ADAPTING CONTRIBUTING-DISCIPLINE INSTRUCTION TO PROGRAM-SPECIFIC NEEDS

TOWARD KNOWLEDGE TRANSFER AND EQUITY IN ASSESSMENT*

Evaluating student competencies is a challenge. In courses that involve contributing disciplines to the program, this task is actually one of the most complex, as instructors must be familiar with the roles and employment settings related to each of the technical program that they teach in. Imagine being told a couple weeks before the term begins that you have to give three new courses in three different programs,

Given this situation, and being motivated by our own professional experience, we wanted to promote equity in assessment, support the transfer of knowledge and facilitate the integration of new colleagues into our team (the psychology department). At the CÉGEP de Sherbrooke, psychology is a contributing discipline in ten different technical programs and two pre-university programs. In total, 26 courses are offered over a one-year period. Obviously, understanding the workplace realities associated with each program is no small task!

Like other colleges, we also strive to ensure the quality of our final assessments and comprehensive examinations. The psychology department has taken various initiatives to maximize equity, which we feel is one of the main factors involved in ensuring quality assessment. Although a number of improvements have been observed, not all faculty members are satisfied with the results.

Accordingly, taking into consideration the obstacles involved in continued faculty turnover, as well as the goal of promoting equity in assessment, we launched a project to establish innovative solutions to enable the department to better meet program-specific needs. This project may also inspire colleagues from other departments and institutions since often face the same challenges, regardless of teaching in specific or contributing disciplines. Some aspects of this article may even help instructors in the General Education sector. We will now look in detail at the various aspects of our project.

FOUR BIRDS WITH ONE STONE

Our primary objective was to establish a bank of formative and summative assessments used in all of our psychology courses. We quickly realized that, in order to do so, we would have to include an essential step (Step 1): collecting information on the everyday realities of the technical programs associated with our discipline. We, therefore, decided to film interviews and make them available to all of the departmental staff. Once the interviews were completed, we began to visualize various possible assessment scenarios (Step 2). As the need for assessment-design and -writing supervision quickly became apparent, we established an assessment matrix (Step 3) that could be used by all faculty members. When the assessment bank was completed, the only step remaining, was to make it accessible to faculty. This involved making the file, *Collégialité départementale accessible* on line (Step 4).

The following sections detail each of the project steps.

...understanding the workplace realities associated with each program is no small task!

1 ESTABLISHING A BANK OF TEACHER INTERVIEWS

The project's first objective was to collect data that would shed light on the professional roles and employment settings characterizing the numerous curricula involved. We, therefore, asked all program coordinators concerned to recruit someone to participate in a filmed interview. Varying in length from 45 to 90 minutes, the interviews comprehensively depicted each occupation associated with a given technical program. They also provided an overview of the challenges faced by teachers and students over the three year period of study involved. In order to ensure that interviews were relevant, we asked for subjects who, in addition to their teaching experience, also had work experience in the field in question. Moreover, the data gathered had to reflect the complex nature of the job

* The project in question was developed at the CÉGEP de Sherbrooke. As this was our initiative, we received partial release time for a one-year period. In order to make the project results accessible to as many people as possible, we discussed them at two conferences organized by the Association des collèges privés du Québec (ACPQ) and the Association québécoise de pédagogie collégiale (AQPC). As a result of the interest shown by participants, we decided to write this article.

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skills and competencies that had to be developed by students in the program in the discipline of psychology. In other words, respondents were questioned on the following aspects:

- Their relationships with colleagues and clients, whether these were:
  - daily;
  - intermittent;
  - ad hoc (crisis-based); or
  - structured
- The technical vocabulary used most regularly in their field
- The students' weaknesses they observed
- The qualities that define an excellent employee in the employment milieu concerned
- The conventional wisdom most characteristic of this milieu
- The courses in the program that could be associated with the contributing psychology class involved (regardless of whether those courses had already been taken or offered in the same session as the class)
- The contribution of the psychology class to students' successful entry into the field in question

Each interview was saved to a DVD and indexed in the faculty library, in order to be available for use by all faculty members. In accordance with their assigned duties, instructors who are called upon to teach in a technical program in which they are unfamiliar, are now able to better grasp that program's needs and relate it to the workplace.

All new teachers joining the department team receive the material, and are encouraged to familiarize themselves with the documents. This enables them to implement approaches consistent with the curriculum involved. In addition to being a source of inspiration and reassurance, this material may also provide new teachers with support and help them plan and organize their courses and content. Furthermore, by being aware of the situation and the vocabulary specific to the field in question, novice instructors will feel more confident, and this in turn, will enhance their credibility with students.

These interviews allowed us to overcome what we believe is a major obstacle for those teaching in contributing disciplines. We are referring to the knowledge they might have of program-related careers, where each field involves subtleties and complexities that are difficult to identify from the outside. (Take nursing, for example: collecting blood samples assumes an interactional context that must be grasped by individuals teaching a contributing discipline such as psychology.) In short, by means of the interviews, we managed to take a closer and more complete look at each of the fields associated with the programs to which we contribute. While not claiming that psychology teachers can associate specific examples with each and every workplace context, we believe that these interviews have made our colleagues more aware of the importance of asking questions about the career paths and requirements related to the programs to which we make an essential contribution.

2 *ESTABLISHING A BANK OF MODIFIABLE ASSESSMENTS*

Driven by a desire to support our team, rather than to impose change, we opted to create a bank of formative and summative assessments associated with the competencies to be developed in the 26 courses and 12 programs concerned. Faculty can now rely on this resource. Combined with the interviews, it has become an invaluable reference, as it allows instructors to promote equity during assessments. The bank also promotes a competency-based teaching strategy among new teachers, and may inspire anyone who is at a loss for ideas.

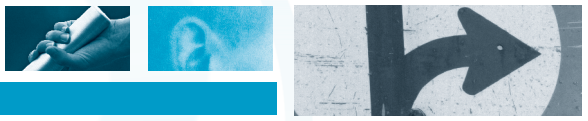
Having created the bank, we eventually decided to create a basic matrix that could be modified by anyone wishing to design an assessment. Despite the fact that we cannot describe all the assessments in question, we can nevertheless provide an example. Below is the basic matrix for the nursing course on early human development (350-183-SH) (see figures 1, 2, and 3) to which the various assessments developed have been added. For each program, the same matrix and sections are used. Although, the documents required to create these assessments are too numerous to be presented in this article, they do appear in the appendix of our virtual bank.

3 *DESIGNING A BASIC MATRIX AND SUGGESTING ASSESSMENT ACTIVITIES*

MATRIX COMPONENTS

General Information

This section incorporates components related to the program name, names and numbers of courses associated with the assessment, session during which the course must be taken, and academic context. The latter includes all other courses taken during the session, all previous courses related to the



course involved, and internships completed. This information gives faculty an idea of where students are in relation to their program, describes the knowledge acquired in other courses, and provides insight into the internship experience. The fact that this data can all be found in one place, may also encourage instructors who are teaching in a given term to collaborate (see Figure 1).

FIGURE 1 BASIC MATRIX FOR *EARLY HUMAN-DEVELOPMENT COURSE* (PART 1)

GENERAL INFORMATION
PROGRAM: Nursing
COURSE: *Early human development* (350-183-SH)
SESSION: 1st
ACADEMIC CONTEXT
• Courses taken concurrently: – *Human Physiology I: A Clinical Approach* (101-187-SH) – *Professional Practice* (180-005-SH) – *Clinical Situations in Medicine and Surgery I* (180-014-SH) – *Sociology of the Family* (387-183-SH) • Previous associated courses: None • Internships: Every session
N.B.: While the nursing department's framework plan contains five competency elements, the individuals in charge, asked us to focus the assessments we designed on the second and third in particular.

Competencies and Competency Elements

In order to steer faculty in the right direction and provide a solid foundation for the assessment activities proposed, the competencies and attendant competency elements have been clarified to ensure that their description immediately follows the general information. Given that each assessment is aimed at determining to what extent the competency or its elements has been attained, we felt it vital, that they be spotlighted as soon as possible (see Figure 2).

Formative Activity

One to three formative activities are proposed for each course, depending on the number of competencies and competency elements involved. Together with the basic matrix, a description of the elements in question is provided for each activity (see Figure 2) in order to portray the activity concerned as accurately as possible. This section contains the following: the competency element(s) evaluated, activity goal, context, student assignment, instructional materials required, activity length, and assessment method (students are asked to work alone or in teams, in class or at home, with or without their textbooks and other materials, etc.). Although the "context" section contains information that varies from one activity to the next, by and large, it relates the material studied in class to the activity concerned. It also often describes the type of activity proposed (one that is filmed, for example), the task(s) involved (provide written answers to questions, etc.) and the workplace context in question (establishing a helping relationship despite time constraints).

We should mention that the activity bank also includes appendices containing the instructions to be given to students. By way of illustration, if the goal of a particular activity is to develop future nurses' ability to assert themselves, the description of the associated context should include appropriate scenarios requiring that skill. Some of the information related to this description could appear in the activity-bank appendix; where applicable, observation charts specially designed for students or teachers are also provided.

Let us continue to illustrate our remarks by using the course on early human development as an example.

Integrative Activity

In accordance with the same principles as the formative activity, the description of the integrative activity includes a reminder of the competency element(s) evaluated, context, instructional materials required, activity length, and assessment method used (see Figure 3).

Like the basic matrix, the activities were all designed on the basis of information collected during the interviews. This ensured that the proposed assessments met the requirements involved in performing a complex, meaningful, and authentic task, such as those comprising any competency-based curriculum. For technical programs to which psychology-department faculty contribute, assessments involve workplace scenarios featuring "real-world" representatives (clients, patients, colleagues, supervisors, etc.). With regards to pre-university curricula, we adopted a "socially-aware" approach that makes use of everyday situations, both personal/relational challenges and topical social issues.[1]

[1] We refer here to an approach in which students are instructed to ask questions on a number of topical or societal issues.

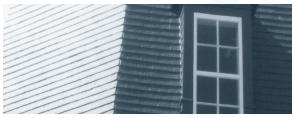
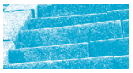




FIGURE 2 MATRIX FOR *EARLY HUMAN-DEVELOPMENT* COURSE (PART 2)

FORMATIVE ACTIVITY: HAVE AN "OWIE"?

COMPETENCY ELEMENTS ASSESSED:

1. Establish initial contact with the child.
2. Describe the child's reactions and behaviour.
3. Interpret the child's reactions and behaviour.
4. Assess the situation's potential seriousness.
5. Conduct a self-assessment of what has been learned over the course of this activity.

OBJECTIVE: On the basis of previously explored concepts, visualize clinical scenarios that might occur in a classroom context

CONTEXT: **For each age group, the instructor discusses various clinical scenarios; students must identify effective treatment strategies in keeping with the developmental characteristics of the children in each group. The clinical scenarios may be chosen from the following in particular:**

- Vaccination session
- Awareness-raising on sexually transmitted and blood-borne infections
- Tips on good hygiene
- Individual medical appointments
- Promoting a healthy lifestyle
- Support and education for children suffering from allergies (to nuts, for example)
- Support for treatment self-administration (e.g., insulin or medication administered via metered-dose inhaler).

TO BE DONE BY STUDENTS:

- Present the scenario.
- Describe the action to be taken.
- Identify moments for interaction with the patient.
- Anticipate problems.
- Discuss the main concepts that might influence a nurse's choices based on the various scenarios involved.
- Think about your own resources and personal limitations.

MATERIALS REQUIRED: NONE

LENGTH OF ACTIVITY: 40 TO 50 MINUTES

ASSESSMENT METHOD:

- The activity will involve either the entire class as a whole or students divided into teams.
- It will be conducted in class.
- It will be "open book".

FIGURE 3 MATRIX FOR *EARLY HUMAN-DEVELOPMENT* COURSE (PART 3)

INTEGRATIVE ACTIVITY: ESTABLISH A COMPREHENSIVE OVERVIEW

COMPETENCY ASSESSED: Deal with patient's reactions and behaviour (Competency 01Q2).

CONTEXT: During the first few weeks of the session, students select a problem in the area of child health that reflects their interests. Over the term, they deepen their knowledge of the disease concerned, especially with regards to its impact on child development. They amalgamate data with the help of a summary record, identify possible treatment and contra-indications, and reflect on the resources and limitations of healthcare professionals likely to work with children affected and their entourage. Each student drafts a detailed record during the term. When the session ends, all records are incorporated into a comprehensive overview, which is given to all participants.

TO BE DONE BY TEACHER:

- Present the main steps of the assignment.
- Organize a brainstorming session for the entire class, in which students look into childhood diseases.
- Approve the problem chosen by each student.
- Discuss the assessment instructions and criteria pertaining to documentary research on the disease.
- Discuss the assessment instructions and criteria pertaining to summary-record creation.
- Discuss the assessment instructions and criteria that students are to apply in their self-assessment.

MATERIALS REQUIRED: Instructions and scoring rubrics for all steps of the assignment

LENGTH OF ACTIVITY: Entire session

ASSESSMENT METHOD:

- Students must work alone.
- They must work at home.
- They may use their textbooks and other materials.

Below are a few examples of workplace scenarios that illustrate some of the materials available to educators for use as simulation exercises with technical-program assessments.

Office Technology

You are a coordinator in a business whose vice-president (who is also your supervisor) insists on meeting with the president immediately, and asks you to inform her accordingly. Unfortunately, the president informed you earlier that she did not want to be disturbed, regardless of the reason. You must therefore, turn down your supervisor's request in a professional manner.

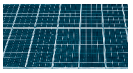
Respiratory Therapy

You work in a hospital as a respiratory therapist. You have to meet with three different patients in the same day, to explain how to properly use a metered-dose inhaler. As all three patients are in some psychological distress, you try to establish a helping relationship with them as quickly as possible.

Computer Technology

You have to make a four-to-five-minute video clip showing how to use a network or software program you created or are familiar with. The clip will be viewed individually by the employees of a small or medium-sized business. Because some of them are complete neophytes who will not get any support when using this computer tool, it is strongly recommended that you keep things simple.





PEER ASSESSMENT

In order to ensure the quality of our work, we submitted some of the assessments we designed to our colleagues in the psychology department. Some of them decided to enter their comments on a grid based on assessment content, effort demanded of educators and students, and complexity and feasibility of the tasks involved. These instructors also were asked to answer the following questions:

- Do you intend to use these assessments?
- If so, do you plan on using our original version in its entirety, or making some adjustments, thereto?

A large majority of respondents said they hoped to use a slightly modified version of our assessments. They also all appreciated the opportunity to make such changes.

As our objective had been to make these valuable work tools (which have been adapted to the specific requirements of each program) accessible to the largest number of people, the comments received helped us confirm the pertinence of the assessments and make any necessary adjustments.

Since we wanted to develop a number of simulation exercises, in order to meet the needs of the instructors involved, we had to demonstrate considerable creativity to avoid repeating the assessment scenarios. Framework plans—particularly the related competency-development goals—were of constant concern, as were the limitations imposed by the various assessment contexts (authenticity of the workplace scenarios presented to students, activity length, etc.), and continually directed our endeavours during the whole assessment-bank creation process.

...we believe these interviews have made our colleagues more aware of the importance of asking questions about the career paths and requirements related to the programs to which we make such an essential contribution.

4 *CREATING AND ONLINING THE* COLLÉGIALITÉ DÉPARTEMENTALE *FILE*

With an aim of encouraging collaboration and discussion among psychology department faculty, we created a computer file called *Collégialité départementale* and incorporated it into the department's database, together with the formative and summative activity bank. We then asked all of our colleagues to add their own assessment activities and give us any suggestions they might have in order to improve our work.

This bank is a worthwhile reference for new teachers, who can now take their inspiration from the materials used by their peers. It has promoted sharing, collaboration, and educational diversity in our department, while at the same time complying with the principles of professional autonomy.

CONCLUSION

Conducted in 2011, in an effort to assist our colleagues, without imposing a particular line of conduct, our innovative project, we feel, has been a resounding success. Indeed, we have found that the materials proposed are still a source of inspiration in 2015, with the result that all psychology instructors at the CÉGEP de Sherbrooke are still mastering the activities in their own way and modifying them in accordance with their own interests and teaching style. Accordingly, there is every indication that this project has been greatly appreciated by a good number of faculty members, veterans and novices alike.

Lastly, this project gave us an opportunity to build bridges between our contributing discipline and the numerous curricula in which we work. Our unique collaboration with physical-rehabilitation instructors helped us design a final assessment involving members from both departments. We asked these individuals to create audio clips containing professional recommendations for physiotherapists, neuropsychologists, physicians, and nurses' aides working on a given case in order to stimulate multidisciplinary discussions. These fictitious comments took the shape of voicemail messages for a physical-rehabilitation technician (the student). The expertise of physical-rehabilitation faculty contributed enormously to the assessment's realism. Our collaboration maximized assessment consistency and ensured that the workplace scenarios concerned were as realistic as possible.

We were hoping to reach, yet another goal by means of this project: to inspire faculty from other contributing disciplines at the CÉGEP de Sherbrooke. Unfortunately, we were unable to achieve this goal.. Therefore, a lot remains to be done in order to accomplish this, and ultimately kill five birds with one stone!

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