Educator's Resource

INTEGRATION OF
best practice guidelines

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CHAPTER 1

Setting the Stage

The *Educator's Resource: Integration of Best Practice Guidelines (Educator's Resource)* is part of the larger Best Practice Guidelines (BPG) Program initiated by the Registered Nurses' Association of Ontario (RNAO) and funded by the Government of Ontario. It is designed to help educators, whether they work in academic settings or practice settings, to plan, implement and evaluate learning events for nurses, whether staff or students, to promote integration of BPG into practice. This resource should be used in conjunction with other materials developed for the Program, including the RNAO *Toolkit: Implementation of Clinical Best Practice Guidelines* (RNAO, 2002), introductory video, *Making it Happen*, and the guidelines themselves.

What is the Nursing Best Practice Guidelines Program?

The Nursing Best Practice Guidelines (BPG) Program aims to bridge the gap between research and practice and ensure that the most current available knowledge is put to use for the benefit of the public who receive nursing care. The overall aim of the program is to improve the quality of care that nurses and other health care professionals provide to the public. Specifically, the program aims to:

1 Reduce the variation in care by encouraging consistency in high quality care based on best available knowledge;

2 Stop interventions that have little effect and/or cause harm;

3 Transfer research and other best available knowledge to practice;

4 Promote the nursing knowledge base;

5 Assist clinicians and patients with health care decision-making;

6 Inform organizational and policy decision-making;

7 Improve practice, system and health care outcomes;

8 Identify research gaps; and

9 Reduce costs through achievement of better outcomes.

Through a multi-faceted dissemination and uptake strategy, the BPG Program has enjoyed success in ensuring that these knowledge products reach across the continuum of nursing education to ensure that nursing students and front line staff can care for patients using the best available knowledge. With increasing awareness and access to BPG, there is a demand for support/assistance in implementing and integrating BPG into education and practice. The *Educator's Resource: Integration of Best Practice Guidelines* is, therefore, developed to address this need.

What is the purpose of the Educator's Resource?

This resource has been developed to assist you as an educator in introducing BPG to student nurses, to faculty and to nurses and colleagues in their practice settings. It is a supplement to the RNAO *Toolkit: Implementation of Clinical Practice Guidelines* (RNAO, 2002). We recommend that both the *Educator's Resource* **and** the *Toolkit* be used to plan, implement and evaluate a comprehensive strategy for BPG implementation in both academic and practice settings.

Who can benefit from the Educator's Resource?

The *Educator's Resource* has been developed for educators in both academic and practice settings. It can also be utilized by any nurse interested in facilitating learning about BPG.

Link to the *Toolkit: Implementation of Clinical Practice Guidelines*

The *Toolkit* is focused on a broad based strategy for implementation of a BPG in a clinical setting. It is designed to assist in:

- Selecting a BPG;
- Assessing the organization for environmental readiness;
- Identifying, assessing and engaging stakeholders;
- Implementing strategies;
- Securing resources; and
- Evaluating outcomes.

The *Educator's Resource* is organized to provide you with "need-to-know" content and, in *Chapter 6: Enrichment Materials*, "nice-to-know" content. Chapters are organized using the Framework for Integration of Best Practice Guidelines into Learning Events *(Figure 1)*. Each of the chapters' "need-to-know" content corresponds to one of the four elements of the framework. They are:

Chapter 2 *Assessment for the Learning Event*;
Chapter 3 *Planning the Learning Event*;
Chapter 4 *Implementing Teaching/Learning Strategies*; and
Chapter 5 *Evaluation*.

Figure 1: Integration of Best Practice Guidelines into Learning Events

The framework in *Figure 1* represents nursing as a knowledge-based practice discipline integrating both the art and science of nursing. These qualities are enhanced through the integration of BPG into practice. The desired outcome is improved quality of nursing care and patient outcomes. This four-step framework incorporates the student, the BPG, the learning event and the educator. The centre of the framework represents the learner and BPG. Each arrow of the framework demonstrates the activities the educator must perform in order to have a successful learning event. These include the four main steps outlined in Chapters 2, 3, 4 and 5 of this resource. The four aspects of the model are depicted in a circular manner because the process of learning and teaching is cyclical and aspects of various elements of the framework may overlap or occur simultaneously.

How was the Educator's Resource developed?

A broad based development panel of 12 nurse educators from both academic and practice settings was convened by RNAO. Over an eight-month period, the panel worked to conceptualize, articulate and develop the *Educator's Resource*. The process included a review of the relevant literature and the creation of a guiding framework to assist in organizing the key components of the *Educator's Resource (Figure 1)*. This process yielded a draft which was submitted to a set of external stakeholders for review and feedback. An acknowledgement of these reviewers is provided at the front of this document.

Stakeholders represented various educators from both practice and clinical settings. External stakeholders provided feedback through focus groups and written communication. The final results of this feedback were compiled and reviewed by the development panel. Discussion and consensus resulted in revisions leading to the final document.

Roadmap to using the Educator's Resource

The *Educator's Resource* is divided into five main chapters to guide you through the steps of the framework as you develop a learning event.

Each chapter is organized in a similar manner with the following headings:

1. What is this chapter about? (outlining the steps of the process);
2. Steps (description of the steps and specific content discussion relevant to the chapter);
3. Scenarios (two case studies that apply information from the chapter);
4. Key Points (summary of the chapter);
5. References;
6. Bibliography; and
7. Tips, Tools and Templates (ready-to-use materials).

These chapters are followed by *Chapter 6: Enrichment Materials*. This is a composite of additional information and resources for those educators who require more in-depth information. It is the "nice-to-know" section of the *Educator's Resource.*

Directional Icons

Table 1 contains the icons that are used throughout the *Educator's Resource* and explains their meanings. The icons provide direction to specific information and resources. Icons are located in the margins and provide direction by indicating the page number where additional content and/or materials are located.

Table 1: Directional Icons

Icon	Description
	Academic Content specific for the educator working in an academic setting such as a School of Nursing.
	Practice Setting Content specific for the educator working in a practice setting.
	Tips, Tools, and Templates Ready-to-use materials that can be put to use immediately.
	Enrichment Content Elaboration, theory, or additional content that is "nice to know" content but not "need to know" content.
	CD1 Nursing Best Practice Guidelines Program Containing all published BPG to date including the *Toolkit,* Health Education Fact Sheets (HEFS), and French translations;
	CD2 Making it Happen A 28-minute introduction video to BPG; and
	CD3 Introduction to RNAO Best Practice Guidelines A PowerPoint presentation on the BPG Program*;* and all blank templates found in the Tips, Tools and Templates section of each chapter.
	Websites Where educators can obtain additional resources and information.

Scenarios

Chapters 2, 3, 4 and 5 contain two scenarios which demonstrate how the chapter content can be practically applied. One scenario takes place in an academic setting and the other occurs in a practice setting. The two scenarios are introduced below and in each subsequent chapter the "story" continues, taking the educator from the beginning to the end of the process outlined in the framework.

Academic Setting

Cynthia is a new faculty member at the School of Nursing. She has been employed by the School for one year and has taught two courses—one for first year nursing students (Introductory Nursing Concepts) and a second course to fourth year students (Advanced Nursing Concepts). In addition, she is supervising 12 fourth-year students during their final clinical consolidation placement.

In Cynthia's last place of work, she had been an active Best Practice Champion and attended a two-day workshop provided by RNAO. For a detailed description of the Best Practice Champion Network see *Chapter 6: Enrichment Materials* (**p. 96**). She has worked diligently to incorporate various BPG into her courses and to expose her students to the various evidence-based resources available on the RNAO website. In her first year at the School of Nursing, she learned that faculty were not familiar with the RNAO work on best practice guidelines but they were interested in learning more.

Cynthia discussed the RNAO work with the Director of the School of Nursing who recommended that Cynthia join the School Curriculum Committee and present on BPG at the next meeting. Cynthia used the *Introduction to RNAO Best Practice Guidelines* PowerPoint presentation, available as part of the *Educator's Resource* (**CD3**).

After Cynthia's presentation, the committee members provided her with positive feedback and brainstormed various ideas of bringing the guidelines into the curricula. First, however, they concluded that the entire teaching staff of the School needed to learn about the guidelines and associated resources. The Curriculum Committee accepted the members' recommendation and a planning group was established to plan and deliver the Faculty Workshop.

The planning group used the *Educator's Resource* to identify which resources would be helpful in achieving their goal. They decided to use the following resources:

Best Practice Champion Network, p. 96

3

Introduction to RNAO Best Practice Guidelines (PowerPoint presentation)

▸ Video: *Making it Happen* (**CD2**)

▸ PowerPoint presentation: *Introduction to RNAO Best Practice Guidelines* (**CD3**)

▸ Sample case studies
(**Chapter 4, *Tips, Tools and Templates* p. 67-71**)

Cynthia agreed to be the ongoing link between the faculty and RNAO in her role as a Best Practice Champion and to ensure new information and resources are communicated to her colleagues.

The reader is asked to reflect on the following:

▸ What does Cynthia need to know prior to bringing knowledge of BPG to the School of Nursing?

▸ How will Cynthia bring knowledge of RNAO BPG Program to the School of Nursing?

▸ How will she assess the readiness of the faculty, students, curriculum committee and other stakeholders?

▸ What strategies will Cynthia use to influence the incorporation of BPG at various levels and depths?

▸ What strategies will she use to implement BPG into her course work?

▸ How will she know that her efforts are making a difference? How will she evaluate her efforts?

▸ How will she know that her students are acquiring the knowledge? How will she evaluate her students with respect to acquired knowledge?

2&3

Making it Happen, CD2
Introduction to RNAO Best Practice Guidelines, CD3

Sample case studies, p. 67-71

Practice Setting

John has been a nurse educator at a medium-sized suburban hospital for the past eight years. He has been practicing in various medical/surgical units since he graduated 20 years ago. Recently, a new Chief Nursing Officer (CNO) was hired and one of the first areas of strategic focus she laid out is the implementation of several BPG in the organization. John and his colleagues have heard about the RNAO work on BPG at various conferences but have not actively addressed how they would implement them in their organization. A steering committee has been established and John's role on the committee is to help plan the education sessions for implementing two BPG: *Screening for Dementia, Delirium and Depression in Older Adults* (RNAO, 2003), and *Care Strategies for Older Adults with Delirium, Dementia, and Depression* (RNAO, 2004) (DDD). John is feeling rather overwhelmed. He is only one of three nurse educators who supports the nursing staff for a facility with 400 beds and many outpatient programs.

John's CNO provided him with a copy of the RNAO *Educator's Resource*. As he was responsible mainly for the educational sessions, John ensured that the steering committee was aware of other resources that could be used to introduce the RNAO BPG to staff and to the organization. The steering committee members made the following decisions:

a To use the *Toolkit: Implementation of Clinical Practice Guidelines* (RNAO, 2002) to guide the overall planning and implementation of the project.

b To show the RNAO video, *Making it Happen* at various forums over a two-month period while the committee was still in the planning phases. (**CD2**)

c To target four units to start the implementation.

d To provide John with additional resources to support the educational process, including preparation of 12 nurses from the target units to become BPG Resource Nurses.

e To develop an initial one-day education workshop for these Resource Nurses.

2

Making it Happen

f To submit a proposal to have John and the 12 Resource Nurses attend the RNAO Best Practice Champions workshops and participate actively in the Champions Network.

The reader is asked to reflect on the following:

▸ What does John need to know prior to creating a learning plan?

▸ What tools will he need to apply and incorporate this new knowledge into an education plan in order to implement BPG in the organization? (i.e., learning plan template, available teaching materials?)

▸ How will he deliver the learning plan? How can he use his existing strategies (e.g. coaching/mentoring, using outside sources) to assist him to deliver the education plan?

▸ How will he evaluate the learning event?

▸ How will he evaluate the success of implementing BPG?

References

Registered Nurses' Association of Ontario. (2002). *Toolkit: Implementation of clinical practice guidelines.* Toronto: Author. Available: **www.rnao.org/bestpractices**.

Tips, Tools & Templates

The following items can be used in introducing and promoting BPG in your organization. These have been especially designed to assist nurses, in all domains of practice, to engage others in dialogue about BPG.

1. Nursing Best Practice Guidelines Program containing all published BPG, including the *Toolkit*, Health Education Fact Sheets (HEFS), and French translations in PDF format (**CD1**)
2. *Making it Happen*, a 28-minute video that introduces the best practice guideline program (**CD2**)
3. *Introduction to RNAO Best Practice Guidelines* (PowerPoint presentation) (**CD3**)
4. Blank templates (**CD3**)
5. Nursing Best Practice Guideline: A Phenomenal Journey [brochure]
6. Nursing Best Practice Guideline: Spreading the News [flyer]
7. Nursing Best Practice Guideline Newsletter: Shaping the Future of Nursing [most recent publication]
8. Best Practice Guideline Champions Network [flyer]
9. Best Practice Guideline Champions Newsletter [most recent publication]
10. BPG Order Form – The order form may not contain recently published BPG. To get the most current listing of published BPG, visit **www.rnao.org/bestpractices**.

These materials can be found in a folder at the back of the binder.

1

Published BPG, the *Toolkit*, Health Education Fact Sheets (HEFS)
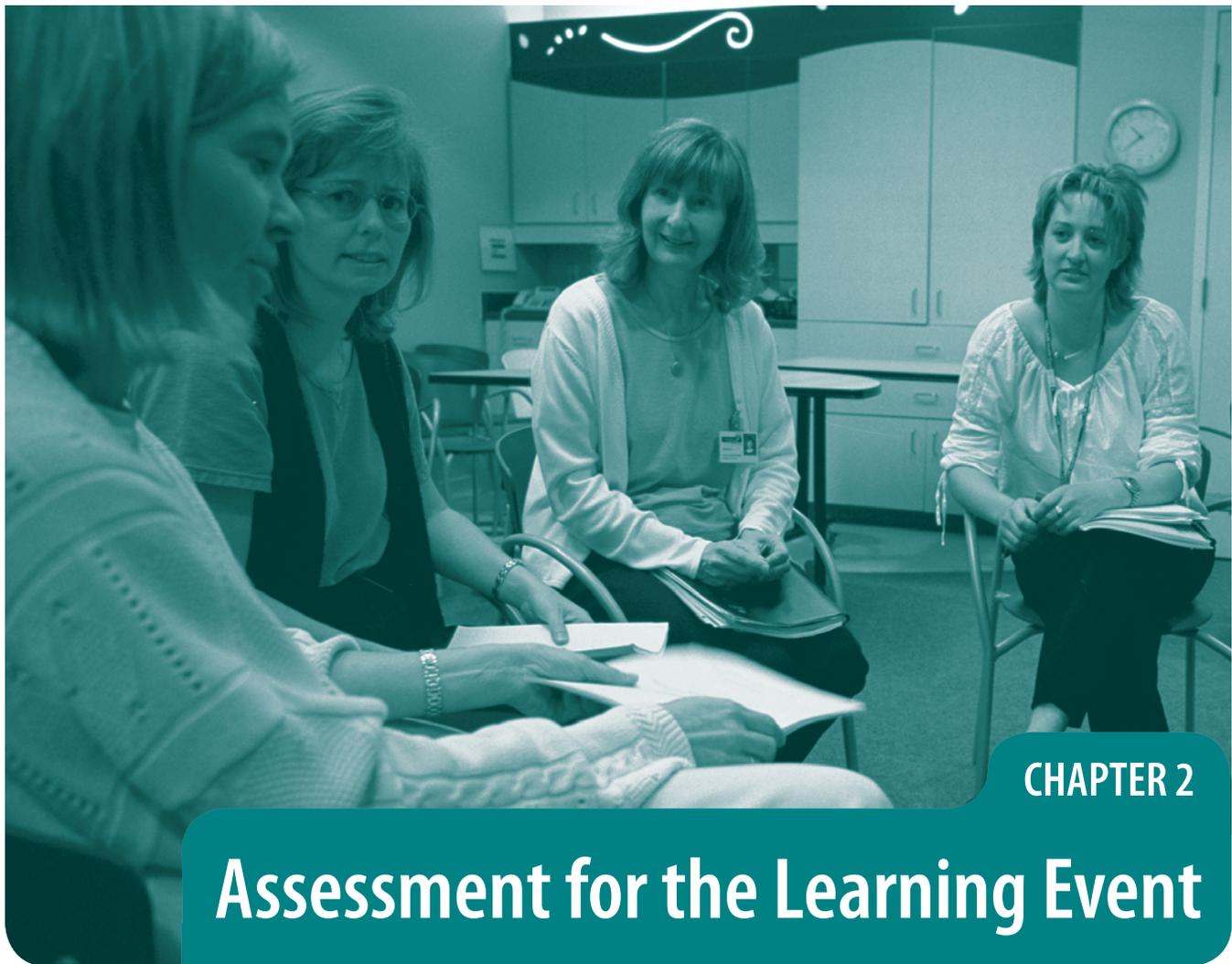
2

Making it Happen

3

Introduction to RNAO Best Practice Guidelines (PPT), blank templates

WWW

BPG Order Form can be found at www.rnao.org/bestpractices

CHAPTER 2

Assessment for the Learning Event

What is this chapter about?

In order to have a successful learning event, there must be an assessment.
The steps you will take to conduct the assessment are:

1. Assess the environment;
2. Assess the educator;
3. Assess the learner;
4. Conduct a learning needs assessment; and
5. Assess the group.

Assumption   Prior to assessment, you will have chosen the BPG for your learning event.

Assessment

Assessment is a holistic process that includes three phases:
pre-assessment, ongoing assessment, and post-assessment (evaluation).
This chapter will focus on the pre-assessment strategies that you apply
throughout the learning event.
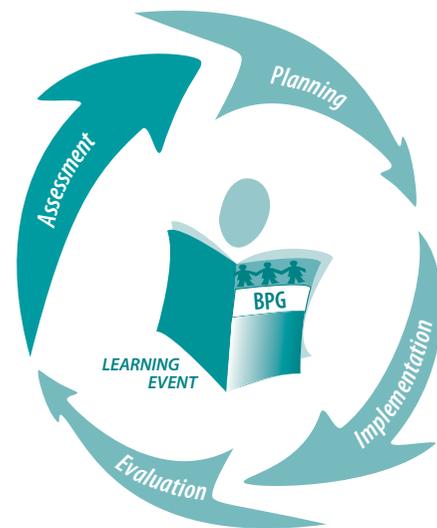
The word "assess" comes from the Latin term "assidere" which means to "sit beside". Process-minded and participatory-oriented adult educators "sit beside" learners to learn about their proficiencies and backgrounds, educational goals, and expected outcomes, immersing themselves in the lives and views of their students (Auerbach, 1994).

Educator's Self-Assessment of BPG Knowledge, p. 29

1

Conducting an environmental assessment, RNAO *Toolkit*, p. 39-46

WWW

Teaching Philosophy exercises www.adm.uwaterloo.ca/infotrac/ tips/teachingphilosophy sampleexercises.pdf

Step 1: Assess the Environment

Organizational readiness will not be covered in this chapter. If you require information on this step refer to the RNAO *Toolkit: Implementation of Clinical Practice Guidelines: Chapter 3 Assessing Your Environmental Readiness* (p. 39-46).

Step 2: Assess the Educator

Assessing your Knowledge of BPG

In your role as educator, it is important to conduct a self-assessment of your current knowledge of BPG. See *Tips, Tools and Templates* for the *Educator's Self-Assessment of BPG Knowledge*, (**p. 29**). Your knowledge level about BPG could range from novice to expert and will affect the strategies you use to assess, plan, implement and evaluate the learning event. Following your knowledge assessment, you will need to reflect on your personal philosophy of teaching and learning and your teaching style.

Assessing your Teaching Philosophy

Before planning the learning event, reflect on your philosophy of teaching and learning to identify how you will approach its planning and delivery.

Apps (1991) described a series of self-directed exercises to assist the educator in developing their teaching philosophy. These exercises can be found at **http://www.adm.uwaterloo.ca/infotrac/tips/teachingphilosophysampleexercises.pdf**.

Assessing Your Teaching Style

There are a variety of teaching styles that can be grouped into four basic types including:

1　**Expert/Formal Authority**, tends toward educator-centred classrooms in which information is presented and students receive knowledge.

2　**Personal/Expert**, an educator-centred approach that emphasizes modeling and demonstration the approach encourages learners to observe processes as well as content.

3　**Facilitator/Personal**, a learner-centred approach for the classroom. Educators design activities, social interactions, or problem-solving situations that allow students to practice the processes for applying course content.

4　**Delegator/Facilitator** places much of the learning burden on the students. Educators provide complex tasks that require learner initiative, and often group work, to complete.

Table 2 outlines how these teaching styles affect classroom methods, sensitivity to student learning style, capability of learners to cope with educational demands, control of classroom tasks, and willingness of the educator to build and maintain relationships. If you understand the possibilities and limits of your own teaching style you can make more consistent decisions on how to best utilize that style (Conti, 1990).

Educators do not adapt their teaching style to the learner, rather they "adopt classroom methods, strategies, techniques, and processes to be more consistent with his or her individual style" (Heimlich & Norland, 1994, p. 45).

Table 2: Teaching Styles and their Application

	Teaching Styles			
	Expert	**Personal**	**Facilitator**	**Delegator**
Classroom Methods	Traditional educator-centred presentations and discussion techniques.	Role modeling and coaching/guiding learners, educator-centred.	Collaborative learning and other learner-centred learning processes consistently emphasized.	Emphasis on independent learning activities for groups and individuals.
Degree of Sensitivity to Student Learning Style	(Low) Differences between learners not considered, students are treated alike.	(Moderate-High) Must know how to teach learners who possess different styles and be able to encourage collaborative learning.	(Moderate-High) Consults with learners and suggests alternative approaches, educator must be able to encourage expression.	(Moderate-High) Acts as a consultant and resource person for learners, must be able to help learners to develop independence.
Capability of Students to Cope with Course Demands	(Low-Moderate) Do not typically display what they know.	(Moderate) Need adequate knowledge and skill, must take initiative, accept feedback and be motivated to improve.	(Moderate) Need adequate levels of knowledge, initiative, and a willingness to accept responsibility for learning.	(High) Need proficient levels of knowledge and skill, must take initiative and accept responsibility for their learning.
Control of Classroom Tasks	(Moderate-High) Works best with educators who are willing to control the content presented.	(Moderate) Important for educator to periodically empower learners to show what they can do.	(Low-Moderate) Educator to get tasks going then turns the processes of learning over to the learners.	(Low) Important for educator to move into the background and serve as a consultant and resource person.
Willingness of Educator to Build/Maintain Relationships	(Low) Classroom tasks do not normally demand development of relationships with learners or help for learners to do so with classmates.	(Moderate-High) Effective models are liked and respected by learners.	(Moderate-High) Good relationships facilitate the educator's role as consultant and make learners willing to share their ideas.	(Low-Moderate) Learners must manage their own interpersonal processes in groups, good learner/educator communication needed.

Source: Grasha, A. (1996). *Teaching with Style*. Pittsburgh, PA: Alliance Publishers.
Available: **http://www.indstate.edu/ctl/styles/tstyle.html**

What is andragogy?

Knowles (1984) defines andragogy as "the art and science of helping adults learn" (p. 38-39) and contrasts it with pedagogy which is concerned with helping children learn. Andragogy assumes individuals become adults at the point at which they achieve a self-concept of essential self-direction and develop a deep psychological need to be perceived by others as being self-directing.

Table 14: Adult Learning Principles: Assessment of the Learner, p. 98

Table 15: Qualities of Learners, p. 99

Table 16: Perry's Scheme of Intellectual Development, p. 100

Table 17: Women's Ways of Knowing, p. 101

Step 3: Assess the Learner

Learners learn in a variety of ways. Acknowledging this involves the recognition of the following factors:

▸ Principles of adult learning;
▸ Concepts of Benner's Model of Novice-to-Expert;
▸ Learning styles; and
▸ Motivational factors.

Principles of Adult Learning (Andragogy)

Understanding how adults approach learning can help you to plan programs. According to Knowles (1984) and Knox (1986) there are four basic characteristics that distinguish adults from children in regards to their learning. Adults:

1 Are self-directed;
2 Have experience to apply to the learning;
3 Have a need to address real-life problems; and
4 Have a need to apply learning immediately in order to value the learning.

As the educator you should assess learners based on these characteristics. *Chapter 6: Enrichment Materials,* contains suggestions as to how to assess learners according to principles of adult learning and other learner qualities (*Tables 14-17,* **p. 98-101**).

Benner's Model of Novice-to-Expert:

Benner's work on learner development and progression is important for you to consider when planning an educational session. Nurses with varied experiences will require different educational strategies when presented with BPG.

Patricia Benner (2001) describes five stages of nurse development. These are:

1 Novice;
2 Advanced beginner;
3 Competent;
4 Proficient; and
5 Expert.

Within each of the stages of development there are performance progressions that describe a nurse's thought process evolution. *Table 3* describes the characteristics of each of Benner's levels of proficiency and includes strategies you can employ to assess learners at each level.

Table 3: Benner's Model of Novice-to-Expert: Strategies for Assessment

Level of Proficiency	Characteristics	Strategies for Assessment
Novice	▲ No experience with situations in which they are expected to perform ▲ Rigid adherence to taught rules or plans ▲ Little situational perception ▲ Unable to use discretionary judgment ▲ Focuses on pieces rather than the whole	**Educator** ▲ Conduct a self-assessment to determine your level of knowledge related to BPG in general, as well as your level of knowledge of specific BPG. This may require you to attend an RNAO workshop on BPG, or consult with a BPG expert (educator may need a BPG coach/mentor). ▲ Reflect on your teaching style and how applicable it is to the needs of the learner and to the BPG content. ▲ According to your self-assessment, identify if there are experts available to assist with the teaching plan objectives. **NOTE** The situation is problematic when the educator is both a novice educator and a novice with BPG. In this situation, you should not be the primary instructor without a mentor or coach. **Learner** ▲ Prior to the learning event the educator will need to conduct a self-assessment of the learners' knowledge of BPG. If they are novices, questions will be related to their general awareness or attitudes towards BPG. ▲ The educator will conduct an assessment of learner preferences taking into consideration learning styles (i.e., visual, auditory, kinesthetic). **NOTE** This assessment would be completed regardless of the level of learner. It is useful to note that novice learners require multiple levels of reinforcement (e.g., simple pictures and diagrams can assist in conveying information about complex concepts).
Advanced Beginner	▲ Guidelines for action based on attributes or aspects ▲ Situational perception still limited ▲ Can demonstrate marginally acceptable performance ▲ Notices change but cannot cope with it ▲ All attributes and aspects are treated separately and given equal importance ▲ Needs help setting priorities ▲ Unable to see entirety of a new situation	**Educator** ▲ Once you have either attended a BPG workshop or gained the basic knowledge of BPG then you can conduct a more in-depth self-assessment of your learning needs. You may seek out RNAO BPG Champions to assist you in your self-appraisal, (i.e., feedback on your teaching plan, observe your teaching of BPG). **Learner** ▲ When assessing advanced beginners, you may include questions about their knowledge of BPG and/or a specific BPG. The learner assessment should include questions about recommendations in the BPG (e.g., a pre-test prior to a workshop to determine knowledge of BPG in order to avoid re-teaching). **NOTE** The challenge is that rarely are all learners at the same level of competency. This challenge can also be an asset if you assess the learners in advance and construct the learning event so that more advanced learners can assess and help novice learners.

...

Level of Proficiency	Characteristics	Strategies for Assessment
Competent	▸ Aware of all the relevant aspects of a situation ▸ Sees actions at least partly in terms of long-term goals ▸ Conscious of deliberate planning ▸ Can set priorities ▸ Critical thinking skills are developing	**Educator** ▸ Once you gain a level of competency with BPG, your assessment will extend to the transfer of knowledge from the classroom to the clinical setting. **Learner** ▸ When assessing competent learners, a detailed assessment of their learning needs should be conducted to avoid re-teaching and to begin the process of application of BPG to the clinical environment. Learners can keep a log of their learning that will assist in identifying their needs.
Proficient	▸ Sees situations holistically rather than in terms of aspects ▸ Sees what is most important in a situation ▸ Perceives deviations from the normal pattern ▸ Decision-making less laboured ▸ Uses guidelines and maxims for guidance	**Educator** ▸ As you become more proficient with BPG, your assessment is more focused on the learner and how to maximize the learning of BPG in more complex clinical settings. **Learner** ▸ Learners at this stage will spontaneously assess their learning needs and communicate these needs freely to the instructor.
Expert	▸ No longer relies on rules, guidelines or maxims ▸ Intuitive grasp of situations based on deep tacit understanding ▸ Analytic approaches used only in novel situations or when problems occur ▸ Vision of what is possible	**Educator** ▸ As an expert educator of BPG you will act as a mentor for others teaching BPG and can actively assess the learning needs of novice educators. **Learner** ▸ Expert learners will be totally self-directed and can take on teaching/mentoring roles and can assess the needs of novice learners (e.g., RNAO BPG Champions can assist the educator in the assessment of the BPG learning event).

Reference: Benner, P. (2001). *From novice to expert: Excellence and power in clinical nursing practice.* New Jersey: Prentice Hall.

Assessing Learning Styles

Learners approach the tasks of learning in many different ways. There are a number of ways of identifying learner preferences for teaching/learning strategies, based on a variety of theoretical approaches. One that has proved useful for assessing learners is based on whether learners prefer seeing (visual), hearing (auditory) or doing (kinesthetic) (Rose, 1987). These ways of learning are not mutually exclusive; however, most learners will have a predominant learning style. Two learning style assessments (*Accelerated Learning Assessment* and *Modality Preference Inventory)* based on this approach are located in the *Tips, Tools and Templates* (**p. 30-31**).

Consideration of the learning style is necessary as this will influence teaching techniques. It is also important to note that individual teaching techniques have an impact on learner retention. The following pyramid (*Figure 2*) illustrates learner retention when teaching strategies address the three learning styles. The more active the learning, the better the retention.

Learning Styles Assessment, p. 30

lecture

reading

audio-visual

demonstration

discussion group

practice by doing

teach others/immediate use

increased retention

Figure 2: The Learning Pyramid
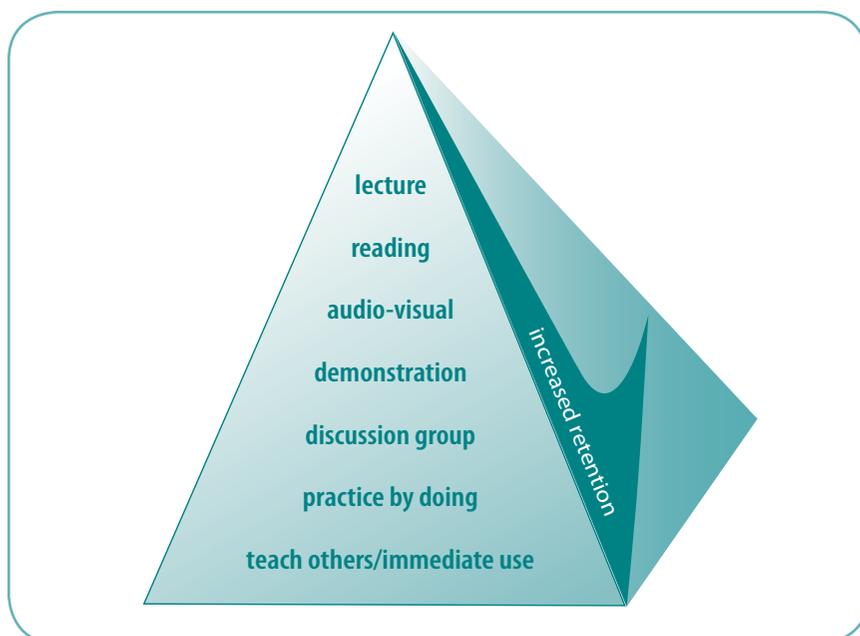
Source: National Training Laboratory (NTL) (1963). The learning pyramid. Alexandria, VA: Author. Available: **http://jwilson.coe.uga.edu/emt668/emt668.folders.f97/rhodes/ LearningPyramid.html**. Reproduced with permission.

Assessing Motivational Factors

As well as addressing learning styles it is necessary to consider how motivational factors influence the learner. The learner may be motivated by a goal, the activity itself, or the desire to learn. *Table 4* summarizes these motivations and the factors that contribute to the motivation. This will help you as an educator to understand the impact these motivations may have on learning, participation and retention. (For more information on learner qualities see *Chapter 6: Enrichment Materials – Table 15*, **p. 99**)

Table 15: Qualities of Learners, p. 99

Table 4: Assessment of the Factors Motivating the Learner

Learner Motivation	Motivational Factors	Assessment of the Learner
Goal orientated	**External expectations** ▸ To comply with instructions from someone else ▸ To carry out the expectations of someone with formal authority ▸ To carry out the recommendation of some authority **Professional advancement** ▸ To give me higher status in my job ▸ To secure professional advancement ▸ To keep up with the competition	▸ Be aware of the influence of formal authority on learners. If the learner respects the authority figure the response to learning will most likely be enthusiastic, but if the learner does not respect the authority figure there will most likely be resistance at least initially. ▸ Learners who are motivated by advancement will be very competitive and dedicated to the learning, but once advancement is secured they could opt out of the learning.
Activity orientated	**Social Relationships** ▸ To fulfill the need for personal associations and friendships ▸ To meet new people and make new friends **Escape/stimulation** ▸ To get relief from boredom ▸ To get a break from work ▸ To provide a contrast to the rest of my life	▸ Be aware that learners who value social relationships will want learning environments that promote dialogue, and that these learners can become a distraction to others when their social needs are not met. ▸ Learners who attend to escape can initially be superficially engaged. But if they are under-stimulated and the learning environment is stimulating to them they can be converted to dedicated and enthusiastic learners.
Learning orientated	**Cognitive interest** ▸ To learn for the sake of learning ▸ To seek knowledge for its own sake to satisfy an inquiring mind **Social Welfare** ▸ To improve my ability to serve mankind ▸ To prepare for service to my community ▸ To improve my ability to participate in community work	▸ Learners who crave knowledge can initially be very motivated and productive, but if their thirst for knowledge is not quenched, and they pull ahead of other learners, they can become bored and move on to other learning challenges. This group of learners would be described as dedicated to lifelong learning. ▸ Learners of this type are the most altruistic of learners and will be dedicated to the learning and strive for higher knowledge.

Source: Cross, P. K. (1981). *Adults as learners: Increasing participation and facilitating learning.* San Francisco: Jossey-Bass.

Step 4: Conduct a Learning Needs Assessment

Now that you have an understanding of adult learning principles, Benner's Model, learner styles and learner motivation, it is time to do a learning needs assessment to determine the learner's level of knowledge of BPG. A *Learner Needs Assessment* is located in *Tips, Tools and Templates* at the end of this chapter (**p. 32**). Assessment of the learner is a continual process that takes place throughout the entire BPG learning event.

Based on the learner's present level of knowledge of BPG and the level of knowledge desired, you can identify what should be achieved during and after the session. At the end of the learning event, you should assess the progress and future directions for both the learners and the learning event. A checklist for the assessment of the learning event can be found in *Tips, Tools and Templates* (**p. 33**).

Step 5: Assess the Group

Now that you have assessed individual learners, you will need to adapt your strategies to address the needs of a group of learners. The experiential makeup of the group is the key to successful planning, implementation and evaluation of an educational session. If your group is homogeneous in their level of proficiency and experience with BPG, then your strategies will be quite different from a group that has diverse proficiency and BPG experience.

Key Points

▸ An environmental assessment must be conducted prior to the BPG learning event (Please refer to the RNAO *Toolkit: Implementation of Clinical Practice Guidelines: Chapter 3 Assessing Your Environmental Readiness* p. 39-46).

▸ Assessment of the BPG learning event inclusive of the educator, learner and context is a continuous process that begins prior to the learning event (pre-assessment), continues during the event (ongoing assessment), and culminates at the conclusion of the event (evaluation).

▸ Educators have individual philosophies and styles of teaching that can be adapted to match the learner(s) styles and the context (setting) of the BPG learning event.

▸ Adult learners have varying levels of expertise, distinct learning styles, individual preferences, and internal and external motivators that need to be assessed to ensure a successful BPG learning event.

▸ Learning needs assessments can be conducted utilizing a variety of tools consistent with the needs of the BPG learning event, the educator and the learner in either an academic or clinical setting.

▸ Finally, a group assessment of the group of learners will allow the educator to tailor the strategies for planning the learning event.

Now you are ready to plan your learning event.

WWW

Teaching as an activity does not exist: or at least it is meaningless to think about it in isolation. There is always an interaction between the Teacher, the Learner and the Subject being taught (Atherton, 2003). For a further discussion regarding this interaction go to **http://www.dmu. ac.uk/~jamesa/learning/dissonance. htm**

Learner Needs Assessment, p. 32
Assessment of the Learning Event
   – Checklist, p. 33

Conducting an environmental
   assessment, RNAO *Toolkit,* p. 39-44.

Academic Setting

Cynthia and her colleagues in the Faculty Workshop planning group conducted a formal needs assessment of all the faculty members to identify their current knowledge and understanding of the RNAO BPG. They adapted and used a survey that is located in the *Tips, Tools and Templates* at the end of this chapter (**p. 29**).

The Curriculum Committee also wanted to proceed with integrating the BPG into the educational curriculum. They discussed how faculty would assess students' and preceptors' learning needs when planning learning events for the students. Cynthia agreed to pilot the assessment strategies for her fourth year students taking Advanced Nursing Concepts. The fourth year students had previously taken an introductory course in research and had preliminary exposure to the principles of evidence-based practice. Cynthia used the *Learner Needs Assessment* located in *Tips, Tools and Templates* (**p. 32**) to assess the students' knowledge. She found that a third of the students had heard of BPG but had not accessed them. Another third of the students had visited the RNAO website and browsed through some of the guidelines. Lastly, a third of the students had had clinical placements at one of the RNAO Best Practice Spotlight Organizations where they had experienced the implementation and evaluation of a number of BPG.

Cynthia also reflected on her own teaching style. In her previous year teaching the courses, she noted that her style was largely a lecture style with frequent questions and answers peppered through the session. She identified that she wanted to review how she taught the courses and develop new strategies (see *Chapter 5: Academic Setting Scenario*).

Lastly, Cynthia realized that the RNAO *Toolkit: Implementing Clinical Practice Guidelines* (RNAO, 2002) could provide guidance for implementing institutional change in the Faculty of Nursing. She found the chapter on environmental readiness assessment particularly helpful. She identified the barriers and facilitators for integrating best practice guidelines into her fourth year course.

Educator's Self-Assessment of BPG Knowledge, p. 29
Learner Needs Assessment, p. 32

Practice Setting

John prepared himself by assessing himself on his knowledge of BPG using the *Educator's Self-Assessment of BPG Knowledge* located in *Tips, Tools and Templates* (**p. 29**). His assessment revealed that his knowledge of BPG in general and of DDD in particular needed upgrading. He began to increase his knowledge of BPG by reading some of the articles that were referenced in the Educator's Resource. He also ordered hard copies of the two DDD BPG. He asked the librarian to retrieve a number of articles that were listed in the references of the DDD guidelines so he could read some of the original evidence sources. He also browsed through other guidelines that were provided on the CD included in the Educator's Resource to help him upgrade his knowledge.

In assessing his own teaching style John discovered that he mainly uses a personal/facilitator style of teaching (coaching/ mentoring) and asks for return demonstration in the clinical setting. He decides on three methods to evaluate himself (see *Chapter 5: Practice Setting Scenario*).

John's assessment of the selected Resource Nurses as learners revealed that they:
- ▸ Are highly motivated;
- ▸ Have varying degrees of understanding and familiarity with BPG;
- ▸ Have strong clinical problem solving skills; and
- ▸ Have some experience in educational roles (i.e., as mentors and preceptors).

Educator's Self-Assessment of BPG Knowledge, p. 29

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Educator's Self-Assessment of BPG Knowledge

Source: Algonquin College, University of Ottawa, La Cité Collégiale. (2004). *RNAO Best Practice Guidelines Implementation in Education Project 2004.* Adapted with permission.

Consider the following statements. Do you agree with them? To what degree?
Do you feel confident in your familiarity with BPG?

For those who feel confident, you are ready to assess the learner.

For those who do not feel confident, there are resources to enhance your knowledge of BPG so that you will be able to incorporate them into your learning event.
CD1 (BPG, RNAO *Toolkit*), CD3 (*Introduction to RNAO Best Practice Guidelines* (PPT))

1　I am knowledgeable about BPG.

_____
_____
_____

2　I include BPG in my teaching.

_____
_____
_____

3　I can explain why RNAO BPG is beneficial for nursing in the academic and/or clinical setting.

_____
_____
_____

4　I am able to incorporate BPG recommendations into my learning event.

_____
_____
_____

5　If fully implemented, the BPG recommendations would make a significant change in the way nurses care for clients.

_____
_____
_____
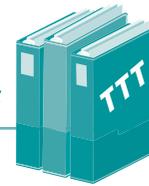
Learning Styles Assessment

1. Accelerated Learning Assessment

This chart helps you determine your learning style; read the word in the left column and then answer the questions in the successive three columns to see how you respond to each situation. Your answers may fall into all three columns, but one column will likely contain the most answers. The dominant column indicates your primary learning style.

When you..	See (Visual)	Hear (Auditory)	Do (Kinesthetic)
Spell	Do you try to see the word?	Do you sound out the word or use a phonetic approach?	Do you write the word down to find if it feels right?
Talk	Do you sparingly but dislike listening for too long? Do you favour words such as *see, picture,* and *imagine*?	Do you enjoy listening but are impatient to talk? Do you use words such as *hear, tune,* and *think*?	Do you gesture and use expressive movements? Do you use words such as *feel, touch,* and *hold*?
Concentrate	Do you become distracted by untidiness or movement?	Do you become distracted by sounds or noises?	Do you become distracted by activity around you?
Meet someone again	Do you forget names but remember faces or remember where you met?	Do you forget faces but remember names or remember what you talked about?	Do you remember best what you did together?
Contact people on business	Do you prefer direct, face-to-face, personal meetings?	Do you prefer the telephone?	Do you talk with them while walking or participating in an activity?
Read	Do you like descriptive scenes or pause to imagine the actions?	Do you enjoy dialogue and conversation or hear the characters talk?	Do you prefer action stories or are not a keen reader?
Do something new at work	Do you like to see demonstrations, diagrams, slides, or posters?	Do you prefer verbal instructions or talking about it with someone else?	Do you prefer to jump right in and try it?
Put something together	Do you look at the directions and the picture?		Do you ignore the directions and figure it out as you go along?
Need help with a computer application	Do you seek out pictures or diagrams?	Do you call the help desk, ask a neighbor, or growl at the computer?	Do you keep trying to do it or try it on another computer?

Source: Rose, C. (1987). *Accelerated learning*. New York: Bantam Doubleday Dell Publishing Group Inc.
Available: **http://www.chaminade.org/inspire/learnstl.htm**. Reproduced with permission.
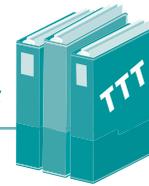
2. Modality Preference Inventory

Keep track of your score. Read each statement and select the appropriate
number response as it applies to you. Often (3), Sometimes (2), Seldom/Never (1).

Visual Modality

I remember information better if I write it down.
Looking at the person helps keep me focused.
I need a quiet place to get my work done.
When I take a test, I can see the textbook page in my head.
I need to write down directions, not just take them verbally.
Music or background noise distracts my attention from the task at hand.
I don't always get the meaning of a joke.
I doodle and draw pictures on the margins of my notebook pages.
I have trouble following lectures.
I react very strongly to colours.

TOTAL

Auditory Modality

My papers and notebooks always seem messy.
When I read, I need to use my index finger to track my place on the line.
I do not follow written directions well.
If I hear something, I will remember it.
Writing has always been difficult for me.
I often misread words from the text-(i.e.,"them" for "then").
I would rather listen and learn than read and learn.
I'm not very good at interpreting an individual's body language.
Pages with small print or poor quality copies are difficult for me to read.
My eyes tire quickly, even though my vision checkup is always fine.

TOTAL

Kinesthetic/Tactile Modality

I start a project before reading the directions.
I hate to sit at a desk for long periods of time.
I prefer first to see something done and then to do it myself.
I use the trial and error approach to problem solving.
I like to read my textbook while riding an exercise bike.
I take frequent study breaks.
I have a difficult time giving step-by-step instructions.
I enjoy sports and do well at several different types of sports.
I use my hands when describing things.
I have to rewrite or type my class notes to reinforce the material.

TOTAL

Total the score for each section. A score of 21 points or more in a modality indicates a strength in that area.
The highest of the 3 scores indicates the most efficient method of information intake. The second highest
score indicates the modality which boosts the primary strength. For example, a score of 23 in the visual
modality indicates a strong visual learner. Such a learner benefits from text, from filmstrips, charts, graphs,
etc. If the second highest score is auditory, then the individual would benefit from audio tapes, lectures, etc.
If you are strong kinesthetically, then taking notes and rewriting class notes will reinforce information.

Learner Needs Assessment

Source: Algonquin College. University of Ottawa. La Cité collégiale. (2004). *RNAO Best Practice Guidelines Implementation in Education Project 2004*. Adapted with permission

Knowledge of RNAO BPG

1   I am aware of (indicate number) BPG.

- [ ] 0
- [ ] 1-3
- [ ] 4-6
- [ ] 7-9
- [ ] 10 or more

2   I have read the recommendations of at least one BPG.

- [ ] Yes
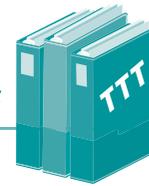- [ ] No

3   I learned about BPG from (indicate all that apply):

- [ ] Clinical courses
- [ ] Nursing Theory Courses
- [ ] RNAO website
- [ ] Clinical practice area where I work
- [ ] Inservices/workshops
- [ ] Colleagues
- [ ] Other sources (please specify)

4   I believe that the quality of client care can improve through the implementation of BPG recommendations.

- [ ] Yes
- [ ] No

Assessment of the Learning Event – Checklist

Steps	Assessment Activities	Yes	No
Step 1 Assess the environment (organizational readiness) depending on your setting (academic or practice)	Please refer to the RNAO *Toolkit : Implementation of Clinical Practice Guidelines: Chapter 3: Assessing Your Environmental Readiness* p. 39-46.		
Step 2 Assess the educator	Have you done a self-assessment on your philosophy/teaching style? Have you compared your teaching style with your learner(s) style? Have you assessed your knowledge in regards to BPG (i.e., Novice-to-Expert)? Have you adapted your teaching style to accommodate your learner(s) and the BPG content? Have you identified BPG Champions/Expert that can assist you?		
Step 3 Assess the learner (students, staff)	Have you assessed your learner(s) learning styles? Have you assessed their learning needs in relation to preferences, motivators and adult learning needs? Have you assessed your learners experience with BPG (i.e., Novice-to-Expert)?		
Step 4 Conduct a learning needs assessment	Have you conducted a needs assessment of the following: ▸ Environment? ▸ Educator? ▸ Learner? Have you utilized a variety of assessment tools to meet the needs of your setting (academic or clinical)?		
Step 5 Assess the group	Have you conducted an assessment of the group as a whole? Does your group have homogeneous proficiency in experience and BPG knowledge? Do your teaching strategies address the learning styles of the homogeneous group? Does your group have diverse proficiency in experience and BPG knowledge? Have you chosen a variety of teaching strategies to accommodate the diverse experience of the group?		

Planning the Learning Event

What is this chapter about?

In order to have a successful learning event, there must be a plan. The steps you will take to plan the learning event are:

1 Integrate BPG content into the curricula of an academic or practice setting;

2 Identify facilitators and driving forces to integration of BPG content;

3 Identify barriers to integrating BPG content and strategies to overcome them;

4 Identify partnerships for BPG education;

5 Facilitate the integration of BPG content into learning events;

6 Identify and allocate resources necessary for a successful learning event;

7 Plan for content;

8 Develop a learning plan; and

9 Plan for contingencies.
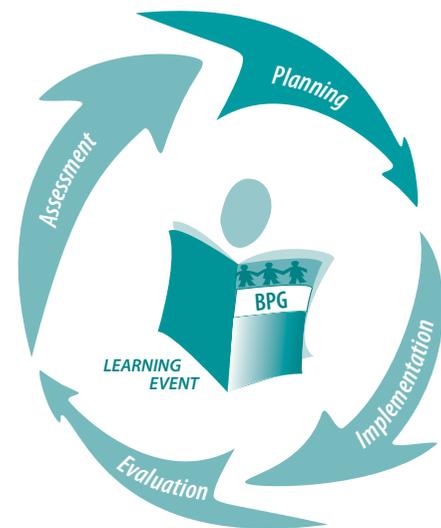
What is curriculum?

A curriculum is a framework that identifies what to include, exclude, the level of achievement, and the rationale for a learning event. It identifies the key approaches and concepts to include the sequencing of subject matter, teaching and evaluation strategies and their inter-relationships (Iwasiw, Goldenberg & Andrusyszyn, 2005).

What is Curriculum in an Academic Setting?

It is:

▸ Complex;
▸ Reflects the values and philosophy of the school; and
▸ Is approved through internal and external review processes.

What is Curriculum in a Practice Setting?

It is:

▸ Focused on client outcomes;
▸ Reflects the values, culture, and priorities of the organization; and
▸ Responds to identified needs and trends.

Step 1: Integrate BPG Content into the Curricula of an Academic or Practice Setting

The curriculum, whether in the academic setting or as the learning strategy for a practice setting, is the overall plan for the education of learners in the institution or program. BPG represent a small part of this greater whole. Consider how BPG fit into the larger picture and identify who needs to be involved to incorporate BPG throughout the program. Examine where BPG can be used as a theme or exemplar in existing courses or in-service plans. Identify how BPG fit the philosophy and values that underlie the existing curriculum and use this knowledge in planning to implement BPG. Once you know how BPG can be introduced into the program, you are ready to plan appropriate learning events.

Step 2: Identify Facilitators and Driving Forces for the Integration of BPG Content

When planning a learning event you will want to consider the factors that promote the introduction of BPG content. The following is a summary of some of the facilitators and driving forces that may influence the integration of BPG in any setting.

Identify from the following the facilitators and driving forces that are applicable to your setting:

▸ Accreditation expectations
  • Canadian Association of Schools of Nursing (CASN)
  • Canadian Council on Health Services Accreditation (CCHSA);
▸ Professional practice standards
  • College of Nurses of Ontario (CNO);
▸ Changes to entry practice requirements
  • Bridging theory-to-practice gap;
▸ Increased awareness and appreciation of evidence-based practice (EBP);
▸ Social accountability for quality outcomes; and
▸ Fiscal accountability for quality outcomes.

Once you have identified which factors apply to your setting, use them as an impetus for change. They may provide the external motivation necessary for learners who do not have internal motivation, as identified in Chapter 2.

Step 3: Identify Barriers to Integrating BPG Content and Strategies to Overcome Them

Now that you have considered the facilitators for change it is important that you also consider the barriers. Any change to the status quo may present challenges. Ritchie (Billings & Halstead, 2005) identified several factors attributable to faculty resistance to curricular changes. These factors may also hold true in the clinical setting. *Table 5* outlines strategies to help overcome the common barriers to curriculum change.

Table 5: Barriers to Integration and Strategies to Overcome Them

Barriers	Strategies to Overcome Barriers
Fear of loss of control	Emphasize that BPG fit into the curriculum and practice and are not taking it over. BPG are only one example of EBP, not a comprehensive approach to curriculum.
Misunderstanding or confusion about new vocabulary and jargon, due to lack of information	Meet with educators or staff to review BPG, EBP and reassure them that BPG fit into their present approaches.
Perception of lack of skill to progress with new demands on time and energies	Many nurses discover that their practice already reflects BPG recommendations. Pointing this out may raise acceptance.
Differing views about what needs to be done	Meet to discuss common goals and strategies.
Lack of motivation to study the change	Appeal to values of high quality care, integration of research into teaching students and practice expectations.
Lack of perception of a need to change (if it's not broken, don't fix it)	Explore what is already in place, identify where changes are indicated.
Too many changes and too many demands related to the change process	Emphasize how BPG implementation fits into existing practice and changes already underway.
Adversarial relationship with leader	Develop coalitions at all levels to promote change from the bottom up, not top down. See RNAO *Toolkit: Chapter 2* for stakeholder involvement.
Idea that "no on can tell me what to do"	Appeal to values of best possible care and evidence as basis of practice.
Threat to change current social support systems	Involve entire teams of educators or practitioners so that social support will be maintained.
Lack of resources	Mobilize resources before starting BPG implementation.
View that formal methods used to facilitate change are barriers rather than helps	Use informal as well as formal strategies within work teams and course groups.
Lack of rewards	Identify intrinsic and extrinsic methods to recognize exemplary practice and implementation of BPG.

Adapted from: Billings, D.M. & Halstead, J.A. (Eds.). (2005). *Teaching in nursing: A guide for faculty* (2nd Ed). St. Louis, MO: Elsevier Saunders.

Step 4: Identify Partnerships for BPG Education

Aside from being prepared to overcome any barriers that may occur, you can also seek support from other sources when introducing BPG into curricula. Nursing is a collaborative discipline that frequently relies on partnerships. Partnerships may involve collaboration with educational facilities, clinical facilities, other health disciplines and the community. *Table 6* describes some possible partnerships that may assist in incorporating BPG into educational activities.

Perceptorship Resource Kit
www.rnao.org

Table 6: Partnerships for BPG Education

Partner	Description	Strategies to Promote Partnerships for BPG Education
Collaborative Educational Partners	College and university partners. Common goals for success of students agreed to by all partners.	▶ All partners should agree to integration ▶ BPG integration in individual courses must be discussed by curriculum committees to ensure consistency and lack of repetition. ▶ Faculty workshops ▶ Encourage faculty to become BPG Champions
Clinical Agencies	A clinical partner where students are provided with an opportunity for placement.	▶ Workshop for preceptors ▶ Addition of BPG information in RNAO *Preceptorship Resource Kit* (RNAO, 2004). (Available: **www.rnao.org**) ▶ Assess partners' utilization of BPG in practice
Community Collaboration	Establish, or work with existing advisory committee to discuss BPG in curriculum	▶ Inform community agencies of the integration of BPG ▶ Ask for community stakeholder support in clinical agencies
Interdisciplinary Collaboration	Physicians, all nursing staff, social workers, occupational and physical therapists, all unit staff	▶ Workshops for all staff regarding plan for the adoption of BPG into unit practice. ▶ Appeal to the value of EBP and the role of BPG in supporting all disciplines ▶ Encourage staff to become BPG Champions

Step 5: Facilitate the Integration of BPG Content into Learning Events

Now that you have planned for the learning event considering the facilitators, barriers and partnerships you are ready to consider the learners and their motivation. Hull, Romain, Alexander, Schaff, & Jones (2001) suggest a framework for facilitating curriculum revision using Lancaster's (1985) six Cs of collaborative research. *Table 7* demonstrates how these six Cs can be used to integrate BPG content into curriculum.

Table 7: Curriculum Revision and its Relevance to BPG

Factor	Elements	Relevance to BPG
Commitment Physical and emotional investment of time, energy and resources	▶ Requires support from: • Administration • Partners • Faculty and students	▶ Encourage staff/faculty to become a BPG Champion ▶ See RNAO *Toolkit, Chapter 2* regarding stakeholder involvement. ▶ Evaluate level of interest and possible barriers through the use of a survey ▶ Identify questions and concerns
Compatibility The ability to harmonize and function as a whole	▶ Teamwork ▶ Respect for each other's expertise ▶ Identification of barriers and strategies to be overcome (*Table 5*)	▶ Examine attitudes and biases associated with EBP and BPG ▶ Move towards a common goal: integration of BPG ▶ Work with curriculum or program as a whole not as individual courses or workshops
Communication Effective interpersonal skills	▶ Use of effective techniques	▶ Identify goals and objectives for integration of BPG ▶ Identify or nominate a facilitator: e.g., a BPG Champion
Contribution Each individual provides unique expertise and experience	▶ Task assignments that recognize • Veteran faculty and staff: experience • Novice faculty and staff: innovation • Student involvement	▶ Brainstorming: ways to integrate BPG into learning objectives and learning activities
Consensus Ongoing consensus involves communication, compromise and negotiation	▶ Agreement among faculty, students and partners	▶ Facilitate integration process through collaboration ▶ Identify main issues from survey and address concerns
Credit All members are recognized for their contribution	▶ Rewards for successful integration ▶ Recognition for contribution ▶ Evaluate milestones and attainment of objectives	▶ Enhance buy-in from staff, faculty and students ▶ Evaluate milestones and attainment of objectives

Source: Hull, E., Romain, J., Alexander, P., Schaff, S. & Jones, W. (2001). Moving cemeteries:
A framework for facilitating curriculum revision. *Nurse Educator, 26*(6): p. 280-282.

Integrating BPG into an Academic Setting

In the academic setting, as well as considering the motivation of the learners you also need to consider the type of course being taught. The integration of BPG throughout curricula will promote student acceptance of the philosophy and underlying BPG values as a natural part of their approach to nursing. These values include:

▶ Having an evidence base for practice;

▶ Integrating systematic reviews of evidence into recommendations for practice;

▶ Critical selection of appropriate recommendations for the client and the context; and

▶ Transfering knowledge to the real world of nursing care.

Strategies for the integration of BPG into undergraduate curricula are outlined in *Table 8*.

Table 8: Planning for BPG Integration into the Academic Setting

Academic Course	Strategies for Integration
Research Courses	▸ Use as exemplars of EBP or systematic reviews ▸ Have students assess levels of evidence and critique ▸ Have students recommend other topics for BPG development and provide rationale
Theory Courses	▸ Analyze applicability of utilizing guideline in client's care Examples • First year students may concentrate on assessment • BPG on *Therapeutic Relationships* can enhance content in a Communications course • BPG on *Supporting and Strengthening Families Through Expected and Unexpected Life Events* can be highlighted in courses on family dynamics, child health, gerontology, or maternal/child care.
Clinical Courses	▸ Assess the relevance of the recommendations of a BPG for a specific client or population in a clinical agency.

Table 9: Planning for BPG Integration into the Practice Setting

Educational Exposure to BPG	Strategies for Integration
Staff with knowledge of BPG ▸ Learned in basic education ▸ In-service exposure ▸ Post graduate courses with BPG in curriculum	▸ Encourage staff with previous knowledge to become BPG Champions ▸ Involve BPG Champions in establishing/running BPG workshops ▸ Have staff assess recommendations and decide how they can be implemented on their unit and identify how BPG fit in their scopes of practice. Nurses can work with unregulated care providers to identify how to integrate specific recommendations into the daily care of clients ▸ Encourage Post RN/graduate students to reflect on use of a BPG in their practice and share with staff.
Staff without previous BPG knowledge	▸ Plan in-service education sessions to stimulate change in practice through implementation of a specific guideline or specific recommendations ▸ Increase effectiveness by complementing in-service sessions with follow-up and integration of BPG in the workplace

Integrating BPG into a Practice Setting

In the practice setting, it is important for you to recognize that some nurses have learned about evidence-based practice (EBP) in their undergraduate education; however, they may not have had recent exposure to BPG. For others, basing their care on evidence may be a new concept. Implementing BPG recommendations may require that these nurses change their approach. Research by Estabrooks (1999) and Gerrish

& Clayton (2004) have shown that EBP has not been key in the delivery of nursing care. Nurses rated knowledge of the client as an individual, and their own experience, more highly than research as the basis for decision making related to client care. Strategies to integrate BPG content into the practice setting will be different from approaches for the academic setting. *Table 9* provides suggestions for the integration of BPG content when the learners may or may not have knowledge of BPG.

Step 6: Identify and Allocate Resources Necessary for a Successful Learning Event

The next step in planning involves identifying the resources needed for implementation. Among these resources are time, space, teaching/learning materials, expertise and finances. *Table 10* provides a comparison between the academic and practice setting in terms of these five resources.

Table 10: Resource Considerations

RESOURCE	Academic Setting	Practice Setting
Time	▸ How much time is needed in each course for students to master BPG content? ▸ Can BPG be used as exemplars with material already included? ▸ Is there educator time available for leveling and planning?	▸ How available are learners – can they be released for one hour, for a half day, for a whole day? ▸ Can the group contract to make time available? ▸ Are repeat sessions required? How will you deal with shift work and continuity? ▸ Do you have time for planning? ▸ Experiential learning takes more time than lectures – can you build in that time?
Space	▸ Is the room assigned for a course suitable for small group work? ▸ If needed, can other space be booked?	▸ How difficult is it to book suitable rooms? ▸ Do the furnishings allow flexibility? ▸ What is the optimum space?
Materials	▸ What is needed? e.g., projector, screen, computer, video, printed BPG, handouts, etc. Are they available, or do they need to be developed?	▸ What is possible within the space – e.g. is projection equipment available? ▸ What can be provided for those who cannot attend?
Expertise	▸ What expertise is needed – e.g., content, facilitation, implementation? ▸ What expertise is available?	▸ What expertise is needed – e.g., content, facilitation, implementation? ▸ What expertise is available?
Finances	All the above imply a need for finances. ▸ Will honoraria be required? ▸ Will materials have to be purchased for the school? ▸ Will students have to purchase materials? ▸ Is there a budget?	▸ Will financing be needed for staff time, materials, room rental, honoraria for experts and refreshments? ▸ Is there a budget? ▸ What are actual and "in-kind" budget requirements? Who can provide funding needed?

Step 7: Plan for Content

Now that you have planned for the context of the learning event, including the resources needed, you are ready to plan for the content. When planning for the content of the learning event you need to consider: the learner characteristics, the desired endpoint, the context of the learning event and the BPG content. *Figure 3* is a visual representation of these factors. Each of these factors will help to identify the level of the content. *Chapter 6: Enrichment Materials (Table 18)* contains questions to consider within each of the four factors in order to determine the content of the learning event (**p. 102**).

> If you don't know where you are going,
> you won't know when you've arrived.

Table 18: Questions to Ask, p. 102

Learner Characteristics
Profession
Year
Novice – Expert
BPG Experience

Desired Endpoint
Knowledge
Skills
Attitude

**Appropriate levels
of BPG content**

Learning Event Context
Course sequencing
Threads & Exemplars
Time available

BPG Content
Practice
Education
Administration
Rationales
References
Models

Figure 3: Factors to consider in choosing appropriate content levels

Learner Characteristics

Learners vary in their level of knowledge and experience. Benner's Model of Novice-to-Expert (*Chapter 2*) can be especially helpful in classifying the level of the learners. When planning the content of the learning event it is important to consider the following:

▸ Experience of the learner with BPG;
▸ Educational level of the learner (year in a nursing program, or years of nursing experience);
▸ Professional mix of the learner group (RN, RPN, PSW, MD, allied health staff); and
▸ Homogeneity of the group (whether learners are alike or different).

Chapter 6: Enrichment Materials (Table 19) contains strategies for planning based on the level of the learner (**p. 104**).

Desired Endpoint

In planning your content you need to identify "where you want to go". The desired endpoint may be expressed as a goal, an outcome, an end-in-view, an objective or a competency. For those interested in writing learning objectives, a detailed discussion of Bloom's (1956) taxonomy and tips for writing objectives is included in *Chapter 6: Enrichment Materials* (**p. 103**). In addition, you will also find a tool (*Table 21*) that combines Benner and Bloom's work to help you identify and define endpoints for different levels of learners (**p. 110**).

Learning Event Context

The context of the learning event will vary depending on the environment in which the content is being taught. When planning the content it is important to consider:

▸ Sequencing: where does the content fit in the larger scheme? Is it an introductory or senior level course in a program or have the staff had previous education sessions on this BPG or other BPG?

▸ Thread and exemplars (models, concepts, examples):
  • Has a BPG been presented previously?
  • What is the motivation for presenting the BPG?
    ▸ To improve practice?
    ▸ To promote EBP?
  • Is this BPG going to be utilized in several courses as a thread throughout the program or as an exemplar in one learning event?

BPG Content

A BPG can be taught at varying levels of complexity. When planning the complexity of the content it is important to consider:

▸ The relevance of the specific BPG to the learners;
▸ The relevance of the recommendations within the BPG to the learners and their clients;
▸ The level of influence learners have on administration to promote implementation of recommendations;
▸ The theoretical models that may assist in the learning of BPG content; and
▸ The references or other resources required to augment learning.

Step 8: Develop a Learning Plan

A comprehensive plan, including the key elements of a learning event, is applicable in both academic and practice settings.

Key elements of a learning plan include:

- ▸ Topic;
- ▸ Resources required;
- ▸ Goals of the learning event;
- ▸ Activities to be completed by learners prior to event;
- ▸ Content to be covered;
- ▸ Post-event assignments;
- ▸ Teaching methods and required resources;
- ▸ Contingency plans for untoward events;
- ▸ Evaluation methods; and
- ▸ Changes to implement with the next learning event.

A *Learning Plan Template* can be found in *Tips, Tools and Templates* (**p. 51**).

Learning Plan Template, p. 51

Step 9: Plan for Contingencies

Planning for untoward events will allow you to recover if they do happen. This may be as simple as having an alternate method of presentation, knowing how to have a locked door unlocked, having an alternate/ additional date/time for the event, and knowing who to contact in the event of technical problems.

Murphy's Law: If anything can go wrong, it will!

Key Points

- ▸ Curriculum is an overall plan for a program into which BPG learning events must fit.
- ▸ Planning the learning event involves assessment of the facilitators that can help create an impetus for change and allow integration of BPG.
- ▸ Barriers to change and integration need to be considered and strategies put in place to overcome them.
- ▸ Taking advantage of partnerships can be key to integration while at the same time allow creative use of resources. Partners can:
  - • Provide expert experience to novice educators;
  - • Support dissemination through collaborative teaching; and
  - • Encourage evidence-based practice.
- ▸ Integration must be planned in relation to present content and context, experience and motivation.
- ▸ Possible disruptions require a contingency plan.

Now you are ready to implement your plan.

Academic Setting

Cynthia's goal was to have the fourth year students begin to use BPG in assignments and practice. The students had all taken a research course that emphasized evidence-based practice and the assessment of research. In addition, all the students had done surgical clinical rotations. Although she wanted her students to be aware of the range (breadth) of BPG available, she also wanted them to have the experience of using one in depth.

Cynthia wanted to provide background for her students on the use of RNAO BPG as a form of evidence-based practice. She decided to use a variety of teaching strategies in order to encourage self-directed learning. The outcomes of the learning activity included that students would:

▸ Identify the appropriate BPG for a particular client; and
▸ Identify which recommendation(s) in the specific BPG would meet the client's needs.

To keep herself organized with the various planning tasks, Cynthia used the *Learning Event Checklist* located in *Tips, Tools and Templates* (**p. 52**). Cynthia also used the following learning plan for her class. A blank template is located in *Tips, Tools and Templates* (**p. 51**).

Learning Event Checklist, p. 52
Learning Plan Template, p. 51

Learning Plan Template

Topic

Evidence-based Practice/Nursing Best Practice Guidelines

Introducing BPG into Care Using "Assessment and Management of Pain" BPG

Learning Objectives

1 *Be able to identify BPG appropriate for their clinical placement*
2 *Choose recommendations relevant to their practice using "Pain" BPG*
3 *Incorporate BPG recommendations into care plans and reflect on utility of recommendations for care of a specific patient*

Activities to be completed by the learner prior to the learning event

1 *Go to RNAO BPG website*
2 *Download recommendations from "Assessment and Management of Pain" and bring to class*
3 *Review evidence-based practice (EBP)*

Content to be reviewed during the learning event

‣ *Mini introduction to BPG - CD2 Making it Happen and CD3 - PPT*
‣ *Development and components of BPG*
‣ *Links of BPG to EBP and standards*
‣ *Recommendations for practice and relevance for students*

Post event assignment

Paper on use of BPG in practice

Teaching methodology and resources required

‣ *Mini lecture*
‣ *Group with students possessing various levels of BPG experience in each group*
‣ *Group reports and discussion of strategies for implementation*
‣ *Resources: CD Player, data projector, space for small group work*

Evaluation methods

‣ *Grading of assignments*
‣ *Exam question on BPG utilization*
‣ *Group reports*

Practice Setting

John knows that prior to the workshop he must write a learning plan that includes development of workshop objectives. He determines that at the end of the workshop, desired endpoints will be that the Resource Nurses will:

1 Understand their role as Resource Nurses;
2 Outline the general concepts of BPG;
3 Outline the specific content of the DDD BPG that apply to their individual units;
4 Identify driving forces and barriers to implementing the DDD BPG on their units;
5 Develop strategies to overcome the barriers; and
6 Develop plans for educating and supporting the staff on their units.

Once John has established the learning outcomes, he completes the *Learning Event Checklist* located in *Tips, Tools and Templates* (**p. 52**).

John has considered other partnerships for this project and is aware of Professor Cynthia's expertise in BPG and the care of the elderly. Her consolidation students are placed on the target units and two of their preceptors are Resource Nurses. He decides he would like to partner with Cynthia for education and follow up. He plans to invite her as a guest speaker to the workshop and suggests she work with him in the evaluation of both staff and students' use of BPG.

In addition to the workshop, John plans to have follow-up sessions for the Resource Nurses. These sessions will be held once a month for one hour. The meetings will focus on: Resource Nurse activities; helpful tips; barriers faced; and group suggestions for strategies to overcome barriers. The following is John's learning plan.

Learning Event Checklist, p. 52

Learning Plan Template

Topic

Train the Trainer event for implementing "Screening for Delirium, Dementia & Depression in Older Adults"

Learning Objectives

1. *Explain the role of the Resource Nurse*
2. *Discuss evidence-based practice & its use through BPG*
3. *Identify key phases of BPG development & dissemination*
4. *Discuss the ,major components of DDD project*
5. *Prioritize recommendations suitable for environment*
6. *Identify driving forces and barriers for BPG use on units*
7. *Develop strategies for introducing BPG with staff*

Activities to be completed by the learner prior to the learning event

1. *Review BPG content available on the RNAO website*
2. *Distribute DDD BPG to participants prior to workshop*

Post event assignment

John will observe experiences with BPG implementation and use the monthly meetings with the Resource Nurse to report on, update and share experiences

Teaching methodology and resources required

- *PowerPoint presentation, discussion, handouts, survey*
- *Resources: laptop, projector, PowerPoint program and presentation file, copies of RNAO BPG, handouts (PowerPoint slides/surveys/evaluation forms)*

Evaluation methods

Level 1 *End of workshop questionnaire*

Level 2 *Workshop discussion and development of strategies*

Level 3 *Monthly follow-up and survey of staff three months post-implementation, based on instrument provided by Cynthia*

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Learning Plan Template

Topic

_____

_____

Learning Objectives

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

...

Activities to be completed by the learner prior to the learning event

1 _____

2 _____

3 _____

4 _____

...

Post event assignment

_____

_____

Teaching methodology and resources required

▶ _____

▶ _____

▶ _____

▶ _____

▶ _____

...

Evaluation methods

Level 1 _____

_____

Level 2 _____

_____

Level 3 _____

_____

Learning Event Checklist

Areas of consideration that must be addressed for each event:

Assessment

- ☐ Topic identified
- ☐ Learners identified
- ☐ Self-assessment (educator)
- ☐ Environment assessed (i.e. readiness and timing)
- ☐ Resources required (i.e., time, space, materials, expertise, and budget)

Planning

- ☐ Goals, objectives and key deliverables identified
- ☐ Appropriate strategies chosen (i.e., matching of learners, content and context)
- ☐ Lesson plan developed
- ☐ Evaluation strategies determined
- ☐ Logistics arranged (i.e., space, equipment, catering, registration)
- ☐ Communication strategy (i.e., marketing, negotiation, promotions)
- ☐ Actual event scheduled
- ☐ Participant availability established (staff and students)

Implementation

- ☐ Back up plan in place!
- ☐ Problems anticipated ahead of time

Evaluation

- ☐ Evaluation plan implemented
- ☐ Evaluation results collated
- ☐ Evaluation results communicated to relevant stakeholders
- ☐ Revisions to be incorporated into next learning event.

Resource Planning Template – Academic

RESOURCE	Academic	My Resource Needs
Time	How much time is needed in each course for students to master BPG content? Can BPG be used as exemplars with material already included? Is there educator time available for leveling and planning?	
Space	Is the room assigned for a course suitable for small group work? If needed, can other space be booked?	
Materials	What materials are needed – e.g., projector, screen, computer, video, printed BPG, handouts, etc? Are they available, or do they need to be developed?	
Expertise	What expertise is needed – e.g., content, facilitation, implementation? What expertise is available?	
Finances	All the above imply a need for finances. Will honoraria be required? Will materials have to be purchased for the school? Will students have to purchase materials? Is there a budget?	

Resource Planning Template – Practice

RESOURCE	Academic	My Resource Needs
Time	How available are learners – can they be released for one hour, for a half day, for a whole day? Are repeat sessions required? How do you deal with shift work and continuity? Do you have time for planning? Experiential learning takes more time than lectures – can you build in that time?	
Space	How difficult is it to book suitable rooms? Do the furnishings allow flexibility? What is the optimum space?	
Materials	What is possible within the space – e.g., is projection available? What can be provided for those who cannot attend	
Expertise	What expertise is needed – e.g., content, facilitation, implementation? What expertise is available?	
Finances	Will financing be needed for staff time, materials, room rental, honoraria for experts, and refreshments? Is there a budget? What are actual and "in-kind" budget requirements? Who can provide funding needed?	

Implementing Teaching/Learning Strategies

What is this chapter about?

In order to have a successful learning event, you must use teaching and learning strategies. The steps you will take to implement the learning plan are:

1 Choose teaching/learning strategies; and

2 Implement teaching/learning plan.

Step 1: Choose Teaching/Learning Strategies

When considering a teaching/learning strategy there are three key categories from which to choose: teacher-centred, interactive, or independent strategies. Within each of these categories, there are techniques that can be employed depending on the learning event and the learning environment (*Figure 4*). Following *Figure 4* you will find a more detailed discussion that outlines the main concepts of these categories. Where indicated, further detail can be found in *Chapter 6: Enrichment Materials*.
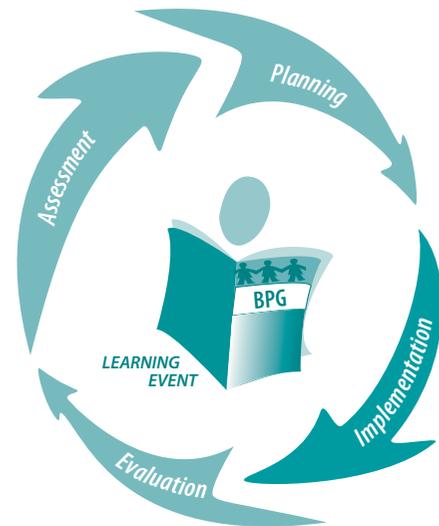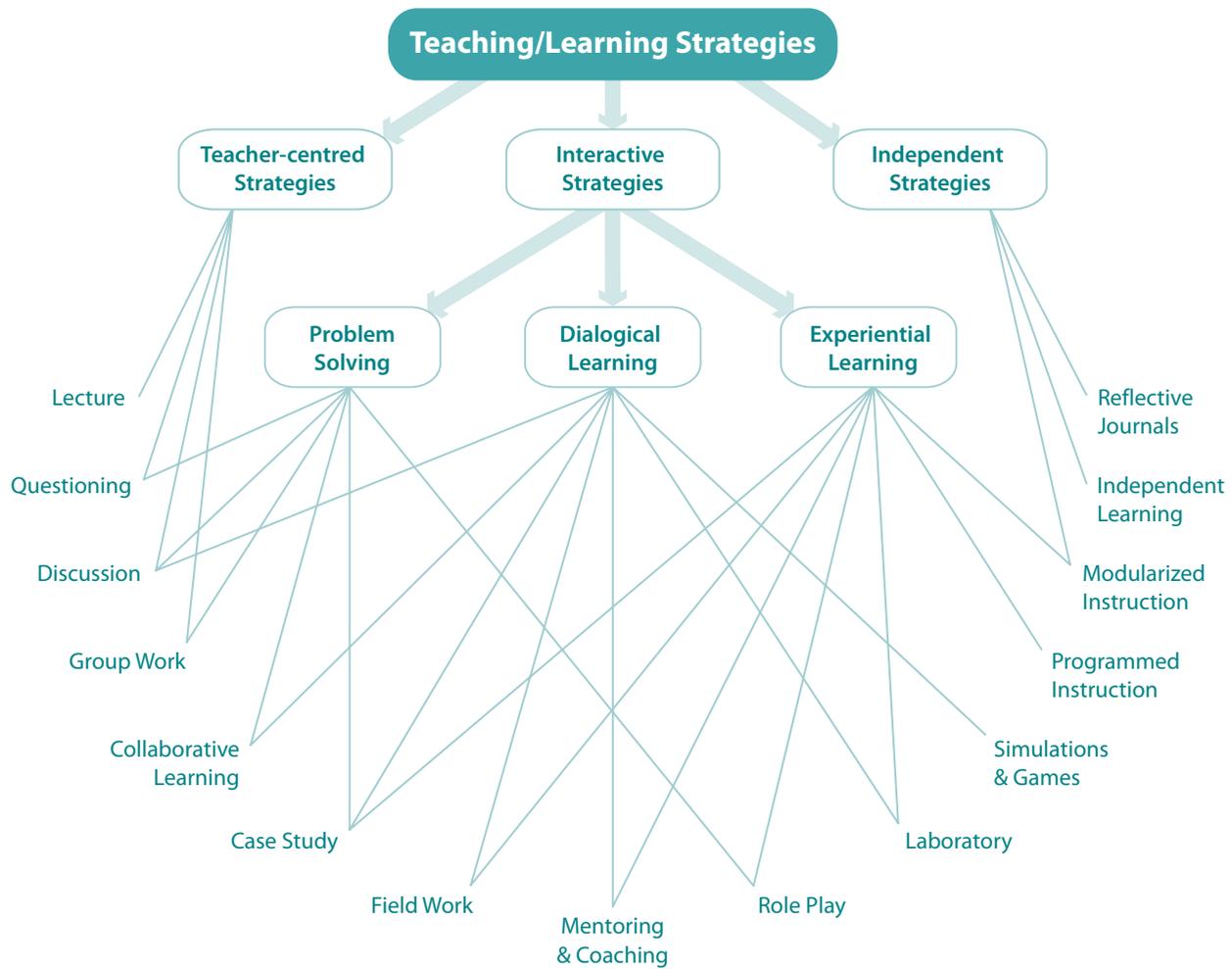
Figure 4: Teaching/Learning Strategies

Teacher-Centered Strategies put the educator at the centre of the learning event. This is the conventional way of teaching. Examples include:
- Lecture;
- Questioning;
- Discussion; and
- Group Work.

Interactive Strategies involve two or more people working together to achieve the learning objectives and outcomes.

a   **Problem Solving** involves either the educator or learner identifying and solving a problem. Learning takes place through the process of solving the problem. Activities may include:
- Questioning
- Discussion
- Group work

"The expert tutor does not direct solutions to a problem, but rather prompts critical thinking amongst the study group members" (Price & Price, 2000, p. 257).

    ▸ Collaborative Learning
    ▸ Case Study
    ▸ Role Play

b **Dialogical Learning** involves two people learning together through various means including:
    ▸ Discussion
    ▸ Collaborative Learning
    ▸ Case Study
    ▸ Field Study
    ▸ Laboratory
    ▸ Simulations/Games
    ▸ Mentoring & Coaching

c **Experiential Learning** involves people learning through acting out real life situations in either a simulated environment or an actual practice setting.
    ▸ Case Study
    ▸ Field Work
    ▸ Mentoring & Coaching
    ▸ Role Play
    ▸ Laboratory
    ▸ Programmed Instruction
    ▸ Modularized Instruction

Independent Strategies involve the individual learner creating the learning event or the interaction material alone.
    ▸ Modularized Instruction
    ▸ Independent Learning
    ▸ Reflective journals

Step 2: Implement Teaching/Learning Plan

As an educator you should incorporate the learning styles that were introduced in *Chapter 2* (visual, auditory, kinesthetic) into the learning event. It is important to adapt your teaching strategies and techniques to maximize the experience for each learner. McDonald & Nadash (2003) also suggest the incorporation of active learning strategies to promote best practice uptake.

Table 11 provides you with learning tips that help to address the three learning styles (visual, auditory and kinesthetic).

Table 11: Learning Tips for Individual Learning Styles

Learning Style	Learning Tips
See (Visual) The visual learner needs to see, observe, record and write	▶ Use graphics to help learning: books, films, pictures, puzzles, videos, computer software ▶ Use colour coding to organize content ▶ Write directions ▶ Use flow charts and diagrams for note taking ▶ Visualize words and facts to be retained
Hear (Auditory) The auditory learner needs to talk and to listen.	▶ Use audio tapes, films, records, videos, radio programs ▶ Participate in debates, seminars, group assignments ▶ Learn by reciting, discussing, interviewing, attending lectures ▶ Ask for oral explanations
Feel (Kinesthetic) The tactic kinesthetic learner needs to do, touch and be physically involved.	▶ Memorize, drill, make decisions while walking or exercising ▶ Use concrete materials: models, lab equipment, subject-related games and puzzles, computer programs ▶ Take frequent breaks in study periods ▶ Learn by touching and doing ▶ Study by writing over and over

Table 12 takes each of the strategies from *Figure 4* and lists techniques that address the three learning styles.

Table 12: Teaching Techniques for Individual Learning Styles

Teaching Strategies	Learning Styles	Techniques			
Lecture	Visual	Pre-reading	Summaries	Diagrams	Case study
		Handouts	Overheads	Picture graph	Self-test
		Statistics	PowerPoint	Algorithms	Films/videos
	Auditory	Narrative stories		Music	
		Mnemonic		Didactic lecture format	
	Kinesthetic	Have learners move around room			
		Interactions			
Questioning	Visual	Word games	Individual project		
		Case study	Self-test		
		Journal club	Online courses		
	Auditory	Mnemonic	Narrative stories		
		Brain storming	Verbal debates		
		Interactions			
	Kinesthetic	Have learners move around room			
		Interactions			
Discussion	Visual	Individual project	Case study	Journal club	
		Algorithms	Online courses	Problem-based learning	
	Auditory	Narrative stories	Brain storming	Verbal debates	
		Mnemonic	Group work		
	Kinesthetic	Have learners move around room			
		Interactions			
Group Work	Visual	Word games	Step-by-step instruction	Diagrams	Case study
		Research projects	Overheads	Picture graph	Journal club
		Problem-based learning	PowerPoint	Algorithms	Online courses
	Auditory	Narrative stories	Brain storming		
		Mnemonic	Verbal debates		
		Interactions			
	Kinesthetic	Practice	Simulated learning vignettes		
		Return demonstration	Have learners move around room		
		Active role-playing	Interactions		
Collaborative Learning	Visual	Word games	Case study		
		Problem based learning	Journal club		
		Diagrams	Films/videos		
	Auditory	Narrative stories	Interactions		
		Mnemonic	Brain storming		
		Music	Verbal debates		
		Didactic lecture			
	Kinesthetic	Practice	Simulated learning vignettes		
		Active role-playing	Have learners move around room		
		Interactions	Return demonstration		
Case Study	Visual	Statistics	Online courses		
		Self-test	Problem-based learning		
	Auditory	Group work			
		Brain storming			
		Interactions			
	Kinesthetic	Simulated learning vignettes			
		Interactions			

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Teaching Strategies	Learning Styles	Techniques	
Field Work	Visual	Research projects Statistics	Individual project Self-test
	Auditory	Brain storming Interactions	
	Kinesthetic	Practice Return demonstration Active role-playing	Simulated learning vignettes Have learners move around room Interactions
Mentoring and Coaching	Visual	Algorithms Journal club	Individual project Online courses
	Auditory	Narrative stories Mnemonic Didactic lecture	Group work Interactions
	Kinesthetic	Practice Return demonstration Active role-playing	Simulated learning vignettes Have learners move around room Interactions
Role Play	Visual	Case study	
	Auditory	Narrative stories Music Interactions	Brain storming Group work
	Kinesthetic	Practice Return demonstration Active role-playing	Simulated learning vignettes Have learners move around room Interactions
Laboratory	Visual	Research projects Experiments Statistics Diagrams	Picture Graphs Self-test Films/videos
	Auditory	Group work Brain storming	
	Kinesthetic	Practice Return demonstration Active role-playing	Simulated learning vignettes Have learners move around room Interactions
Simulations/Games	Visual	Problem-based learning Step-by-step instruction Diagrams	Case study Films/videos
	Auditory	Narrative stories Mnemonic Music	Group work Interactions Brain storming
	Kinesthetic	Practice Return demonstration Active role-playing	Simulated learning vignettes Have learners move around room Interactions
Programmed Instruction	Visual	Research projects Overheads PowerPoint	Case Study Individualized project Self-paced projects
	Auditory	Narrative stories Mnemonic Group work	Verbal debates Interactions Brain storming
	Kinesthetic	Practice Return demonstration	Simulated learning vignettes Interactions Active role-playing

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Teaching Strategies	Learning Styles	Techniques			
Modularized Instruction	Visual	Problem-based learning Step-by-step Instruction Overheads Power Point Case study		Journal club Individualized project Self-paced projects Self-test Online courses	
	Auditory	Narrative stories Mnemonic		Didactic lecture	
	Kinesthetic	Practice Return demonstration Active role playing		Simulated learning vignettes Interactions	
Independent Learning	Visual	Research projects Experiments Problem-based learning	Step-by-step instruction Summaries Diagrams Picture Graph	Case Study Journal club Individualized project	Self-paced projects Self-test Online courses Films/videos
	Auditory	Mnemonic Music			
	Kinesthetic	Practice Return demonstration			
Reflective Journals	Visual	Summaries Self-paced projects	Online courses		
	Auditory	Interactions			

Key Points

‣ A variety of teaching strategies and techniques should be used in order to meet the different learning styles of the learners.

‣ By assessing individual learning styles the educator can identify the predominant style and choose strategies and techniques that best fit the style.

‣ Retention rates vary based on the learning style and the teaching strategy used. Groups are not necessarily homogeneous in their style or retention rate. It is therefore essential to use a combination of strategies when implementing a learning plan in order to maximize the learning experience for the group and for the individual.

Now you are ready to evaluate the learning event.

Academic Setting

Having read *Chapter 4*, Cynthia has identified four main teaching/learning strategies to use with her fourth-year students.

First, Cynthia showed the RNAO video, *Making it Happen* (**CD2**), which provided an introduction to the best practice guidelines. Second, she had the students form small groups to discuss their thoughts and questions raised by the video. Third, Cynthia provided them with a list of RNAO BPG obtained from **www.rnao.org/bestpractices** and gave each student an example of case studies located in the *Tips, Tools and Templates* (**p. 67-70**). She then had the students choose the most appropriate BPG and most appropriate recommendation(s) in the BPG for the client in the case study. She also asked the students to provide rationale for their choices. She plans to bring the groups together in a plenary session to discuss their recommendations and rationale for the case study. Fourth, Cynthia had the students prepare a written assignment.

Assignment

Write a paper of not more than four pages describing one of your client's experiences with pain and identify which recommendations from *Assessment and Management of Pain* (RNAO, 2002) would be appropriate for this client. What strategies would you employ to ensure consistent application of these recommendations and explain your rationale for selection. How would you evaluate the effectiveness of these interventions?

2

Making it Happen

WWW

List of RNAO BPG
www.rnao.org/bestpractices

Sample case studies, p. 67-70

Practice Setting

John and the steering committee meet to plan the workshop.
Cynthia agrees to work with John to deliver the workshop and
to conduct the subsequent evaluation with staff and students.
During the planning phase, John keeps in mind that there are
three types of learners: visual, auditory and kinesthetic.

John and the committee members decide on a highly interactive
one-day workshop using a variety of teaching strategies to
address the various types of learning styles:

1. Independent learning through pre-circulated materials
   and a survey to identify staff challenges in working with
   patients with dementia, delirium or depression;
2. Small group discussion using case studies; and
3. Multi-media such as PowerPoint and videos.

Monthly, John will meet with the Resource Nurses to identify
area-specific facilitators and barriers, successful strategies and
problem-solving techniques.

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Case Study 1 – Year 1

Source: Lakehead University, Thunder Bay, Ontario. Reprinted with permission.

Mrs. K. is a 78-year-old widow, living in a seniors' apartment building. She has a longstanding history of osteoporosis and osteoarthritis. Currently she is taking Celebrex® 100mg daily. Recently her daughter has noticed a change in her usual fastidious housekeeping and attention to her personal care. When questioned by her daughter, Mrs. K. states she is having increased pain with daily tasks and increased fatigue as her sleep is interrupted by the pain.

   1 You are the nurse in her health care team. What other information do you need in order to advocate with her physician for increased pain control?

   2 What constitutes a comprehensive pain assessment? What will help you to validate your assessment?

Dr. P. has prescribed Tylenol® #3 1-2 tabs. Q4h prn, and will see Mrs. K. in the office in 3 weeks time to evaluate treatment efficacy. At the daughter's request he has asked that she be evaluated for homemaking assistance. On your next visit Mrs. K. reports that as long as she takes her Tylenol® every 4 hrs. the pain is much improved and she is able to accomplish some tasks. However, the homemaker reports bruising to both knees and Mrs. K. states she hasn't had a bowel movement for four days and is falling asleep in the afternoon while watching her favourite shows on T.V.

   3 What documentation is necessary in the reassessment process? What information needs to be included in the care plan in order to achieve positive outcomes for Mrs. K.?

   4 What action is the appropriate next step in managing Mrs. K.'s pain?

   5 What other disciplines should be involved at this point? What non-pharmacological intervention could be considered in her management?

Case Study 2 – Year 2

Source: Lakehead University, Thunder Bay, Ontario. Reprinted with permission.

Dakota is a 2-year-old Native Canadian child whose mother has brought him to the nurse with a 3 day history of fever, cough and runny nose. He has been irritable, and not eating, although he has been drinking from his bottle.

1 What is the appropriate tool to use in assessing this child? Who else is necessary to include in gathering information regarding this child and what questions would you ask?

2 What physical assessments should be made to facilitate care planning for this child?

3 What should be included in the care plan with regard to pain management for Dakota?

Tylenol® is prescribed.

4 What physical finding determines the type of analgesic and the dose? What education is necessary for the mother? How will you facilitate information sharing to ensure understanding?

5 What comfort measures would you discuss with the Mom?

How would you evaluate the efficacy of your care plan for this child?

Case Study 3 – Year 3

Source: Lakehead University, Thunder Bay, Ontario. Reprinted with permission.

Mr. B. is a 43-year-old, previously healthy male who presents in emergency with a 2 day history of abdominal pain and vomiting. Investigations reveal an abdominal mass requiring immediate surgical intervention. The surgeon has indicated that the mass is likely malignant, but definite pathology is not yet available. Mr. B. returns from the operating room with a colostomy and a nasogastric (NG) tube. His wife is very anxious, asking questions about diagnosis, treatment plans and how long he will be off work.

1   Who would you include in the treatment plan?

2   After three days it is clear his pain is escalating. He is receiving IV Demerol® and the nurses are questioning why he would require more medication. What questions would you ask him in assessing his pain? What would be a more appropriate pain medication at this point in his recovery?

The doctor changes Mr. B.'s analgesic to regular IV morphine. He is more comfortable and tolerating sips of fluids and his NG tube is removed that night. Two days later his morphine is changed to oral and his wife expresses a concern about the amount of morphine he is still taking and the fact that he is sleeping so much of the time. His colostomy has not been active for three days and he is experiencing increased nausea.

3   How would you address the wife's concerns and the patient's changing symptoms?

4   With a few minor adjustments to his medication he is comfortable and more alert but he is increasingly anxious about the pending pathology report and its implications. What adjustment to his careplan would be appropriate at this time?

5   What non-pharmaceutical interventions might be considered and what other disciplines may now need to be involved?

What resources would you access to support the patient/family and staff around concerns re: colostomy care, supplies and future treatments at home?

Case Study 4 – Year 4

Source: Lakehead University, Thunder Bay, Ontario. Reprinted with permission.

Mr. J. is a 65-year-old, mildly cognitively impaired diabetic gentleman, with renal impairment, living in Cedar Crest Manor, a nursing home. On the night shift he is found wandering the halls shouting and striking out at the nurse as she tries to direct him back to his room. Mr. J. is usually very mild mannered and compliant.

 1 What might be the cause of his sudden change in behaviour? What investigations should initially be considered?

He has been on antibiotics for five days and his behaviour has stabilized but he now is reluctant to return to his previous levels of activity, refusing to wear anything except his comfortable slippers. Family have requested a re-evaluation of his condition as he appears more uncomfortable and has a decreased appetite.

 2 What other information do you require from the family and Mr. J.? What diagnostic tools are available to assist you in gathering that information?

 3 On examination his feet are cool to touch and hypersensitive and he states they burn when you touch them. What possible condition explains these symptoms? What treatment options are available?

 4 His physician starts him on Duragesic$^{®}$ 25 mcg q3 days. What implications does this have for his careplanning?

Staff express concerns around knowledge about the Duragesic$^{®}$ patch and its appropriateness for use in the nursing home, as there is no present policy regarding the patch. What are the next steps to consider in this scenario? What resources are available to implement change and support staff with these concerns?

Guidelines for Writing Reflections: L.E.A.R.N. Format

Criteria	Reflective Thoughts
Look Back ▸ A meaningful event presented ▸ Event described in detail	

Elaborate
Elaborate on what happened
▸ Identify, present and discuss:
   What happened, what you saw, felt, heard
▸ Identify:
   Individuals involved
   When and where it happened
   How you felt during the situation
   How you felt as result of the situation
   How others may have thought	

Analyze ▸ Identify key issue clearly ▸ Critical analysis of issue: Identify how contents within one article are relevant in the analysis of issue. ▸ Compare and contrast: What you have learned from the situation and from literature (article) ▸ Integrated: theory (content from article) ▸ Integrated: critical thinking (clear, organized)	
Revision ▸ Identify what is important from situation, literature review ▸ What should be preserved (of experience) in future situations? ▸ What should be changed, how should it be changed?	
New Perspective ▸ Recommendations for learning in similar future experience: (e.g., what you might do, utilize, not do)	
References ▸ Appropriate article: reviewed, discussed and cited in reflection ▸ Article is referenced appropriately: APA format	

Source: College of Nurses of Ontario (1996). *Professional profile: A reflective portfolio for continuous learning*. Toronto: Author.
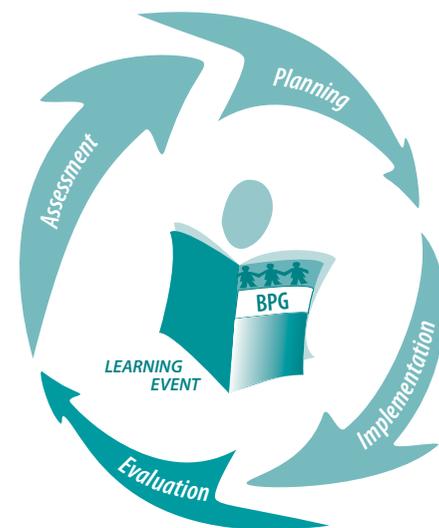
CHAPTER 5
Evaluation

What is the chapter about?

To determine the success of the learning event, there must be an evaluation. The steps you will take to evaluate the learning event are:

1 Review your goal, outcome, endpoint, objective or competency ("Have you arrived?");
2 Evaluate the process of the learning event including an evaluation of the educator and the event itself;
3 Evaluate the learner; and
4 Review the results and implement the desired changes.

Evaluation strategies need to be incorporated throughout assessment, planning and implementation of the learning event. By engaging in ongoing evaluation you will be able to determine if the strategies you chose from the previous chapters have been successful in achieving the objectives of the learning event.

Two questions that need to be addressed are:
▸ How will I know the learning event has been successful?
▸ How will I know learning has occurred?

Organizational outcomes will not be covered in this chapter. For strategies to evaluate the outcomes of implementing specific BPG, please refer to the RNAO *Toolkit: Implementation of Clinical Practice Guidelines; Chapter 5: Evaluating your success.*

Learner Evaluation of the Educator (End -of-course Evaluation), p. 83

Step 1: Review your Endpoint

In *Chapter 2* you established the goal of your learning event by answering the question "where do you want to go?" The evaluation strategies you employ need to be structured to determine whether or not your goals have been met.

Step 2: Evaluate the Learning Event

Evaluation of the learning event involves evaluation of the:

- ▸ Educator
- ▸ Event

Educator Evaluation

There are several methods used to evaluate the educator. These include:

- ▸ evaluation by the learners at the end of the learning event;
- ▸ self-evaluation; and
- ▸ peer evaluation.

Evaluation by the Learner

Learners should always be invited to provide feedback on the teaching strategies employed during the learning event. This information can be obtained through end-of -workshop evaluation forms or end-of-course evaluations. See *Tips, Tools, and Templates* for *Learner Evaluation of the Educator (End-of-course Evaluation)* (**p. 83**).

Educator Self-Evaluation

You should perform a self-evaluation of your teaching strategies at the end of all learning events. The main question to ask is, "Did the strategies I used help me obtain my desired endpoint?"

Examples of self-evaluation questions for educators may include:

1. Am I teaching and modeling skills of evidence-based practice?
2. Did my teaching strategies help to integrate BPG into curriculum/ educational programs and experiences?
3. Have I clearly identified and communicated the desired "outcomes" of learning?
4. Can I "see" the effects of the teaching strategies on my learners (short-term, mid-term, and long-term)?
5. Do I routinely evaluate the effectiveness of my teaching strategies?
6. What have I learned from the experience?
7. What successful elements will I incorporate into future learning events?
8. What will I do differently next time?

A *Self-Assessment for the Educator* is located in *Tips, Tools and Templates* (**p. 81**).

Peer Evaluation

Finally, a peer evaluation can provide the educator with objective feedback. Invite a peer to sit in on your educational event and provide you with feedback. See *Tips, Tools, and Templates* for a *Peer Assessment of the Educator* (**p. 82**).

Evaluation of the Learning Event

There are a several levels of evaluation strategies that can be employed to evaluate the learning event. In order to select the most appropriate strategy you need to know what you want to measure. When evaluating the event, you can choose to evaluate the content, and/or the teaching strategies.

Originally devised for use in the training and development field, Kirkpatrick's (1994) model consists of four levels of evaluation. *Table 13* provides a description of each of Kirkpatrick's levels and also includes "intangible areas" for evaluation. Specific strategies for each level are also provided.

Self-Assessment for the Educator, p. 81
Peer Assessment of the Educator, p. 82
Learner Evaluation of the Educator,
   (End-of-course Evaluation), p. 83
Self-Assessment for the Learner, p. 84
Peer assessment of the Learner, p. 85

Table 13: Levels of Evaluation and Strategies for Measurement

Level of Evaluation	Description	Strategies for Measurement
1 Reaction	Participant satisfaction with the program and associated processes	▶ Standard feedback questionnaires such as *Learner Evaluation of the Educator: (End-of-course Evaluation)* (**p. 83**) ▶ Participation/attendance records
2 Learning	Focus is on measuring the change in knowledge, skills, and attitudes. Directly related to learning goals.	▶ Pre-post tests ▶ Formal exams ▶ Written assignments ▶ Demonstration of required skills ▶ *Self-Assessment for the Learner* (**p. 84**) ▶ *Learner Evaluation of the Educator (End-of-course Evaluation)* (**p. 83**) ▶ *Peer Assessment of the Learner* (**p. 85**)
3 Application	Focus is on the degree of application into practice; change in practice in the actual practice setting; sustainability measured over time.	▶ Direct observation ▶ Clinical decision-making ▶ Clinical pre-conference – degree of care planning ▶ Clinical post-conference discussion regarding patient care and related decision making ▶ Clinical functioning – ability to apply learning to various scenarios ▶ Follow-up surveys of the learning event (usually at 3, 6, and 12 months post)

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Level of Evaluation		Description	Strategies for Measurement
4	Business impact	Focus is on measuring the outcomes (positive and negative) on the overall program and/or organization.	▶ Canadian Council Health Services Accreditation Standards (CCHSA) ▶ Canadian Association Schools of Nursing (CASN) Accreditation Standards ▶ Pre-post test/survey results
5	Intangible	Focus is on the outcomes that can not be easily converted into quantitative figures — although some can still be "measured" and monitored. Intangible outcomes can be used to support the benefits of the program/initiative.	Examples of intangible outcomes include: ▶ Supportive work climate ▶ Innovation ▶ Teamwork ▶ Improved communication ▶ Commitment ▶ Satisfaction ▶ Decreased complaints/grievances ▶ Decisiveness

Reference: Kirkpatrick, D. L. (1994). *Evaluating training programs: The four levels*. San Francisco, CA: Benett-Koehler.
Phillips, J., & Phillips, P. (2003). Using action plans to measure ROI. *Performance Improvement, 42*(1), 24-33.

Step 3: Evaluate the Learner

When evaluating learners, you can evaluate their knowledge, skills and attitudes. These can be achieved through three methods: evaluation by the educator, self-evaluation, and/or peer evaluation.

Evaluation by the Educator

Educator evaluation of the performance of the learner is based on the desired outcomes identified through prior assessment of the learners (*Chapter 2*) and the goal, outcome, end-in-view, objective or competency identified for the learning event (*Chapter 3*). You can evaluate performance through written testing (knowledge) or direct observation of skills and/or behaviours indicating attitudes.

Evaluation of Performance

Performance is an outcome of learning whether cognitive, behavioural or attitudinal. The desired outcomes need to be identified prior to implementing the learning event. Rubrics are guidelines for rating learner performance. They specify the expected outcomes for the level of the learner (i.e., novice to expert). See *Tips, Tools, and Templates* for templates of rubrics that evaluate written assignments and performance. (**p. 86-87**).

Chapter 6: Enrichment Materials contains the following for evaluating the outcomes of learning:

▶ Reflective journal scoring guideline (*Table 23*, **p. 116**)

Rubrics, p. 86-87

‣ Evaluation of desired competencies (*Table 24*, **p. 117**)
‣ Rubric for grading of written work (*Table 25*, **p. 118**)
‣ Rubric for grading performance specific skills (*Table 26*, **p. 118**)

Self-Evaluation

Learners should perform a self-evaluation of their knowledge of BPG at the end of the learning event. The main question learners should ask themselves is "Did this learning event help me achieve my personal learning goal?"

Examples of self-assessment questions specific to BPG may include:

1 Was this BPG learning event applicable to the clients in my practice?
2 Am I using evidence-based practice?
3 Did this learning event help to integrate BPG into my client care?
4 Did I achieve the desired outcomes of the learning event?
5 What have I learned from the experience?
6 What was successful that I will incorporate into my future practice?
7 What are the gaps in my knowledge, skills and attitudes as they relate to BPG?

See *Tips, Tools, and Templates* for a *Self-Assessment for the Learner* (**p. 84**).

Peer Feedback

Finally, a peer evaluation can provide the learner with objective feedback. Invite fellow learners to observe each other in order to provide you with feedback. See *Tips, Tools, and Templates* for a *Peer Assessment of the Learner* (**p. 85**).

Step 4: Review and Implementation of Evaluation

Now that you have completed the first three steps, it is time to review the results of your implementation. These results will determine the level of change the educator must make to subsequent learning events to achieve even greater success.

Key Points

‣ Evaluation is an ongoing part of the learning event and must be considered from the outset.
‣ Evaluation measures outcomes to determine the impact of the learning event.
‣ Evaluation can lead you through a cyclical process of information gathering and bring you back to where you first began!

Reflective Journal Scoring Guideline, p. 116
Desired Competencies, p. 117
Rubric for Grading Written Work, p. 118
Rubric for Grading Performance, p. 118

Self-Assessment for the Learner, p. 84
Peer assessment of the learner, p. 85

L.E.A.R.N. guide, p. 71
Learner Evaluation of the Educator
(End-of-Course Evaluation), p. 83
Rubric for Grading Written
Work/Assignments, p. 86

Academic Setting

Cynthia conducted a self-evaluation at the beginning of the year. She used the L.E.A.R.N. guide (**p. 71**) for self-reflection and made the decision on how she would make adjustments to the teaching style that she normally used. Cynthia used both informal responses from students and formal feedback from the year-end course evaluations (**p. 83**) to determine how the students had responded to her new strategies. She added several questions to the standardized School of Nursing evaluation in order to obtain feedback on the BPG component of the course.

To evaluate students, Cynthia used a combination of assignments and exam questions. She used the sample *Rubric for Grading Written Work/Assignments* provided in *Tips, Tools and Templates* (**p. 86**) to develop a marking scheme for the fourth-year student BPG assignments.

Cynthia's overall goal was to integrate best practice guidelines into the curriculum at the School of Nursing. She felt confident that valuable progress had occurred during the first year based on her interaction with colleagues and the feedback she received. She noted an increased number of emails, phone calls and informal conversations with her colleagues who had questions or comments concerning the integration of the guidelines.

Practice Setting

John planned for three types of evaluation: self-assessment as the educator, peer evaluation from Cynthia and learner evaluation of the workshop. (**p. 81, 82, 83**).

John also used three methods to evaluate the Resource Nurses. Self-assessment, peer evaluation, and educator evaluation were used following the workshop. (**p. 84, 85, 86-87**). These tools would also be used during the monthly follow-up meetings for ongoing evaluation of the Resource Nurses and their effectiveness based on their new knowledge.

As planned, John and Cynthia will also be conducting a formal evaluation of the learning event and preparing a research proposal to study changes in staff behaviour and patient outcomes.

Self-Assessment for the Educator, p. 81
Peer Evaluation of the Educator, p. 82
Learner Evaluation of the Educator
    (End-of-course Evaluation), p. 83
Self-Assessment for the Learner, p. 84
Peer Assessment for the Learner, p. 85
Rubrics, p. 86-87

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Self-Assessment for the Educator

SELF ASSESSMENT STATEMENTS	ALWAYS	MOSTLY	SOMETIMES	NEVER
I am teaching and modeling evidence-based practice				
My teaching strategies help to integrate BPG into curriculum/educational programs and experiences				
I have clearly identified and communicated desired "outcomes" of learning				
I can "see" the effects of teaching strategies on my learners (short-term, mid-term, long-term)				
I routinely evaluate the effectiveness of my teaching strategies				
I routinely evaluate the effectiveness of the learning event				
I have increased my knowledge of BPG from this experience				
I have incorporated successful strategies from previous experiences into this learning event				

Peer Assessment of the Educator

PEER ASSESSMENT STATEMENTS	ALWAYS	MOSTLY	SOMETIMES	NEVER
Teaches and models evidence-based practice?				
Comments				
Teaching strategies helped to integrate BPG into curriculum/educational programs and experiences				
Comments				
Clearly identifies and communicates the desired outcomes of learning				
Comments				
Effects of teaching strategies on learners can be seen (short-term, mid-term, long-term)				
Comments				
Routinely evaluates the outcomes of teaching strategies				
Comments				
Routinely evaluates the outcomes of learning events				
Comments				
Incorporates successful strategies from previous experiences into learning events				
Comments				
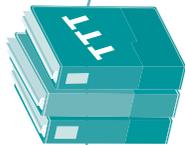
Learner Evaluation of the Educator (End-of-course Evaluation)

Description	Outstanding	Very good	Satisfactory	Unsatisfactory	Not applicable
Displays enthusiasm and energy in conducting learning events					
Conducts learning events in an organized, well planned manner					
Demonstrates and role models evidence-based practice					
Explains concepts clearly and understandably					
Encourages student participation and independent thinking through learning activities					
Responds to students questions clearly and thoroughly					
Presents learning materials in an interesting way					
Shows concern for student progress and offers assistance with problems					
Available for individual consultation (considering class size)					
Close agreement between course objectives and what is actually taught					
Uses methods of evaluation that reflect important aspects of the subject matter and provides for fair evaluation of student learning					
Has motivated me to increase my knowledge and competence in this area					
Overall, how would you rate this course as a learning experience?					

Source: University of Western Ontario. (2003). 2003-4 Undergraduate course and instructor evaluation questionnaire. London, Ontario: Author. Adapted with permission.

Self-Assessment for the Learner

SELF ASSESSMENT STATEMENTS	ALWAYS	MOSTLY	SOMETIMES	NEVER
I am able to choose BPG to fit my practice				
I am able to choose recommendations that fit my clients				
I am able to give rationale for the BPG and the recommendations I choose				
I am using evidence-based practice				
I am integrating BPG into my client care				
I achieved the desired "outcomes" of the learning event				
I have increased my knowledge of BPG from this experience				
I routinely evaluate my learning to address gaps in my knowledge, skills and attitudes as they relate to BPG				

Peer Assessment of the Learner

PEER ASSESSMENT STATEMENTS	ALWAYS	MOSTLY	SOMETIMES	NEVER
Chooses appropriate BPG for practice				
Chooses appropriate recommendations for clients				
Gives sound rationale for choices				
Uses evidence-based practice				
Integrates BPG into client care				
Achieved the desired "outcomes" of the learning event				
Has increased knowledge of BPG from this experience				
Routinely evaluates learning to address gaps in knowledge, skills and attitudes as they relate to BPG				

Educator Evaluation of the Learner – Rubric for Grading Written Work/Assignments

Grade	Topic / Issue / Question	Use of evidence	Degree of analysis	Application to practice
Superior (A+ / A)	Applicable, plausible, sophisticated insight into concepts within current and future trends Comments:	Examples of primary sources evident; excellent integration of quoted material into paper Comments:	Analysis is fresh and exciting, poses new ways to view material and concepts Comments:	Makes clear and definitive links to patient, contextual and professional implications Comments:
Very Good (B+ / B)	Promising, but slightly unclear or lacking insight and originality Comments:	Examples used to support most points; some evidence does not support main points, quotes well integrated Comments:	Evidence related, although points may not be clear Comments:	Application to practice described; fair degree of breadth/depth of argument Comments:
Acceptable / Average (C+ / C)	Uses familiar concepts; offers relatively few new concepts for consideration; may be unclear Comments:	Examples used to support some points; quotes poorly integrated into sentences Comments:	Analysis offers nothing new; quotes do not relate to analysis Comments:	Surface level degree of application; does not demonstrate application beyond status quo; logic often fails Comments:
Needs help / Below average (D+ / D)	Difficult to identify; no originality; restatement of obvious/well identified position Comments:	Very few or weak examples; general failure to support arguments; quotes "plopped in" – not integrated into sentences in meaningful way Comments:	Very little, weak or no attempt to link evidence to argument Comments:	Application does not flow; no connections made Comments:
Does not meet Requirements / Failing paper (F grade)	Lack of comprehensive thought or structure Comments:	No evidence identified or referred to Comments:	No analysis evident Comments:	No application to practice included; inappropriate application Comments:

Educator Evaluation of the Learner – Rubric for Rating of Performance (specific skills)

PERFORMANCE LEVELS	Questioning Skills	Search Skills		Critical Appraisal Skills	Clinical Decision -Making	Sharing Information with Others
			CRITERIA			
EXCEPTIONAL	Continually asks questions, raises different points of view Comments:	Readily accesses internal & external resources; able to conduct search independently Comments:		Integrates critical appraisal skills into practice Comments:	Synthesizes information to facilitate problem-based Learning and decision-making with self and others Comments:	Freely shares information and resources with others Comments:
GOOD	Contributes to discussion in a meaningful way Comments:	Accesses available resources; able to conduct search with assistance Comments:		Critically appraises information used for practice Comments:	Can confidently articulate evidence base for clinical practice and decision-making Comments:	Provides meaningful contributions to discussions Comments:
FAIR	Expresses own thoughts & questions Comments:	Aware of resources but does not access Comments:		Demonstrates critical appraisal skills inconsistently Comments:	Attempts to explain rationale for clinical decisions Comments:	Shares superficial information in discussions Comments:
NOT EVIDENT	Does not ask questions Comments:	Does not access available resources Comments:		Does not critically appraise at all Comments:	Can not provide rationale for clinical decisions beyond 'traditional routine' Comments:	Does not contribute to discussions Comments:

CHAPTER 6
Enrichment Materials

What is this chapter about?

In order to have a successful learning event, you may want to use the additional information contained in this chapter. It will allow you to augment the knowledge you have gained throughout the previous chapters which contain the "need-to-know" material for planning a learning event. This chapter contains "nice-to-know" content to give you more background information and skills. It contains additional information on the following:

1 The Nursing Best Practice Program;
2 Assessing your learners;
3 Planning your strategies;
4 Implementing your plan; and
5 Evaluating your learning event.

Nursing Best Practice Guidelines Program

This section contains additional information about the Nursing Best Practice Guidelines Program. The following topics are discussed:

▸ Government funding
▸ Key areas of priority
▸ Organizational structure
▸ What are Best Practice Guidelines
▸ Standards of Practice and Evidence-Based Practice
▸ Types of evidence use for BPG recommendations
▸ Dissemination
▸ Best Practice Champions Network

Government Funding

In 1998, the Ontario Minister of Health and Long-Term Care, Elizabeth Witmer, established a Nursing Task Force to address a broad range of issues related to the nursing profession. One of the task force's key recommendations was the development of clinical practice guidelines as a means of ensuring quality care for the public. In 1999, Minister Witmer announced multi-year funding, allocated to the RNAO for the development, pilot implementation, evaluation and dissemination of nursing best practice guidelines. In November of 1999, the Nursing Best Practice Guidelines Program was launched starting with several focus groups to further the conceptual and operational direction of the program, as well as to identify priority areas.

Key Areas of Priority

Through several focus groups with key stakeholders, five key areas of priority were identified. These priorities have provided a framework to identify specific clinical topics for best practice guideline development. These five areas are:

1 Gerontology
2 Primary Health Care
3 Mental Health
4 Home Care
5 Emergency

Organizational Structure of the Nursing Best Practice Guideline Program

The organization of the Nursing Best Practice Guideline Program reflects the various functions/mandates of the program. The program has a core staff that direct and coordinate activities and report to the RNAO Executive Director and provide regular reports to the Government of Ontario. The program is structured in a manner that engages a broad spectrum of stakeholders: patients/families; nurses; health care providers;

Achievements

In early 2000, RNAO commenced the first cycle of guideline development, pilot testing, evaluation and dissemination. Since its early months, the program has gained tremendous momentum with several cycles now underway. In its early months, the RNAO also committed to ensure that the best practice guidelines were kept up to date and to formally review and revise the best practice guidelines, if necessary, every three years.

To date, dozens of best practice guidelines have been developed along with health education fact sheets and toolkits/resources for best practice guideline implementation in practice and in nursing education. A comprehensive and updated list of the latest documents and resources can be found on the RNAO website at **www.rnao.org/bestpractices**. Many of the best practice guidelines and resources are also available in French.

Additionally, the best practice guidelines have been piloted in over 40 health care settings in Ontario and in over a dozen nursing education programs. A comprehensive, multi-dimensional dissemination, uptake, and implementation plan has been put in place to ensure the best practice guidelines and related resources are actively used in health care.

health care organizations; nursing educational programs; researchers; policy makers; health care and professional associations; subject matter experts; advocacy groups; etc.

Best Practice Guidelines

Best practice guidelines are systematically developed statements based on best available evidence to assist nurses, other health care providers and patients make decisions about patient care. Important points for learners include:

a **Systematic development.** Each best practice guideline is developed using rigorous methods including:

  ▸ Literature review, particularly systematic reviews and meta-analyses, along with other general reviews. Literature is critically appraised using defined criteria.

  ▸ Recommendations are developed based on research evidence and, where research evidence is not available, through expert opinion and consensus.

  ▸ All draft best practice guidelines undergo an extensive review by a diverse range of stakeholders including patients and their families, advocacy groups as well as multidisciplinary health care providers, managers and policy decision makers.

b **Best available evidence.** Although proponents of evidence-based practice strongly advocate for randomized control trials (RCT) as the gold standard for evidence, there are many areas of patient care that are neither amendable nor appropriate for RCT research design and such research is not available. The notion of strong evidence only coming from the quantitative tradition of research is increasingly challenged. A debate on broadening the definition and nature of evidence to include other forms of evidence such as evidence from qualitative studies, patient experience, clinician expertise, etc., has informed the choice of evidence for BPG.

At present, the RNAO BPG Program uses the levels of evidence detailed in the margin, noting that international work is underway to establish a more inclusive system of evidence.

c **BPG as decision tools.** BPG should be thought of as decision-making tools within the context of patient preferences, wishes, ethics and feasibility. The recommendations should not be used blindly or in a "cookbook" fashion.

Levels of Evidence

Ia Evidence obtained from meta-analysis or systematic review of randomized controlled trials.

Ib Evidence obtained from at least one randomized controlled trial.

IIa Evidence obtained from at least one well-designed controlled study without randomization.

IIb Evidence obtained from at least one other type of well-designed quasi-experimental study, without randomization.

III Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies and case studies.

IV Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities.

BPG, Standards of Practice and Evidence-Based Practice

The College of Nurses of Ontario (CNO), the nursing regulating body, has a number of mandatory practice standards that define the professional expectations for all Ontario nurses, which apply in a variety of practice settings and situations.

RNAO BPG are congruent with the practice standards and provide the best available knowledge for practice. These are based on optimal care and therefore may not necessarily be mandatory standards. Therefore, there may be an overlap between standards and BPG. The distinction should be made that BPG provide recommendations, not obligations.

In Ontario, RNAO and CNO have collaborated to ensure that where there is overlap or connection between standards and BPG, these are made apparent to nurses. For example, in newly developed BPG, related standards are cross-referenced. Also, on the RNAO and CNO websites, standards and BPG are cross-referenced. For example, the RNAO BPG *Prevention of Falls and Falls Injuries in the Older Adult* is cross-referenced with a related standard in the CNO guide to the use of restraints. The scope of the guideline is broader but does contain recommendations on least restraints, which are then discussed in the CNO guide in greater detail. Similarly, the RNAO BPG *Client Centred Care* is linked to CNO standards on "ethical framework", "guide to consent" and "guide to nurses providing culturally sensitive care".

BPG are one strategy in moving towards an evidence-based practice environment. Evidence-based practice is "a set of tools and resources for finding and applying current best evidence from research for the care of individual patients" (Haynes, 2004, p. 232). Although individual clinicians can conduct their own literature searches, appraisal and application of best evidence for clinical decision making, it is unlikely that all practitioners will be able to do so at all times in all practice situations. It is also impractical to expect that individuals will have the skill and necessary time and resources to find, appraise and apply best evidence on their own. Therefore, guidelines provide a means of accessing pre-appraised evidence and recommendations on appropriate ways of applying the evidence in practice. Additionally, guideline development panels use their clinical experience and expertise as well as feedback from a broad spectrum of stakeholders to weigh the evidence and make appropriate recommendations for practice, for the context and for skill requirement.

How Best Practice Guidelines are Developed and Kept Current

Numerous BPG have been published, along with patient education materials referred to as Health Education Fact Sheets. Many of the guidelines and all of the Health Education Fact Sheets are published in French. All materials can be found on, and ordered online, from the RNAO website at **www.rnao.org/bestpractices** (**CD1**).

Typically, a BPG is a hard copy or web-based document that contains the following:

- ▸ Purpose and scope of the guideline
- ▸ Guideline development process
- ▸ Definition of terms
- ▸ Description of levels of evidence
- ▸ Background information on the topic area
- ▸ Summary of recommendations
- ▸ Detailed list of recommendations with associated discussion of evidence. All material is appropriately referenced. Three types of recommendations are provided:
  - • Practice recommendations: statements of best practice directed at the practice of health care professionals that are evidence-based.
  - • Educational recommendations: statements of educational requirements and educational approaches/strategies for the introduction, implementation and sustainability of the best practice guideline.
  - • Organization & policy recommendations: statements of conditions required for a practice setting that enable the successful implementation of the best practice guideline. The conditions for success are largely the responsibility of the organization, although they may have implications for policy at a broader government or societal level.
- ▸ Indicators and measures that can be used for evaluation
- ▸ Strategies for implementing the guideline
- ▸ References and bibliography
- ▸ Other resource information such as assessment tools, detailed information on specific recommendations such as medications, referral information for patients, etc.

All BPG are formally reviewed every three years by an expert panel. The panel reviews the evidence available since the original BPG was published. Revisions are made as necessary, validated as required by stakeholders and re-published. Where revisions are minor, an addendum accompanying the original BPG is published. The review and revision process is described in the reviewed/revised BPG document.

BPG and Health Education Fact Sheets (HEFS)

www.rnao.org/bestpractices

Types of Evidence Used to Develop the Recommendations

The RNAO Nursing Best Practice Guidelines Program uses a broad range of both quantitative and qualitative research evidence appropriate for the relevant clinical questions for the specific topic of the BPG. In addition, the development panel members consider experiential and clinical expertise in the development of recommendations, validation of the research findings, and discussion of the recommendations in the various local contexts, specifically, as they relate to various health care sectors such as acute care, long term care, community, etc. Lastly, stakeholder feedback, evidence from a broad spectrum of health care providers, managers, policy makers, and most importantly, patients and their families, is systematically solicited, discussed and incorporated into the final BPG recommendations.

Each BPG is also scrutinized to ensure it has contextual relevance. At times, the evidence may suggest a particular recommendation but the environment does not make it feasible for the recommendation to be implemented. Therefore, the BPG development panel must consider the context when making recommendations. It is important for readers to ensure they read the "discussion of evidence" to understand the nature of the evidence used to derive a particular recommendation.

BPG Dissemination, Knowledge Transfer/Uptake and Evaluation

Various resources are available to the educator for promoting BPG as well as keeping up to date with BPG related knowledge. Other tools and resources can be used to enhance the educator's networks.

a **Website www.rnao.org/bestpractices.** All BPG and related material are available for free download from the RNAO website. The BPG come in two formats: summary of recommendations and the complete guideline.

b **CD with all published BPG.** Each year, a CD containing PDF files of all currently published BPG (English and French), all Health Education Fact Sheets, and the *Toolkit* is released. A CD is available with this binder (**CD1**).

c **BPG Newsletter.** Published three times a year, anyone can subscribe to these free newsletters on the website. A copy of the latest newsletter is available with this binder.

d **A 28-minute video:** *Making it Happen.* This is available to help orient staff and students to the Nursing Best Practice Guidelines Program. This can be ordered on the website, and is available in CD and DVD formats. A copy is included with this binder.

WWW

**BPG and related material
www.rnao.org/bestpractices**

e   Best Practice Champions Network. Nurses in all sectors, including nursing schools, can join the Champions Network. BPG Champions commit to a two-year period to assist in promoting, influencing and implementing guidelines. An initial two-day workshop is provided to all Champions followed by regular support through teleconferences, symposiums, newsletters, and other supports by RNAO. A staff Champions Coordinator provides the necessary support along with a network of over 500 other Champions across the province of Ontario. A more detailed description follows at the end of this section.

f   International Conference. A two-day conference is held every other year (odd years) in Toronto, Ontario.

g   Best Practice Summer Institute. An annual one-week long institute held in Ontario to develop in-depth capacity in evidence-based practice, guideline implementation, and change management.

h   Advanced Clinical/Practice Fellowships for Best Practice Guideline Implementation. This fellowship provides funding for nurses to conduct a 12-week mentored learning experience to develop personal and organizational capacity for guideline implementation.

i   RNAO Doctoral Fellowships. Offered to one candidate annually, this fellowship is an initiative in partnership with the Government of Ontario to develop research capacity in the evaluation of health outcomes, and where feasible, financial and system outcomes associated with implementation of BPG.

j   RNAO. Conducts presentations, workshops, and writes for various publications in order to spread the knowledge packaged in the BPG. In 2004, RNAO held 20 full day BPG workshops across Canada and over a 1000 nurses participated in these sessions. These workshops were funded by Health Canada. Organizations wishing to hold customized workshops in their organizations are requested to contact the RNAO to discuss details.

k   Web-based Learning. Resources available on the RNAO website include a self-paced e-learning module on critical appraisal of research publications and a self-paced e-learning program based on a best practice guideline on smoking cessation, titled *Helping People Stop Smoking*. Additionally, a workshop entitled *Diabetes Foot: Risk Assessment Education Program* has been designed. A facilitator's guide and participant's package, plus images on slides are all available for free download on the website.

l   New Product Development. Knowledge uptake is continuously occurring and announced through various means and usually available on the website.

m **Best Practice Spotlight Organization Initiative.** A long-term partnership between RNAO and selected organizations to plan, implement and evaluate multiple guidelines in one organization. Lessons learned from these projects are disseminated broadly.

n **Best Practice Education Demonstration Projects.** These are projects undertaken in partnership between RNAO and selected faculties of nursing to integrate and evaluate best practice guidelines into nursing educational curriculum. Lessons learned from these projects are disseminated broadly.

o **Evaluation tools.** Various BPG evaluation tools have been developed and are available as published monographs on the website.

Best Practice Champions Network

The Best Practice Champions Network is an initiative of the RNAO that prepares nurses to take active roles in promoting, influencing, supporting and implementing best practice guidelines in their practices throughout Ontario. The Network was launched in Toronto in June 2002 with an overwhelming response from the nursing community. The aim of the Network is to provide a means of sharing successes and challenges, requesting assistance, and continuous learning on dissemination and implementation of BPG. Best Practice Champions are nurses and others who are passionate about improving nursing practice and client care in their organization. Champions can be anyone who will be able to have organizational and/or unit/program level influence. The Champions can take many different roles such as bringing awareness of best practices to their organization, influencing groups and committees to consider these best practices, mobilizing, coordinating and facilitating the training and development of professional staff in BPG implementation, etc. Moreover, they can provide ongoing resource support for bridging the gap between evidence and practice with strategies to implement specific BPG. For detailed information on how to get involved, see the RNAO website at **www.rnao.org/bestpractices.**

In order to create a critical mass of committed individuals towards BPG within an organization, one approach might be to identify and engage select individuals in the Best Practice Champions Network. This group could attend the orientation workshop together and subsequently create their own support group within their organization to plan and implement strategies to influence uptake of BPG in their organization. An organizational approach to establishing champions can provide leverage, support and momentum. Examples of activities conducted by already established Best Practice Champions in Ontario include:

WWW

Get involved!
www.rnao.org/bestpractices

- Presenting at the professional practice committee to get buy-in from others.
- Developing an organization-wide communications plan, including raising awareness of BPG through booths, posters, contests, intra web, newsletters, etc.
- Establishing an organizational BPG steering committee to spearhead the identification and implementation of BPG in the organization.
- Networking and sharing ideas and resources with other Best Practice Champions outside of the organization by holding open house sessions, drop-in site visits, teleconference sessions, or by email and phone.

Assessing your Learners

This section contains additional information about the assessment for the learning event. The following topics are discussed:

- Adult learning principles and how to assess the learner;
- Learner qualities in the clinical setting; and
- Developmental phases of learning.

Adult Learning Principles

According to Knowles (1984) and Knox (1986) there are characteristics that distinguish adults from children in regards to their learning. *Table 14* contains suggestions of how to assess learners of BPG according to the principles of adult learning.

Table 14: Adult Learning Principles: Assessment of the Learner

Adult Learning Principles	Assessment of the Learner
Adults must want to learn	Assess motivational factors affecting your learners (e.g., goal-orientated, activity-oriented, learning orientated)
Adults will learn only what they feel they need to learn	Assess the BPG content that the learner wants to learn. Have them distinguish between "need-to-know" and "nice-to-know"
Adults learn by comparing past experiences with new experiences	Assess the learner's previous exposure to BPG and how learning was best facilitated in the past. Ask them for examples of how they have applied BPG in their past work experiences
Adults need immediate feedback concerning their progress	During your initial assessment ask your learner the type, mode and frequency of feedback they wish to receive
Adults want their learning to be practical	Have your learners identify the demands and problems in their current work setting that relate to BPG, and ask them to identify situations in which they feel BPG would be helpful
Adults try to avoid failure	Have your learners identify the methods for in- class participation and evaluation to avoid putting individuals on the spot.
Adults do not all learn the same way	Assess the individual learning styles of your learners by asking them to describe how they best learn

Learner Qualities

The knowledge, skills and attitudes of the learner will also have an impact on the success of the learning event. Educators, therefore, need to be aware of specific qualities of the learner and adapt their educational strategies appropriately. *Table 15* outlines some of the qualities the educator should assess prior to choosing and implementing teaching strategies.

Developmental Phases of Learning

In addition to assessing learners on the basis of adult learning principles and learner characteristics, educators of adult learners can also consider the developmental phases of learners when they are preparing the learning event.

Perry's Scheme of Intellectual Development

Perry (1968), working with male university students, suggested that they move through a series of fairly well-defined phases of cognitive development that he described as coherent interpretive frameworks for giving meaning to educational experiences. Perry's scheme of intellectual development is described in *Table 16* ().

Table 15: Qualities of Learners

Qualities for BPG Learners	Assessment of Learners
1 Excellent patient care	▶ Commitment to excellent patient care is central to becoming an practitioner who uses BPG ▶ Practitioners who continually strive for excellence will want to understand their patients' problems thoroughly and apply BPG appropriately to all aspects of care
2 Excellent Clinical Skills	▶ Excellent clinical skills in patient interviewing and physical examination are needed for practitioners to accurately understand the clinical problem, the patient's unique situation and values, and the BPG recommendations related to the identified problem ▶ Excellent communication skills are essential so that practitioners can clearly explain to patients and learners the risks and benefits of the available options and BPG recommendations
3 Excellent Clinical Judgment	▶ Excellent clinical judgment is of paramount importance because it enables practitioners to weigh the risks and benefits of the available BPG in light of the patient's values and preferences ▶ Time and experience are essential elements to developing clinical judgment ▶ Expert learners will be expected to have a highly developed level of clinical judgment, whereas this quality will grow in early learners
4 Diligence	▶ Learners of BPG must be consistently willing to work hard and to apply the recommendations to clinical practice situations, taking into consideration the context and the complexity of clinical situations ▶ Diligence is needed to communicate and hone the other essential skills of interviewing, physical examination, clinical reasoning and judgment
5 Perspective	▶ An ability on the part of the learner to view newly appraised BPG appropriately within the context of health care and feasibility

Reference: Melnyk, B., Fineout-Overholt, E. (2005). *Evidence-based practice in nursing & healthcare: A guide to best practice*. Philadelphia: Lippincott Williams & Wilkins.

Women's Ways of Knowing

Since the vast majority of nurses are women, nurse educators should be aware of the developmental stages women experience so as to meet them as they are. Educators who are aware of different levels of achieving meaning can help learners by taking a connected knowledge approach, seeking to understand the perspective of the learner and how that perspective was reached. The researchers claim these ways of knowing, although gender related, are not gender specific, and while these ways of knowing are commonly held by women they are also accessible to men.

Table 16: Perry's Scheme of Intellectual Development

Phases	Characteristics of the Learner
Phase 1 Dualism	▸ Knowledge viewed as absolute, black or white, right or wrong, factual or subject ▸ Right answers come from authorities ▸ Multiple points of view are confusing ▸ Judgments lack rationale ▸ Learning is simply taking notes, memorizing facts **NOTE** Novice BPG learners tend to be in this phase and will apply BPG recommendations in a mechanized and routine manner
Phase 2 Multiplicity	▸ Multiple perspectives are acknowledged ▸ Authorities are not always right, they just have different opinions ▸ Knowledge is simply a matter of opinion ▸ Beginning to seek rationale for opinions ▸ Lacking in ability to evaluate opinions
Phase 3 Relativism	▸ Learn to weigh evidence and distinguish between weak and strong support ▸ Authorities are neither deified nor resisted ▸ Capacity for seeing the 'big picture' ▸ Can evaluate ideas ▸ Beginning to synthesize ideas
Phase 4 Commitment in Relativism	▸ Recognize they must make choices and commitments ▸ Authorities are consulted, ▸ Can transfer understandings of complexities and diverse perspectives ranging from academic pursuits to the creation of a personal world view **NOTE** Expert BPG learners tend to be in this phase and will be able to adapt BPG recommendations to the context of complex situations

Belenky, Clinchy, Goldberger, & Tarule (1996) identified a series of stages that women experience in coming to full participation in knowledge development. The five epistemological perspectives by which women know and view the world were identified as follows:

1. Silence;
2. Received knowing;
3. Subjective knowing;
4. Procedural knowing including two different types of procedures, called 'separate knowing' and 'connected knowing' and
5. Constructed knowledge.

Educators who are aware of women's different ways of knowing can help learners by taking a connected knowledge approach and seeking to understand the perspective of the learner and how that perspective was reached. Learners who have not yet reached the stage of constructed knowing may need help in recognizing that BPG recommendations do not dictate actions and different situations require different approaches

to care. *Table 17* is based on the five epistemological perspectives by which women know and view the world.

Table 17: Women's Ways of Knowing

Perspective	Characteristics	Relevance for BPG Educators
Silence	In silence women experience themselves as mindless and voiceless, and subject to the whim of authority.	This person may be a very passive participant, perceives themselves as oppressed by society and the organization and will either resent attempts to be engaged or just ask for the "recipe" or "cookbook" for implementing BPG.
Received Knowing	The learner sees herself as capable of receiving and reproducing knowledge from external authorities, but these women do see themselves as being able to construct or create knowledge themselves.	This person will be capable of appreciating that BPG are based on expert knowledge from external authorities, but may apply the BPG in a routine manner, neglecting the context and the complexity of situations, and be hesitant to apply critical thinking skills to adapting BPG. She may also have difficulty understanding that there may be conflicting views held by authorities and be frustrated by ambiguity. "Received knowers" are listeners and tend towards conformist thinking. They encourage authorities to speak and act for them.
Subjective knowing	From this perspective, truth and knowledge are conceived as personal and private and subjectively known or intuited.	This person may also be passive/introverted and may be less enthusiastic about guidelines, feeling that the time honored ways of doing things are the best and reject BPG in favour of traditional practices and intuitive knowing. She will also tend to listen and observe and may be more receptive to experiential learning through reflection.
Procedural knowing	Procedural knowledge is present where women are invested in learning. Two types of procedural knowledge are reported: ▸ "separate knowing", distinguished by evaluation and objectivity in judging another's point of view; and, ▸ "connected knowing", distinguished by acceptance and appreciation of another's point of view.	This person may follow BPG guidelines in a very matter-of-fact manner. Those for whom procedural knowledge is 'separate knowing' will not accept BPG as fact and will doubt the credibility of the guidelines. Those for whom procedural knowledge is "connected knowing" will immerse themselves in exploring BPG through the experiential knowledge of themselves and others and will be open and receptive to incongruencies and ambiguities and the creation of new ideas.
Constructed knowing	From this position, women view all knowledge as contextual, and they experience themselves as creators of knowledge and place value on both subjective and objective strategies for knowing.	This person will be passionately involved in the learning process and embrace BPG as an opportunity to explore new ways of thinking, feeling and acting and will engage in dialogue with others by listening, asking questions, argumentation, hypothesizing and sharing ideas. Reciprocity and cooperation are prominent.

Planning the Learning Event

This section contains additional information about planning the learning event. The following topics are discussed:

▸ Factors to consider in order to level the content of the learning event;

▸ Bloom's taxonomy and learning objectives; and

▸ Writing learning objectives.

Table 18: Leveling Content for BPG Learning Events – Questions to Ask

Factor	Questions to Ask to Determine Level
Desired Endpoints ▸ Knowledge (Cognitive) ▸ Skills (Psychomotor) ▸ Attitudes (Affective)	▸ Given the factors listed, what level of learning is appropriate for these learners? ▸ What level of objective is appropriate for the level desired – e.g., for novices, beginning students, or introductory sessions use knowledge, comprehension or application; for senior students, experts, or those experienced with BPG look for application, synthesis, analysis. ▸ Are there affective and/or psychomotor aspects to the desired learning? Choose objectives that level them to suit learner, BPG and practice situation. (See **p. 108** for Bloom's leveling of objectives).
Learner Characteristics ▸ Profession ▸ Program/Year ▸ Novice – Expert ▸ BPG experience	▸ How homogeneous is your learner group? ▸ What is the professional mix – RNs, RPNs, PCWs, MDs, other health care professionals? ▸ What years in the educational program – Year 1-4/post grad ▸ What is the experience level of staff (clinical issue) – novice-to-expert? ▸ What is the experience of learners with BPG – introduction or advanced level?
Learning Event Context ▸ Course sequencing ▸ Threads & exemplars ▸ Time available	▸ Where does this course fit in the curriculum? e.g., in an introductory or senior level course? ▸ Have BPG been used previously as exemplars? ▸ Is desired use of BPG related to practice, evidence use or critique skills? ▸ Do curricular threads make it relevant to use a BPG in different courses? If so, what was the most recent use of the BPG? ▸ Have staff/students been exposed to previous learning opportunities re BPG?
BPG Content ▸ Practice recommendations ▸ Education ▸ Administration ▸ Rationales ▸ References ▸ Models	▸ Which recommendations are suitable for this target group? ▸ Do learners have any influence on educational or administrative actions in the institution? ▸ How much background on rationales/references should learners have to succeed in this learning? ▸ Are there models and summaries that can aid learning?

Four Factors to Consider for Planning the Learning Event

A BPG can be taught at varying levels of complexity. Four key factors introduced in *Chapter 3* should be considered when deciding the level of content to be included in a learning event:

1 The learner characteristics;
2 The desired endpoint;
3 The context of the learning event; and
4 The BPG content, including the parts to be emphasized and the complexity of the emphasis.

Table 18 outlines the questions to be asked for each of these factors to assist the educator in determining the level of the content.

When considering learner characteristics, it is important to plan for varying levels of experience. *Table 19* provides a more detailed description of the "Learner Characteristics". *Figure 3* in *Chapter 3* (**p. 42**) gives factors to consider in planning for various learner levels of proficiency.

Bloom's Taxonomy and Learning Objectives

When planning a learning event you will want to define the endpoint for the learners. You may also want to define the endpoint as a learning objective.

Learning objectives reflect outcomes and provide guidance to educators and learners. Learning objectives are also referred to as behavioural objectives, instructional objectives, and performance objectives. The main purpose is to assist the learner in gaining the most from the learning event. The term learning objective is defined as: "statements to assist and guide the learner toward achieving the desired outcome(s) of the learning event" (Morrison, Ross & Kemp, 2001).

Morrison, Ross & Kemp (2001) described the threefold purpose of learning objectives:

1 To assist the educator in selecting and organizing appropriate instruction and resources aimed at facilitating effective learning events.
2 To provide the educator with a framework for planning and formulating methods to evaluate student learning events.
3 To guide the learner in identifying the skills and knowledge required for mastery of the material covered in the learning event.

Table 19: Learner Characteristics: Benner's Model Novice-to-Expert

Level of Proficiency	Characteristics	Strategies for Planning
Novice in relationship to BPG	▸ No experience with situations in which they are expected to perform ▸ Rigid adherence to taught rules or plans ▸ Little situational perception ▸ Unable to use discretionary judgment ▸ Focuses on pieces rather than whole	▸ Plan to provide structure, lead learners through specific BPG ▸ Proceed from simple to complex ▸ Use case studies, lab experiences and other concrete opportunities to apply skills and build confidence ▸ Group novices with experts so that they can learn from them, but recognize that experts can become frustrated with novice learners because intuitive thinkers may not be unable to break down BPG learning into concrete steps
Advanced Beginner	▸ Guidelines for action based on attributes or aspects ▸ Situational perception still limited ▸ Can demonstrate marginally acceptable performance ▸ Notices change but cannot cope with it ▸ All attributes and aspects are treated separately and given equal importance ▸ Needs help setting priorities ▸ Unable to see entirety of a new situation	▸ Plan for structured and well organized learning opportunities that build on prior learning experiences. Help them to begin to integrate BPG into their practice ▸ Provide opportunities for dialogue with competent and proficient clinicians to demonstrate using BPG to assist with problem solving and priority setting ▸ For positive learning to occur, plan opportunities for support and reinforcement in the learning session
Competent	▸ Now aware of all the relevant aspects of a situation ▸ Sees actions at least partly in terms of long-term goals ▸ Conscious of deliberate planning ▸ Can set priorities ▸ Critical thinking skills are developing	▸ Plan for less structure and more self-directed learning opportunities to allow building on recognized capability to choose learning needs ▸ Provide access to a preceptor/mentor who has expertise to assist in development of critical thinking skills related to the BPG
Proficient	▸ Sees situations holistically rather than in terms of aspects ▸ Sees what is most important in a situation ▸ Perceives deviations from the normal pattern ▸ Decision-making less laboured ▸ Uses guidelines and maxims for guidance	▸ Plan self directed activities to explore diverse situations and share their knowledge with clinicians, especially as teachers of BPG to more novice clinicians ▸ Have these nurses work with and guide novices and advanced beginners in workshop exercises and in reinforcing BPG use in practice ▸ Expand critical thinking and decision-making skills by arranging opportunities for dialogue with experts on complex situations regarding BPG
Expert	▸ No longer relies on rules, guidelines or maxims ▸ Intuitive grasp of situations based on deep tacit understanding ▸ Analytic approaches used only in novel situations or when problems occur ▸ Vision of what is possible	▸ May be bored with traditional lecture methods that are focused on the learning needs of novices and beginners ▸ Recognize expertise by involving in planning ▸ Allow for total self-direction in their learning and encourage generating hypotheses and questions about integration of BPG and adaptation to context ▸ Recognize expertise by having them act as teacher, group leader, or mentor for competent and proficient clinicians ▸ Consult on BPG education and implementation

In order to develop learning objectives it is essential to focus on the learner. A key tool for identifying and leveling learning objectives is Bloom's taxonomy. Benjamin Bloom & David Krathwohl (1956) devised taxonomy of learning behaviours to identify levels of learning within three domains: Cognitive, Affective and Psychomotor.

The Cognitive Domain

Educational activities and behaviours identified in this domain relate specifically to intellectual competence. Bloom and colleagues identified different levels of intellectual competence using a hierarchy of six categories: Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation. Each of the categories has been defined and language terms assigned to assist educators and students in identifying the level of intellectual competence to be achieved (Bloom & Krathwohl, 1956; Anderson & Krathwohl, 2001). This language is helpful in the process of developing and leveling learning objectives. *Table 20a* describes the elements of this domain.

The Affective Domain

Educational activities and behaviours identified in this domain relate specifically to an awareness of feelings, emotions and ways of thinking. This domain includes interest, attention, concern, responsibility, communication skills and the ability to demonstrate these characteristics in the context of situations relative to the area of study, in this case BPG. This domain has not been categorized; however, language terms have been assigned to assist educators and students in identifying achievement of behaviours specified in this domain. *Table 20b* describes the affective domain.

The Psychomotor Domain

This domain was not identified in Bloom's original work, but has been defined and classified in works other than Bloom's. For the purposes of this resource, it will be defined as educational activities and behaviours specific to the use of motor skills. *Table 20c* describes the elements of the psychomotor domain.

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Table 20a: Cognitive Domain
(thinking, knowledge)

Knowledge

Definition
Remembers previously learned material

Sample verbs
▲ Define
▲ Identify
▲ Label
▲ List
▲ Name
▲ Recall
▲ State

Comprehension

Definition
Grasps the meaning of the material (lowest level of understanding)

Sample verbs
▲ Describe
▲ Discuss
▲ Explain
▲ Locate
▲ Paraphrase
▲ Give example
▲ Translate

Application

Definition
Uses learning in new and concrete situations (higher level of understanding)

Sample verbs
▲ Apply
▲ Carry out
▲ Demonstrate
▲ Illustrate
▲ Prepare
▲ Solve
▲ Use

Analysis

Definition
Understands both the content and structure of material

Sample verbs
▲ Analyze
▲ Categorize
▲ Compare
▲ Contrast
▲ Differentiate
▲ Discriminate
▲ Outline

Synthesis

Definition
Formulates new structures from existing knowledge and skills

Sample verbs
▲ Combine
▲ Construct
▲ Design
▲ Generate
▲ Plan
▲ Propose

Evaluation

Definition
Judges the value of material for a given purpose

Sample verbs
▲ Assess
▲ Conclude
▲ Evaluate
▲ Interpret
▲ Justify
▲ Select
▲ Support

Source: Krumme, G. (2001). Major categories in the taxonomy of educational objectives: Bloom 1956. Available: **http://faculty.washington.edu/krumme/guides/bloom.html.** Adapted with permission.

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Table 20b: Affective Domain
(feelings, attitudes)

Knowledge

Definition
Selective attention to stimuli

Sample verbs
- Accept
- Acknowledge
- Be aware
- Listen
- Notice
- Pay attention
- Tolerate

Comprehension

Definition
Responds to Stimuli

Sample verbs
- Agrees to
- Answer freely
- Assist
- Care for
- Communicate
- Comply
- Conform
- Consent
- Contribute
- Cooperate
- Follow
- Obey
- Participate willingly
- Read voluntarily
- Respond
- Visit
- Volunteer

Application

Definition
Attaches value or worth to something

Sample verbs
- Adopt
- Assume responsibility
- Behave according to
- Choose
- Commit
- Desire
- Exhibit loyalty
- Express
- Initiate
- Prefer
- Seek
- Show concern
- Show continual desire to
- Use resources to

Analysis

Definition
Conceptualizes the value and resolves conflict between it and other values

Sample verbs
- Adapt
- Adjust
- Arrange
- Balance
- Classify
- Conceptualize
- Formulate
- Group
- Organize
- Rank
- Theorize

Synthesis

Definition
Integrates the value into a value system that controls behaviour

Sample verbs
- Act upon
- Advocate
- Defend
- Exemplify
- Influence
- Justify behaviour
- Maintain
- Serve
- Support

Source: Krumme, G. (2001). Major categories in the taxonomy of educational objectives: Bloom 1956. Available: **http://faculty.washington.edu/krumme/guides/bloom.html**. Adapted with permission.

Table 20c: Psychomotor Domain
(doing, skills)

Perception
Definition
Senses cues that guide motor activity

Sample verbs
- Detect
- Hear
- Listen
- Observe
- Perceive
- Recognize
- See
- Sense
- Smell
- Taste
- View
- Watch

Set
Definition
Is mentally, emotionally and physically ready to act

Sample verbs
- Achieve a posture
- Assume a body stance
- Establish a body position
- Place hands, arms, etc.
- Position the body
- Sit
- Stand
- Station

Guided Response
Definition
Imitates and practices skills, often in discrete sets

Sample verbs
- Copy
- Duplicate
- Imitate
- Manipulate with guidance
- Operate under supervision
- Practice
- Repeat
- Try

Mechanism
Definition
Performs acts with increasing efficiency, confidence, and proficiency

Sample verbs
- Complete with confidence
- Conduct
- Demonstrate
- Execute
- Improve efficiency
- Increase speed
- Make
- Pace
- Produce
- Show dexterity

Complete Overt Response
Definition
Performs automatically

Sample verbs
- Act habitually
- Advance with assurance
- Control
- Direct
- Excel
- Guide
- Maintain efficiency
- Manage
- Master
- Organize
- Perfect
- Perform automatically
- Proceed

Adaption
Definition
Adapts skill sets to meet a problem situation

Sample verbs
- Adapts
- Reorganizes
- Alters
- Revises
- Changes

Organization
Definition
Creates new patterns for specific situations

Sample verbs
- Designs
- Originates
- Combines
- Composes
- Constructs

Source: Krumme, G. (2001). Major categories in the taxonomy of educational objectives: Bloom 1956. Available: **http://faculty.washington.edu/krumme/guides/bloom.html**. Adapted with permission.

Writing Learning Objectives

Objectives begin with the identification of a topic and are refined as the learning process evolves. Content can be grouped and defined by specific goals related to the learning event. In essence, what will the student accomplish through participation in this learning event? A learning objective can then be formulated for each of the goals. Learning objectives are formatted after identifying the essential content of the learning event. Learning objectives must be written in the active voice and contain the condition, the behaviour and the criterion (Mager, 1984).

The Condition

This portion of the learning objective is specific to the situation under which the student will achieve the behaviour. An example: "At the completion of this learning event the student will…."

The Behaviour

This portion of the learning objective is specific to what the student will demonstrate. The behaviour is usually expressed in the form of a verb; this verb must define an observable or measurable student action. It is helpful to use Bloom's language terms for this portion of the learning objective. Two examples are:

1 "The student will describe the purpose of BPG" (Bloom's Cognitive Domain: Comprehension); and
2 "The student will collaborate with the client to identify the components of the BPG desired for integration in the current care plan" (Bloom's Cognitive Domain: Synthesis).

The Criterion

This portion of the learning objective is specific to the degree of satisfaction that the student will demonstrate the behaviour as evaluated by the educator. It is difficult in the field of nursing to assign numbers as an identification of the criterion. Therefore, you must use your own judgment of the situation to identify criteria for this portion of the learning objective. In terms of behaviours in the cognitive domain, the criterion may be an assigned number. For example, "… as demonstrated by the achievement of 80% upon the completion of a post-test." When describing behaviours in the affective and psychomotor domain this may be more difficult. For example, "…as demonstrated in the clinical setting to the satisfaction of the educator." *Table 21* includes each of the levels from both Bloom and Benner in comparison with examples to assist you in leveling learning objectives; the level of learning objective can be used once the learner's needs are identified. (Note: Level 5 is a combination of Bloom's synthesis and evaluation.)

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Table 21: Leveling Learning Objectives using Bloom and Benner

Level of Objective	Bloom's Taxonomy (Cognitive, Affective, Psychomotor)	Benner	Example	BPG objective
Level One	**(C)** Knowledge – ability to recall or remember concept/ information contained in the learning event **(A)** Receiving – selective attention to stimuli **(P)** Perception – senses cues that guide motor activity Set – mental, emotional and physical readiness to act	**Novice** ▲ No previous knowledge of the concept/ information contained in the learning event	▲ 1st year student ▲ New graduate new to a specialty area ▲ Preceptor working with a student for the first time	▲ Learner can identify a BPG relevant to the area of practice ▲ Learner can assemble required materials for wound care according to BPG recommendations.
Level Two	**(C)** Comprehension – can explain the concept/information contained in the learning event **(A)** Responding – responds to stimuli **(P)** Guided response – imitates and practices skills, often in discrete steps	**Advanced Beginner** ▲ Enough knowledge and experience to understand the concept/information contained in the learning event ▲ May require additional guidance/supervision to put knowledge into practice	▲ New graduate with recent unit experience ▲ Educator new to teaching role	▲ Learner explains importance of BPGs in improving care ▲ Learner participates in activities to promote BPGs
Level Three	**(C)** Application utilizes previously learned concepts/ information in new situations **(A)** Valuing – attaches value or worth **(P)** Mechanism – performs acts with increasing efficiency, confidence and proficiency	**Competent** ▲ Able to plan using the concepts/information from the learning event for situations	▲ Experienced nurse on new unit ▲ Experienced educator with no knowledge of BPG ▲ Nurse developing an experience base in a specialty area	▲ Learner seeks other BPGs that may be appropriate for clients ▲ Learner can explain value of BPGs in improving care. ▲ Learner uses BPG recommendations routinely in care of most clients for which it is suitable
Level Four	**(C)** Analysis – able to generalize previously learned concepts/information to various situations, identifying causes and finding evidence to support use of knowledge and skills to obtain the best outcome **(A)** Organization – conceptualizes the value and resolves conflict between it and other values **(P)** Complete overt response – performs automatically	**Proficient** ▲ Able to anticipate what will occur in response to use of knowledge and skills, intuition and ability to recognize acute changes in the situation as they present themselves. ▲ Uses previously learned concepts/knowledge to anticipate the outcome of the plan	▲ Experienced nurse with the confidence in knowledge base and experience to make modifications in practice based on individual client's condition	▲ Learner identifies situations where modifications to BPG recommendations must be made to improve client care
Level Five	**(C)** Synthesis/Evaluation – creatively or divergently applying prior knowledge and skills to produce a new or original whole. **(A)** Internalizing – integrates value into a value system that controls behaviour **(P)** Adaptation/organization – adapts skill sets, creates a new pattern to meet specific problem or situation	**Expert** ▲ No longer relies on analytic rules, guidelines or principles. Is able to focus on the accurate region of the problem or situation because judgment is based on paradigms	▲ Leader in nursing care within a unit ▲ Post-graduate nursing student ▲ Experienced nurse transferring to a new unit with BPG that are relevant to all client care	▲ Learner seeks out other evidence sources to deal with unique problems ▲ Learner modifies approaches to improve patient care ▲ Learner identifies ways to collect data to assess effectiveness of various approaches

(C) = Cognitive (A) = Affective (P) = Psychomotor

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Putting it all together

In these examples, final learning objectives may look like this:

1   At the completion of this learning event the student will describe the use of BPG as demonstrated by the achievement of 80% upon the completion of a post-test.

2   At the completion of this learning event the student will collaborate with the client to identify the components of the BPG desired for integration in the current care plan as demonstrated in the clinical setting to the satisfaction of the educator.

Implementing the Learning Plan

This section contains additional information about teaching and learning strategies and offers an alternative theory about how people learn. The following topics are discussed:

▸ Learning Styles
▸ Teaching Strategies

Learning Styles

Until the 1980s it was thought that most learners were verbal and computational (Brualdi, 1996). Howard Gardner (1983) proposed that there were eight types of intelligence. These were referred to as Multiple Intelligences. This model is a theory of cognitive functioning and proposes that each person has capacities in all eight intelligences. The intelligences usually work together and are always interacting with each other. An understanding of Gardner's eight intelligences will aid an educator in planning and implementing an educational session. *Table 22* describes the intelligences and corresponding teaching strategies to meet individual needs.

Table 22: Strategies for Individual Learner Needs

Multiple Intelligences	Learning Style	Teaching and Learning Strategies	
Linguistic (word smart)	▶ Learns best by speaking, hearing and seeing ▶ Likes to read, write and tell stories ▶ Good at memorizing names, places, dates and trivia ▶ Reads, writes and follows a lecture delivery with ease	▶ Didactic lecture format ▶ Use narrative stories to give meaning to BPGs ▶ Pre-reading packages ▶ Well written handouts ▶ Verbal debates ▶ Word games	
Logical-mathematical (number/reasoning smart)	▶ Associated with scientific and mathematical thinking ▶ Has ability to detect patterns ▶ Reasons deductively ▶ Thinks logically ▶ Explores patterns and relationships	▶ Experiments/research projects ▶ Statistics: interpreting results ▶ Problem based learning ▶ Teach how to do literature searches to obtain BPG ▶ Introduce the research that supports the BPG ▶ Step-by-step instructions ▶ Summaries	
Spatial (picture smart)	▶ Ability to manipulate and create mental images to solve problems ▶ Not limited to visual domains ▶ Likes to draw, build, design, create things, daydream, look at pictures/slides	▶ Demonstrations ▶ Overheads ▶ PowerPoint presentations ▶ Diagrams	▶ Pictures, graphs ▶ Concept maps ▶ Involve in development of algorithms to follow BPGs
Musical (music smart)	▶ Capacity to recognize and compose musical pitches, tones and rhythms ▶ Learns best by rhythm, melody and music ▶ Likes to sing, hum, listen, play and respond to music	▶ Mneumonic and rhythmic reminders ▶ Play music as participants enter the room, or during evaluations	
Bodily-kinesthetic (body smart)	▶ Learns best with sense of movement and touch ▶ Processes knowledge through bodily sensations ▶ Likes to move, touch, talk ▶ Uses body language ▶ Good at physical activities	▶ Hands-on practice or simulation of client care ▶ Learners return the demonstration of the skill, knowledge or attitude	▶ Active role-playing ▶ Simulated learning vignettes ▶ Have participants move around the room and write ideas on flip chart papers
Interpersonal (people smart)	▶ Has the ability to understand, perceive and discriminate between people's moods, feelings, motives and intelligences ▶ Good leader, organizer, communicator, manipulator and mediator ▶ Learns best by sharing, comparing, relating, cooperating	▶ Group work ▶ Case studies ▶ Simulations	▶ Real interactions with clients ▶ Brain storming ▶ Journal clubs
Intrapersonal (self smart)	▶ The ability to know oneself and to understand one's own inner workings ▶ Has ability to understand one's own feeling and motivation ▶ Learns best by working alone	▶ Individualized projects ▶ Self-paced instruction ▶ Self-reading packages, or self-testing ▶ Online courses	▶ Reflective journaling ▶ Praise and reinforcement to confirm learner is on the right track
Naturalistic (nature smart)	▶ Enjoys biological chemical and physiological underpinning of the teaching	▶ Present the research behind the BPG	

Reference: Gardner, H. (1983) *Frames of Mind: The theory of multiple intelligences.* New York: Basic Books.

Teaching Strategies

Dialogical Learning

Small group work

▸ *Small group work* in the clinical setting may be more difficult, as many experienced nurses may not have used this type of learning. You may want to do some education on small group work with participants or facilitators before you begin (Elwyn, et al, 2000).

▸ *Case Studies* are an excellent way to develop learners' analytical and problem-solving skills, the types of skills needed to utilize BPG.

▸ *Group work* can begin with each group selecting one of the BPG to review. Present a short lecture on BPG, including prior background, content. Have the learners review the BPG as a group and compare the recommendations contained in the BPG to their current practice in their clinical area. They then present which recommendations are currently in place, which ones they have not seen or are not using and how they might incorporate the recommendations into their current practice.

▸ *Pre-reading packages* help learners come to group work with questions.

▸ *Interactive workshops* may also be effective but require resources and ongoing support of a clinical expert or champion.

  • Have a train-the-trainer course for resource nurses on the units, and organize regular meeting to discuss education issues.

  • Consider sending nurses to a Best Practice Champions Workshop offered by RNAO. It educates nurses on the use of the *Toolkit* for implementing BPG into clinical settings.

▸ Have learners work in small groups and ask them the following questions: How do you read a guideline? How will this guideline help you in practice? How strong is the evidence on which it is based? What can you take from this guideline today and apply to your practice tomorrow?

▸ *In clinical areas* set up scheduled times on patient care units to address questions about BPG.

▸ *In clinical areas* arrange for small group work to include the interdisciplinary team.

Journal Club

▸ Put students into journal clubs at the beginning of the semester. They pick an interest for the group (e.g., pediatrics, elder care, practice improvement) and then search BPG for interventions that apply to their topics. Have the students read and discuss the references of the BPG.

Experiential Learning

Role-playing

▸ Can be an effective technique, but you must be cognizant that some learners will not feel comfortable participating. If you can make case studies and role-playing scenarios more realistic you may have better participation. (Elwyn et al, 2000)

Brain Storming Sessions

▸ Ask the learners what they think would be a good solution to a particular problem, have them brainstorm for solutions and then introduce the BPG and compare the class solutions to the BPG interventions. This is particularly useful in the clinical area, as it can help acknowledge and recognize clinical expertise (Elwyn et al., 2000).

Case Scenarios

▸ Case Studies are an excellent way to develop learners' analytical and problem-solving skills, needed to utilize BPG. As the educator you should develop realistic case scenarios using real-life events and help participants develop well-built clinical questions. This will allow learners to determine if the clinical questions are answered in a particular BPG and allow them to reference other sources to determine answers.

Examples of Case Scenario types include:

▸ Simulations/Vignettes – Departments can develop vignettes online, or have actual actors. One university has used actors to simulate a client centred care conversation. Another used online vignettes to teach therapeutic relationships.

▸ Practice Sites – Identify which sites use the BPG that you are interested in teaching and partner with them to do education, or have students visit that site. In the clinical area you could have nurses who are interested in implementing a BPG visit other sites that have already done this.

On-Site Visits

▸ Have students visit sites that are currently using BPG (e.g., one professor had her students attend a Breastfeeding Clinic, when studying the BPG *Breastfeeding Best Practice Guidelines for Nurses*).

Educational outreach visits

▸ BPG Champions meet with clinical nurses on the unit to discuss the use of BPG, one-on-one.

Library Seminar

▸ Have your hospital or school librarian present a session in the computer lab/nursing station that focuses on the use of the nursing databases and the Web to find peer reviewed articles (Crumley et al, 2001).

▸ Unit staff can meet with the hospital librarian in a classroom, or individual session or mini sessions on the unit, to help them to ask good clinical questions and search appropriate resources. This may be needed for staff who question the BPG and its value (Crumley et al. 2001).

▸ Have students in clinical courses write a critical analysis on the use of BPG in their practice setting.

▸ Have nurses discuss or reflect on their own personal experiences that may affect their nursing care.

Independent Strategies

Reflective Journals

Reflective journals allow the learner the opportunity to reflect on current practices, identify areas of strength as well as areas for improvement. Journal entries over time provide the learner with an evolving story of changes experienced as a result of the learning event. Reflective journals may be used as a personal development tool (i.e., not to be shared or evaluated by others), or may also be incorporated into the learning event as an assignment with evaluation criteria (i.e., shared between teacher and learner).

A consistent format for journal writings can also aid in establishing effective reflective writing. The following format takes the writer from reflection to action (College of Nurses of Ontario, 1996)

L	Looking back
E	Elaborate
A	Analyze critically
R	Reflecting
N	Next time…what would you do?

> "The journal holds experience as a puzzle frame holds its pieces. The writer begins to recognize the pieces that fit together and, like the detective, sees the picture evolve."
> A. Williamson

Strategies to Aid Journal Writing

1 Questions to aid personal reflections

▸ What meaning does this topic/area have for you?

▸ In what areas/situations do you feel you need to improve?

▸ In what areas have you made progress? Specifically, what have you learned? What strengths can you identify?

▸ What resources are available to you? Have you searched out

resources to aid in your learning?

▸ What was helpful to you; what was a barrier?

▸ How are you feeling about this area of learning?

▸ What are the current or future opportunities to work on in these areas?

▸ How will you know?

2 Reflections regarding a specific learning event(s)

▸ What happened?

▸ What did I do?

▸ Who else was involved?

▸ How do I feel about what happened?

▸ What did I learn?

▸ How will I use this in future situations?

Evaluation

This section contains additional information about evaluating the learning event. The following topics are discussed:

▸ Evaluating reflective journals

▸ Evaluating the outcomes of learning using rubrics.

Evaluating Reflective Journals

When used as a specific teaching strategy, reflective journals can be evaluated according to the desired outcomes of using the reflective journal (i.e., evidence of self-reflection, progressive reflective and linkage to practice; enhanced ability to link reflections to concepts and implications for practice). *Table 23* is a scoring guideline for journals.

Table 23: Reflective Journal Scoring Guideline

1	2	3	4	5
Vague description	Detailed description of event but lacking personal reflections	Detailed description of event including some personal opinions	Detailed personal reflections including personal learnings	Personal reflections including implications for professional practice; linkage to relevant concepts and theories

Reference: Webster University (2004). Reflective journal: A self-reflective scoring guide. Available: **http://www.webster.edu/~dtheiss/RJfie.htm**.

Evaluating the Outcomes of Learning

Several methods can be used to identify and evaluate the desired outcomes of learning. Rubrics are guidelines for rating learner performance. They specify the expected outcomes for the level of the learner. *Table 24* incorporates two models for determining outcomes of learning specifically related to use of evidence and best practice guidelines. The table integrates Benner's (1984) "from novice-to-expert" and Steinaker & Bell's (1979) "experiential taxonomy". *Table 25* is a rubric for the grading of written work and *Table 26* is a rubric for grading performance (specific skills).

Table 24: Desired Competencies: Application of Research into Practice

Benner	Steinaker & Bell				
	Exposure	**Participation**	**Identification**	**Internalization**	**Dissemination**
Novice	Shows awareness of BPGs and application to patient care	Demonstrates ability to identify relevant evidence and/or BPGs	Identifies areas for further growth and learning re: BPGs and patient care	Able to identify evidence required or lacking	Open to new information
Advanced Beginner	Able to discuss how certain aspects of BPGs apply to patient scenarios	Asks questions re: evidence and rationale for decisions	Demonstrates a wish to acquire more information and seeks out resources	Able to explain the rationale for specific BPG	Shares information with others
Competent	Able to analyze and discuss rationale for care decisions	Actively seeks out sources of information	Identifies aspects of BPGs applicable to patient care and practice	Learning becomes integrated into practice	Attempts to share BPG information and influence the practice of others
Proficient	Able to identify opportunities for incorporating BPGs into existing practice	Consistently demonstrates critical analysis and appraisal skills	Able to analyze and interpret information	Able to transfer knowledge to a variety of situations	Shows ability to teach others; critical analysis of evidence incorporated into practice
Expert	Identifies sources and types of information required to enhance knowledge	Confidently articulates foundation for practice and rationale for clinical decisions	Able to apply problem solving skills and knowledge in a variety of situations	Seeks and applies new knowledge and research findings.	Advocates for the implementation of BPG into care delivery models and systems

References: Benner, P. (1984) Cited by: Rolfe, G. (1993) Closing the theory – practice gap: A model of nursing practice. *Journal of Clinical Nursing, 2*, 173 –177.
Steinaker, N. & Bell, R. (1979). *The experiential taxonomy: a new approach to teaching and learning.* New York: Academic Press.

Table 25: Rubric for Grading of Written Work

Grade	Topic / Issue / Question	Use of Evidence	Degree of Analysis	Application to Practice
Superior (A+ / A-)	Applicable, insightful, plausible, sophisticated insight into concepts within current and future trends	Examples of primary sources evident; excellent integration of quoted material into paper	Analysis is fresh and exciting, poses new ways to view material and concepts	Makes clear and definitive links to patient, contextual and professional implications
Very Good (B+ / B -)	Promising, but slightly unclear or lacking insight and originality	Examples used to support most points; some evidence does not support main points, quotes well integrated	Evidence related, although points may not be clear	Application to practice described; fair degree of degree of breadth/depth of argument
Good/Average (C+ / C-)	Uses familiar concepts; offers relatively few new concepts for consideration; may be unclear	Examples used to support some points; quotes poorly integrated into sentences	Analysis offers nothing new; quotes do not relate to analysis	Surface level degree of application; does not demonstrate application beyond status quo; logic often fails
Needs help/Below average (D+ / D)	Difficult to identify; no originality; restatement of obvious/well identified position	Very few or weak examples; general failure to support arguments; quotes "plopped in" – not integrated into sentences in meaningful way	Very little, weak or no attempt to link evidence to argument	Application does not flow; no connections made
Does not meet Requirements / Failing paper (F)	Lack of comprehensive thought or structure	No evidence identified or referred to	No analysis evident	No application to practice included; inappropriate application

Table 26: Rubric for Grading Performance (specific skills)

Performance Levels	Criteria				
	Questioning Skills	Search Skills	Critical Appraisal Skills	Clinical Decision Making	Sharing Information with Others
Exceptional	Continually asks questions, raises different points of view	Readily accesses internal & external resources; able to conduct search independently	Integrates critical appraisal skills into practice	Synthesizes information to facilitate problem-based learning & decision-making with self & others	Freely shares information & resources with others
Good	Contributes to discussion in a meaningful way	Accesses available resources; able to conduct search with assistance	Critically appraises information used for practice	Can confidently articulate evidence base for clinical practice & decision-making	Provides meaningful contributions to discussions
Fair	Expresses own thoughts & questions	Aware of resources but does not access	Demonstrates critical appraisal skills inconsistently	Attempts to explain rationale for clinical decisions	Shares superficial information in discussions
Not Evident	Does not ask questions	Does not access available resource	Does not critically appraise at all	Cannot provide rationale for clinical decisions beyond "traditional routine"	Does not contribute to discussions

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