NextStep is an IBM compatible, computer-assisted learning system to help users explore and reality test their tentative career plans and bring their career decision to a more real and community-oriented level. The NextStep system assumes that the user is literate and has at least one tentative occupational goal. The system is based on a cognitive-behavioral and developmental model. NextStep is targeted to secondary school students, adults in career transition, or those returning to the workforce. The program is designed to show users how to carry on with additional research and gain exposure to relevant experiences, and to give the user a specific blueprint for action. That blueprint will contain such information as names, addresses, telephone numbers, yellow page headings, names of publications, and ideas for part-time and summer jobs. Much of this information will be local in nature. By emphasizing the research component, the system can help some users to avoid locking themselves into a tentative occupational choice before they have properly explored the realities of the occupation under consideration. Some users may be recycled back to the career exploration decision making stage. A fundamental value behind the design of the NextStep program is that it is better to find out now that an occupation is inappropriate rather than after completing training or taking an entry level job. (LLL)
NextStep: A Computer-Based Career Implementation System

Completed By: Jim Blakley
Coordinator of Counselling and Placement

Loyalist College
P.O. Box 4200
Belleville, Ontario
K8N 5B9

[Paper presented at the National Consultation on Vocational Counselling]
NextStep is an IBM compatible, computer-assisted learning system to help users explore and reality test their tentative career plans and bring their career decision to a more real and community-oriented level. The reality testing phase of career counselling is often not adequately completed. The majority of students and adults in career transition don't seem to make appropriate career decisions. Procrastination is a large issue in career planning - students and adults just put off the self-assessment and career exploration that is necessary for good decision making. And many other students and adults just don't know how to go about a very time consuming and complex process. Sometimes career decision are made too quickly as students and adults seek to avoid the anxiety caused by not having a goal.

The NextStep system assumes that the user is literate (can deal with reading at the Grade 7 level) and has at least one tentative occupational goal. The system is based on a cognitive-behavioural and developmental model.

Career decisions are often emotionally charged and complex. What we do (in work) often determines who we are (in society). Who we are (as a person) is an important determinant of what we do (in work). Reality-based issues are most often minimized or ignored. Very few of us purchase our cars through a careful analysis of consumer information and realistic comparisons among alternatives. In the same way we tend to pick jobs and occupations on "the look", "the feel", "the easy availability", and "the image". Cars get old, rust, and relentlessly reveal to us their strengths and weaknesses only after we own them awhile. The NextStep system will assist users to make better consumer decisions about occupations to ensure that the strengths and weaknesses of career choices are revealed at an early stage.

The system is viewed as a counselling tool as part of a counselling process. Only the most motivated user will be able to significantly benefit from use of the program not supported by counsellor, volunteer or peer support and involvement.

Rationale

Loyalist College is working on the development of a computer-based learning program to assist users in the research and confirmation stages of career planning - few materials are available now. Many strategies and tools focus on the self-assessment, career awareness and career decision making stages, or on the job finding stages, but few materials are available to assist clients in the more explorative stages of career implementation. Research and discovery of the reality of tentative choices and the confirmation of the choices are critical career developmental tasks.
At present, many college and university students use their educational program as ways to do career exploration. Other young people use their jobs as a way to undertake career exploration. This is a very expensive process for both individuals and governments. Philip Jarvis has created the term career browsing to reflect this expensive and often wasteful process. The NextStep computer-assisted counselling program will assist users in performing career exploration and reality testing before they commit themselves to educational/training programs or entry level jobs.

It is expected that users of the finished program will make better, reality-based career decisions. At the same time, they will develop the kind of local, personal contacts that research indicates are often necessary to get jobs.

The NextStep computer program will bring to life the simple yet powerful worksheet activity developed by the writer over the past two years called "My NextStep" (see Appendix A). Although there are innovative, computer-based career systems that assist users to explore career choices, this system will help the user to explore and research occupation choices from a more reality-based perspective. The program is meant to complement and not replace existing systems.

The first phase of the career decision process tends to be oriented to personal requirements and needs and a more general analysis of occupation demands. For example, a client finishing the CHOICES program or finishing a few sessions with an Employment Counsellor in a Canada Employment Centre or with a secondary school counsellor might now arrive at a couple of tentative occupation goals. At this point he or she will be at a critical juncture where additional exploration and information is needed. In most cases clients need to actually do one or more of the following:

- read relevant career information
- utilize appropriate audio-visual material
- talk to people in the field
- visit work sites
- develop plans to obtain related summer or part-time work experience
- participate in a coop program
- choose and participate in relevant activities and hobbies
- select secondary or continuing education courses
- follow-up with colleges and universities
- spend time job-shadowing
- take a company tour
- volunteer time in an organization that would provide relevant work experience
- research and seek out specialized occupation information
- talk to students studying in the field.
No available computer-assisted counselling tool or paper-based tool addresses these issues systematically - NextStep fills this gap. The topic areas above are the major content focus of NextStep.

Career counselling professionals know that most clients need to do at least so-e of these tasks buts don't assist clients in doing them. We also know that most clients don't do them - just as most people who need and want to quit smoking, start dieting, take up increased and regular physical activity, or reduce alcohol consumption don't follow through with what needs to be done.

NextStep will be targeted to secondary school students, adults in career transition or those returning to the workforce. The program will be designed to show them how to carry on with additional research and gain exposure to relevant experiences, and to give the user a specific blueprint for action. That blueprint will contain such information as: names, addresses, phone numbers, yellow page headings, names of publications, ideas for part-time and summer jobs. Much of this information will be local in nature. By emphasizing the research component some users will avoid "locking" themselves into a tentative occupational choice before they have properly explored the realities of the occupation under consideration. Some users may be "recycled" back to the career exploration decision making stage. A fundamental value behind the design of the NextStep program is that it is better to find out now that an occupation is inappropriate rather than after completing training or taking an entry level job.

There will be many differences and enhancements from the paper version of NextStep. First, the computer version will contain a significant number of national and provincial resources available on-line for more than 150 popular and significant occupations. Second, the computer version will allow the counsellor to add local information. Third, the process of using the program will be extensive and interactive. The user will be left with a printout summarizing the interaction and giving details on how to follow-up on the various issues raised and questions asked. See Appendix B for a sample printout as conceived at this early stage in the development process.

The completed computer program and support materials will fill a specific need for counsellors working with young people as they make career decisions. The program will complement existing computer programs, career development curriculums and paper-based tools.

The focus of this project will be to develop a Canadian version of the program. Subsequently, it would be relatively easy to develop versions for other countries using appropriate information in the database. The NEXTSTEP program is targeted at post-secondary bound high school students, adults in career transition, and non-postsecondary bound secondary students who face similar decisions.
This workbook is designed to help you think in more detail about the career decisions you are making now and in the future. Although your career plans should probably remain tentative for now, you must start to dig and explore various careers more systematically. This workbook may assist you in making some specific action plans. Try to work on these items quickly in a brainstorming fashion. You can change things later. In fact you may want to get a second copy so you can do the entire exercise again at a later time.

My present, though possibly tentative career goals are:

<table>
<thead>
<tr>
<th>JOB TITLE</th>
<th>RELATED EDUCATIONAL PROGRAM</th>
</tr>
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<tbody>
<tr>
<td>A ***</td>
<td></td>
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<td>B ***</td>
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<td>C ***</td>
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<td>D ***</td>
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<td>E ***</td>
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</table>

Look at the list above and pick out two jobs that feel good or seem to capture your interest for now. Then jot them down below.

The two career goals which I see as most realistic and appropriate for further study at this time are:

1. ______________________  
2. ______________________
People resources are often better than paper resources like books. Although the biases of any one person might distort your information search, talking to several people can give you a balanced and useful perspective. Use the left column for answers relating to job or program choice #1 above and the right column for choice #2.

Three people with whom I can discuss these choices and find out more information are:

<table>
<thead>
<tr>
<th>TENTATIVE JOB/PROGRAM CHOICE #1</th>
<th>TENTATIVE JOB/PROGRAM CHOICE #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1.</td>
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<tr>
<td>2.</td>
<td>2.</td>
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<tr>
<td>3.</td>
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</table>

Paper resources can be useful as well. Try your school library and your local public library. Your guidance centre career library will probably be a "gold mine" of information.

Reading materials that can help me discover more about my job or program choices:

<table>
<thead>
<tr>
<th>TENTATIVE JOB/PROGRAM CHOICE #1</th>
<th>TENTATIVE JOB/PROGRAM CHOICE #2</th>
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<tr>
<td>1.</td>
<td>1.</td>
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<td>2.</td>
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<td>3.</td>
<td>3.</td>
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</tbody>
</table>
Many job fields have national, provincial, and regional associations that can give you timely and useful information that is not available anywhere else. Research the name and addresses of organizations where you can write for additional information on the occupations you are exploring (remember your friendly librarian). Three organizations that might have information on these two occupations or programs are:

TENTATIVE JOB/PROGRAM CHOICE #1 TENTATIVE JOB/PROGRAM CHOICE #2

1. __________________________ 1. __________________________
2. __________________________ 2. __________________________
3. __________________________ 3. __________________________

If only it were as easy as just deciding what you want to do. There is his tiny little problem of being able to do it. You know, overcoming difficulties, self-doubts, that kind of thing. Think for a moment about the blocks you have (as you see them now) in terms of your tentative occupation goals. What might stand in your way: financially, academically, physically, geographically, psychologically, socially, ....

The major problems that I would have to overcome to achieve these goals are:

TENTATIVE JOB/PROGRAM CHOICE #1 TENTATIVE JOB/PROGRAM CHOICE #2

1. __________________________ 1. __________________________
2. __________________________ 2. __________________________
3. __________________________ 3. __________________________
You are unique, special and one of a kind. Think (hard) for a minute about what you do have going for yourself. Don't shut things out by thinking "Oh, anybody can do that!". Brainstorm strengths that you have in relation to the two tentative occupation goals you are looking at now. Ask a friend for help if you get stuck.

My major assets that would help me to reach these goals are:

**TENTATIVE JOB/PROGRAM CHOICE #1**

1. 
2. 
3. 
4. 

**TENTATIVE JOB/PROGRAM CHOICE #2**

1. 
2. 
3. 
4. 

**DO VIEW THINGS IN TECHNICOLOUR:**
**SEE THE PRO'S AND CON'S**

One of the most critical (and difficult) skills to put into practice is the ability to see both the pro and the con sides of any decision. This is what is called seeing the "grey" areas. Once you decide tentatively upon a couple of options, try to "objectively" think about the pluses and minuses of each choice.

Nursing may sound exciting (and it is) but what about shift work, working on weekends and holidays, lack of control on the job, stressful working conditions, etc. Of course, it isn't just Nursing that has drawbacks. **All occupation choices (like all people) have pro's and con's.** We must be able to see the "good" and the "bad" at the same time (this is also very useful when looking at yourself and other people). **All jobs are compromises.** Jobs are not designed to be completely enjoyable--- rather they are created as a means to efficiently and effectively get tasks completed, usually either providing a service or producing a product. Basically, jobs solve problems.
For the two occupation choices presently under consideration on this worksheet write down four positives for each. Next try writing four negatives for each.

**TENTATIVE JOB/PROGRAM CHOICE #1**

**TENTATIVE JOB/PROGRAM CHOICE #2**

### POSITIVES OR PRO'S

<table>
<thead>
<tr>
<th>1.</th>
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<tbody>
<tr>
<td>2.</td>
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<td>3.</td>
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<td>4.</td>
<td>4.</td>
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</table>

### NEGATIVES OR CON'S

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<td>3.</td>
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<td>4.</td>
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</tbody>
</table>

**GET GOING! IF YOU DON'T START NOW, WHEN ARE YOU GOING TO?**

O.K., we are at the end of this worksheet. What are you going to do about it ---- now? Think in terms of what do I have to do now to be able to reach these goals?

For example, what courses do you need to take? Who should you talk to or write to? What volunteer experiences should you try to get?
The ten (10) basic and important steps that I would have to complete to reach these goals include:

**Ten Basic Action Steps For Career Planning**

<table>
<thead>
<tr>
<th>TENTATIVE JOB/PROGRAM CHOICE #1</th>
<th>TENTATIVE JOB/PROGRAM CHOICE #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1.</td>
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<td>9.</td>
<td>9.</td>
</tr>
<tr>
<td>10.</td>
<td>10.</td>
</tr>
</tbody>
</table>

Perhaps working through this process has made you think differently about your two choices above. Try the workbook again with different job/program choices.

Remember, this workbook has just been a start. You will want to consult a occupation counsellor or secondary school counsellor to assist you with your exploration, examination, clarification, and action towards your future **career**.
APPENDIX B: Rough Draft of Sample Computer Output

**NextStep: Session Summary**

Jillian Jiggs  
Time On System: 1 hour 13 minutes  
September 19, 1991  
School: I.E. Weldon Secondary School

---

**Session Summary**

Job Title Explored: Accountant  
NextStep: Follow-up on Information Suggestions  
Rating of Usefulness of This Session: Moderately Useful  
Region Explored: Quinte Area

**INFORMATION REFERENCES:**

----- JOB FUTURES -----
Reference to "Job Futures": Page 13, Accounting, Community College

"Although more accounting graduates entered the labour force than other college graduates, they had a slightly higher unemployment rate."

Also refer to page 217 (4131) Bookkeepers and Accounting Clerks and page 144 (1171) Accountants and Auditors

----- Guidance Monograph #417 Accountants and Financial Officers -----

----- Careers Canada #4 Finance and Related Careers -----

Also see Careers Canada #2 Clerical Careers

----- National Contacts: -----

CMA  
Canadian Management Accountant  
154 Main Street East  
MPO Box 2150  
Hamilton, Ontario  
L8N 4A5  
Attn: Ms. Jane Mansbridge

CGA  
Certified General Accountant  
480 Ontario  
Fourth Floor  
Toronto, Ontario  
M5G 1V2  
Attn: Mr. Robert Charles

Institute of Chartered Accountants  
692 Bay Street  
Box 4730 Station A  
Toronto, Ontario  
M4L 2V8  
Attn: Ms. Lynn Crawford
NextStep: Session Summary  Page Two

Jillian Jiggs
September 19, 1989

Post-secondary Educational Institution Contacts:

You selected the following two colleges to research further:

Algonquin College  December 15, 1989
135 Woodroffe Avenue  Georgia College
Nepean, Ontario  One Georgian Drive
K2G 1V8  Barrie, Ontario
Attn: Registrar  Attn: Registrar
(613) 727-7678  (807) 461 9696

For further information on Post-secondary Education in Ontario see HORIZONS and ONTARIO SPECTRUM, both available in the Guidance Office.

Educational Institution Contacts:

You indicated that you might be interested in taking a correspondence course. Here is the address in Ontario:

Independent Learning Centre  Telephone (Toronto area) 965-2657
909 Yonge Street  Toll-free 1 (800) 268 7065
Toronto, Ontario
M4W 3G2

ACTION PLAN:

WRITE:

CMA  _ _  Letter Written  _ _  Reply Received  _ _  Follow-up Needed

CGA  _ _  Letter Written  _ _  Reply Received  _ _  Follow-up Needed

ICA  _ _  Letter Written  _ _  Reply Received  _ _  Follow-up Needed

Algonquin College  _ _  Letter Written  _ _  Reply Received  _ _  Follow-up Needed

Georgian College  _ _  Letter Written  _ _  Reply Received  _ _  Follow-up Needed

Independent Learning Centre  _ _  Letter Written  _ _  Reply Received  _ _  Follow-up Needed

READ:

  _ Careers Canada  #2 and #4
  _ Guidance Monograph  #417
  _ Job Futures  Pages 13, 217, 114
DON'T BELIEVE EVERYTHING YOU HEAR

Here is a list of organizations and people (or just sample job titles) who you might want to contact for further information. People in a job can often be one of the best sources of information about a job, as long as you don't take what they have to say too seriously.

CONTACT NAMES (if available)  ORGANIZATIONS  TELEPHONE

Ms. Susan Smith  Interface Carpet Ltd.  967-3139
  Comptroller

Mr. Gilles Thibault  Quinte Area CGA  968-1425

Mr. Gene Gemmell  Canadian Imperial Bank  966-4027
  Bank Manager

DON'T BELIEVE EVERYTHING YOU THINK

Here is a list of the problems that you have identified that could effect your tentative career plans. Try thinking about how you could overcome some of these difficulties.

<table>
<thead>
<tr>
<th>Difficulty</th>
<th>Idea To Overcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor performance in math</td>
<td>Get a math Peer Tutor</td>
</tr>
<tr>
<td>No knowledge of computers</td>
<td>Take Grade 10 Computer</td>
</tr>
<tr>
<td>No related work experience</td>
<td>Get a volunteer position with</td>
</tr>
<tr>
<td></td>
<td>United Way</td>
</tr>
</tbody>
</table>

DO BELIEVE IN YOURSELF

You are unique, special and one of a kind. Here are the strengths that you identified in yourself in relations to the tentative career goal of Accounting. Ask some friends, some teachers and your parents what they think about this list.

Like detail work (e.g. keeping track of paper route money)
Like business environment
Good at writing memos and reports
Friendly and good with people
Love money
PRO'S AND CON'S

It is critically important to see both the pro's and con's of a job. What are the pro's and con's of accounting as you see them now.

<table>
<thead>
<tr>
<th>Pro's</th>
<th>Con's</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daytime hours</td>
<td>Seems like a difficult course</td>
</tr>
<tr>
<td>Good job security</td>
<td>Parents don't like the idea</td>
</tr>
<tr>
<td>Possible advancement</td>
<td>Could be boring</td>
</tr>
<tr>
<td>Professional designation possible</td>
<td>No field placement like Nursing</td>
</tr>
<tr>
<td>Balance of men and women in field</td>
<td>Too many math courses like statistics</td>
</tr>
</tbody>
</table>

What other ideas do you have about pro's and con's.

Volunteer Work Related To ACCOUNTING:

All small social service agencies and community groups have a significant amount of accounting work to do. These groups would be the most likely to accept you for a volunteer position as bookkeeper/clerk. Eventually you might be able to progress to a junior accountant position.

Contact Gord Russell at the United Community Services at 962-6709 or Richard Rashotte at Big Brothers at 967-1159.

Job Shadowing Possibilities Related To ACCOUNTING:

In our area the following people have expressed a willingness to have a student spend half a day with them on the job. They are:

Peter King  Alliance Industries, 259 Front, Belleville, 967-8523
Suzanne Coulette Printcraft Printers, 187 Herchimer, Belleville, 967-7812

Secondary Co-op courses with placement in a job setting related to ACCOUNTING would provide an excellent opportunity.

Hobbies and Activities Related To ACCOUNTING:

You may want to talk to your parents about taking over some of the family bookkeeping and accounting. This could include monthly cheque reconciliations and yearly income tax.
Many financially-oriented students enjoy participating in a Stock or Investment Club. Some schools participate in the Sir Wilfrid Laurier University Stock Simulation where teams of students "buy" stocks on paper and compete to see who has the highest return. Other hobbies that could have an indirect relationship to ACCOUNTING are:

- Stamp Collecting
- Computer Programming
- Computer Spreadsheets
- Becoming the Treasurer of a group or club. This is a position that many organizations have a very difficult time filling.

Part-time Jobs Related To ACCOUNTING:

Any positions in a company or organization where you could work with money and bookkeeping would be useful. As a younger and inexperienced person you are not likely to be a junior accountant as a part-time employee. Consider the skills that you would gain in being a cashier or a clerk working with bookkeeping. Many other jobs could still have as one function the preparation of a bank deposit. This kind of experience could be excellent for you.

Secondary School Courses For ACCOUNTING:

In general, courses in the following areas provide a good basis for continuing education in ACCOUNTING: Math (both General Math and Business Math), Computers, Economics, Law, English (courses oriented to writing rather than literature), Accounting, Office Procedures, Typing, and related co-op courses.

Other Considerations For ACCOUNTING:

Like many occupations, ACCOUNTING is a field where, depending on where you intend to work, having a knowledge of French may assist you in your career development. You might be interested in participating in the Summer Language Bursary Program. Students are reimbursed for the cost of tuition and room and board to attend a six week French program offered in many sites across the country. For our province the Coordinator of the "LBP is: Ms. Nicole Theriault, Ministry of Education, Box 4700, University Avenue, Toronto, Ontario, M6L 4G2. This program is only available to post-secondary students.

GET GOING! IF YOU DON'T START NOW, WHEN ARE YOU GOING TO?

You are at the end of this session. What are you going to do about your occupation goal —— now? Think in terms of "what do I have to do now to be able to reach this goal?".
For example, what courses do you need to take, who should you talk to or write to, what volunteer experiences should you try to get?

How do you feel about Accounting now? Have you changed your mind at all?