as well as further development of College policies related to this document will come about as a result of input and recommendations from Academic Counsel which represents the views of faculty.

Effective research and scholarship is based on creativity and commitment of faculty members. It also requires integrity. Dishonesty and fabrication of information affect the value of research and other scholarly activities.

The Responsibilities of Researchers and Scholars

Columbia College has endorsed and will comply with the principles and responsibilities outlined in the Tri-Council policy statement, Integrity in Research and Scholarship, as follows:

1. recognizing the substantive contributions of collaborators and students; using unpublished work of other researchers and scholars only with permission and due acknowledgement; and using archival material in accordance with the rules of the archival source;
2. obtaining the permission of the author before using new information, concepts or data originally obtained through access to confidential manuscripts or applications for funds for research or training that may have been seen as a result of processes such as peer review;
3. using scholarly and scientific rigour and integrity in obtaining, recording and analyzing data, and in reporting and publishing results;
4. ensuring that authorship of published work includes all those who have materially contributed to, and share responsibility for, the contents of the publication, and only those people; and
5. revealing to sponsors, universities, journals or funding agencies, any material conflict of interest, financial or other, that might influence their decisions on whether the individual should be asked to review manuscripts or applications, test products or be permitted to undertake work sponsored from outside sources.

Responsibility of Columbia College

Columbia College is committed to integrity in research and scholarship. Any allegation of scholarly misconduct will be dealt with through the following impartial procedures which are in compliance with Tri-Council policy:

1. to conduct an enquiry within a reasonable time period;
2. to protect the privacy of both the person(s) accused and the person(s) making an allegation as much as possible;
3. to allow the accused person(s) due process in responding to the allegations;
4. to determine if there has been any misconduct and determine what actions will be taken, if any; and
5. to inform the accused of the findings, what actions will be taken, and prepare a report.

Steps To Be Followed

1. Reports of misconduct are to be given in writing (signed by the accuser) to the Department Chair.

2. The Department Chair shall share a copy of the report with the President (or Designate) and the Registrar. This group shall conduct a preliminary investigation.
3. This group shall determine within fifteen (15) working days if the complaint may be considered misconduct and therefore an offence according to the terms of the College's policy on Integrity in Scholarship and Research.
4. If it is determined that the current policy applies to the allegation, then a full investigation will take place and the Department Chair will inform both parties to retain all pertinent documents and respect all privacy matters.
5. The Department Chair shall give a copy of the complaint to the accused and ask him or her to submit a written response within fifteen (15) working days.
6. An investigation shall be conducted within fifteen (15) working days of receiving a written response, from which the group shall write a report which will be distributed to each party who will have fifteen (15) working days to respond in writing.
7. If either party's response requires a meeting, then it will be set up. Following this meeting, the case shall either be dismissed or disciplinary action will be taken.
8. If the case is dismissed, both parties will be advised in writing and a copy of the report will be given to the President. All copies of the letters and related documents will be retained for one year.
9. If a complaint is upheld, then it shall be given to the President. The President shall meet with the Department Chair and Registrar to determine the disciplinary action. Discipline may range from a letter of reprimand (placed in the employee's file) to dismissal.
10. The accused will be informed in writing of the decision.
11. The decision may be appealed in writing to the President within fifteen (15) working days. The appeal may be for conflict of interest or bias, or failure to follow the College's policies and procedures.
12. The President shall, once an appeal has been launched, seek an adjudicator from another university or college.
13. The adjudicator shall review all the documents to determine if there are grounds for an appeal. If grounds are found, the Board shall launch an investigation. The decision of the Board of Directors shall be final.
14. The College will do its best to ensure that anyone who makes an allegation of misconduct in good faith and without mischievous or malicious intent will be protected from reprisals or harassment during the investigation and following the final decision.

Dissemination of the Policy on Integrity in Scholarship and Research

The policy on Integrity in Scholarship and Research will be placed in the College's Facilitator Handbook.

Creating a Successful Program

Program Principles

In the late 1980s the American Council on Education created a task force responsible for the development of a set of principles that would be used to guide the development of all degree programs developed to service primarily non-traditional adult learners (mid 20s and older). In 1990 the task force presented a document "Principles of Good Practice" (1990). It was adopted by the Council and strengthened the position of a larger alliance of institutions, programs, and educators who had been working together. They were drawn to each other by their belief that adult learners needs were different than traditional 18 to 22 year olds. Members of this group created an organization, Adult Higher Education Alliance (AHEA).

The following 8 principles presented in "Principles of Good Practice" (1990) have been adopted and in some

cases modified by Columbia College. Each professional program at the College follows these principles. The College's pre-career programs adopt the principles as much as reasonably possible.

Principle 1: Mission Statement.

The program has a mission statement that reflects an educational philosophy, goals, purposes, and general intent that clearly complements the institutional mission

Rationale

A well-defined program mission statement has a guiding, vitalizing, and unifying effect on all those who develop and operate the program. In addition to describing the fundamental goals and purposes of the program, the mission statement presents a commitment to the constituencies it endeavors to serve, and it provides key parameters for evaluating the program. While the mission statement reflects common goals and values, it allows for a diversity of viewpoints and directions within the program by which the goals may be reached, and values expressed.

For a program that is a part of an institution, the mission statement establishes the internal relationship of the program to the institution's mission. Alternative and external higher education programs for adults are, by their very nature, dynamic and evolving; therefore, a clear mission statement serves to Ensure continuity of purpose despite programmatic and personnel changes.

Subprinciples

- The program mission statement is congruent with, extends from, or is a part of the institutional mission.
- The program mission statement is reflected in program planning, goal setting, decision making, and in program policies.
- The program mission statement is included in the institution's catalog and program materials.
- The program mission statement is reviewed periodically and revised, as necessary, to reflect changes in the program, institution, and the larger community.

Principle 2: Personnel – Faculty and Academic Professionals

Faculty and academic professionals working in alternative, external, and non-traditional higher education programs such as those offered by Columbia College share a commitment to serve adult learners and have the attitudes, knowledge, and skills required to teach, advise, counsel, and assist such students.

Rationale

Faculty and academic professionals who work in the above-named programs for adult learners have common characteristics, although their titles and responsibilities may vary. Their tasks may be wide-ranging, encompassing the characteristics of facilitator, administrator, adviser, counselor, broker, and student personnel provider. While certain positions will emphasize certain tasks over others, most positions will involve a general mix of roles. In terms of the overall program, the combination of these various roles, whether within an individual or among the program staff, provides an integration of attitudes and abilities central to serving adult learners.

The academic competencies of the faculty must be complemented by their understanding of adult learners and the goals and nature of the adult education program. Likewise, part-time or adjunct faculty, who often provide special perspectives, resources, and expertise, need similar orientation and development. Meeting the needs of

these part-time faculty members and integrating them into higher education programs for adults are issues for the future.

In addition to fulfilling their other leadership responsibilities, all academic professionals in alternative and external higher education programs serve as advocates for adult learners within their institutions. Their responsibilities include speaking for this population and increasing the institution's understanding of adult learners.

Subprinciples

- In addition to academic or professional expertise, faculty and academic professionals have an understanding of adult learning and development, and other characteristics and needs of adult students.
- Professional development is systematically planned and implemented for all personnel involved in the program to improve understanding of adult learners and to enhance academic and professional expertise.
- Faculty and academic professionals actively participate in establishing, implementing, and evaluating the curricular and academic standards of their programs.
- Criteria, rationale, and procedures for the selection and evaluation of faculty and academic professionals in the program are congruent with the standards of the institution.
- Specific criteria, standards, and expectations for the role of part-time or adjunct faculty are clearly articulated.
- Faculty and academic professionals in the program participate in the institution's systems for evaluation, incentive, and reward, e.g., promotion.

Principle 3: Learning Outcomes

Clearly articulated programmatic learning outcomes frame the comprehensive curriculum as well as specific learning experiences; in developing these outcomes the program incorporates general student goals and in implementing them it accommodates individual goals.

Rationale

Learning outcomes provide a focus for facilitating, for what is to be learned, and for assessment of that learning; they also serve as a foundation for program evaluation. A distinction is made between programmatic learning outcomes that are comprehensive or program-wide in scope and programmatic learning outcomes that are identified for a specific learning experience (course, tutorial, independent project, etc.). Faculty and academic professionals determine both types of outcomes, but seek the involvement of students in that determination. Some specific learning experiences may involve students in the identification of their own outcomes for those experiences.

Adult learners enroll in higher education programs for various reasons, often with specific personal or career goals in mind. It is both reassuring and motivating to them if programmatic outcomes clearly relate to their individual goals. The interrelationships among comprehensive outcomes, specific outcomes of learning experiences, and students" goals reinforce the learning process. The direct participation of the students in the identification of specific outcomes for a learning experience further supports their achievement and recognition of academic progress.

As part of the comprehensive outcomes, programs have a responsibility to assist students in the acquisition of the depth and breadth of knowledge requisite for their specific programs. They are also responsible for aiding students in the development of skills and abilities in critical thinking, communication, problem solving, learning resource utilization, and analysis and integration of knowledge. The development of these skills and abilities encourages students to become more autonomous, self-directed lifelong learners.

Subprinciples

- The faculty and other academic professionals determine the program's learning outcomes to form a coherent curriculum.
- Learning outcomes reflect the core values and standards of the program and institution, and the general learning goals of their students.
- The achievement of learning outcomes for the specific learning experiences can be demonstrated and assessed.
- Programmatic learning outcomes are described so that students can relate the specific learning outcomes of each learning experience to the comprehensive outcomes of the program.
- Learning outcomes for specific experiences are framed in consultation with students.
- Learning outcomes provide a context for faculty/student discussions of academic progress and help guide student program implementation and modification.
- Learning outcomes are clearly described so that external audiences (undergraduate schools, employers, etc.) understand both comprehensive and specific programmatic outcomes.
- Programmatic learning outcomes are periodically revised to reflect changes in the program, institution, student population, and larger community.

Principle 4: Learning Experiences

The program is designed to provide diverse learning experiences that respond to the characteristics and contexts of adult learners while meeting established academic standards.

Rationale

Learning experiences in adult higher education programs recognize the social environments, experiences, backgrounds, motivations, and learning styles of adult students. Program designs might employ a variety of methods: didactic presentation, small group discussion, interactive sessions, internships, or independent study. The experiences take into account the increasing use of technology to achieve learning goals. In addition to the mastery of academic subject matter, learning experiences should be designed to facilitate and enhance the learning skills, capabilities, and strengths of the learner.

Canadian and American societies abound in resources for learning. Public and private colleges and universities and proprietary institutions exercise the central but not exclusive responsibility for providing postsecondary education. Associations, businesses, government, industry, military, labor, and other groups offer formal instruction, much of it at the postsecondary level. In addition, independent study and reading, career and voluntary work, the mass media, community involvement, and social interaction contribute to each individual's learning.

Given that college-level learning occurs in many places and at many times, college and university faculty have a responsibility to assess and accommodate extra institutional as well as institutional learning as part of their credentialing function. Through reliable and valid assessment of extra institutional learning, new learning is encouraged, past learning is renewed, and theory becomes integrated with practice. Faculty involved in degree programs for adults have the special responsibility of determining with the individual how this learning contributed to the goal of becoming an effective lifelong learner.

Subprinciples

Specific learning experiences are determined by faculty and academic professionals in consultation with students in order to facilitate the achievement of learning outcomes, to use and extend the strengths of the individual's learning style, and to develop the student's social and work environment as a learning resource.

- Learning experiences equip learners to develop progressively those habits, skills, and values necessary for lifelong learning.
- Learning experiences make use of current research and theory about how adults learn.
- Learning experiences are offered in a variety of ways, settings, and time frames to accommodate individual learning styles and life situations.
- Learning experiences are designed to provide feedback to learners regarding their progress in achieving the specific learning outcomes.
- Program design and specific learning experiences recognize an individual's prior and current extra institutional postsecondary learning.
- Learners are assisted in examining the relationship of prior and current institutional and extra institutional learning to their abilities, learning outcomes, and overall educational goals.

Principle 5: Assessment Of Student Learning

The assessment of a student's learning is based on the achievement of comprehensive and specific learning outcomes.

Rationale

The progress of students and their achievement of outcomes require assessment that has direct, personal links to the teaching-learning process. Because the assessment of learning is complex, programs use multiple methods of assessment including written and oral examinations, case study methods, interviews, portfolio and project review, and other means to determine that learning goals are achieved.

Forms of assessment selected are appropriate for the particular learning experience and assist students in their learning.

Just as the learner's involvement in identifying learning experiences and learning outcomes is essential, so too is the learner's involvement in the assessment process. Assessment grows from a partnership of faculty or academic professional and student that is committed to a process of helpful dialogue and feedback. Student participation in assessment contributes significantly to the goal of developing more self-managing, autonomous learners. Without the capacity for assessing one's own learning, the accomplishment of this goal is unlikely to be realized.

In addition to serving the individual student, assessment of students" progress provides essential information regarding the facilitating and learning processes of the program. Individual student assessment is an integral part of the general program assessment and evaluation plan and contributes to the accountability of the program and the institution.

Subprinciples

- Assessment is designed to be an integral and active part of each learning experience.
- Student learning is evidenced by what the student knows and can do through demonstrations of knowledge and skill.
- The assessment criteria, methods, techniques, or strategies are developed by faculty and academic professionals on the basis of how effectively they might determine the extent to which the specific

learning outcomes are achieved.

- The assessment process for student learning provides ongoing feedback between facilitator and learner regarding the acquisition of both knowledge and skills.
- The development of student self-assessment skills is an integral part of the learning process and is critical to the growth of self-managing, autonomous learning.
- The program has policies and procedures for assessing and recognizing extra institutional learning, as well as learning that takes place at accredited postsecondary institutions.
- Program policy for recognizing prior or current extra institutional learning specifies standards or criteria, administrative and faculty responsibility, means of assessment, recording of results on transcripts, and the maximum number of credits or other forms of recognition allowable.

Principle 6: Student Services

The policies, procedures, and practices of the program take into account the conditions and circumstances of adult learners and promote the success of those students.

Rationale

Student success in alternative and external higher education programs for adults is enhanced not only by the academic quality of the program, but also by well-designed and appropriately delivered services that recognize the particular needs and circumstances of adult learners. Student services policies and practices support student academic and personal success in the form of student achievement and student development. Student achievement is identified as learning at the highest possible level consistent with program standards, one's interests and abilities, and the personal

constraints experienced in making progress toward one's goals. Student achievement is demonstrated by such evidence as course completion, satisfaction with goal attainment, improved learning or self-management skills, and program completion. Student development fosters personal characteristics such as self-esteem, self-directedness, autonomy, and the ability to formulate clear goals.

Adult and external programs are essentially student centered. Their student services enable learners to succeed from admission to graduation by recognizing, responding to, and honoring student diversity in preparedness, ethnicity, work and family commitments, goals, age, race, gender, and other characteristics.

Initial services focus on successful entry to the college, including useful program materials that inform students about educational options and procedures, and an admission process that is responsive to adult learners. Subsequently, transition into the education realm is eased and focused by providing meaningful orientation services and assessment of academic and learning skills. Support services to promote student success while pursuing program work include financial aid, counseling, advising, life/career planning, placement, childcare, and academic tutoring. These services, which need to be accessible to adults, are directed at focusing student goals and options and overcoming obstacles to goal achievement. A diversity of services is provided to students with disabilities who may require accommodations in order to equalize access to education and support services to aid in the development of learning and skills.

Subprinciples

- Promotional materials present a clear, comprehensive, and accurate description of the educational program and the services offered, including information concerning admission requirements, parchment awarded, curriculum, costs, learning formats, assessment methods, graduation requirements, policies regarding the recognition of extra institutional learning, and accreditation.
- Admission and retention policies take into account qualitative as well as quantitative data that reflect the

student's current motivation and ability.

- Financial arrangements and student financial assistance policies and procedures for adult students are equitable with those for other students at the institution.
- Program entry services help students assess and understand their academic and learning skills as a basis for undertaking the program; students are assisted to strengthen these skills.
- Orientation services are provided to help students understand themselves as learners and their new learning environment.
- Academic progress of students is monitored and intervention strategies geared to adult learners are developed to improve student success.
- A program plan is developed for student achievement and retention; follow-up research is conducted to ascertain reasons for problems and success of students and graduates.
- Students in the program are included in the various institutional policies and practices with regard to awards, recognition, and honors.
- Student support services of the institution are available, accessible, and appropriate for the adult learner; such services are designed to assist the student from admission through graduation.

Principle 7: Program Administration

The administrative structures and the human, fiscal, and learning resources are sufficient, appropriate, and stable for accomplishing the program mission.

Rationale

Central to the success of higher education programs serving adults is the institutional commitment to the program. This commitment is reflected in the fundamental administrative structure, the financial and budgetary arrangements, the academic systems, and other resource arrangements that support the program. The administrative structure of the program has equitable status with other academic units within its institution. At the same time, just as the program as a whole needs to be dynamic, open, innovative, and responsive, its administration also must possess these characteristics.

The administrative structure of adult higher education programs varies; it may involve a program within a college or university; a separate college, school, or division within a larger institution; or a free-standing institution. Regardless of structure, administrators provide leadership in designing and implementing policies and procedures to serve adult learners in the program, while remaining consistent with the general policies, procedures, and standards of the institution.

Financial and other resources need to be sufficient to achieve the goals of the program. Particular attention is given to ensuring that proper library, media, laboratory, and computer support is available to students and faculty. The program's academic systems must also provide recognized, acceptable, and equitable strategies for a broad range of issues, including hiring, training, and evaluating faculty; developing and evaluating curricula; admitting students and assessing their learning; and evaluating overall program success.

Subprinciples

- Administrators provide leadership to assure that program operation grows out of an integration of administrative, academic, and student support commitments to the adult learner.
- Criteria, standards, and expectations are clearly articulated for the roles of faculty and academic professionals in the program; specific requirements are delineated for part-time faculty.

- Faculty and academic professionals participate in the development, review, and revision of program policies, procedures, and practices.
- Funding and fiscal policies of a program are consistent with its own mission and with the general fiscal directions, purposes, and goals of the institution as a whole.
- Adequate learning resources, including but not limited to computer support, laboratories, and library materials and services are available to students, faculty, and academic professionals.
- Academic systems provide clearly stated standards and methods for managing and maintaining the quality of faculty, students, curricular, and program design.
- Administrative arrangements are reviewed periodically to determine the extent to which they support program and institutional goals, purposes, and values.
- The administrative structure and governance system provide ongoing planning and analysis of program directions and practices.
- Criteria used to determine tuition and fees reflect the purposes, practices, services, and outcomes of the program.

Principle 8: Program Evaluation

Evaluation of the program involves faculty, academic professionals, administrators, and students on a continuing, systematic basis to assure standards and quality and to stimulate program improvement.

Rationale

Continuous evaluation of a program and its components is vital to the maintenance of quality, the assurance of accountability, and the development and improvement of the program. The program administrator provides leadership for evaluation with the involvement of faculty, academic professionals, students, employers, and others who contribute to the process.

The participation of faculty and academic professionals from other academic units provides valuable perspectives for the review of higher education programs for adults. Likewise, the viewpoints of professionals from the non-academic community and from other educational programs for adults are beneficial to the evaluative process. Program evaluation results, shared widely, inform all those involved in the program and guide them in determining future program direction. The results also become a part of an external review process by being linked directly or indirectly to the institutional accreditation procedure.

Subprinciples

- In the context of the program and institutional missions, program evaluation focuses on both the attainment of goals and objectives and the processes designed to attain them.
- Program evaluation provides for the inclusion of information from various constituencies, including faculty, academic professionals, administrators, students, graduates, employers, and other appropriate groups.
- Program evaluation processes encourage the participation of professionals from outside the program or the institution.
- Results of program evaluation are reported to the institution's chief administrator, and to administrators, faculty, students, and others involved in the program; the results are used to modify and improve the program as well as to provide the basis for planning.
- Both the process and the results of program evaluation are incorporated in institutional accreditation review.

The following list of terms was presented in “Principles of Good Practice (1990). They were developed by Kent Warren. Columbia College has reviewed and adopted them in whole as the definitions for terms it uses.

The following glossary offers some practical definitions relevant to alternative and external degree programs for adult students. For the most part, the glossary is descriptive, not prescriptive. It was developed by reviewing program materials from institutions throughout the country, identifying and collating common terms, defining those terms, and finally having the resulting definitions examined and refined by the task force and by other professionals practicing in the field.

The goal of the glossary is to develop a set of definitions that will help clarify and unify this arena of higher education. The definitions are not intended to be fixed; rather, they reflect current usage and should be modified and clarified as further analysis warrants. Reactions from users of this material will be appreciated.

- **ADULT:** The most encompassing definition of adult derives from a functional point of view. In this sense, an adult is someone who has assumed the major responsibilities and commitments of adulthood (work, family, relationships, community), who is operating independently in society, and whose principal identity is other than that of a full-time student. At this time, some programs use the term to refer specifically to people over a certain age, e.g., 26, 27, or “older than average”. The majority of programs, however, appear to advocate a definition of adult in terms of roles and functions rather than age per se.
    - Adult is not usually used to refer to the adults on campus who are undergraduates between the ages of 18 and 23, nor does it usually refer to any person, regardless of age, who is in a traditional graduate or professional school. Adult, however, may be used to refer to the population served by some graduate programs designed for individuals with extensive work, family, and community commitments.
- **ADULT EDUCATIONAL PROGRAM:** A college or university program that offers a certificate, diploma, associate’s, bachelor’s, master’s, or doctor’s degree whose primary or exclusive clientele are adults.
- **ALTERNATIVE:** An educational program that is designed to be different from the typical structures and requirements of higher education programs. The difference might focus on how learning is accomplished, what is learned, how learning is evaluated, who teaches, who evaluates, who is responsible, or who is to learn. The term also may imply a choice that is outside of established norms and methods.
- **ASSESSMENT:** Assessment is the measurement or evaluation of a student’s learning whether gained in the classroom, from prior experiences, or through independent study. Assessment is a process of gathering evidence of what a student can do and providing feedback on a student’s learning to encourage further development. Evaluation is the process of interpreting the evidence and making a judgment of a performance to make a decision, such as, assigning a grade. It involves generating evidence and making judgments of an individual’s competence, by comparing his or her performance against established criteria. Assessment may also refer to the examination of other attributes of the learner and the learning experience, e.g., how people learn, what helps them retain and use their learning, or how we evaluate affective as well as cognitive learning. The term assessment increasingly is being used to refer to the measurement of student learning and related processes. The term evaluation, on the other hand, while still used to refer to student learning, is being used increasingly to refer to the processes involved in examining and judging educational programs and institutions.
- **AUTONOMOUS LEARNER:** A mature self-directed learner who is able to identify personal learning goals, adopt and adapt appropriate learning strategies, and instigate and complete the learning task through internal motivation and commitment. The characteristics of such an individual are seen as ultimate ideals in the student’s educational process. The term is essentially synonymous with self-directed learners but seems to indicate a more accomplished or integrated stage of self-directed learning.
- **COMPETENCE-BASED EDUCATION** (or competency-based): This form of education is an alternative to the coursework and credit-based traditional model. Competence- based education is built upon the idea that students may gain knowledge and skill in a variety of ways, and that they can demonstrate that knowledge and have it assessed through a range of institutional procedures. What a student knows and is able to do within a knowledge or skill domain and at a certain level is referred to as a competence. For a

competence to be acceptable as part of a college or degree program, it typically must combine theory and practice and meet the established standards of the academic community. Competence-based education may be used to structure a program within a traditional community or four-year college or may form the entire educational philosophy of an institution.

- **CONTINUING EDUCATION:** General credit and non-credit educational offerings that occur outside of the regular daytime curricula. It may expand to cover a college or degree program for adults or it may be used limitedly to refer only to learning that does not include college credit. It is also used to refer to ongoing learning opportunities presented by professional organizations that do not offer formal college credit. (Also see Extension.)
- **CRITERION-REFERENCED** (criterion-based): This concept, used by some "universities without walls" and a few other programs, is based on the idea that any college-level program can be described in general terms regardless of subject matter. The criteria serve as standards and guidelines for developing an individual's program. The criteria will usually include an area of concentrated study and broad knowledge of the liberal arts; they may also be oriented toward process as well as content, e.g., self-directed learning, scientific inquiry, communication skills, and quantitative skills.
- **DEGREE COMPLETION PROGRAM:** Such a program, most often available at the bachelor's level, is designed specifically to assist students who began a degree program, interrupted their education for some reason, and now want to complete their degree. The degree content, the learning strategies, the overall structure, and the services offered by such a program typically are designed to help in the achievement of that goal.
- **DISTANCE EDUCATION or E-LEARNING:** While this term can apply to all learning that happens at a distance from the parent institution, it has come to refer more directly and consistently to learning experiences brought to the distant student through the mail or through technological means. Those technologies include radio, television, satellite, film, video, computer, or the internet.
- **EXPERIENTIAL LEARNING:** The central notion is that the learner is in direct contact with the realities being studied, whether involving prior or new activities, and that such direct involvement with activities will lead to the acquisition of knowledge and skill. "Prior" experiential learning generally is focused on knowledge and skill gained from work or volunteer activities, community involvement, or family responsibilities. This type of learning may not be the result of structured educational effort.
    - "New" experiential learning, sometimes referred to as sponsored learning, on the other hand, often is a planned and structured educational effort. Internships, travel, and work- related projects are common forms of new experiential learning. With this form of learning, goals, learning objectives, methods, outcomes, and assessment strategies typically are identified before the activity occurs, thereby providing structure for the learning. The expression is also used to indicate a pedagogical approach used in some traditional classroom settings; this approach would include activities such as role playing, structured interviews, simulations, and other forms of active learning.
- **E-LEARNING:** See Distance Education.
- **EVALUATION:** See Assessment.
- **EXTENDED DEGREE PROGRAMS:** This expression implies that the institution is extending itself beyond the borders of its campus. It may be used to identify course offerings and educational programs that are taken off-campus. It may also indicate a program that will use a variety of non-classroom instruction to meet students" educational goals. Forms of instruction include independent/correspondence study, guided instruction, research, internships, programmed learning, etc.
- **EXTENSION:** Generally the term is used to refer to education that extends from the institution's regular offerings. Traditionally it has referred to taking education to people who are geographically removed from an institution. Historically, it has also been strongly connected with agricultural and rural services of universities. In many institutions the term is used to refer to courses that are offered outside traditional times or methods, e.g., night courses and independent study courses.
- **EXTERNAL DEGREE PROGRAMS:** This term indicates that a high percentage of the learning required for an educational program can be completed outside of the central campus. By implication such

programs also offer forms of off-campus instruction that will permit successful completion of a program. Further, many programs identified as external offer ways to recognize learning gained outside the college environment.

  - There is considerable variation among programs that call themselves external. Some require no time on campus, while others demand regular visits to campus. Many institutions offer the traditional curriculum and courses off campus and may or may not offer other, more nontraditional forms of instruction and evaluation. Other programs offer no direct forms of instruction, but facilitate the use of a wide variety of learning resources and activities.

- **EXTRA-INSTITUTIONAL LEARNING:** Whether completed before or after entering a degree program, this term refers to learning that occurred in a setting outside of an accredited postsecondary institution. Types of learning within this category often include formal educational experiences that have been sponsored by another institution such as a business, professional organization, government agency, or the military. The term may also be used synonymously with experiential learning to indicate learning that results from work experience, independent research and study, volunteer experience, or other unsponsored activity.
- **FACULTY AND ACADEMIC PROFESSIONALS:** The faculty, administrators, and other academic professionals who work in educational programs serving adult learners have many titles and responsibilities. In some cases, the roles of these individuals fall into traditional patterns; however, most professionals in the field have multiple roles and responsibilities in areas such as program development, planning, management, and marketing, as well as facilitating, advising, and counseling. Titles of positions include the traditional faculty rankings, as well as mentor, academic adviser, preceptor, tutor, academic counselor, program director, and others.
  - Part-time faculty tend to have similar responsibilities but are called by a variety of titles such as adjunct faculty, community faculty, and field faculty. Many of these part-time faculty are practicing professionals who are believed to bring to the classroom a special connection between theory and practice. The standards applied to hiring these faculty members may parallel those used in the wider institution or they may place greater emphasis on professional experience and expertise rather than on specific academic credentials.
- **INDEPENDENT STUDY**: The term is used by many institutions and programs to refer to any learning that a student achieves outside of the classroom. Students may also do independent study in a classroom setting. The learning activities often subsumed under the title of independent study include: a regular course taken on an individual basis; a correspondence course, a project initiated and developed by a student and guided by a faculty member, a directed reading or study structured by a faculty member for an individual student; a tutorial combined with an intensive seminar; an extensive research activity; and in some cases even teaching. Contract learning is another term used to describe some forms of independent learning for certain institutions. A few alternative degree programs use the term as their primary descriptor.
  - The term leads to confusion because it is used increasingly as the primary and only descriptor for courses completed through correspondence study. Such courses are designed by faculty to be completed by many students on an individual basis. This type of learning may be based solely on written material or it may be augmented with radio, television, or video instruction.
- **INDIVIDUALIZED:** The word is used to identify program content or learning processes that are adjusted to meet personal goals and/or preferred learning strategies. The term, which implies the meeting of personal needs and goals, may be used to refer to an entire educational program, to a course or project, or to the selection of learning activities and strategies. In some institutions the terms “special major” or “personalized” are used to refer to individualized educational programs that are proposed by students around a theme or specific concentration and subsequently approved by academic advisers/faculty.
- **LEARNING CONTRACT:** This education tool is a formal agreement between a student and a faculty member that specifies the subject to be studied, the learning objectives to be achieved, the methods to be used, the intended learning outcomes, the form of evaluation, and the resulting recognition of the learning, e.g., credits to be awarded or competency to be achieved. The term project-based learning is used similarly in some programs.

- **LEARNING OUTCOMES:** The expression refers generally to the knowledge or skills individuals are expected to acquire as a result of specific learning experiences (courses, independent learning activities, etc.) Or of a program as a whole. Typically learning outcomes are both demonstrable and measurable so that they can be assessed and used as part of an educational program. The knowledge and skills may be applicable to a specific field or discipline, or they may be general in nature and apply broadly to education and learning. Learning outcomes also may often be serendipitous, providing the learner with unexpected knowledge, skills, and insight.
    - The term is also applied to change and growth in other areas: personal values and attitudes, social responsibility, and future personal and professional achievement. When used within this context, learning outcomes will usually related to broader programmatic objectives, rather than to a specific learning experience.
- **LIFELONG LEARNING:** The expression can be used to mean simply that people can and do learn through their lives. However, it is often used to delineate programmatic goals or philosophy and to imply that people should learn throughout their lives. The use of lifelong learning is similar to that of autonomous learning as it indicates the purposeful development of self-directed learning skills: identifying goals, determining methods, and developing learning resources. This pattern of skill development and its related planning, implementation, and completion of learning activities is viewed as a required activity for a full life.
- **MATURE LEARNERS:** As with experienced learners, the term is used to imply that such students bring experiences to their education, and that they have learned and developed from those experiences. Usually a synonym for adult, this term is often used to differentiate between younger adults (students of traditional age) and older adults (though not necessarily senior citizens). The expression may also imply that the learners have characteristics and abilities different from those of the traditional students.
- **NARRATIVE TRANSCRIPTS:** This alternative to coursework transcripts with grades and credits provides written evaluations of learning activities (both formal courses and independent learning projects). The written, or narrative, evaluations are recorded on a narrative transcript that either replaces or complements the traditional transcript. The narrative transcript is used exclusively by some institutions.
- **NEW COLLEGE:** Taken from a centuries-old college at Oxford, the expression is now used primarily to identify a program outside the traditional collegiate structures. It may refer to an evening and/or weekend program designed for working adults but offering the traditional curricula of the institution. In other cases it refers to a special unit within an institution, which is open to many students, but which attempts to maintain a variety of innovative approaches to teaching, learning, and curriculum.
- **NONTRADITIONAL:** With or without a hyphen (i.e., non-traditional), this word signifies that the program, institution, or type of education involved is different from the typical or traditional forms found on campus. The degree and type of difference found in the so- called nontraditional forms will vary widely. The term is also applied to students, learning processes, and programmatic approach to content.
    - Nontraditional students often are thought of as adults, but the term may also refer to members of minority groups, part-time learners, and those who are educationally underprepared. A nontraditional program may be offering courses off campus, on weekends, through correspondence, at a distance, or through some other delivery system. Processes may involve active learning in the classroom, experiential learning in the workplace, or instruction through a computer. Content may be approached in many different fashions: students may have a major hand in the focus and direction of an activity or a degree program; interdisciplinary and thematic courses may be taught; and learning how to learn may be viewed as more important than specific content.
    - It should be noted that many in the field are discarding this term in favor of language that focuses on positive elements that describe the nature and characteristics of their programs, e.g., adult, external, independent, individualized, integrative, and liberal studies.
- **OFF CAMPUS:** Programs or services that identify themselves as being off campus mean first that they are not on a declared campus of the parent institution. The off- campus program or service may be in another location within the same city or may be located in another town or state. A few institutions operate without a campus and have many sites similar to off-campus programs; these institutions may consider

themselves to be campus-free or a generic university without walls.

- **OPEN:** This descriptor is most commonly connected to the word university, as in British Open University; it is also connected to terms such as division and studies. In each case the term implies flexibility in time and place of learning, off-campus instruction, and individualization of degree requirements. It also indicates an orientation toward the working adult.
- **PORTFOLIO ASSESSMENT:** The most common form of prior learning evaluation, with the possible exception of formal testing programs, involves the compilation of a portfolio to demonstrate and document achievement of college-level knowledge and skill. Through the evaluation of the portfolio, credits, competencies, or other forms of recognition are awarded to the student. Credits may be awarded in general categories or content areas; just as specific numbers of credits are awarded for classes or their equivalents.
- **PRIOR LEARNING:** This type of learning, achieved before entering a college assessment program, may have been acquired through many avenues such as work experience, volunteering, community involvement, and independent reading. As with extra institutional learning, the expression typically refers to learning gained outside the formal sponsorship of a postsecondary institution; it also refers to learning gained under the sponsorship of a business, government, or social agency whose educational offerings have been assessed by an educational body such as ACE. In some cases, the expression has been used to include formal college course work. At this point, however, the term is being used more consistently to indicate that postsecondary sponsored learning is excluded.
- **SELF-ASSESSMENT:** This activity of the learning process has been seen by many practitioners as a critical event in the acquisition and internalization of knowledge and skill. The expression is used to refer to the process that an individual undertakes to examine the extent, amount, quality, depth, and impact of the learning involved in a specific experience. The term also implies that this self-examination or personal reflection will consider both cognitive and affective results of the learning experience.
- **SELF-DIRECTED LEARNERS:** The term implies that students who have this attribute know what they want to learn and how to acquire that knowledge and skill, are able to control their use of time and resources to achieve that learning, and have learned how to balance their commitments to work, family, community, and education. Further, self- directed learners are assumed to have accepted the essential responsibility for meeting their educational goals. Being a self-directed learner is often viewed as critical to success in adult-oriented educational programs.
- **UNIVERSITY COLLEGE:** The expression has been used for many years to refer to different kinds of educational units within colleges or universities. The term has been used extensively to refer to units whose mission is to provide the lower division portion of a four-year program. In many cases it indicates a cross-college or cross-disciplinary focus. It may refer to continuing education/continuing studies units within larger institutions. In some cases the term may also refer to collegiate units that offer one or more nontraditional degree programs.
- **UNIVERSITY WITHOUT WALLS**: Founded in the late 1960‟s and early 1970‟s in conjunction with the Union of Experimenting Colleges and Universities, this form of nontraditional education was designed to break down barriers to learning imposed by traditional institutions and programs. Critical to these programs were the beliefs that people learned at many different times and places in their lives, that they should have greater responsibility for their learning, and that factors such as age, work, family, and distance should not impede access to higher education.
    - In addition to official University Without Walls programs at traditional educational institutions in the country, programs and institutions that operated on similar principles were often called universities, schools, or colleges without walls. Many of the institutions did not have traditional campuses, full-time faculty, or other elements of more traditional alternatives.
- **WEEKEND COLLEGE:** These educational programs are generally characterized by traditional curricula offered in large blocks on the weekends and by a variety of corresponding student services designed for the adult student population. Other time- related programs, e.g., twilight college and evening college, are similar in curricula and services, but built around another time period.
    - Growing out of the weekend college concept are various other educational structures, e.g., a college for working adults, designed to integrate various learning strategies into a planned whole.

Here, students often learn through a combination of night classes, independent study, and internet-based courses. The curriculum, however, often is presented as broad, conceptually integrated courses built around selected subjects.

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