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# The Programme Development Process for a Proposed Graduate Diploma in Educational Fundraising & Community Ties

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Abstract

Limited funding poses problems for almost all schools. Serious funding shortages prevent many schools from keeping up with rapid changes in educational technology, and the demands of society (Blue Valley Schools; *n.d.*; Fundsnet Online Services, 2003; The Performance Institute, 2003; Schuyler, 1997). In light of this trend, there is need for a programme designed to help teachers and educational administrators identify and secure sources of additional funding and community ties to enhance the ability of schools to provide adequate educational resources and learning opportunities. This paper examines the process by which one such proposed programme—the Graduate Diploma in Educational Fundraising & Community Ties—would be developed. This examination is carried out in the context of a generic model of programme design and development (Leahy, et. al., 2003).

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# The Programme Development Process for a Proposed Graduate Diploma in Educational Fundraising & Community Ties

The purpose of this paper is to develop a programme prototype, based on a model of programme development that could be used to guide the development and integration of a programme in educational fundraising and community ties. The programme would examine the current sources of funding for K-12 and post-secondary education systems in Canada, and help teachers and educational administrators to find new sources of funding in an untraditional way. The programme would also examine the ties between educators and the community, on the premise that when everyone has access to high-quality education, the entire community benefits. It is anticipated that the acquisition of more sources of funding for schools and the establishment of mutual relationships with local communities will contribute to the development of teaching and learning (Blue Valley Schools; *n.d.*; Fundsnet Online Services, 2003; The Performance Institute, 2003; Schuyler, 1997).

This paper will take a detailed look at the process involved in the design, development and implementation of a proposed programme, The Graduate Diploma in Educational Fundraising & Community Ties. The processes of design, development and implementation discussed here will follow those outlined in a generic programme development model developed by Leahy, et. al., (2003) as part of the Principals of Programme Design & Development Course at Memorial University of Newfoundland.

## The Programme Idea

In educational contexts, limited funding perplexes almost all schools. In this information age, new technology brings us a revolution in almost every aspect of our lives. Educational computing is being led to a prosperous future due to the development of modern science and

technology. At the same time, a serious lack of funding for many schools does not allow them to keep up with the ever-changing world (Blue Valley Schools; *n.d.*; Fundsnet Online Services, 2003; The Performance Institute, 2003; Schuyler, 1997).

Any achievement is obtained by serious action. As a result, many teachers and educational administrators have identified a need to be able to track down new sources of funding for their schools (Blue Valley Schools; *n.d.*; Fundsnet Online Services, 2003; The Performance Institute, 2003; Schuyler, 1997). Therefore, a programme that can help teachers and educational administrators find and apply for sources of funding (i.e., grants), other than the traditional GrassRoots funding available through organizations such as STEM~Net (SchoolNet, 2003; STEM~Net, *n.d.*, 1999), that shows leadership in curricular, technological, and community relations areas is urgently needed.

The rationale for this programme development prototype would closely resemble the Programme Mission Statement (Power & Yang, 2003*a*). That is, the Graduate Diploma in Educational Fundraising and Community Ties is designed to facilitate the development of knowledge and skills needed to build and strengthen ties between educators, educational institutions, and members of the corporate and private community, with the aim of identifying community-based sources of funding and leadership for educational initiatives. This programme will be of interest to educators and educational administrators at all levels, including primary, elementary, secondary, and post-secondary educational systems.

## The Programme Development Model

The process of the design and development of the proposed Graduate Diploma in Educational Fundraising & Community Ties will be examined in the context of a generic programme development model. For this example, a model has been selected that was

developed as part of a graduate course in Principles of Programme Design & Development at Memorial University of Newfoundland (Leahy, et. al., 2003).

The programme development model developed by Leahy, et. al., (2003) is based on a simple premise: separate the tasks of programme design into common groups. The model divides the steps in the programme development process into three common groups referred to as "Phases." Each phase encompasses a variety of tasks. However, the phases are not designed to exist autonomously. They are considered a part of a whole, and represent an ongoing, fluid process of continuous evaluation, return to previous phases and steps, and revision, as a programme is designed, developed, and implemented. Descriptions of each of the phases, the individual steps, and their relation to the proposed Graduate Diploma in Educational Fundraising & Community Ties, are provided in the sections that follow. A diagram representing the programme development model is presented in Appendix A.

## The Programme Development Process

### *Phase One – Analysis and Planning*

#### *Identify the problem.*

Programme design begins when problems are seen in what is desired of a situation (Brown, H., 2003; Leahy, et. al., 2003; MacAulay, 2003; Rothwell & Kazanas, 1998). Like a needs assessment, this stage points out discrepancies in "what is" and "what should be". The difference between the two is in their complexity. In this beginning stage the task is to identify, not explain as in a proper needs assessment, and is therefore much less complex. In this programme development scenario, the problem, or discrepancy, could likely be identified as a lack of funding for individual schools, or school boards, to effectively supply educational

resources and learning opportunities for students (Blue Valley Schools; *n.d.*; Fundsnet Online Services, 2003; The Performance Institute, 2003; Schuyler, 1997).

In most situations the problem that is first seen is only a symptom caused by the discrepancy or gap in that actual situation. It is not the true problem first seen in most cases, rather it is a perceived problem, and the true problem is hidden behind these symptoms (Brown, H., 2003; Leahy, et. al., 2003; MacAulay, 2003; Rothwell & Kazanas, 1998). When followed to the cause, the true problem emerges from behind these symptoms and is exactly what programme designers want to find to accurately solve the discrepancy. In this programme development scenario, it is anticipated that programme designers would identify a lack of knowledge about, as well as skills in identifying and securing sources of additional funding for educational institutions, and in the importance of and skills needed to successfully build ties between the school and the community (Blue Valley Schools; *n.d.*; Fundsnet Online Services, 2003; The Performance Institute, 2003; Schuyler, 1997). Remediating these problems would likely lead to a resolution of the initial perceived problem, or discrepancy.

The causes of problems stem from a deficiency in knowledge or in the environment, or a combination of the two (Brown, H., 2003; Leahy, et. al., 2003; MacAulay, 2003; Rothwell & Kazanas, 1998). A deficiency in environment exists when there is a barrier to performance. For instance: poorly explained job descriptions, or an improper working environment. A deficiency of knowledge exists when people do not know how to perform because of not having the knowledge to perform the skill, or lack of information because of being poorly informed on how to accomplish the task.

The goal of the identifying the problem stage is to start the programme design process with the right information, giving designers the knowledge of what exactly is the problem and

some basics on what is causing the problem to be solved (Brown, H., 2003; Leahy, et. al., 2003; MacAulay, 2003; Rothwell & Kazanas, 1998). It can be anything from a deficiency in knowledge to environment, or any combination of the two. Properly identifying the problem sets the stage for the rest of the process, starting with establishing a programme mission statement and completing a needs assessment, by giving designers a starting point to expand into the "need".

*Establish a mission statement and programme goals.*

Establishing a mission statement and setting programme objectives is a critical step in the programme design and development process. This step clearly sets out the purpose for the programme development project, the reason for the existence of the programme itself, and the objectives that the programme is intended to fulfill (Brown, H., 2003; Leahy, et. al., 2003; MacAulay, 2003; Power & Yang, 2003*a*; Rothwell & Kazanas, 1998). Completing this step requires designers to make decisions based upon the problems, or discrepancies, that were identified, and that led to the generation of the programme idea. The mission statement and programme objectives then provide a rough roadmap for the rest of the design and development process, and act as a useful guide for determining whether the process is remaining on-track. Of course, in any programme development model, formative evaluation is an ongoing process that may necessitate revisions to any of the steps taken by designers. A mission statement and list of programme objectives may need to be modified as the development process progresses, or as contextual factors change, creating new problems, needs, or priorities that should be addressed by the programme itself.

In this programme development scenario (Blue Valley Schools; *n.d.*; Fundsnet Online Services, 2003; The Performance Institute, 2003; Power & Yang, 2003*a*; Schuyler, 1997), the mission statement could appear as follows:

> The Graduate Diploma in Educational Fundraising & Community Ties is designed to facilitate the development of knowledge and skills needed to build and strengthen ties between educators, educational institutions, and members of the corporate and private community, with the aim of identifying community-based sources of funding and leadership for educational initiatives. This programme will be of interest to educators and educational administrators at all levels, including primary, elementary, secondary, and post-secondary educational systems.

A likely set of programme objectives could also be identified. An example of a list of likely programme objectives is presented in Appendix B.

*Complete the needs assessment.*

It is during this stage of programme development that the discrepancies between what is and what should be are fully and systematically identified (Brown, H., 2003; Leahy, et. al., 2003; MacAulay, 2003; Rothwell & Kazanas, 1998). The needs assessment is one of the most critical stages in the programme development process because it answers questions that are central to the planning and implementation of every other stage. Kaufman (1997, in Brown, 2003) summarizes the importance of needs assessment:

> Needs assessments provide the direction for useful problem resolution through identifying, documenting and selecting appropriate problems. By selecting important problems and deriving useful objectives before rushing off to resolve them, performance system professionals may improve the effectiveness and efficiency of any organization

and it's individual operations. Specifically, it: provides the rationale needed to move forward in planning effective interventions to solve human performance problems; ensures the plans are evidence based; enables the programme planner to sell the programme plan to key stakeholders with decision making power.

Needs assessment must be carried out in a systematic manner, and should address a number of concerns (Brown, H., 2003; Leahy, et. al., 2003; MacAulay, 2003; Rothwell & Kazanas, 1998). The first of these is the need to set objectives for the needs assessment itself. From there, programme designers should identify the target group (including both the target audience of the programme, and the target audience of stakeholders and decision makers who will read the needs assessment, lend support to the programme development project, and make key decisions about programme development and implementation). This is followed by selecting an appropriate sampling procedure for gathering the data used in the needs assessment process, determining the data collection strategies that will be used, and specifying the tools, instruments and protocol that will be used to gather the data. Designers will make data collection choices based on the desire to gather a wide variety of data and the need to carry out the needs assessment within budgetary and contextual constraints. After this, programme designers will determine the methods of data analysis that will be used. Descriptions must be provided of how decisions will be made based on the data collected. Finally, designers must assess the feasibility of the plan that has been developed.

While it is difficult to specify exactly how the needs assessment process would unfold in this programme development scenario (Brown, H., 2003; Leahy, et. al., 2003; MacAulay, 2003; Rothwell & Kazanas, 1998), it is possible to identify some likely conclusions and decisions that could be made (Blue Valley Schools; *n.d.*; Fundsnet Online Services, 2003; The Performance

Institute, 2003; Schuyler, 1997). For example, in the context of the Graduate Diploma in Educational Fundraising & Community Ties, it is likely that designers would determine the target audience for the needs assessment to include fellow programme designers and specific committees at the university level who would be involved in approving or rejecting the proposed Diploma programme. This audience might also include key educational stakeholders at the Department of Education, school board and school administrative levels, who might be called upon to review the programme proposal. The target audience for the programme would likely be identified as educators who play leadership roles in their schools, school administrators, and educational administrators working at the school board level, who wish to become involved in the process of building community ties and raising funds for schools. Sampling methods for a needs assessment in this context might include random sampling of teachers and administrators, or the distribution of questionnaires to all administrators and department heads within a selected school district. Decisions about sampling protocol might be dependent upon Department of Education, university, or school board policies. Decisions about data collection and analysis would be dependent upon the resources available to the designers, and time and budgetary constraints (Brown, H., 2003; Leahy, et. al., 2003; MacAulay, 2003; Rothwell & Kazanas, 1998).

*Establish a time frame.*

This stage of the programme development process sets out a blueprint for all other activities (Leahy, et. al., 2003; Rothwell & Kazanas, 1998). A number of methods could be used to set a programme time line. These methods range from using scheduling and control charts, to using the critical path method, and the programme evaluation and review technique. Time lines provide reference points for the completion of tasks and subtasks towards fulfilling the ultimate

project goal or goals. They often present graphical information about the expected time frame for task and subtask completion, and provide information on what needs to be completed, by whom, and when. Rothwell and Kazanas (1998, pp. 307-309) identify five primary benefits to establishing a time line in programme development as focusing attention on identifying procedures, tasks and subtasks, allocating responsibilities, providing a basis for controlling project time, budgeting, and staffing requirements, minimizing the effort needed to effectively complete tasks, and providing a basis for determining project duration. Without completing other steps in Phase One of the programme development model, it is difficult to arrive at a time frame for the Graduate Diploma in Educational Fundraising & Community Ties scenario. Such a time frame would be dependent upon the programme mission statement and objectives, the resources available to designers, and the results of the programme needs assessment (Leahy, et. al., 2003; Rothwell & Kazanas, 1998).

*Establish performance objectives.*

Delineating a list of performance objectives for a programme is a complex but critical task. This step is used to determine and express the results that are desired from the implementation of a programme (Brown, K., 1995; Leahy, et. al., 2003; Rothwell & Kazanas, 1998). Designers focus on identifying results that are measurable, and that focus on the outcomes of the programme itself, not just on the activities undertaken to get there. Programme developers should be able to classify and then write performance objectives based on understanding gained through task and target audience analyses. According to *The Standards* (Rothwell & Kazanas, 1998), these performance objectives should:

> …clarify, in measurable terms, what [members of an organization] should be able to do at the end of [the program], how well they should be able to do it, and what conditions have to exist or equipment has to be available for them to exhibit the performance (p. 159).

In addition, Rothwell and Kazanas (1998, pp. 165-166) list four common mistakes that should be avoided when writing delineated performance objective lists. Programme designers should avoid writing long-winded objectives. They should avoid using vague language. Descriptions of criteria linked to evaluator satisfaction or subjective opinion should be avoided. And designers should avoid including lengthy lists of equipment, resources, or conditions necessary for learner performance. Such lists should only include equipment, resources, or conditions that are "not immediately obvious to a reasonable person" (pp. 165-166).

As with the establishment of a programme time frame, the establishment of performance objectives is difficult to estimate for the Graduate Diploma in Educational Fundraising & Community Ties scenario. Again, the specific performance objectives that will be arrived at are dependent upon the programme mission statement and objectives, and the completion of the detailed needs assessment (Brown, K., 1995; Leahy, et. al., 2003; Rothwell & Kazanas, 1998). However, it is likely that the performance objectives will reflect the ability of target learners to demonstrate mastery of each of the sample programme objectives listed in Appendix B (Blue Valley Schools; *n.d.*; Fundsnet Online Services, 2003; The Performance Institute, 2003; Power & Yang, 2003*a*; Schuyler, 1997).

*Establish a budget.*

Budgetary considerations are critical to the success or failure of any programme development project (Leahy, et. al., 2003; Rothwell & Kazanas, 1998, pp. 309-311). Establishing and maintaining budgets help programme developers to set out a plan in financial

terms that can be used to guide the development and implementation processes. They also help designers and decision-makers keep track of the project in financial terms, allowing them to make sure that the project stays on track.

Key decision-makers within an organization regard the establishing of a budget as an essential step. A detailed and accurate budget will allow them to determine whether or not the project is financially feasible given available resource levels (Leahy, et. al., 2003; Rothwell & Kazanas, 1998, pp. 309-311). It will also allow them to determine if the benefits of the project will outweigh the costs associated with it.

Detailed budgets should be prepared that include cost estimates such as salaries, equipment, and overhead (Leahy, et. al., 2003; Rothwell & Kazanas, 1998, pp. 309-311). It is also a good idea to prepare budgets for each stage of smaller projects, and each task in larger projects, and to combine all of these budgets into a master budget for the entire project. In addition, Rothwell and Kazanas (1998, pp. 309-311) identify several key considerations for programme developers. Designers should know the budgeting system of the organization, and the relationships between departmental, project, and organizational master budgets. They should know the budgeting cycle of the organization. It is important to know organizational forms and procedures for submitting budget estimates and requests. An awareness of deadlines for submitting budget estimates and requests is essential, as is an awareness of organizational requirements and procedures for monitoring and reporting project expenditures, and comparing them to original budget estimates. Finally, designers should be aware of any governmental regulations that relate to monitoring and reporting project budgets and expenses.

Preparing a detailed project budget is not always an easy task, especially considering the often unique and temporary natures of individual projects (Leahy, et. al., 2003; Rothwell &

Kazanas, 1998, pp. 309-311). However, it is vital that this stage be given due consideration. Organizational decision makers want, and need this information. In addition, poor budgeting can lead to over-projections that could send projects into the hands of a developer's competitors, or under-projecting, which could prevent developers from ever making a profit from projects (Rothwell & Kazanas, 1998, pp. 309-311). While this stage in programme development is vital, it is impossible to estimate a budget that might be established in the hypothetical Graduate Diploma in Educational Fundraising & Community ties scenario. Such an estimation is dependent upon the completion of a needs assessment, and the determination of available funding, resources, and programme development constraints.

*Analyze the context.*

This stage of the programme development process includes conducting an analysis of instructional objectives, including such things as job, task, and content analysis. It also includes an analysis of the target audience of the instructional design solution, and their specific contexts (Blank & James, 1993; Derry, 1988; Leahy, et. al., 2003; Rothwell & Kazanas, 1998; Power & Yang, 2003*b*; Pratt, 1997; Spoon, 1998).

Analyzing instructional objectives is a logical step to follow the completion of the needs assessment (Leahy, et. al, 2003; Rothwell & Kazanas, 1998). From there, decisions can be made about what needs to address with instructional design solutions, which needs are feasible to address in such a way, and what kind of instruction would be needed to address those needs. In order to effectively make such decisions, programme developers must analyze the jobs performed by target learners, and how instructional design solutions will fit into the context of those jobs, and the tasks performed by the target learners (Blank & James, 1993; Campbell & Campbell, 1993; Derry, 1988; Driscoll, 1994; Gray & Herr, 1998; Raybould, 1995). Designers

must also analyze the tasks that they will expect target learners to complete through instructional design solutions, and they must make decisions about the content to be included. A number of different approaches have been identified as useful for determining content in programme development projects. These approaches can be used by themselves, or in combinations, and include a Philosophical Basis, Personal Introspection, Function Approach, Critical Incident, Delphi Technique, DACUM Process, and Occupational Research (Leahy, et. al., 2003; Rothwell & Kazanas, 1998).

The analysis of the target audience involves the identification of target learners, their characteristics, and their specific contexts (Blank & James, 1993; Derry, 1988; Leahy, et. al., 2003; Pratt, 1997; Spoon, 1998). Learner characteristics can include such demographic data as their range of ages, gender, geographic locations, positions within the organization, years of work experience, amount and type of educational experience, and their social and cultural backgrounds. All of these characteristics can play a role in determining the learning styles of the target audience, which will be valuable information for designers when determining instructional delivery strategies. Knowledge of these characteristics helps designers to understand the social, cultural, and motivational contexts of the target learners—factors which will, again, influence decisions about instructional strategies. They can also be used to help appreciate the level of support that target learners may show for the programme development initiative.

It is possible to identify the likely salient characteristics of the target audience for the Graduate Diploma in Educational Fundraising & Community Ties (Blue Valley Schools; *n.d.*; Fundsnet Online Services, 2003; The Performance Institute, 2003; Power & Yang, 2003*b*; Rothwell & Kazanas, 1998; Schuyler, 1997). These characteristics are likely to be situation-related (Power & Yang, 2003*b*), stemming from events surrounding the decision to design and

deliver instruction. The identified target audience of this programme scenario has identified a need to build further ties between schools and the community, and to secure more sources of funding for schools. It is anticipated that the acquisition of more sources of funding for schools and the establishment of mutual relationships with local communities will contribute to the development of teaching and learning. Thus, target learners and programme designers in this scenario are primarily motivated by the perceived problem of a lack of educational funding, and community support for schools. According to Rothwell & Kazanas (1998), the rationale why the situation-related characteristics will be especially important to address is that subsequent delivery of instruction to the targeted group, which is composed of teachers and educational administrators, will presumably have the greatest impact to the whole situation. It will also be substantially more cost effective than delivering instruction to all faculty and staff in an educational system.

Decision-related characteristics are not expected to have as significant an impact on instructional design for the Graduate Diploma in Educational Fundraising & Community Ties. This is because of the nature of the programme itself (Blue Valley Schools; *n.d.*; Fundsnet Online Services, 2003; The Performance Institute, 2003; Power & Yang, 2003*b*; Rothwell & Kazanas, 1998; Schuyler, 1997). The programme would likely be delivered as a Graduate Studies programme, rather than professional development within schools. Thus, it is anticipated that members of the target audience will be the ones to make the decision to participate, as opposed to their supervisors. Because of this, it is expected that instructional design elements tailored to the target audience will closely fit the needs of learners who decide to enroll in the programme.

Learner-related characteristics are also expected to play a significant role in the instructional design process for this programme (Blue Valley Schools; *n.d.*; Fundsnet Online Services, 2003; The Performance Institute, 2003; Power & Yang, 2003*b*; Rothwell & Kazanas, 1998; Schuyler, 1997). It is anticipated that the target audience will be comprised of professional educators and educational administrators. Typical learners from this target group will already possess significant levels of post-secondary education at the university level, including baccalaureate and masters degrees, and perhaps other graduate diplomas. These target learners will possess significant prior knowledge about educational learning theory and education-related issues, as well as significant experience with learning in different contexts, and using different learning styles and strategies. They are also expected to possess particular attitudes regarding the programme content, and the styles of learning, to which they will be exposed, that will play critical roles in the instructional design process. Ignoring these factors could have negative effects for the programme, as they could alienate the target learners, and create in them an opinion that the programme content is not relevant, or that the mode of programme delivery is wasting their time, and tuition expenses (Power & Yang, 2003*b*; Rothwell & Kazanas, 1998). Awareness of the educational experience and levels of target learners for this programme will also be useful in aiding programme designers to develop a list of prerequisite skills and knowledge to qualify for entrance into the graduate diploma and programme. Rothwell & Kazanas (1998, p. 91) provide a useful worksheet to aid programme and instructional designers in the task of identifying relevant learner characteristics and their relationship to the programme development project. An example of this worksheet, completed in the context of the Graduate Diploma in Educational Fundraising & Community Ties scenario (Yang & Power, 2003*b*), is included in Appendix C.

*Phase Two – Development and Implementation*

*Develop strategy (instructional or non-instructional).*

Instructional strategies are the techniques, methods, sequences, media, and other means that we have of delivering the programme content to the target group. To develop and specify instructional strategy is to determine the preferred media to be used, which includes sections of pre-instructional activities, presentation of information, practice and feedback, testing and follow-through activities (Leahy, et. al, 2003). In the scenario of the Graduate Diploma in Educational Fundraising & Community Ties programme, online platforms such as WebCT™ could be used for the delivery of distance education alternatives in the instructional design solution. In WebCT™, asynchronous and synchronous communications tools could allow designers and learners in different locations to collaborate during the design and development stages. For example, synchronous communications tools could be used to facilitate meetings between instructors and learners in different locations and asynchronous tools could be used to disseminate information needed by instructors and learners, as well as to submit assignments completed for each course in the programme. The use of WebCT™ allows target learners to participate in the programme despite personal constraints of time and money. It could also be used prior to full-scale implementation, to field test instructional design solutions without having to schedule such resources as space and equipment on campus. Non-instructional strategies address human performance problems through means other than training, education or development (Leahy, et. al, 2003). In this programme scenario, these strategies could include consultation with administrators or government officers, or interviews with fundraising experts. Through the use of such strategies, learners will gain a better understanding about fundraising issues in real work environments. Developing and specifying instructional or non-instructional

strategies can systematically move the target learner toward clearly defined programme goals and standards.

*Define assessment tools.*

Assessment is a critical component of the programme design process. Designers need to create assessment tools that are valid, reliable, and efficient in evaluating what the target audience knows or can do (Leahy, et. al., 2003). These performance measures will enable monitoring of the progress of target learners in mastering what the instruction is designed to deliver. To define the assessment tools includes defining any instruments that can be used to reliably document changes in programme performance. For the Graduate Diploma in Educational Fundraising & Community Ties scenario, a combination of standardized and alternative and programme-developed tools can be used to assess learner progress. These may include portfolios, checklists, interviews, observations, and performance-based tests. In curriculum design, the teaching methodology should be adjusted towards the delivery of fundraising issues in real work environments. Professionals dealing with funding and budgets from work places should be part of the instruction process. Instructors also need to be trained before they start to deliver the instruction to students. Technology could be a very useful tool. For example, the Internet can be used to help students to communicate with professionals, and to access information they need in workplaces.

The changes in programme design and staff development need to be ensured so that current and new assessment tools are reliably used. Research and development should define the kinds of assessment that are needed to best match programme requirements and measure learners' progress toward their goals, and to develop improved tools to assess progress and impact.

*Develop performance assessment instruments.*

Programme designers should usually develop performance assessment instruments and measurements during or sequentially following the preparation of performance objectives (Leahy, et. al., 2003; Rothwell & Kazanas, 1998). In a programme design model, the assessment step is very important to the whole design process. Assessment reflects authentic, real-world applications of knowledge and understanding. It confirms gains, and leads to restructuring, reorganizing, programme modifications and new objectives for a given learner, customer or group of people. The development of goals, performance standards, scope, and sequences, benchmarks and assessment instruments is based on identified needs and objectives.

Performance measurements provide guidance in the preparation of instructional programmes. They ensure economical choice of instructional content, provide a basis for learner accountability, and help link learner achievement to organizational strategic plans (Brown, 1995). In this programme scenario, designers should develop tests, questionnaires, interviews and other methods of assessment to check the goals that have been identified in the Performance Objectives. Designers will also determine the purpose of the measurement and focus on appropriate methods of measuring instruction.

*Implement solution.*

The first step to implementing the solutions is to confirm that the participants have been diagnosed for their readiness for the solution (Leahy, et. al., 2003). Designers should make sure the solution is convenient in location and delivery to the participants. The programme designers should also inform all participants involved in the delivery process that readiness is important to the success of the solution. In this Graduate Diploma in Educational Fundraising & Community

Ties scenario, all stakeholders should be involved, including the Faculty of Education, school boards, corporate bodies, communities and the target student group. The implementation success is a reflection of the planning and research that has previously taken place. Adequate support resources should be arranged prior to implementation, including instructors, facilities, instructional materials and media. There should be more than one type of delivery format in order to satisfy the needs of the participants. Designers should first state the terminal performance objectives, then assess the motivation of the participants taking part in the design solution.

*Phase Three – Evaluation and Revision*

*Perform formative evaluation.*

A mechanism or mechanisms of evaluation are essential to the success of any programme development project (Leahy, et. al., 2003; Rothwell & Kazanas, 1998). The programme evaluation is an ongoing process that is intended to ensure programme outcomes address the objectives previously established by the developers, and that the objectives are being met by the solutions. They ensure that solutions implemented are meeting objectives as effectively and efficiently as possible, and point out problems that need to be addressed, or alternative solutions that could be integrated. And they ensure that the programme, itself, remains valid and responsive to changing contextual factors, both internally and externally (Power & Yang, 2003*c*).

Bhola (1990) notes that formative evaluation is a method of judging the worth of a programme while the programme activities are forming or happening. The feedback or results obtained through formal formative evaluation should result in modifications to the programme to ensure objectives are being addressed. Formative evaluation is typically an internal process

conducted by the programme development team in consultation with content experts. Properly conducted formative evaluation will enable programme developers to identify problems prior to widespread implementation to a wider audience. Rothwell and Kazanas (1998) state, "formative evaluation is conducted before instructional materials are delivered to targeted learners" (p. 264). In this programme scenario, the evaluation processes, while located in Phase Three of the programme development model, are actually ongoing, and are to be specified from the beginning of the project. This will ensure that the designers are able to conduct effective evaluations as the project progresses, and that they are able to be responsive to feedback and contextual changes. One example would be the creation or selection of instructional materials for the instructional design solution. It is essential that this step in the process be the subject of evaluation in order to ensure that the materials are accurate, up-to-date, and effective in meeting the needs of target learners. The evaluation of instructional materials would be conducted by sending the material for review by subject area experts or by field-testing of the materials with target learners (Power & Yang, 2003*c*). Such corrective measures, or revisions, will help to ensure the final product addresses the objectives established at the onset of the project, which will be verified through the process of summative evaluation (Leahy, et. al., 2003; Power & Yang, 2003*c*; Rothwell & Kazanas, 1998).

*Perform summative evaluation.*

The summative evaluation process is conducted at the completion of the implementation phase of the programme development model (Leahy, et. al., 2003). A thorough analysis of all relevant data and results generated as a result of programme implementation is used to determine if the programme met the objectives initially established. As opposed to formative evaluation, which enables programme developers to identify and correct measures during development,

summative evaluation analyses the final results of the implementation. The mechanism of summative evaluation would be used in this scenario for two purposes: 1) to evaluate whether the programme has been successful in meeting its objectives; and 2) to identify problem areas or suggestions for future improvement to ensure that the programme remains effective, and competitive against alternative programmes that are, or that may become available for our target audience. External evaluators should be allowed the opportunity to provide recommendations for programme improvement as opposed to simply completing an impact study to pass judgment on the success or failure of the programme (Gredler, 1996, p.251).

A very important evaluation issue is the evaluation of the whole programme. Learners' feedback during their enrolment in the programme, and the field-testing of fundraising issues in real work environments after learners go back to their work settings, are two main methods to deal with this type of evaluation. Through these strategies, the programme designers can gather information about what needs to be more efficiently done, and what changes need to be made in order to make the programme more beneficial to the learner. As Worthen, Sanders, and Fitzpatrick (1997) note, "both formative and summative evaluations are essential because decisions are needed during the developmental stages of a program to improve and strengthen it, and again, when it has stabilized, to judge its final worth or determine its future" (p. 15).

*Revision.*

As the evaluation portion of the model is completed, one of the critical parts is the benefit of revision (Leahy, et. al., 2003; Power & Yang, 2003*c*; Rothwell & Kazanas, 1998). From the evaluation, information would be gathered about what needs to be done more efficiently and what changes may need to be made in order to make the programme more beneficial to the learner. Instructional materials and methods should be evaluated and revised prior to widespread

use to increase their instructional effectiveness. Revision can be carried out during the programme as well as at the end of the process, to make the whole programme more efficient, effective and enjoyable. Designers should then determine what steps from the programme need to be revisited in order to develop and implement changes as the result of the revision.

*Reality check.*

The key features of project planning are function, plan, schedule and control. There are many tools that one could use to help plan and monitor a project (Leahy, et. al., 2003). These include preparing a time line, budgeting projects, monitoring the time of instructional designers, tracking project accomplishments, establishing and using methods to reallocate funds and planning and monitoring equipment and facility requirements.

Finally, after the instruction has been delivered, the designers must assess the whole process from start to finish in order to determine if the learners are informed and satisfied. As well, evaluation after the completion will identify problem areas or very successful areas of the programme to be considered if the programme is to be implemented again.

## Conclusion

The Graduate Diploma in Educational Fundraising & Community Ties is a proposed programme intended to help educators and educational administrators to find and secure alternative sources of funding for schools, and to build ties with the community that will help schools to keep up with the demands imposed on them. The use of a generic programme development model (Leahy, et. al., 2003) is recommended because it will guide programme developers through a step-by-step process of designing and developing a programme that will

effectively and efficiently meet these goals. Such a model can help developers to identify the real sources of problems faced by schools in terms of finding sources of alternative funding. It will also guide them through three major phases of programme development that will help them to analyze the problems, plan and implement effective solutions, and evaluate the success of the project.

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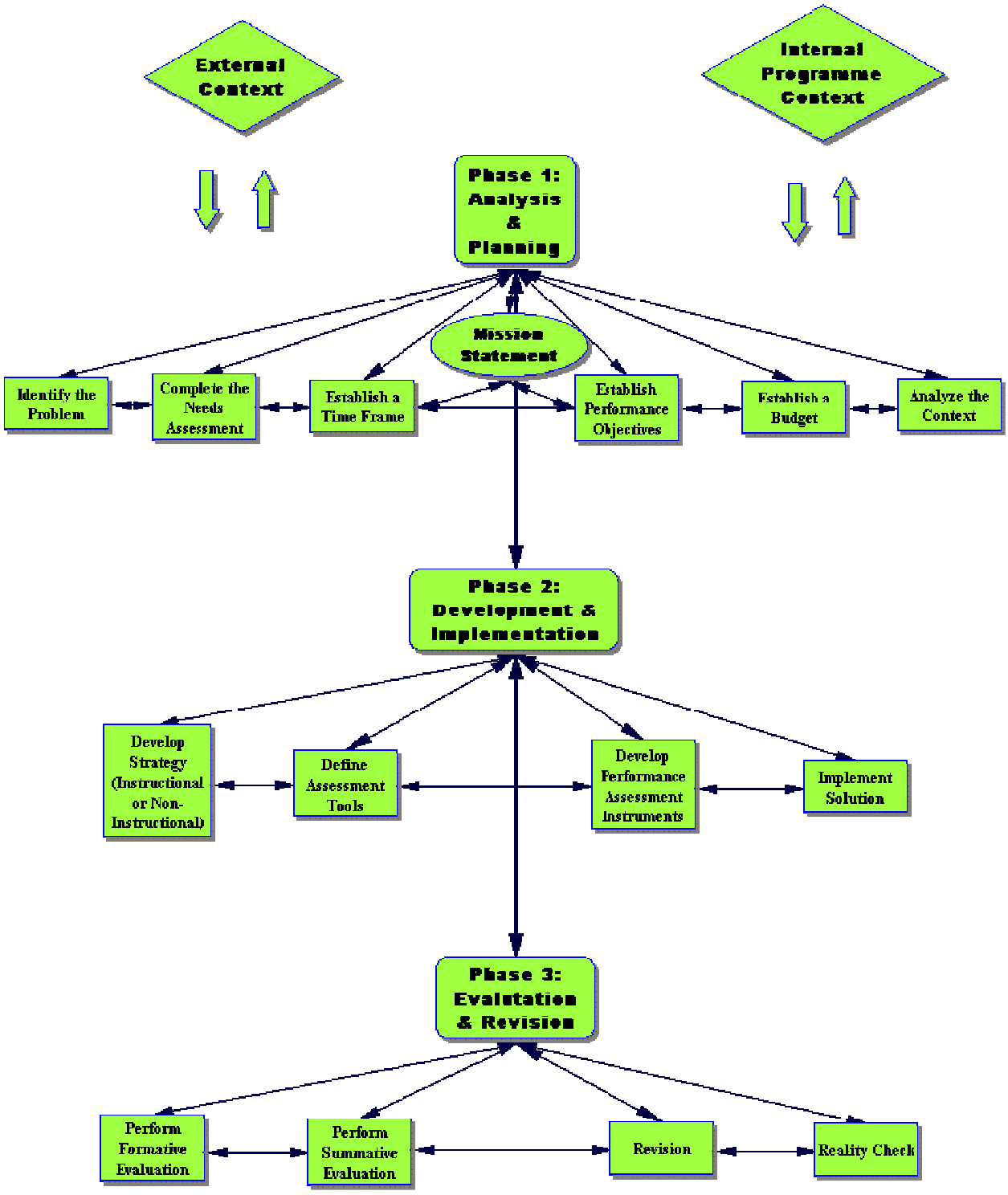
Appendix A: The Programme Development Model

(Leahy, et. al., 2003)



## Appendix B: Listing of Possible Programme Objectives

1. To develop an awareness amongst educators of the need to identify new sources of funding for educational initiatives.
2. To develop an awareness amongst educators of the need to build, maintain, and strengthen ties between educators, educational institutions, and members of the corporate and private communities.
3. To develop an awareness amongst educators of the moral and ethical issues and practicalities involved in seeking out and developing relationships between educators, educational institutions, and members of the corporate and private communities, and in seeking out sources of funding for educational initiatives from within and outside traditional educational networks.
4. To develop amongst educators the knowledge and skills needed to identify possible sources of funding, and to connect those funding avenues to appropriate educational initiatives.
5. To develop amongst educators the knowledge and skills needed to develop funding proposals appropriate to a variety of specific contexts.
6. To provide a context within which ties between educational, corporate and private communities can be forged and strengthened for the ultimate benefit of students, the spirit of learning, and the principals of ethical academic endeavours.

(Alpert-Sleight, 1993; Barclay & Murray, 1997; Blank & James, 1993; Blue Valley Schools; *n.d.*; Campbell & Campbell, 1993; Cantor, *n.d.*; Derry, 1998; Dickleman, *n.d.*, 1995, 1996; Driscoll, 1994; Eckhouse, 1999; Fundsnet Online Services, 2003; Gery, 1998; Heywood, *n.d.*; Leighton, *n.d.*; Marion, 1997; Miller, *n.d.*; The Performance Institute, 2003; Power & Yang, 2003*a*; Pratt, 1997; Quinn, 1997; Raybould, 1995; Rothwell & Kazanas, 1998; Schuyler, 1997; Spoon, 1998; "Tapping," *n.d.*; Tracey, 1998)

Appendix C: Completed Worksheet on Learner Characteristics for the Graduate Diploma in Educational Fundraising & Community Ties

(Blue Valley Schools; *n.d.*; Fundsnet Online Services, 2003; The Performance Institute, 2003; Power & Yang, 2003*b*; Rothwell & Kazanas, 1998; Schuyler, 1997)

| Column 1 | Column 2 | Column 3 |
|---|---|---|
| What learner characteristics… | What are the characteristics? | How should the characteristics be addressed (or considered) in the instruction you subsequently design? |
| Are targeted directly at the area of need? | - Demographic Characteristics<br>- Attitudinal Characteristics<br>- Geographical Location<br>- Job Category<br>- Value Systems | Demographic and geographic characteristics are expected to be tied to available funding levels and sources of funding in a school's immediate area. Attitudinal characteristics are expected to play a role in ability to identify, and willingness to seek particular sources of funding and community ties, as are value systems. Job category is expected to include those who play administrative or leadership roles within schools or school boards.<br><br>These characteristics should be addressed. Demographic and geographic characteristics should be targeted because of their significant roles in education funding levels, and because of their subsequent roles in creating demand amongst learners for the programme. Attitudinal and value characteristics should be addressed in |

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| | | determining instructional design strategies, and in determining content that will positively affect these characteristics amongst learners. Job categories of typical learners should be considered as they will likely play a role in determining perceived needs, and thus programme enrolment. They will also affect such factors as intrinsic motivation to learn content. |
| Pertain to organizational policies? | - Aptitude<br>- Experience<br>- Knowledge<br>- Job Category<br>- Career Stage or Career Prospects | These characteristics relate to the organizational policies of school boards, and play a role in determining who is hired for leadership or administrative positions in the board or at the school level. They also play a role within such organizations in determining who is eligible for educational leave, or funding to pursue educational opportunities. As well, organizational policies affect the determination of who is eligible to receive pay incentives, such as advancement to a higher level teaching certificate (a factor which could entice or deter potential learners from enrolment). They also relate to the organizational policies of post-secondary educational institutions, in |

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| | | that they may be used to determine who meets minimum entrance requirements to participate in a programme.<br><br>These characteristics must all be taken into consideration by programme designers. They will impact upon the typical learners who will enroll in the programme, and how they are addressed may also have an effect upon organizational (school board) attitudes towards the programme, its merits, and the eligibility of programme graduates for pay incentives and/or career advancement. |
| Pertain to learner/organizational needs? | - Demographic Characteristics<br>- Experience<br>- Knowledge<br>- Attitudinal Characteristics<br>- Geographical Location<br>- Job Category<br>- Career Stage or Career Prospects | The rationale for focusing on these characteristics is similar to that given for those characteristics "targeted at the area of need." The learner (educator / administrator) and the organization (School Board) will likely have a need for more experienced and knowledgeable staff with ambitions to move into leadership or administrative roles. It will likely also have a need to find new sources of educational funding and community ties that is linked to a need for staff with specific attitudinal characteristics. The need |

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| | | for funding and community tie sources may be intricately tied to geographic and demographic characteristics. All of these characteristics should be addressed in order to attract target learners, and to insure that programme content meets particular learner and organizational needs. |
| Can be addressed with available resources? | - Demographic Characteristics<br>- Aptitude<br>- Experience<br>- Knowledge<br>- Learning Styles<br>- Attitudinal Characteristics<br>- Geographical Location<br>- Job Category<br>- Value Systems<br>- Life Cycle Stage<br>- Career Stage or Career Prospects | It is difficult to determine in advance what funding levels would be available for this programme. However, the programme is intended for development within a post-secondary educational context, such as Memorial University of Newfoundland's Faculty of Education. Thus, it can be assumed that, within the institutional context, the necessary resources and expertise exist to address each of these learner characteristics, given appropriate levels of priority within the faculty. Demographic, geographic and value system characteristics can be addressed using the expertise, where needed, of faculty experts in native and northern education. Faculty expertise in the delivery of distance education and e-learning could also be drawn upon |

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| | | to help attract, and address the needs of remotely located target learners. It can also be assumed that the necessary knowledge and expertise exists within the Faculty to address issues related to learning theory, content, and instructional design, necessary to meet knowledge, experience, and attitudinal instructional needs. |
| Pertain to existing constraints on the instructional design project? | In this instance, this category would be directly related to, and affected by those characteristics outlined in the previous category (available resources), and by the methods used to address those characteristics and issues. | In this instance, this category would be directly related to, and affected by those characteristics outlined in the previous category (available resources), and by the methods used to address those characteristics and issues. |
| Are feasible to collect data about in terms of resources and logistical limitations? | - Demographic Characteristics<br>- Experience<br>- Knowledge<br>- Learning Styles<br>- Attitudinal Characteristics<br>- Geographical Location<br>- Job Category<br>- Life Cycle Stage<br>- Career Stage or Career Prospects | In this programme development context, it may be feasible to easily collect information on a wide range of learner characteristics. School boards and Departments of Education are potential sources of read-to use data on learner characteristics such as the demographic characteristics and geographical location of personnel, as well as their job categories, ages, and career stages. Such institutions may also have available information on the educational experience levels of personnel. Other |

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| | | characteristics, such as attitudes, learning styles, and career prospects could easily be collected through interviewing samples of target learners, or from the distribution of surveys to all or selected personnel within school boards. |
| Are translatable into design specifications? | - Demographic Characteristics<br>- Aptitude<br>- Experience<br>- Knowledge<br>- Learning Styles<br>- Attitudinal Characteristics<br>- Geographical Location<br>- Job Category<br>- Value Systems<br>- Career Stage or Career Prospects | Again, it can be assumed that in the context of a university-level Faculty of Education, the necessary knowledge and resources are available to address all of these learner characteristics in instructional design. Characteristics such as geographic location could also be relatively easily addressed by drawing upon Faculty expertise and resources pertaining to distance education and e-learning. Career Stage and career prospects characteristics could be addressed in design specifications through consultation with the appropriate organizational authorities, to ensure that the minimum requirements for advancement in such areas as Teaching Certificate Level are met through completion of the programme. |
| Are related to the performance problem that instruction is intended to solve? | - Demographic Characteristics<br>- Attitudinal Characteristics | Again, these are the same characteristics as those identified as being targeted at the area of |

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|---|---|---|
| | - Geographical Location<br>- Value Systems | need. The impact of demographic characteristics and geographic location on the availability of funding and community ties should be addressed in instructional design. Instruction should also be designed to affect learner attitudes and values towards available funding sources, and towards building ties with community partners. Instruction should also be designed to insure that value systems are respected, and drawn upon as potential strengths in finding available funding sources and building community ties. |
| Other | | |