THE EVALUATION OF MEASURES THAT SUPPORT SUCCESS

1. Conditions for effectiveness of a support measure

2. General evaluation process of a support measure

The **Carrefour de la réussite au collegial** was created by the *Fédération des cégeps* to support CEGEPs in the implementation of their plans for success. The means selected to accomplish this include the organization of conferences, seminars, thematic workshops, regional meetings and support for the development of screening and diagnostic tools.

This document falls under the "tool development" category, however in this case it is not a matter of screening or diagnosing but rather of evaluating support measures. The document is divided into two parts that are quite distinct yet connected:

— The conditions for effectiveness of a support measure for success;

— A general and instrument-based process for evaluating the support measures for success.

It was developed by the following six-person work group:

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> M_{rs.} **Line Chouinard, educational advisor at Cégep de Chicoutimi**
> M_{rs.} **Sylvie Coutu, educational advisor at Cégep de Victoriaville**
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Le Carrefour de la réussite au collegial would like to thank Collège de Rosemont, Cégep de Chicoutimi and Cégep de Victoriaville for allowing their educational advisors to participate in the committee work.

Carrefour de la réussite au collégial
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Table of Contents

INTRODUCTION

In response to the many requests received from colleges, particularly over the last two years, the *Carrefour de la réussite au collégial* decided to include the question of evaluating the effectiveness of support measures in its 2004-2005 work plan. This was not the first time the Carrefour displayed an interest in the subject. In recent years, the Carrefour asked Groupe Qualité for a repertory[1] of indicators[2] on the quality of higher college education. It pursued this endeavour last year by assigning a project manager to research the role of indicators in evaluating support measures. It is therefore in a perspective of continuity that the Carrefour pursued this work, looking further into what tools can be supplied to colleges to help them evaluate their measures that support success.

The mandate

To accomplish this, a work group was formed and given a double mandate:

a) Produce a document for colleges that defines effective conditions for the different support measures.

b) Produce a document for colleges that presents a general and instrument-based process for evaluating the effectiveness of support measures.

One might question why the Carrefour chose to establish two mandates. Why not simply concentrate on developing a typical process for evaluating the effectiveness of support measures and the tools needed to conduct such a process? Wouldn't this be a better way to meet the colleges' needs?

Evaluating the effectiveness of support measures, even when trying to keep things simple[4], remains a complex process due specifically to the number and the nature of factors involved. It is a process that involves many choices, one that requires a rigorous collection and analysis of data which, consequently, places high demands on both time and resources. In addition, the number of support measures targeting success currently implemented in colleges is so high that trying to evaluate each one, either separately or in groups, becomes an almost overly demanding task.

These two facts led management to raise questions before proceeding and to examine other avenues: Does a college need to evaluate all the support measures for success it has implemented? Instead of this type of evaluation, would it be possible, by taking certain precautions, to ensure the effectiveness of support measures from the very beginning, from the moment they are conceived and developed?

[1]   Jean-Paul Dallaire, Bernard Demers and Jean-Yves Lescop, *Les indicateurs de l'enseignement supérieur*, Groupe Qualité, Télé-université, Université du Québec, December 2003, 193 p.

[2]   This repertory serves also as a repertory for tools that make it possible to measure the indicators.

[3]   Nathalie Prévost, *Le rôle des indicateurs dans l'évaluation des mesures d'encadrement*, preliminary version, August 2004, 64p.

[4]   Applying the expression of voluntary simplicity to the question of evaluating the effectiveness of support measures was put forth by Mrs. Jacqueline T. Giard, during the closing speech at the Days of discussions on success, on January 27 and 28, 2005, organized by the Carrefour de la Réussite.

This type of reflection led to the first mandate being formulated. This task was also considered a prerequisite to the mandate for an evaluation process. This meant that members of the work group needed to produce a document that would identify the main active variables in the implementation of a support measure and then determine the conditions for effectiveness or effective conditions for each of these variables.

The Carrefour realized that producing this type of document would not only help colleges develop support measures but it would also support their follow up and evaluation. An evaluation will always remain a relatively complex and burdensome task. Also, taking steps from the very beginning to ensure that support measures are effective, appeared to be, if not an alternative to evaluation processes, at least a rigorous and realistic way to make their subsequent evaluation easier.

The work group

The work group comprised six people[5], three who were directly involved in their college's success project for the past three or four years, and three others who, although not presently active in a college, had a broad experience with the college environment and the evaluation process. This made it possible, as desired, to start from the actual college situation and then move on to a certain modeling before returning to validate the model with actual measures applied in the colleges, thereby completing a profitable feedback loop between practice and conceptualization.

The process

From the very beginning, the work group decided it was necessary to clarify the concept of support measures. After examining a sample of success plans, the computerized data bank on means adopted by colleges to improve success rates (BIMAC) and the synthesis report from the *Commission d'évaluation de l'enseignement collégial* (CEEC), two facts became clear:

a)   there is a large number of support measures put forth by the colleges, and

b)   there is a great diversity of measures in terms of their nature and scope.

Given this reality[6], and the fact that just about everything can be called a support measure, the concept of support measure needed to be put into proper perspective by answering the following question:

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[5] From Mrs. Marie Blain, educational advisor at Collège de Rosemont, Line Chouinard, educational advisor at Cégep de Chicoutimi, Sylvie Coutu, educational advisor at Cégep de Victoriaville, and Claude Gagnon, Pierre Matteau and Jean-Paul Michaud, three project managers for the *Carrefour de la réussite au collégial*.

[6] To understand this proliferation of support measures and their wide variety, it is helpful to remember a few contextual elements from which success plans in colleges have evolved: additional allocations that needed to be justified; the rather cool reaction from many staff members to using quantitative indicators; the widely shared feeling that the official discourse on the effectiveness of colleges based on various quantitative indicators was unfair since it ignored the fact that colleges have always been preoccupied with their students' success; the strategic and political obligation to have a "good balance sheet" at least for activities if not for results, etc. it is important to note that the situation has evolved and in phase 2, many aspects of success plans have changed.

— **What is a "true" support measure?**

In going through the process, two additional questions needed to be answered:

a)   Should the term support measure be reserved only for interventions with students considered "at risk"?

b)   What is the difference between a service, a support measure and regular college activity?

The answer to the first question is in keeping with the consensus in the network, taking into account that the term support measure applies as much to interventions destined for all students in a college, not only students said to be "at risk". The answers to the second question seem to go against certain beliefs currently present in the network. **For example**, the work group considers that a support centre **is not** in itself a support measure, but rather a college **service** that offers students various support measures. This position is elaborated in point 1.2 and in Appendix 1.

Two important and complementary remarks should be made here. In the first place, it would be a serious error to consider the results of the group's clarification of the concept as "dogma". Therefore we should not be overwhelmed by the expression "true support measure"; a support measure is not "true" in itself, but rather within a particular context and based on a minimum number of attributes that define the concept of a support measure. The first part of this document is a tool, not a philosophy. As a tool, we hope that it will do more to help improve the quality of support measures than to bring about more or less productive discussions on the "true" or "not so true" character of a support measure. The second comment follows a similar logic; it is not that important for **daily college life** that a support measure "pass the test" of being a "true" measure, (the college can always consider its support centres as support measures, if it so desires), but the most important thing is that the interventions to support success be effective with regard to expected impact and targeted results.

The concept of success

The work group also had to agree on the concept of success. In the present document, success should be understood as being **successful college studies**, which includes **success in courses, perseverance in studies** and **graduation**. In this sense, some may think that for the work group, success **amounts to** nothing more than the number of courses completed, the percentage of students re-registered in the same program, session after session, the number of students receiving their diploma within a prescribed timeframe, etc.   But this is not so.

Implementing the use of **qualitative** and **quantitative** indicators as a required step in evaluating the effectiveness of support measures does not take away from a college's need to provide itself with inspiring educational objectives. To determine its global perspective within the scope of its educational project and to expand its concept of success within the framework of its success plan are choices that each college must make.   This document therefore is not concerned with objectives such as developing a culture of success, fulfilling all personal aspects of oneself, etc.

The content of this document

From what has preceded, we see that content of the present document deals with the first mandate only, that is, to define the general conditions that make support measures effective, what we can call conditions for effectiveness. This document can be divided into two closely linked parts, the content of the first being re-examined in the second part.

The first part offers an operational definition of the concept of a support measure. It is followed by a sheet used to describe a support measure and other sheets that are already completed to serve as examples for illustration purposes.

It is not enough to be able to describe a measure, the conditions that make its effective application possible must also be determined. This is what we find in the second part, which deals with the variables to take into consideration when developing, implementing and even evaluating these support measures, as well as the conditions that ensure their effectiveness. These variables were defined and the general conditions for effectiveness were determined based on the characteristics used to describe a support measure.

This document also has five appendixes. The first one presents the results of a critical exercise on interventions often considered to be support measures. The second appendix outlines several typologies of support measures. The next two contain examples, that is, measures described according to the developed characteristics, and the analysis of a support measure using a blank sheet on conditions for effectiveness. Finally, the last appendix presents this same blank sheet for colleges who want to use it as a checklist.

The members of the work group are well aware that the success file has evolved over the last four years and that colleges are now better equipped to follow up on different student groups and more experienced in matters supporting success. The work group hopes that the tools developed here will contribute to this ongoing evolution.

1. A USEFUL CONCEPT OF A SUPPORT MEASURE

Several college intervenors might be surprised by the fact that the work group on the effectiveness of support measures began by focusing its attention on the concept of a support measure. Is it really useful for colleges to define the concept, given they have already selected a large number of measures in their institutional plan for success? What's more, the *Commission d'évaluation de l'enseignement collegial* has already provided colleges with feedback on their success plan and on the implementation of their measures without having felt the need to define the concept.

Before beginning the task of evaluating the effectiveness of support measures, the work group felt it was relevant to define the concept of a support measure. First of all, it was important for group members to agree on the concept of a support measure before trying to determine its conditions for effectiveness. In addition, from the perspective of producing a document to help colleges evaluate "something", it was essential for us to know "what" needed to be evaluated.

However, the initial reason that led the group to devote its attention to the concept of a support measure deals with the eminently practical character of such a concept:

— Within the framework of their support plan for success, colleges have identified a large number of means to promote success. Are all these means really support measures? Is it possible that certain means are really support measures and that others are simply activities that are designed to support success?

— At first glance, this question may seem theoretical, but it does present a fundamentally practical character: if colleges had to systematically evaluate all the means listed in their plan for success, they would be facing an enormous task. Is it possible, on the contrary, that among all those means identified, there could be a much more limited number of "support measures" and that therefore the task could be easier to achieve?

The work group undertook its examination of the concept of "support measure for success" by focusing on this very practical question. We hope the approach proves useful and enlightening, given the challenges that colleges are facing and, at the same time, resolutely operational, even though we recognize the fact that it has not been formally validated on a theoretical level.

In this document, the concept is first defined by its critical attributes. It is then differentiated from a diagnosis, an activity or a service. The consequences relating to the evaluation of support measures are then specified before we tackle the question of choices made by individual institutions relative to support measures. Finally, tools are proposed to support the colleges in their work: a sheet describing a support measure and examples of descriptions of a support measure. Two other complementary tools can be found in the appendix: an analysis of interventions often considered as support measures (Appendix 1) and typologies of support measures in colleges (Appendix 2).

1.1 THE CONCEPT OF A SUPPORT MEASURE

A support measure for success is a set of coordinated designed to achieve a result or an objective linked to success; like any measure[7] it is a means developed specifically to "resolve" a question or problem.

In light of this definition based on the concept of a measure, what distinguishes "a support measure" is its structured nature, explicitly organized based on results to achieve relative to a real or potential obstacle to successful college studies.

Based on this concept and subsequent to a validation[8] process, the following elements are considered critical attributes of a support measure:

— **an obstacle or problem:**

i.e. an identified obstacle or problem that affects students' success in college studies; a measure is based on the identification of an obstacle or a problem affecting success rather than on the identification of a student need. For example, one can determine that students need support in their orientation; thus a service is created. In the case of an obstacle, one can determine that weak students often experience problems with motivation and orientation in their first session: based on this particular problem, the orientation department could implement a support measure for success[9];

— **a specific project for the problem diagnosed:**

i.e. a specific intervention project for this particular problem relative to success in college studies;

— **an expected result linked directly to the implementation of the support measure:**

i.e. a result (or results) to be achieved over the short term in relation to the identified problem after implementing the measure; it is to some degree a <u>direct consequence</u> resulting from the measure (ex.: being able to produce a better summary after being taught to use the summary as a study strategy);.

— **coordinated means:**

i.e. the determination of a set of coordinated means designed to achieve this result;

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[7] In everyday language, a measure is considered an "unusual" or "out of the ordinary" means to solve a problem.

[8] This section is based on an approach whereby a concept is defined by its critical attributes, the latter being validated by analyzing a set of examples and non-examples. In the case of the concept of support measures, the validation was made based on theoretical examples (ex.: the support centres for French) and real examples (ex: the inversion of the French sequence as it is applied in college Y). This exercise evidenced the fact that support measures, even with identical names, vary greatly from one college to another; it also allowed us to confirm and enrich the attributes that were selected at the start.

[9] This distinction between a problem and a need, with regard to a support measure, was inspired by a statement made by Mr. Daniel Fiset of Cégep du Vieux Montréal at the *Journées d'échanges sur la réussite,* held January 17 and 28, 2005.

— **clearly identified intervenors:**

i.e. intervenors responsible for implementing the measure;

— **expected impact on the success of college studies following implementation of the measure:**

i.e. the anticipated medium-term impact on student success in college studies, on **the basis of indicators,** such as the success rate or average of a group or sub-group in a course, the success rate or average of a group or sub-group for all the courses in a session or program, the graduation rate, perseverance in studies. These effects correspond to the <u>contribution of a measure</u> in improving the success rate in college studies. Other more **qualitative** indicators can also be used: for example, assessing how competent students feel at the end of the program with regard to their entrance into the job market, their confidence in their new capacities to undertake and succeed in university studies or to become integrated in some enterprise;

— **a follow-up mechanism to evaluate the measure:**

i.e. the identification of means to collect information that will be used to judge the effectiveness of the measure based on targeted results and the expected impact.

The following example will illustrate the difference between "an expected result linked directly to the application of a measure" (third attribute) and "the expected impact, following the implementation of a measure, on the success of college studies" (sixth attribute). In the case of a measure dealing with students' use of the summary as a strategy for in-depth study, we could identify the following results: the students summarize more effectively, more of them are using the summary, and the average on a future exam will be higher than usual, say 5% more. These are three examples of <u>direct consequences</u> resulting from the implementation of a measure. With regard to the expected results on college studies, there could be an increase in the general average for course X, a higher student success rate for the course, or a greater number of students re-registering for the following session: three examples of a measure's contribution to improving the success rate for college studies.

Note it is also possible that **the results expected directly from the measure could be positive without necessarily having a positive impact on college success, or that it may not possible in certain cases to attribute these results to the support measure.**

1.2 A DIAGNOSIS, AN ACTIVITY OR A SERVICE ARE NOT SUPPORT MEASURES

By referring to the concept of a support measure for success as presented, we can distinguish it from a diagnosis linked to success, regular college activity or a college service.

One of the major consequences of this definition of a support measure for success is that we cannot consider a "diagnosis" of students' learning difficulties or any other form of obstacle to success to be a support measure. Therefore, having newcomers take the "Help us get to know you" test cannot be considered a support measure. In fact, a support measure implies that in addition to the diagnosis, there are a set of intervention means relative to the established diagnosis. The diagnosis is only one attribute of a support measure.

Another consequence of this concept of a support measure is that a regular college activity cannot be considered a "de facto" support measure for success. In fact, a support measure for success is defined as a set of means that are implemented to improve an observed situation that has been defined as a problem or an obstacle to success. This specific characteristic of a particular type of problem allows us to distinguish a support measure from a college activity. First of all, certain activities are not directly linked to success: students registering for a course for example. Other activities may be linked to success without relying on a specific diagnosis linked to success: this could be the case for bursaries given for excellence, the welcome given in a program, the presentation of a course plan and teacher proficiency training.

However, certain activities can become "support measures for success": one such activity is teacher proficiency training organized following a specific diagnosis relating to success. For example, this diagnosis could evidence the fact that students are very weak with regard to their strategies for in-depth study: a training activity is organized for this purpose for teachers in the program. Then, an intervention strategy in class is selected to teach the students these strategies. An appropriate follow-up on the measure is then carried out. What this means is that the training activity is part of a set of means that constitute the support measure. It also implies that a means can involve an activity in one college and constitute a "support measure", or be part of one, in another college.

Given the definition retained for a support measure for success, the implementation or existence of a service in a college is not a support measure for success. A service is a college structure that can give rise to a diversity of support measures. Thus, an institution's orientation service is not a support measure: however, such a service can develop several support measures for success. This is also true for an early diagnosis of orientation problems, follow-up interventions in class regarding the job market, professions and aptitudes linked to various employment functions covered by the program. Similarly, help centres in various disciplines constitute services offered to students: they may bring about the implementation of a set of means that constitute one or more support measures, such as peer tutoring, early individual corrective teaching followed by a makeup exam for students who failed an exam, using self-correcting software, etc. The measures retained for the same kind of help centre can vary considerably from one college to another.

To summarize, in a college, several activities and services are implemented to meet the institution's educational objectives. These activities and services retain their pertinence without constituting a support measure for success. In other words, a college selects a large number of activities (including teaching, of course), services and support measures for success to help achieve the institution's educational project.

Appendix 1 provides a list of examples of means often considered as support measures for success as well as a number of observations relative to this situation.

1.3 CONSEQUENCES OF THIS CONCEPT ON THE EVALUATON OF SUPPORT MEASURES FOR SUCCESS

Four consequences emerge from the proposed concept of a support measure for success, a concept that allows us to distinguish it from a simple diagnosis, a regular activity or a college service. For the moment, these consequences on evaluation are simply listed; the section dealing with the evaluation of support measures will provide more detailed explanations and justifications. However, the immediate explanation of these consequences on evaluation gives the developed concept a certain scope that seems significant at this stage of the analysis.

The first consequence deals with the fact that not everything in an institution is a support measure, and consequently, not everything has to be evaluated as a support measure.

The second consequence concerns the fact that the evaluation of a support measure is not the same as the evaluation of a service. It is easier to evaluate a support measure implemented in a college by the help centre for French than to evaluate the help centre in its entirety. A college may, of course, decide to evaluate the relevance or efficiency of such a centre: it could also consider the evaluation of various support measures implemented by such a service, but also many other variables such as the allocated resources, the taking charge of the centre by the program team, etc.

A third consequence deals with a self-evaluation of the institution's plan for success or for reporting to the *Commission d'évaluation de l'enseignement collégial.* A college may target certain support measures for success to be evaluated, while shedding light on the idea that other activities are taking place in the institution. A college can also stagger the implementation of various support measures and their evaluation.

A final consequence: The same set of interventions can represent a support measure in one college but not in another, based on the presence or absence of the critical attributes of a support measure.

1.4 An INSTITUTIONAL CHOICE: A MEASURE OR A SET OF MEASURES

The explicit description of a support measure poses the problem of what is the scope of the selected support measures. Certain colleges select precise support measures which are "limited" in scope: this is the case for a support measure that focuses on teaching the "summary" as a study strategy, for instance. In another college, a support measure could deal with the integration of several in-depth study strategies, such as the summary, preparing for an exam, taking notes, etc. Another example: a college may consider "first session pedagogy" as a support measure, which could include peer tutoring, teacher support, individualized orientation support, and a strategy for developing a sense of belonging to the program. For another college, these various elements can be seen as individual support measures for success.

The group believes that both approaches are acceptable. The advantage of one approach represents a challenge for another. The main interest in designing a support measure from a broad perspective, one that is very "encompassing", lies in the fact that a more global perspective sheds light on the links between the various means used by an institution which, in turn, helps determine the contribution of individual means relative to the selected support measure for success.

The main advantage of conceiving a more precise measure on a smaller scale is: it is easier to measure its contribution with regard to expected results. However, here the challenge lies in connecting these diverse measures within a global perspective, in terms of a session, a program or an institutional plan for success; in short, it is more difficult to evaluate its contribution to the expected impact as measured by one of the selected indicators.

Even if the two perspectives are of equal value, it remains important to determine the limits of each one. Sometimes, colleges may even select one approach in a given program and a different approach in another program.

Beyond these choices that vary from one institution to the other, or even from one program to the next in the same college, there are three essential aspects: the proper selection of measures within the framework of the institutional plan; their explicit description so that the "choices and commitments" are clearly defined; and the explicit consideration of the effective conditions regarding their implementation (which will be covered in the second part of this document).

1.5 DESCRIPTION OF A SUPPORT MEASURE

Before implementing a support measure, the group recommends that each college make an explicit description of it.

The main underlying reasons for this suggestion are:

— The more explicitly a measure is described during its development, the more it will contain conditions favouring its success;

— the more explicitly a measure is described, the more it contains the important ingredients that facilitate evaluating its effectiveness.

The sheet below can be very useful for describing a support measure for success. It was designed to help bring out the characteristics of a support measure for success and to visualize its dynamic character. The essential elements of this sheet could obviously be used as categories if a college deemed it appropriate. Furthermore, the second page of this sheet contains complementary information that can also be considered when implementing a measure: the necessary resources for the project, the timeline, the support of participants and collaborators as well as the "person responsible" for the measure. Although these indications are not part of the essential attributes of a measure, they remain very useful for an adequate implementation. Some of this information will prove extremely valuable when the time comes to verify the effectiveness of a support measure (see the section on conditions for effectiveness).

In **the pages** following the presentation of the sheet, two examples are provided to demonstrate how the sheet can be completed: an increase in the quality and number of study hours (example 1, page 20) and extra math course (example 2, page 23).

Name of SUPPORT MEASURE FOR SUCCESS:

OBSTACLE OR PROBLEM LINKED TO SUCCESS:

SPECIFIC INTERVENTION PROJECT FOR THE DIAGNOSED PROBLEM:

EXPECTED RESULT DIRECTLY LINKED TO THE APPLICATION OF THE MEASURE in relation to the problem:

COORDINATED MEANS to achieve the result:

CLEARLY IDENTIFIED INTERVENORS
(counsellors, teachers, coordinators, management, etc.):

EXPECTED IMPACT ON SUCCESS in terms of quantitative indicators such as average, success rate for a course or session, re-registration rate, perseverance, graduation rate, etc. as well as qualitative indicators such as feeling of competence and motivation, for example:

FOLLOW-UP MECHANISMS TO EVALUATE THE IMPLEMENTATION OF THE MEASURE:

HUMAN, FINANCIAL OR MATERIAL RESOURCES REQUIRED (secretarial, locale, budget, access to the college's professional and technical services, etc.):

APPROXIMATE TIMETABLE:

Starting date for developing the measure:

Date for implementing the measure with the students:

Approximate date for the first evaluation of the measure:

ESTABLISHED CONTRIBUTION FROM CONCERNED INTERVENORS AND COLLABORATORS, if required (program, departments, team session, services, management, etc.):

OTHER ASPECTS:

NAME OF PERSON RESPONSIBLE FOR THE SUPPORT MEASURE:

SIGNATURE:_____

DATE: _____

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Name of SUPPORT MEASURE FOR SUCCESS:
Increasing the quality and number of study hours

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Example 1

OBSTACLE OR PROBLEM LINKED TO SUCCESS:
— after administering Résultats Plus, it was determined that the number of study hours and the nature of study activities are lacking.

SPECIFIC INTERVENTION PROJECT FOR THE DIAGNOSED PROBLEM:
— teaching a few study strategies to all students and requiring precise weekly homework assignments.

EXPECTED RESULT DIRECTLY LINKED TO THE APPLICATION OF THE MEASURE in relation to the problem:
— the actual number of hours spent studying each week will increase for all students;
- the proposed study activities (homework) will be done by the students;
— the quality of studying will be improved in terms of in-depth treatment.

COORDINATED MEANS to achieve the result:
—make a diagnosis of the situation with the students: compare the number of study hours in relation to the anticipated success rates (using Résultats Plus?); (service supporting success);
— present the proposed intervention strategy to the students. Provide a clear explanation of what learning is: learning varies based on acquisitions, their use and the quality of treatment by each individual;
— present the strategy: the "mandatory" weekly completion of short assignments used in class from week to week (teacher X);
— explicitly teach the following strategies: identification of key words and brief summaries (teacher X);
— concerted effort of at least three teachers in the session: common and systematic requirement by each teacher from week 3 to week 7 of the session (teachers x, y and z).

CLEARLY IDENTIFIED INTERVENORS
(counsellors, teachers, coordinators, management, etc.):

— the educational advisor will be responsible for the diagnosis and will work with the teachers to select the tools;
— 3 teachers from the first session in the specific training program will present the strategy together;
— teacher X will carry out the explicit teaching; the other two will carry out the transfer;
— the measure will be presented to the teachers in the program.

EXPECTED IMPACT ON SUCCESS in terms of quantitative indicators such as average, success rate for a course or session, re-registration rate, perseverance, graduation rate, etc. as well as qualitative indicators such as feeling of competence and motivation, for example:

— the average achieved by the student group on the exam will be higher than the average normally observed on the same exam in previous years;
— the group average for the overall session will also be higher; - the number of students that successfully complete the course will be higher; - and so will the students' confidence with regard to their capacities for studies.

FOLLOW-UP MECHANISMS TO EVALUATE THE IMPLEMENTATION OF THE MEASURE:
— question the students about their usual number of study hours and their strategies:
use a sample from Résultats Plus; establish a profile for each;
— administer the exam and examine the results;
— administer the Résultats Plus questionnaire once again: compare the relevant parameters (number of study hours, strategy, etc.);
— evaluate either of the strategies used (key concepts or summaries);
— administer the questionnaire to the students: their evaluation of their strategy according to their post-test success in December: the strategies implemented after this.

HUMAN, FINANCIAL OR MATERIAL RESOURCES REQUIRED (secretarial, locale, budget, access to the college's professional and technical services, etc.):
— need to call on the educational advisor to adapt a part of the Résultats Plus questionnaire and to fine-tune an evaluation tool for the strategies taught;
— need to call on the IT department to process the Résultats Plus data;
— need the specific collaboration of the educational organization service to follow up on the quantitative success rates.

APPROXIMATE TIMETABLE:

Starting date for developing the measure: April

Date for implementing the measure with the students: August of the following year

Approximate date for the first evaluation of the measure: January of the following year

ESTABLISHED CONTRIBUTION FROM CONCERNED PARTICIPANTS AND COLLABORATORS, if required (program, departments, team session, services, management, etc.):

— all the concerned participants gave their approval for the project; - all the concerned participants agreed to play a part.

OTHER ASPECTS:

Would it be possible to free up some time to implement the project (3 hours per week)?

Budget source: Teachers' payroll? Foundation?

NAME OF PERSON RESPONSIBLE FOR THE SUPPORT MEASURE:

SIGNATURE:_____

DATE: _____

Name of SUPPORT MEASURE FOR SUCCESS:
Extra course in mathematics

Example2

OBSTACLE OR PROBLEM LINKED TO SUCCESS:
— difficulty observed from one year to the next in basic mathematics among first session nursing students, especially with calculating dosages.

SPECIFIC INTERVENTION PROJECT FOR THE DIAGNOSED PROBLEM:
— offer three or four hours of training in mathematics (basic operations) for students who do not have the capacity to execute the basic mathematical operations required to succeed in certain courses in the specific training of the program (nursing, chemistry and biology).

EXPECTED RESULT DIRECTLY LINKED TO THE APPLICATION OF THE MEASURE in relation to the problem:
— at the end of the activity, the targeted students will be able to calculate dosages and will be able to do so in real life situations that require the calculation of amounts of medication.

COORDINATED MEANS to achieve the result:

— development of a test by a teacher in the mathematics department;
— administration of the test early in the session;
— grading of tests;
— analysis of results;
— detection of students with problems;
— three or four hours of additional training by a mathematics teacher for students experiencing problems;
— re-evaluation of the measure – post-test;
— verification in the courses, in nursing (calculating dosages), chemistry and biology courses, as to the successful application of basic mathematical operations in each discipline.

**CLEARLY IDENTIFIED INTERVENORS
(counsellors, teachers, coordinators, management, etc.):**

— the nursing program coordinator is responsible for implementing the activity;
— the diagnosis is the responsibility of one of the three teachers in the first year nursing course, Nursing 1;
— the teaching is done by a mathematics teacher;
- verification is done by the mathematics teacher;
— the application without error is carried out by the three teachers in the first year nursing course, Nursing 1;
— the nursing program coordinator is responsible for the follow-up in the nursing courses;
— the evaluation of the measure's effectiveness is done by the educational advisor, the assistant and the personnel;
— the teacher is committed to the measure.

EXPECTED IMPACT ON SUCCESS as measured by quantitative indicators such as average, success rate for a course or session, re-registration rate, perseverance, graduation rate, etc. as well as qualitative indicators such as feeling of competence and motivation, for example:
— an increase in the success rate of work placements and courses in the first year nursing program.

FOLLOW-UP MECHANISMS TO EVALUATE THE IMPLEMENTATION OF THE MEASURE:

— individual student results on the diagnostic test in mathematics and identification of students requiring additional courses;
— post-test results of these students compared to test results;
— evaluation questionnaire given to teachers where the subject matter requires skills in mathematics (nursing, chemistry, biology);
— nursing course results for the first and second sessions.

HUMAN, FINANCIAL OR MATERIAL RESOURCES REQUIRED (secretarial, locale, budget, access to the college's professional and technical services, etc.):
— the academic organization service follows up on data to be evaluated.

APPROXIMATE TIMETABLE:

Starting date for developing the measure: May 2004

Date for implementing the measure with the students: August 2004

Approximate date for the first evaluation of the measure: January 2005

ESTABLISHED CONTRIBUTION FROM CONCERNED PARTICIPANTS AND COLLABORATORS, if required (program, departments, team session, services, management, etc.):
— the IT department has accepted to process the data, and so has the mathematics teacher concerned;
— the nursing program unanimously supports the project.

OTHER ASPECTS:

NAME OF PERSON RESPONSIBLE FOR THE SUPPORT MEASURE:

SIGNATURE: _____

DATE: _____

1.6 POTENTIAL DIVERSITY OF SUPPORT MEASURES FOR SUCCESS

Typologies

One of the main objectives of this document is to support colleges in the development of support measures based on optimal conditions for effectiveness. To this effect, the work group has chosen to provide the institutions with various typologies of support measures.

In doing so, the group believes it addresses a double concern:

— in addition to evaluating the effectiveness of measures, colleges must choose a number these measures and finalize their institutional plan for success: it could be useful for them to have a typology that brings out the potential diversity in types of measures. Those responsible for the colleges' success project had formulated a similar request during meetings held in 2004;

— college intervenors might have the impression that the concept of a support measure for success put forth in this document reduces the potential number of support measures: a typology might be useful here for demonstrating the potential diversity of types of measures. For example, we could have a tendency to design measures that target only students: one of the typologies brings out the fact that we can implement measures that target employers or intervenors in secondary-level teaching.

The work group did not see the need for selecting just one typology among those presented: colleges can select the one that best suits their situation based on the advantages and disadvantages of each.

The work group would also like to underscore the fact that the suggested typologies were not part of a comparative study, nor were they validated. Here again, the group relied on concrete college experiences to explicitly define various frames of reference likely to be of help to the institutions.

The different typologies can be found in Appendix 2: they are presented succinctly along with the main advantages and limitations of each.

Examples

Using a given typology can help a college design diverse support measures in a variety of sectors of college life or at various moments in a student's life. We shall illustrate this diversity of measures by describing support measures in other sectors of college life that are not linked directly to teaching. The group has noticed that often the examples provided to illustrate support measures are generally linked to the teaching sector.

Interested readers can consult these examples in Appendix 3: this appendix also contains an example of a support measure dealing with the end of a student training program. The perspective here is to provide an example of a support measure that does not involve the first session of student training. This measure involves **preparing for the Standard French Test.**

Two examples involve **school orientation and program changes;** a third example deals with **participation in sporting activities,** according to certain conditions.

1.7 CONCLUSION: INSTITUTIONAL CHOICES

In this first chapter, we have brought to light a certain number of impacts or consequences resulting from the concept of a support measure for success as developed by the work group:

—not everything can be considered a support measure simply because it involves working towards success or because it helps students;

—a diagnosis, even though it deals with students' problems, is not a measure since in only constitutes a single attribute of a support measure for success;

—an activity linked to success is not a support measure; it does not constitute a specific project designed to counter an obstacle to success, it is not generally supported by a precise diagnosis and it rarely results in a structured evaluation mechanism. However, it is possible to transform an activity linked to success into a support measure by ensuring that it has all the attributes of a support measure;

—a service is not a support measure; it is not based on a specific diagnosis of a problem relating to success and it constitutes a "permanent" structure in an institution that is designed to meet a student need, even when the service is linked to success;

—the evaluation of a support measure does not correspond to evaluating a service or the institution's plan for success; from an evaluation perspective all the actions of a support plan for success are not to be considered support measures.

The choice of implementing one support measure for success rather than another depends on the college: the proposed concept of a support measure helps colleges recognize a measure and its potential based on critical attributes. It also helps determine the relative importance of the proposed measure based on the problem diagnosed. However, what we are proposing here does not help colleges select one measure over another to counter a problem linked to success. Also, a college many decide not to implement a measure even when a problem linked to success has been identified: this could be for reasons of priority, cost, choice of scheduling, or other.

All these consequences can be of interest to an institution. However, for many establishments, this concept differs from the one generally used implicitly on its premises. Based on experiments in a few colleges, the work group estimates that a college will benefit from a strategy to implement this type of change in concept.

This strategy can vary from one institution to another: for instance, a college can introduce critical attributes as evaluation criteria for projects, use these attributes to analyze the support plan for success, provide budgets for activities as well as support measures, etc. These paths illustrate the possibility of implementing this concept progressively, without pomp or fanfare, which will help lessen resistance. In other colleges, the institutional context makes it possible to tackle the discussion of such a concept directly with the *Commission des études,* for example. Calls for project proposals and task allocations can also present interesting opportunities to include this type of change on the agenda.

Colleges must therefore evaluate their own institutional context and determine the most relevant strategy for introducing the proposed change, if they feel it is pertinent.

2. CONDITIONS FOR AN EFFECTIVE SUPPORT MEASURE

When colleges define an institutional plan for success and when teachers and other intervenors design and implement a support measure, they have one main preoccupation: increase the success rate in college studies for the greatest possible number of students. As shown already, this preoccupation is an integral part of each one's desire to maintain or improve the quality of education on the one hand, and, on the other, to improve the education of all students, not only those considered to be experiencing difficulties.

Whenever colleges or intervenors devote energy and resources to elaborate and implement support measures, they do so with the perspective of reaching targeted results. In this sense, it seems necessary to identify concrete conditions that ensure the implemented measures have the greatest chance of producing the targeted results. In short, it means putting all the chances on the side of success!

The second part of the document outlines the conditions for effectiveness identified by the work group. It also provides a few examples for applying these to support measures and describes various uses that colleges can make of them. To begin, the scope of the expression "conditions for effectiveness" will be defined as well as the perspective from which these conditions are to be viewed in this document.

2.1 GENERAL CONDITIONS FOR EFFECTIVENESS

How can one explain that certain measures produce such good results in one college, while the same measures are less effective in other colleges? How is it that in the same college, one measure produces the desired effects in one session, but not in the next? Is it possible to specify necessary conditions, that is, conditions that must be present in all measures for them to produce results?

The work group on evaluating the effectiveness of support measures decided to undertake the search for answers to these questions using the expression "conditions for effectiveness" to designate these "answers". By "conditions for effectiveness" the group means a certain number of indicators that are important if we want a measure to reach its potential and enable us to achieve the anticipated results.

The following example illustrates this orientation: a support measure implemented without a precise diagnosis (condition for effectiveness) of a student problem relating to success has much less potential in terms of results, than a measure where a precise diagnosis has been established. This example is one of the conditions linked to the fifteen or so variables that are characteristic of an effective support measure.

Four comments should be made here. First of all, it would be imprudent to consider

these conditions for effectiveness as automatic mechanisms and, even when they are all present, the results are not always guaranteed! Unfortunately, there is no manufacturer's warranty: experience has nevertheless demonstrated the chances for success are much greater when these conditions are respected.

A second comment: The conditions for effectiveness described are general in the sense that they apply in principle to all support measures. The measures possess sufficient common characteristics, as illustrated in the first part of this document, to make it possible to treat the general conditions in a useful manner. There is also a practical side to this approach. The fact is, there are so many support measures, as vividly demonstrated by the colleges' support plans for success, that the task of defining the conditions for effectiveness for each one of these measures, or even types of measures, would be very time consuming. Furthermore, the institutions present

a variety of different characteristics; so the responsibility of adapting a support measure to the particular institutional situation remains in the hands of each college. However, a sampling of measures will show how conditions for effectiveness can be adapted.

Not all conditions for effectiveness have the same status: certain conditions have been established as necessary, while others are seen as desirable. Evidently, in an ideal world, all the necessary and desired conditions should be met in order to provide the best chance for good results. However, the actual situation does not always allow colleges to make this happen. This is why we have adopted the following perspective: the necessary conditions are considered optimal conditions in the sense that one should find as many of these conditions as possible in a measure. This means that a measure that does not meet all the necessary conditions can still manage to produce results; however this measure would reach its full potential (from which the expression "optimal conditions") if it met all the conditions for effectiveness. Therefore a college may decide to implement a measure even if it does not meet all the conditions and then see how it can be improved. This is the third comment.

Final comment: It is possible that conditions for effectiveness cannot be applied to a measure; it is not possible to change reality and make it compatible with a grid. In such a case, one should ignore one or more of the conditions that are not applicable. The example of a desirable condition for effectiveness such as "a physical place of reference", can apply to a support measure like peer tutoring, while it may be meaningless for a support measure like the teaching of a study strategy.

2.2 SELECTING CONDITIONS FOR EFFECTIVENESS

How was the list of conditions for effectiveness established? The group tackled the issue based on individual experience in response to the question: when is a measure effective? This analysis based on concrete experience preceded the second stage during which the examination of a large number of support measures used in colleges made it possible to determine which conditions for "success" these examples actually met. Then, certain examples considered ineffective or less effective were used as "references" as to the relevance of all the conditions. This led certain conditions to be evaluated as desirable, while others were classified as optimal.

When making their selection on conditions for effectiveness, the group established the link between the attributes of a support measure, the variables that describe them and the conditions for effectiveness associated with these variables. The variables define the critical attributes, while the conditions for effectiveness qualify the variables to bring out their maximum potential. For example, the critical attribute "a problem or obstacle" is defined by three variables: a diagnosis, a clientele and the intervenors' recognition of the need. These variables must possess a certain quality to become conditions for effectiveness. For example, for a diagnosis to be recognized for its quality, the work group believes it should be "instrument-based", or "based on a systematic observation", or "based on an in-depth reflection". These are the three conditions for effectiveness that define the "diagnosis" variable. Each of the variables is defined by conditions for effectiveness.

It should be noted that neither the variables nor the conditions for effectiveness were defined in a theoretical manner: it is not a matter of determining what a problem is "per se", but rather of defining the problem or obstacle in reference to a support measure for success. The same is true for conditions for effectiveness. The approach once again is decidedly operational.

Once this work was completed, it was decided that each group member coming from a college environment would describe and analyze various measures that were actually implemented in their respective institutions. In this phase, the relevance of the conditions for effectiveness and the process mapped out for the intervenors were also evaluated.

Here is a sample of this type of evaluation assessed by a member of the group after determining that one of the measures used at his college did not possess the attributes of a measure:

"I nevertheless completed the two sheets, to see what the results would be, but it is so obvious that the approach (...used to develop and implement the measure...) is deficient, that it is quite embarrassing.

Filling out the sheets obviously implies that one has a good knowledge of the project; therefore initiators should prepare a detailed description of it beforehand; at the same time, this forces people to be precise.

Filling in the sheets does take a certain amount of time, but not **too much** time. I personally feel the time is well invested, because the reflection it brings about suggests mechanisms to implement for the follow-up and also reveals incoherencies in the project, if there are any."

In the end, the group opted for one of the most practical approaches for identifying the conditions. Moreover, the fact of being resolutely centered on action accompanied by a group validation process seemed to provide adequate credibility for the proposed conditions for effectiveness.

2.3 CONDITIONS FOR EFFECTIVENESS: FROM THE CONCEPT OF A SUPPORT MEASURE TO CONDITIONS OF EFFECTIVENESS

The table below presents the list of conditions for effectiveness in four columns:

— column 1 lists the essential attributes of a support measure for success following the creation of a given support measure:

— column 2 indicates the specific variables of each critical attribute. These variables were selected using a double rationale: they are required for the effectiveness of a measure as was observed in all the examples handled by the group: moreover, these variables define the scope of each critical attribute. For example, the attribute "a problem or obstacle to success" finds its scope and limit in the three following variables: a problem relating to success is well identified if it gives rise to **a diagnosis**, if a **target clientele** has been identified and if the **need for the diagnosed support is recognized** by the students and the intervenors;

— column 3 identifies optimal conditions for effectiveness;

— column 4 identifies desirable conditions for effectiveness.

In order facilitate identifying optimal and desirable conditions for effectiveness, the latter are presented in regular font while the **optimal conditions are presented in bold.**

Conditions for effectiveness of a support measure for success

Essential attributes of a support measure for success	Variables to consider[10]	Optimal conditions for effectiveness	Desirable conditions for effectiveness
A PROBLEM, AN OBSTACLE	**Quantitative or qualitative diagnosis**	**instrument-based** **or** **based on systematic observation** **or** **based on in-depth reflection**	
	CLIENTELE	**well identified**	-optional participation in the measure, based on the explicit will of those responsible for the measure[11]
	NEED FOR SUPPORT	**recognized by the intervenors**[12]	-recognized by students or other persons targeted by the measure in question
A SPECIFIC PROJECT for the problem diagnosed	**RELEVANCE OF THE PROJET**	**-obvious link to the identified problem relating to success** **-project feasibility**	-promising project -innovative project as regards the problem -project linked to the institutional plan for success -project linked to the program plan for success, if applicable -documented project

[10] The variables play a dual role here: they define the attributes of a support measure while also positioning the conditions for effectiveness according to meaningful headings.

[11] For some measures, it is interesting if students have the choice of participating in the measure; for others it is better to make participation mandatory. What is important is that the choice be explicit and clear for the persons responsible for the measure.

[12] This recognition by the intervenors deals with two aspects: first a recognition by the group of intervenors; and secondly a recognition of the importance of the problem.

Essential attributes of a support measure for success	Variables to consider[10]	Optimal conditions for effectiveness	Desirable conditions for effectiveness
A RESULT TO ACHIEVE based on the problem diagnosed	**DIRECT IMPACT OF THE MEASURE**	**Identified explicitly according to targeted students and/or the problem diagnosed**	-identified explicitly in terms of repercussions that can be transferred to other situations (other courses in the program, for example) -identified in terms of the impact on learning
CLEARLY INDENTIFIED INTERVENORS	**TEACHERS AND OTHER INTERVENORS (tutors, professionals, coordinator, etc.)**	**— explicitly prepared for the project** **— competent in the application of the measure** **— convinced of the potential effectiveness of the measure** **— interested**	-stable[13]
	MOTIVATION	**— established means for stimulating students' commitment and their confidence in their capacity to succeed** **— established means for taking into account teachers' and other intervenors' interests and reservations**	-support of the program team or department

[13]   The stability of the intervenors in a measure is desirable if optimal conditions (preparation, competence, confidence, interest) are included. If they are not present, then this stability is not sought after. Failing this it is highly desirable to ensure continuity in the measure from one year to the next.

Essential attributes of a support measure for success	Variables to consider[10]	Optimal conditions for effectiveness	Desirable conditions for effectiveness
CLEARLY IDENTIFIED INTERVENORS	Project **COORDINATION**	— **assumed by an accepted person in charge, a committee, department or program team and/or** — **assumed by management**	
	ESTABLISHED MEANS	— **linked to each other** — **relevant** — **realistic**	
	INTERVENTION	— explicitly linked to the content of the course, program or to the student's progress in the program	
	RESOURCES	realistic as regards budget foreseeing adequate professional, administrative and clerical support allowing for project viability once implemented	
			-tools available to support the intervention -collective and common documents
			— a special locale for the students, if required
			— a special locale for the intervenors, if required

Essential attributes of a support measure for success	Variables to consider[10]	Optimal conditions for effectiveness	Desirable conditions for effectiveness
ANTICIPATED IMPACT ON SUCCESS and indicators	**CONTRIBUTION of the measure to improving success**	**EXPLICIT IMPACT** … — **based on one or several indicators** (ex.: averages, success rates, perseverance, graduation, etc.) — **based on the quality of training offered** (ex.: in-depth learning, confidence in one's capacities, etc.)	- repercussions that can be transferred to other situations (other courses, SFT for instance)
		PROBABLE IMPACT… — **based on qualitative and quantitative results**	
A FOLLOW UP MECHANISM FOR THE MEASURE	**PLANNED PROCESS**	— **a person responsible** — **a timetable**	
	OBJETS SELECTED for COLLECTING information	— linked to planning the measure — linked to implementing the measure — linked to the results of the measure	
	TOOLS FOR COLLECTING INFORMATION	-identified for each selected evaluation object - administered according to appropriate procedures	
	APPROPRIATE FOLLOW UP	—summary analysis of results — adjustment to the evaluation plan, if necessary	

2.4 A FEW EXAMPLES OF HOW COLLEGES USE THE LIST OF CONDITIONS FOR EFFECTIVENESS

The list of conditions for effectiveness, as presented in point 2.2, can be used in a variety of ways in colleges based on the institution in question or according to its strategy. Four different situations illustrate the diverse uses of these conditions for effectiveness. They can be used as a checklist, as a complementary grid for project presentations, as an evaluation grid, or as a tool for preparing a report.

Used as a checklist

A college can use these conditions for effectiveness as a "checklist" or as an evaluation tool for measures to be implemented or already in place. This list of conditions allows for the selection of certain measures over others; it can also allow colleges to detect areas for improvement in some measures that have already been implemented.

In this case, the table in Appendix 5 helps identify the conditions that are present or absent by indicating Y (yes) or N (no) in the last column.

Used as a tool for presenting a measure

A college may ask those responsible for implementing a measure to justify its relevance based on the essential attributes of a measure on the one hand, and, on the other, to demonstrate how the project involving the measure to be implemented meets the essential requirements of conditions for effectiveness.

In this case, the table in section 2.3 presents a format that is better adapted to this purpose.

Used as a improvement or evaluation tool

A college may also decide to evaluate how effective the implementation of a measure is by asking the intervenors to show how it meets the conditions for effectiveness relating to the implementation of a measure: failing this, they must provide a plan for improvement.

The format of conditions presented in section 2.3 can also be used for this purpose.

Used as a tool for a preparing a report

Finally, a college may use these conditions for effectiveness when asking those responsible for the measures to evaluate their performance and provide an account of this in their annual report, which will be used as the basis for the institution's self-evaluation and also to evaluate its support plan for success.

In this case, the list of conditions for effectiveness presented in section 2.3 would prove useful.

In addition to the various uses described, individual colleges must determine the level of description or justification that they are expecting to obtain on the part of those promoting the implementation of a measure. Each of the conditions for effectiveness could be the object of a lengthy description or justification to such an extent that, given the number of identified conditions for effectiveness, the description or evaluation of a support measure by the intervenors could become a most fastidious task and produce undesirable effects. The work group therefore estimates that determining the level of requirements is the responsibility of each institution and that it is perfectly "acceptable" that this level vary from one institution to the next. This level of requirements could even vary within the same college based on whether or not the measure is financed, whether it originates from a program, a service or an individual.

We should make one thing clear as regards setting a relative limit on conditions for effectiveness: they make it possible to determine the chances a project has to succeed. However, they cannot in themselves constitute an indication of the relevance of selecting a certain measure over another in the institutional plan for success. On one hand, a measure can technically meet all the conditions for effectiveness without however satisfying the priorities or values of an institution; and, on the other, the conditions as such do not indicate that measure A is superior to measure B based on its contribution to student success. The conditions for effectiveness provide indications as to the chances for success for measure A or measure B without being a tool that lets colleges know which measure is more relevant. A college may select a measure that presents the best conditions for effectiveness without regard for relevance; or it may select the most relevant measures and ask the intervenors to improve them by upgrading the conditions for effectiveness of certain variables related to the project.

2.5 AN EXAMPLE OF A SUPPORT MEASURE EVALUATED ACCORDING TO THE CONDITIONS FOR EFFECTIVENESS

Appendix 4 presents an evaluation made by those responsible for the support measure "calculating dosages in nursing" that was implemented at Cégep de Victoriaville. A complete description of this support measure can be found in **point 1.5, example 2.** The evaluation was made by the two people responsible for the measure: the educational advisor and the program coordinator in charge of this support measure. This sample analysis of a support measure based on conditions for effectiveness illustrates the way this analysis enriches the questioning, lets one imagine improvements and provides confirmation of the conditions already present in a measure.

The work group analyzed a number of support measures this way by confronting them to the conditions for effectiveness. This was the case for group members, originating from colleges, who tested this evaluation based on the conditions for effectiveness of a support measure. The following excerpts illustrate this evaluation.

— "Confronting a support measure to the conditions for effectiveness allowed me to confirm my spontaneous feelings towards measure X: for me, this was a very weak measure. Examining the conditions for effectiveness helped me understand exactly why I felt this way."

— "The analysis process demanded by the conditions for effectiveness is relatively demanding: one cannot always answer with a simple yes or no. Interestingly however, this brings us to reflect on what could be done to improve the measure." (see Appendix 4)

— "Evaluating a support measure takes a bit of time; but it is time well spent. This evaluation allows us to pinpoint what is not working in a measure. Therefore, in our exchanges with the person responsible for the measure, we can provide precise and clear feedback on potential improvements."

— "When I used the grid and conditions for effectiveness, I performed a major cleanup on what was considered support measures in the college. This action was appreciated: we were at that stage."

— "When we used the grid on conditions for effectiveness, we quickly realized the usefulness of having a common tool for the committee."

— "I was dreading the reactions of the members on the committee for success as regards the conditions and attributes of a measure..., but it wasn't at all like that. We figured it would be interesting to be on the same page and it would help with the cleanup."

In short, the type of validation, or "benchmark", that the group gave itself has provided indications on the utility and the interest in using the conditions for effectiveness: its implementation does take some time, but it helps one judge the quality of a measure and enriches it if necessary; also it must be implemented in a "prepared" institutional context.

2.6 A CHALLENGE: FOSTERING COMMITMENT

The commitment of teachers and other intervenors has often been underscored in discussions as being an essential and "sine qua non" condition for the success of a measure. This is a decisive condition for effectiveness in the vast majority of measures supporting success linked to teaching[14]. It is also an indispensable condition because, for many support measures, the teachers are the main participants: wanting to implement a support measure that the main participants don't really believe in, is more often than not a recipe for failure.

From this perspective, the work group examined one of the conditions in greater depth: how to stimulate teachers to commit to a support measure? This same question and analysis are also valid for other college intervenors. The college experience, as is the case for many other school and industrial environments, has demonstrated that the motivation to commit to development projects cannot be taken for granted. At various times, college management, teachers and counsellors all wish that their respective colleagues would be more involved and committed. All agree that, in education, often the most difficult motivation to develop is that of a certain number of teachers.

In order to support the reflection and choices made by management and intervenors, a certain number of means are suggested, means that have proven to be efficient in providing a strategy that stimulates the interest and commitment of teachers for implementing support measures. This list of means has been applied to the situation of teachers.

The suggested means have been classified according to various critical attributes of a **support measure for success.** The intervenors, of course, do not have to retain all these means: on the contrary, means must be chosen in relation to an overall perspective in order to provide a real strategy for mobilizing the personnel involved, a choice relating to the specific strategy of each college. Unfortunately, once again, these means are fallible and do not automatically provide the desired results.

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[14]   Of course, other conditions for effectiveness could be developed: means of stimulating student commitment, coordination, relationship between a measure and course content, etc. The group however only worked on stimulating teachers' commitment given the strategic importance of this condition.

Means used to stimulate
TEACHERS' COMMITMENT to
SUPPORT MEASURES FOR SUCCESS

As regards the obstacle or problem

— prioritize a problem brought up by the teachers and elaborate a support measure based on it.

— prioritize a collective appropriation (teachers, the department and the program) of the problem.

— select a problem or difficulty that is as close as possible to the class situation or that affects the students' actual situation.

— bring out the potential impact of a measure on the behaviour of students in class.

— take advantage of the external evaluation (the evaluation of programs for example) to bring out certain problems relating to success.

As regards the project

— propose, encourage and support properly directed interventions with clearly established objectives; interventions that remain flexible as to the means, which facilitates the appropriation of the project by the teachers and its adaptation to their teaching situation.

As regards teacher commitment

— propose means that are concrete, realistic and that deliver results for the students

— prioritize measures that are clearly included in the institution's perspective on success, a perspective to which concerned teachers all adhere

— use the testimonials of teachers from other colleges to stimulate interest and imagination: on training, seminars, conferences, etc.

— use the testimony of teachers from other departments to stimulate interest and imagination: on training, pedagogical days, etc.

— give preference to measures that are easily integrated into teaching activities and that are connected as closely as possible to the discipline or program

— point out the impact of a measure on the learning of the subject matter taught or on the program content

— demonstrate to teachers that management is clearly enthusiastic about the measure

— supply rapid feedback on implemented measures
help support the teams in their analysis of prioritized means

As regards coordinated means

— Dealing with resources

— use one approach per project and follow-ups (initially, "liberate" teachers during implementation and then, search for means to facilitate their integration into regular teaching activities)

— define the task to be carried out in the most realistic manner possible, which facilitates participation and maintenance of a support measure

— promote a progressive approach: don't do everything at the same time. Select fewer measures, but implement explicit and systematic measures and follow-ups

— prioritize collective rather than individual work; by session, by program, by discipline, etc.

— make the teachers' task easier regarding a measure by exempting them from administrative or clerical tasks

— Dealing with competencies

— select teachers who have the intervention skills required based on the nature of the measure

— support the teachers for the initial familiarization while making sure they master the competencies afterwards

— organize teacher training activities during which time support measures can be planned and supported

— Dealing with project coordination

— implement a good follow-up mechanism for management to carry out; the participants in a measure must have the clear impression that the person responsible for the measure has the ability to really influence management with respect to actual needs

— adopt adequate coordination with at least one teacher and one educational advisor, if need be

As regards results

— rely equally, if not more, on the quality of improved education (qualitative indicators) brought about by the measure as on the quantitative indicators for success

— insist on the specific short term results of the measure; this insistence does not imply that one should ignore the longer term results inherent to the indicators of success

As regards project follow up

— make available the tools for collecting relevant follow-up information at the opportune moment

— provide regular information on the results of the measure

— alleviate the clerical and follow-up work required from teachers

2.7 CONCLUSION

The main message in this section dealing with the conditions for effectiveness is: It is possible, in spite of the diversity of support measures, to identify general conditions for effectiveness. These conditions rest on the critical attributes of a support measure and the variables that describe them.

The application and adaptation of these conditions for effectiveness achieve positive results. Utilisation to date has facilitated the analysis of support measures, their enrichment and management. Implementing such a concept of support measures and conditions for effectiveness undoubtedly requires a certain amount of institutional "diplomacy" with which colleges are familiar.

Applying the conditions for effectiveness, just like the concept of a support measure, should not be perceived as a mechanical process that will "automatically" produce the anticipated results. There are at least two reasons for this. First of all, it is always necessary to remember that student success is a complex process that is influenced by many variables. Then, one must remember that when support measures are implemented, colleges manage important changes: management itself and the management of changes in particular are not automatic processes because they involve managing people and the processes of change.

The challenge for the colleges is clear: An institution cannot hope that certain changes will be realized without the stated leadership of management. Given the importance of the changes and their integration to other mandates relating to success (institutional evaluation plan, strategic plan, program evaluations, etc.), a college that would proceed without the commitment of its management would be on the wrong path: Teachers and other intervenors would quickly understand that in reality the "support measures for success" are more a question of managing teaching resources (the FTE to assign) or a question of "looking good" as a college when producing reports. On the contrary, a committed institutional leadership facilitates the integration of support measures for success, where they become a prioritized means of contributing to the college's main mission: student success.

This type of leadership has other consequences: Initial support for the intervenors responsible takes the form of clear directions and then support for daily actions with small gestures that give significance and the required importance to the success file in that college.

Implementing support measures based on an explicit concept therefore constitutes a major change. The evaluation of support measures is a change in progress that is just as important: The work group will examine this question in the second part of its mandate. This analysis will be a direct extension of the orientations developed on the basis of the concept of support measures and the conditions for effectiveness governing their implementation.

This appendix presents a list of means often considered to be support measures for success. It also includes a few observations relative to this situation.

This appendix is the result of a critical exercise designed, above all, to validate the concept of support measures as elaborated. The exercise consisted in analyzing all the support measures defined as such in the plans for success, or in the CEEC report. These examples were compared to the list of critical attributes that characterize a support measure. Following this comparison, several examples demonstrated they did not possess all the critical attributes of a support measure as defined in this document. The following table presents the results of this exercise. Obviously, only the analysis of each of these measures **during its effective implementation** would have really made it possible to determine if it was a measure in the sense of the definition provided here. The analysis was done based on the general understanding of the group relative to such means implemented in colleges.

The observations were made for the purpose of summarily illustrating the measures when confronted to the critical attributes; they also attempt to bring out the way these "means" could be transformed, if need be, into support measures for success, should the college so desire.

LIST OF INTERVENTIONS OFTEN CONSIDERED
TO BE SUPPORT MEASURES

INTERVENTIONS	OBSERVATIONS
Help Centres to support learning in various disciplines (French, philosophy, mathematics)	The work group estimates that help centres generally correspond to real services rather than support measures in the sense that they have relative stability with regard to time and resources allocated. In most cases, these services have implemented a large variety of support measures or activities targeting the improvement of success in college studies. - Colleges could examine their help centres and find various means or measures such as: retaking an exam along with corrective teaching, individualized teaching with follow-up in the discipline, buddy system, peer tutoring, etc. Many colleges have implemented these types of support measures.
Maintain or increase school orientation and information services	-These services do not correspond to an intervention project concerning a specific problem linked to success. It is a global diagnosis, based on an identified student need. - Many orientation services have developed various support measures for success: early in-class detection of orientation problems followed by orientation activities in small groups, collective support for orientation in the program team, etc.
The welcome & integration session	-The welcome & integration session is sometimes considered a training program in colleges, sometimes it is considered the first session in a training program for students. This type of session is therefore not a support measure: the diagnosis is not generally specific to a problem linked to success and the intervention has all the characteristics of a program. -Generally, this session gives rise to a large diversity of support measures based on precise diagnoses: tutoring, collective follow-up on students and coaching interventions, teaching study strategies, particular support in program orientation, supervised study hour, etc.
Support for scientific careers Practice firms	-These projects do not seem to correspond to a diagnosis characteristic of a problem linked to success in school. However, support measures could be developed within these very inclusive projects.

INTERVENTIONS	OBSERVATIONS
Industrial visits Alternating work-studies	-These work-study projects were probably implemented following a form of evaluation of the problem of perseverance in studies, which is linked to success. However, this diagnosis does not seem to relate specifically to success and, in most colleges, it appears more global in perspective. As for industrial visits, they do not represent a set of coordinated means: however, a college could possibly transform such visits into a support measure in accordance with the attributes of a measure. -Generally speaking therefore, these projects are not measures.
Mid-session report card Administering of any diagnostic tool Follow-up with non-graduating last session students Keeping a file on each student Detection of students with orientation problems Evaluation or self-evaluation questionnaire on training needs	-These means are diagnostic activities only. They only possess a single attribute of a support measure for success. -If these diagnoses are followed by a plan of action and appropriate follow-up, they could then possibly be support measures for success.
Program evaluation and revision	-A program of studies, whether old or new, is not a measure in itself; it comprises neither a diagnosis nor a specific project intervention for success. -However, the introduction of a new program could result in the implementation of measures.
Training given to teachers	-It all depends on the learning objects and how they relate to the problematics of success. Training in "word processing" given to teachers is not a support measure, whereas training that deals with integrated study strategies could possibly be. -Further training in first session pedagogy, following a specific diagnosis of problems experienced by first session students, could become a very important element of a support measure if this training results in implementing this pedagogy in a program with appropriate follow up.

INTERVENTIONS	OBSERVATIONS
Applying a policy of course attendance Measures that promote school orientation or the feeling of belonging Educational projects Adapting methods to student characteristics Diversifying approaches in French Implementation of program appropriation activities	-These examples seem to be activities planned by colleges to promote student success: it is not clear that they were implemented based on a precise diagnosis and that an intervention strategy was implemented in order to obtain results; however, it is possible that these characteristics of a support measure for success exist in certain colleges. In these cases, they would be considered support measures for success.
Student participation in extracurricular activities	-These extracurricular activities could be support measures as long as they have the attributes of a measure. Generally, in colleges, these consist in activities that may contribute to success rather than true support measures
Sensitization of personnel to the process of career selection	-This activity could become a support measure if it was really developed based on the critical attributes of a support measure. -As it stands, it does not seem to have an intervention strategy and there is no proof of the existence of results linked to a specific problem.
Evaluation Teaching Varied teaching methods ICT	-There is no specific diagnosis of a problematic related to success. -These are teaching activities.
Funds to support the activities	-The funds may contribute to implementing support measures for success, but the funds themselves are not considered a measure
Common hour of free time for student activities	-The hour of free time is not a support measure in itself... What student activities are proposed and what specific contribution are they expected to have on the success of college studies? The participation of students from administrative techniques in the financial management of the student coop can represent examples of student activities that can be transformed into support measures.
Maximum number of students per group Adjustment of schedules	-It all depends on the teaching strategies linked to success implemented within the framework of these administrative gestures that, in themselves, do not have the essential characteristics of a support measure as regards a diagnosis and an intervention project linked specifically to success.

APPENDIX 2

Typologies of support measures

This appendix presents different typologies of support measures along with the advantages and limitations of each.

The left column lists a variety of measures grouped into "categories" or "types" of measures. In the right column, we present examples of measures that are assumed in principle to meet the essential elements that constitute the concept of a support measure. It goes without saying that the elements presented in this column are by no means exhaustive.

1. Typology based on student difficulties

Types of measures	Examples of measures
Measures relating to students' difficulties with school subjects	-support measures in a given subject - support measures on studying strategies - support measures relating to academic adaptation - ...
Measures relating to orientation difficulties	- support measures for orientation - measures relating to the information given to high school students - ...
Measures relating to problems with the quality of studying	-support measures for studying strategies -- support measures on preparing for exams - ...
Measures relating to emotional problems	**-** support measures relating to stress - support measures for students with emotional problems of a suicidal nature **- ...**
Measures relating to difficulties with progressing in the program	**-** support measures relating to the welcome students receive in the program - support measures for analyzing academic progress in the program -support measures to facilitate the retaking of a course - ...
Measures relating to the difficulties students have in successfully completing certain courses	- support measures relating to the selection of educational methods **-** ...
Measures relating to the difficulties students have in passing exams	— support measures for successfully passing exams -support measures for analyzing exam results - ...
...	

ADVANTAGES OF THIS TYPOLOGY:

— this typology has a very tangible character for the intervenors given that it focuses on students' difficulties;

— it is a very flexible typology.

LIMITS OF THIS TYPOLOGY:

— this typology is very open and has no limits; all that is required is to find difficulties and add them to the typology. The user has no indication of having covered all the measures offered by the typology;

— this typology only affects one participant directly, the student. It may give the impression that only measures that directly address students are considered support measures

2. Typology based on a chronology of student progress in school

Types of measures	Examples of measures
Before requesting admission to the college	- measures dealing with information for high school students - ...
At the time of their enrolment into college	- preventative measures in school orientation - ...
When starting college	- measures supporting the students' welcome into the program and college - measures for the teachers to support the students - implementing first session pedagogy - ...
At the time of the first exams	- preventative measures inherent to study strategies - measures for peer tutoring - ...
Following the first exams	- follow up measures for students experiencing difficulties with several subjects in the program - ...
Problems facing students in the first session	- specific training for first session teachers in the program and organization of coherent interventions - ...
Passing the Standard French Test	- finalizing a specific strategy for preparing for the Standard French Test
Passing the comprehensive program	- finalizing a specific strategy for preparing for the comprehensive program assessment
And so on, from session to session	

ADVANTAGES OF THIS TYPOLOGY:

- this is a very flexible typology but it also has a closed nature: it can be used to determine if all academic events are affected;

- this typology has a very tangible aspect for the intervenors since it focuses on students' academic life;

- this typology covers a wide variety of potential measures since it involves the students' overall academic progress from pre-registration all the way to the work force or to university;

- it can simplify the development, promotion and follow-up of the success plan.

LIMITS OF THIS TYPOLOGY:

- this typology directly affects students' academic progress and may give the impression that only measures that relate directly to academic progress constitute support measures. For example, it is difficult for this typology to include measures that relate to student services.

— this typology is obviously based on students' regular progress and does not take into account the large variations in academic progress for a great number of students.

3. Typology based on the academic situation targeted by the support measure

Types of measures	Examples of measures
Choice of program	-support measures for orientation **- …**
Students' welcome	-measures for welcoming students in the program - …
Study	-support measures relating to study strategies - …
Passing exams	-support measures dealing with stress during the exam -support measures dealing with preparing for exams - …
Class	-support measures on taking notes in class -measures relating to the choice of teaching methods - …
Labs	-support measures relating to lab preparation and follow-up on laboratory learning - …
Failure situations	- support measures originating from help centres -support measures for retaking exams -under certain conditions - …
Motivational situations	-finalizing a strategy to stimulate learning for first year students in the program -…
Resolution of problems or situations	-measures relating to learning to solve problems: strategies for studying and resolving problems - …

Types of Measures	Examples of measures
Session 1	-measures based on first session pedagogy - selection and participation in extra-curricular activities as an extension to the program -...
During each session in the program	- selection and participation in extra-curricular activities as an extension to the program - ...-...
Work placements	- implementing a work placement book to help support learning in placement situations through practice ...
Courses to be completed to receive a DEC	- support strategies for students needing only to complete a few courses to obtain their DEC -...
Standard French Test	-specific strategy for preparing students for the Standard French Test - ...
Comprehensive program assessment	-specific strategy for preparing students for the comprehensive program assessment - ...

ADVANTAGES OF THIS TYPOLOGY:

- this is a very flexible typology but it also has a closed nature: it can be used to determine if all academic events are affected;

- this typology has a very tangible aspect for the intervenors since it focuses on students' academic life;

- this typology covers a wide variety of potential measures since it involves the students' overall academic progress from pre-registration all the way to the work force or to university;

- this typology is the same type as typology 2: it has a more specific character or nature however, since it covers a diversity of situations, rather than the stages of a student's academic progress.

LIMITS OF THIS TYPOLOGY:

- This typology directly affects student's academic situations and may give the impression that only measures that relate directly to academic progress constitute support measures. For example, it is difficult for this typology to include measures that relate to student services

4. Typology based on persons targeted

This typology is characterized by the diversity of the people and possible groupings targeted by a measure. A measure can concern students: the students can be affected by individual measures, measures for small groups, for a class or a program. A measure can even target all the students in the institution. This is also true for other types of people such as teachers, parents, school board intervenors, the general population and employers.

This typology can be found in the form of a grid on the next page. The grid includes a certain amount of intervention examples which could be support measures for success if they included all the attributes of a support measure.

ADVANTAGES OF THIS TYPOLOGY:

- this is a very flexible typology but it also has a closed dimension: it can be used to determine if all intervenors have been affected, including those in continuous training;

- this typology leads us to consider a great variety of measures;

- this typology should be viewed in the following perspective: the more we affect the student, the class, the program and the student's progress, the more chances the implemented measure will have of scoring high in terms of results on the success scale. However, students are not the only ones responsible for their success. Other measures can therefore target these other participants.

- this typology can be viewed as a way to vary the measures depending on whether we are targeting success rates in courses, perseverance in studies or the graduation rate;

- this typology covers a wide diversity of potential measures since it involves the students' overall academic progress from pre-registration all the way to their entry in the job market or university.

LIMITS OF THIS TYPOLOGY:

- this typology has a somewhat less tangible nature since it is less directly linked to the concrete situations of intervenors;

- presented in diagram form, it may seem more complex

Participants (Intervenors)	Individually[15]	By grouping			Institutionally
Support measures classified according to the intervenors they are targeting					
Regular students (continuous training)		Small groups	Class	Program	— Having all student groups in the college meet with the academic dean to promote a feeling of belonging among the students.
		- Support measures for students having problems with calculating doses	-The use of the summary as an in-depth study strategy for all students	-Specific preparation for the Standard French Test	
Regular teachers (continuous training)		Subject	Session	Program	-Training aimed at developing a graduate's profile and his integration into each of the programs
			- The first session teachers undergo training on implementing a first session pedagogy		
Service professionals Other personnel					Integration of an approach to help students based on in-depth learning for all intervenors who work directly with teachers and students
Parents				information for parents on program requirements and necessary follow up	
Employers				— agreement with employers on the requirement of having completed a DEC in order to be hired.	

[15] The work group assumes that support measures are generally implemented for a group of students. Nevertheless, in rare cases, it is possible for a college to implement a support measure for one student only (for example: a blind student).

Participants (Intervenors)	Individually[15]	By grouping			Institutionally
School boards		By Service	By discipline	Per Year	
		— agreement with those responsible for the academic information that promotes programs to improve recruitment			

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APPENDIX 3

Examples illustrating the diversity

of support measures for success

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This appendix presents various examples of support measures for success. They illustrate the possibility of developing support measures in situations other than those found in the first session and in fields other than teaching in the strict sense of the word.

The first example covers preparing for the Standard French Test. **The second one** describes the implementation of an intervention in secondary 4 and 5 dealing with the occupation of a student and **the third one** is a preventative intervention in the context of program changes. **The last example** describes particular support (mentoring) destined for students registered in competitive sporting activities.

These support measures are described according to the critical attributes of a support measure. We should now expand our scope of reflection to verify if it meets most, if not all of the conditions for effectiveness of a support measure.

1. Name of support measure for success: Workshop to support success in the Standard French Test (SFT)

OBSTACLE OR PROBLEM LINKED TO SUCCESS:

-many final year students (5th session) fail the Standard French Test in certain technical programs. However, these students have good results in other courses that relate directly to the technology.

SPECIFIC INTERVENTION PROJECT FOR THE DIAGNOSED PROBLEM:
— provide support for these students with targeted group or individual activities.

EXPECTED RESULT DIRECTLY LINKED TO THE APPLICATION OF THE MEASURE in relation to the problem:
— on one hand we expect the students to show up for the test (because some practice avoidance: by simply not showing up for the test even though they are registered and have completed the French course); on the other that they become aware of their specific difficulties and the means needed to correct them.

COORDINATED MEANS to achieve the result:
— identify last year students in a technical field who have still not successfully completed the test;
— disseminate this information to the teachers responsible for the programs in which the students are registered in order to ensure the collaboration of teachers in the given programs;
— offer support for concerned students;
— order the exams for students who accept to participate in the workshops;
— analyze the copies and personalized diagnosis of the project manager;
— individual meetings with each student to work on aspects that need improvement;
eventual referral to the psychologist in order to solve certain stress management problems;
— assignments to be done between meetings;
- real time test simulation and follow up meeting.

CLEARLY IDENTIFIED INTERVENORS
(counsellors, teachers, coordinators, management, etc.) :
— identified by the person responsible for the success file;
— support offered to the students **by the program coordinator**;
— analysis of the copies by the person responsible for the measure and meeting with students;
— simulation of the test verified by the program coordinator;
— follow ups by the person responsible for the success file
— analysis of the results and expected impact with the program team.

EXPECTED IMPACT ON SUCCESS in terms of quantitative indicators such as average, success rate for a course or session, re-registration rate, perseverance, graduation rate, etc. as well as qualitative indicators such as feeling of competence and motivation, for example:— greater attendance at the test by students who have no particular reason to be absent;
— improved written language skills for these students;
— higher success rate on the test for students in this category.

FOLLOW-UP MECHANISMS TO EVALUATE THE IMPLEMENTATION OF THE MEASURE:
— analyze the improvement of student skills during the session (the results in the simulated test vs. the results of the previously failed test);
— verify attendance for the next test;
— analyze the student results following the test.

2. Name of support measure for success: occupation: student — 4th and 5th year secondary

OBSTACLE OR PROBLEM LINKED TO SUCCESS:

- in a survey on success conducted among students at the Cégep de Chicoutimi by the student association, 74.6% of respondents felt it was important to be well prepared when going from high school to college and 71.3% found the transition difficult. Furthermore, according to the "*Aide-nous à te connaître*" survey, one student in three would like to receive more guidance and when new arrivals were asked to point out what could help them succeed, 41% said they wanted help to develop better work habits and 37% mentioned help to better organize their time. Better preparation for the transition from high school to college could help the success rate for the first session

SPECIFIC INTERVENTION PROJECT FOR THE DIAGNOSED PROBLEM:
— a one hour workshop given to secondary 4 students on vocational indecision and also another one hour workshop for secondary 5 students on the occupation of a student.

COORDINATED MEANS to achieve the result:
— meeting with secondary 4 and 5 class groups (in collaboration with the high school guidance counsellors in the immediate sector)

secondary 5	**secondary 4**
- sensitization towards the future educational lifestyle in the CEGEP	- presentation of the CURSUS process
— distribution of a brochure dealing with adaptation, personnel, resources and the pitfalls to avoid	— presentation of the Isabelle Falardeau typology
	— distribution of the typology

CLEARLY IDENTIFIED INTERVENORS
(counsellors, teachers, coordinators, management, etc.):
— orientation service for organizing and holding workshops;
— support from the teacher of the class group that was met.

EXPECTED IMPACT ON SUCCESS in terms of quantitative indicators such as average, success rate for a course or session, re-registration rate, perseverance, graduation rate, etc. as well as qualitative indicators such as feeling of competence, motivation, for example:
— better success rate in the first session: percentage of success rate in the session and re-registration rate for the second session.

FOLLOW-UP MECHANISMS TO EVALUATE THE IMPLEMENTATION OF THE MEASURE:
— evaluation of participants' level of satisfaction following the workshop;
— survey of the student population to confirm there is a decreasing percentage of students who consider the transition from high school to college a difficult one;
— success and re-registration rate.

3. Name of support measure for success: Help for students who change programs

OBSTACLE OR PROBLEM LINKED TO SUCCESS:

— students are experiencing real problems with vocational choice: at Cégep de Chicoutimi, one student in three will change programs at least once during his time in college. However, the graduation rate for students who change programs is lower than for other students (see data in the college's success plan). Many first session students have a hard time dealing with the transition from high school to college, others have problems succeeding for the first time and some opt for a change of program to escape their anxiety. The project hopes to intervene in a "preventative" manner with students considering a change of program during their first session.

SPECIFIC INTERVENTION PROJECT FOR THE DIAGNOSED PROBLEM:
— group intervention on learning styles, identity development and program selection with students who are considering a change in program.

EXPECTED RESULT DIRECTLY LINKED TO THE APPLICATION OF THE MEASURE in relation to the problem:
— understanding the connection between orientation and identity;
— understanding the connection between orientation and identity and a reduction in program changes.

COORDINATED MEANS to achieve the result:
— ad in the weekly student-services newspaper for holding orientation meetings for students thinking of changing programs;
— formation of groups of 10 people (grouped by interest)
— holding a meeting with activities on
o learning styles (allowing the confirmation of certain doubts)
o developing an identity
o changing programs as a solution to lower anxiety
o the current session
— individual follow up during the current session (for selecting a program or succeeding in the current session).

CLEARLY IDENTIFIED INTERVENORS
(counsellors, teachers, coordinators, management, etc.) :
— orientation department for organizing and holding workshops;
— support of coordinators in concerned programs.

EXPECTED IMPACT ON SUCCESS in terms of quantitative indicators such as average, success rate for a course or session, re-registration rate, perseverance, graduation rate, etc. as well as qualitative indicators such as feeling of competence, motivation, for example:
— higher success for the current session as well as an increased rate for re-registration in the same program.

4. Name of support measure for success: Mentoring students for the men's basketball team

OBSTACLE OR PROBLEM LINKED TO SUCCESS:
— it was determined during recent sessions that boys on the basketball team were suffering many academic failures. These students had often been admitted with a fairly weak high school background; however, success in the majority of courses for which they are registered is a condition for remaining on the team.

SPECIFIC INTERVENTION PROJECT FOR THE DIAGNOSED PROBLEM:
— the project consists in pairing a student with a mentor whose mandate is to help the student maintain his motivation for his studies and not devote all his energy to practicing his sport.

EXPECTED RESULT DIRECTLY LINKED TO THE APPLICATION OF THE MEASURE in relation to the problem:
— we hope that these mentoring meetings will allow interested students to succeed in the courses for which they are registered in the session in question.

COORDINATED MEANS to achieve the result:
— a meeting organized by the person responsible for the measure with all team members, during which it is strongly suggested that students participate in this measure, while maintaining its optional character;
— recruiting mentors from personnel involved in student college life. The mentors must be able to offer their student at least one meeting per week;
— pairing students with mentors at the beginning of the session;
— the meetings deal with managing the student's time and allow the mentor to follow up and bring about a rapid reaction when a problem arises. During the first meeting, the mentor and the student examine the course and training schedules, as well as the different deadlines for the first part of the session. Certain mentors will ask the student to sign a symbolic contract and commit to meeting certain objectives;
— the following meetings allow for a follow up and to ensure that motivation is still present;
— the mentor will sometimes meet with a teacher responsible for the course in which the student is experiencing problems and work with him to find a solution. If he feels there is a need, he then refers the student to a professional.

**CLEARLY IDENTIFIED INTERVENORS
(counsellors, teachers, coordinators, management, etc.):**
— the person responsible for the activity is the college's social intervenor;
— the mentors are staff members involved in student life at college;
— the academic progress service supplies the academic information on students required by the mentors.

EXPECTED IMPACT ON SUCCESS in terms of quantitative indicators such as average, success rate for a course or session, re-registration rate, perseverance, graduation rate, etc. as well as qualitative indicators such as feeling of competence, motivation, for example:
— better success rate for these students;
— better average on the whole for courses taken;
— reduced "de-registration" for courses;
— increased motivation.

FOLLOW-UP MECHANISMS TO EVALUATE THE IMPLEMENTATION OF THE MEASURE:
— verification of success rates and averages for students involved;
— sharing of observations of different mentors in order to improve interventions in the following sessions.

APPENDIX 4
A sample verification of the
conditions of effectiveness
for a support measure: calculating dosages in nursing

In point 1.5, the support measure "calculating dosages in nursing" (Victoriaville) is described based on the critical attributes of a measure. The reader would find it useful to read this description again in order to determine the scope of the evaluations as to the presence (or lack thereof) of the conditions for effectiveness in this measure. The results of this verification are written in italics.

Note that this is a first version of our document which is designed to serve as a checklist. The titles are therefore not repeated at the top of the page.

CONDITIONS FOR EFFECTIVENESS OF
SUPPORT MEASURES FOR SUCCESS

The essential attributes of a support measure for success	Variable to consider	Optimum conditions for effectiveness	Desirable conditions for effectiveness	Yes? No?
A PROBLEM AN OBSTACLE	Is the quantitative or qualitative, DIAGNOSIS....	instrument-based or based on systematic observation? or based on in-depth reflection? *Yes, the failures in calculating dosages are high enough to cause concern.*		Y N Y N Y N
	Is the CLIENTELE ...	- clearly identified?	- optional participation in the measure, based on the explicit will of those responsible for the measure **Once identified it must be adhered to.**	Y N Y N
	Is the NEED FOR SUPPORT ...	-recognized by the intervenors?	— recognized by the students or other persons targeted by the measure in question? **The diagnosis questionnaire allows it.**	Y N Y N

CONDITIONS FOR EFFECTIVENESS OF
SUPPORT MEASURES FOR SUCCESS

The essential attributes of a support measure for success	Variable to consider	Optimum conditions for effectiveness	Desirable conditions for effectiveness	Yes? No?
A SPECIFIC PROJECT for the problem diagnosed	Is the project RELEVANT AND CLEARLY LINKED to the problem diagnosed?	obvious link to the identified problem with success? **Absolutely.** — a feasible project?		Y N Y N
			-a promising project?	Y N
			— an innovative project based on the problem? *I don't believe it is innovative but it is well thought out.*	Y N
			- a project clearly linked to the institution's success plan? — *Yes, absolutely*	Y N
			- a project clearly linked to the program's success plan, if applicable? *Yes, absolutely*	Y N
			- a documented project? *Probably to some degree with regard to what is required to calculate dosages, and, in general, the usefulness of mathematics in the nursing program.*	Y N

CONDITIONS FOR EFFECTIVENESS OF
SUPPORT MEASURES FOR SUCCESS

The essential attributes of a support measure for success	Variable to consider	Optimum conditions for effectiveness	Desirable conditions for effectiveness	Yes? No?
A RESULT TO ACHIEVE based on the problem diagnosed	Does the project EXPLICITLY identify ...	the expected consequences of the measure on the students or problem diagnosed?		Y N
			-repercussions that can be transferred to other situations (other course in the program for example)? *Yes especially for the first nursing course*	Y N
			— the impact on learning? *I suppose so!*	Y N
CLEARLY IDENTIFIED INTERVENORS	TEACHERS AND OTHER INTERVENORS (tutors, professionals, coordinators, etc.) are they...	-specifically prepared for the project? *Yes, the math teachers as well as the nursing teachers .*		Y N
		— competent with regard to the application of the measure?		Y N
		— confident in the potential effectiveness of the measure? *Yes, absolutely.*		Y N
		- interested? *I don't know, but I suspect the answer is yes since the project requires little effort and provides short term results.*	— stable? *For the time being, yes.*	Y N Y N

CONDITIONS FOR EFFECTIVENESS OF
SUPPORT MEASURES FOR SUCCESS

The essential attributes of a support measure for success	Variable to consider	Optimum conditions for effectiveness	Desirable conditions for effectiveness	Yes? No?
	With regard to MOTIVATION, does the project provide the means to...	— stimulate students' commitment and their confidence in their capacity to succeed? *The fact that the training is associated with the results of the diagnosis test probably plays a role. The message being given is that training can solve the problem and that a success rate of 70% for calculating dosages is essential.*		**Y N**
		— to take into account the interests and reservations of teachers and other intervenors with regard to the project? *Here is would say yes because I believe the measure itself is stimulating since it is concrete (real) and that the results are quickly visible in the field.*	-enlist the support of the program team or department? *Yes, the project is shared and information relating to the number of students who successfully passed the diagnostic test as well as post-test is also shared.*	**Y N** **Y N**

CONDITIONS FOR EFFECTIVENESS OF
SUPPORT MEASURES FOR SUCCESS

The essential attributes of a support measure for success	Variable to consider	Optimum conditions for effectiveness	Desirable conditions for effectiveness	Yes? No?
	Is the COORDINATION for the project carried out by…	— an accepted responsible person? a committee? a department or program team? the program coordinator? and/or — management?		Y N Y N
COORDINATED MEANS	**Are the MEANS PROVIDED by the measure…**	-linked to each other? — relevant? — realistic?		Y N Y N Y N
	Is the INTERVENTION based on…	a specific link to the content of the course, the program or the student's progress in the program?		Y N

CONDITIONS FOR EFFECTIVENESS OF
SUPPORT MEASURES FOR SUCCESS

The essential attributes of a support measure for success	Variable to consider	Optimum conditions for effectiveness	Desirable conditions for effectiveness	Yes? No?
COORDINATED MEANS	**With regard to RESOURCES does the project have…**	**— a realistic budget?** **— adequate professional, administrative and clerical support?** **— means to make the project viable once it is implemented?** *We don't know. For the time being, as long as the college spends the money to hire a math teacher and the teachers are willing to take an hour from their course time to administer the questionnaire and the students are willing to increase their training by three or four hours, then everything is okay.*		Y N Y N Y N

CONDITIONS FOR EFFECTIVENESS OF
SUPPORT MEASURES FOR SUCCESS

The essential attributes of a support measure for success	Variable to consider	Optimum conditions for effectiveness	Desirable conditions for effectiveness	Yes? No?
COORDINATED MEANS	**With regard to RESOURCES does the project have…**		the tools available to support the intervention? *A diagnostic test needed to be developed but it is now completed. Course notes can be added…* — collective and common documents?	Y N Y N
			— a special locale for students, if necessary? - a special locale for intervenors, if necessary?	Y N Y N
EXPECTED IMPACT on SUCCESS and indicators	**Were the contributions of the measure towards improving success…**	**explicit…** — **based on one or more indicators** (ex.: average rate of success, perseverance, graduation, etc.)? — **based on the quality of training offered** (ex.: in-depth learning, confidence in one's capacity, etc.)? **probable** — **based on qualitative and quantitative results?**	— repercussions that can be transferred to other situations (other courses, SFT, for example)? *Yes, other nursing courses.*	Y N Y N Y N Y N

CONDITIONS FOR EFFECTIVENESS OF
SUPPORT MEASURES FOR SUCCESS

The essential attributes of a support measure for success	Variable to consider	Optimum conditions for effectiveness	Desirable conditions for effectiveness	Yes? No?
A FOLLOW UP MECHANISM[16] FOR THE MEASURE	**Are the MEANS FOR COLLECTING information…**	**-established based on expected results?**		Y N
		-designed based on indicators linked to success?		Y N
		-designed to bring out the successes and difficulties encountered along the way?		Y N
		-designed to verify the satisfaction and opinion of students and intervenors?		Y N
		-designed to verify the transfer of acquisitions from the measure to regular activities?		Y N

[16] This part of the effectiveness conditions is based on the first version of this document; we have maintained it because the evaluation was carried out on this basis.

APPENDIX 5
Table on the conditions for effectiveness of a
support measure for success: Checklist format

The table presented in this appendix should help identify the conditions that are present or missing by underlining Y (yes) or N (no) in the last column.

This table indicates, in connection with the critical attributes of a good support measure and the different variables which characterize them, the optimal conditions and the desirable conditions retained by the work group.

CONDITIONS FOR EFFECTIVENESS OF
SUPPORT MEASURES FOR SUCCESS

The essential attributes of a support measure for success	Variable to consider	Optimum conditions for effectiveness	Desirable conditions for effectiveness	Yes? No?
A PROBLEM AN OBSTACLE	Is the quantitative or qualitative, DIAGNOSIS... .	instrument-based or based on systematic observation? or based on in-depth reflection?		Y N Y N Y N
	Is the CLIENTELE ...	- learly identified?	- - optional participation in the measure, based on the explicit will of those responsible	Y N Y N
	Is the NEED FOR SUPPORT ...	-recognized by the intervenors?	— recognized by the students or other persons targeted by the measure in question?	Y N
A SPECIFIC PROJECT for the problem diagnosed	Is the project RELEVANT AND CLEARLY LINKED to the problem diagnosed?	-obvious link to the identified problem relating to success? — a feasible project?	-a promising project? — an innovative project based on the problem? - project clearly linked to the institution's success plan? - project clearly linked to the program's success plan, if applicable? - documented project?	Y N Y N Y N Y N Y N Y N Y N

CONDITIONS FOR EFFECTIVENESS OF SUPPORT MEASURES FOR SUCCESS

The essential attributes of a support measure for success	Variable to consider	Optimum conditions for effectiveness	Desirable conditions for effectiveness	Yes? No?
A RESULT TO ACHIEVE based on the problem diagnosed	Does the project EXPLICITLY identify ...	the direct expected consequences of the measure on the students or problem diagnosed?		Y N
			-repercussions that can be transferred to other situations (other course in the program, for example)?	Y N
			— the impact on learning?	Y N
CLEARLY IDENTIFIED INTERVENORS	TEACHERS AND OTHER INTERVENORS (tutors, professionals, coordinators, etc.) are they...	-specifically prepared for the project?		Y N
		— competent with regard to the application of the measure?		Y N
		— confident in the potential effectiveness of the measure?		Y N
				Y N
		interested?		Y N
			— stable?	Y N
	With regard to MOTIVATION, does the project provide the means to...	— stimulate students' commitment and their confidence in their capacity to succeed?		Y N
		— take into account the interests and reservations of teachers and other intervenors with regard to the project?		Y N
			-enlist the participation of the program team or department?	Y N

CONDITIONS FOR EFFECTIVENESS OF
SUPPORT MEASURES FOR SUCCESS

The essential attributes of a support measure for success	Variable to consider	Optimum conditions for effectiveness	Desirable conditions for effectiveness	Yes? No?
CLEARLY IDENTIFIED INTERVENORS	Is the COORDINATION for the project carried out by…	— an accepted responsible person? a committee? a department or program team? and/or		Y N
		— management?		Y N
COORDINATED MEANS	Are the MEANS PROVIDED by the measure…	-linked to each other?		Y N
		— relevant?		Y N
		— realistic?		Y N
	Is the INTERVENTION based on…	-a specific link to the content of the course, the program or the student's progress in the program?		Y N
	With regard to RESOURCES does the project have…	— a realistic budget?		Y N
		— adequate professional, administrative and clerical support?		Y N
		— means to make the project viable once it is implemented?		Y N
			-the tools available to support the intervention?	Y N
			— collective and common documents?	Y N

CONDITIONS FOR EFFECTIVENESS OF
SUPPORT MEASURES FOR SUCCESS

The essential attributes of a support measure for success	Variable to consider	Optimum conditions for effectiveness	Desirable conditions for effectiveness	Yes? No?
COORDINATED MEANS	**With regard to RESOURCES does the project have…**		- a special locale for students, if necessary? — a special locale for intervenors, if necessary?	Y N Y N
EXPECTED IMPACT on SUCCESS and indicators	**Were the contributions of the measure towards improving success…**	**specific…** **— based on one or more indicators** (ex.: average rate of success, perseverance, graduation, etc.)? **— based on the quality of training offered** (ex.: in-depth learning, confidence in one's capacity, etc.)? **probable…** **— based on qualitative and quantitative results?**	— repercussions that can be transferred to other situations (other courses, SFT, for example).	Y N Y N Y N Y N
A FOLLOW UP MECHANISM FOR THE MEASURE	**Is the APPROACH planned as regards …**	**-the person responsible? - the schedule?**		Y N Y N
	Are the objects selected for data collection based on…	**-the preparation of the measure? -the implementation of the measure? -the results of the measure?**		Y N Y N Y N

CONDITIONS FOR EFFECTIVENESS OF
SUPPORT MEASURES FOR SUCCESS

The essential attributes of a support measure for success	Variable to consider	Optimum conditions for effectiveness	Desirable conditions for effectiveness	Yes? No?
	Are the mechanisms for data collection …	— identified for each evaluation object selected ? — administered according to the appropriate procedures?		Y N Y N
	Is the FOLLOW UP APPROPRIATE as regards	- he summary analysis of results? - djustments to the evaluation plan, if required		Y N Y N