

**Assessing Learning Outcomes: Changing Habits of
Mind and Transforming Universities into Learning Communities**

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The ultimate aim of the learning outcomes movement in universities is the continuous improvement of student learning. Consequently, all individuals working with students in higher education – administrators and faculty members alike - should be well versed in the processes of developing and assessing learning outcomes and using results of assessment for improving student outcomes at all levels. More importantly, this process should become a “habit of mind” for these individuals, and universities should become “professional learning communities” that are united in their commitment to continuous inquiry and improvement of student learning. Developing and assessing learning outcomes at the American University of Beirut took the above framework as an organizing principle for our work in the development and assessment of program learning outcomes.

What do we mean by “habits of mind”? According to Costa and Kallik (2000), habits of minds are a set of thinking *dispositions* which help people develop their critical and creative thinking skills; they are what good problem solvers do when they are faced with hard to solve problems or problems whose solution are not immediately obvious. More importantly, they are the intellectual habits that individuals use to make their thinking and learning more self-regulated.

Based on the above definition, we pose the following question: What “habits of mind” or intellectual dispositions do faculty members and universities need to have in order for the

“learning outcomes” movement to be a productive force of improvement and change in higher education institutions? We submit that there are at least two essential dispositions necessary for the learning outcomes movement to become advantageous in higher education and for this movement not to become a set of bureaucratic activities implemented in response to external (or internal) accountability requirements. These are (1) the centrality of evidence-based and data-driven decisions at all levels of the institution and (2) the necessity of a continuous process of individual and collaborative group reflection.

Developing program and course learning outcomes, assessing these outcomes, and using the results for improvement is a process that bases decisions on evidence rather than opinion or tradition. If the purpose of education is to provide all students with equal opportunities to acquire the knowledge, skills and attitudes necessary to succeed in life, then it is imperative to insure that students have acquired what we expect them to acquire in a program or a course. The issue is not only about teaching but rather about learning. However, obtaining results from assessing learning outcomes and using these results to engender change and improvement is not a static process; it is a dynamic and continuous process that requires individuals and groups to reflect on results and improvements to insure that they are producing authentic change in students and to rethink the learning outcomes and the teaching methods used to accomplish them if there is a need to do so. This process has to become a “habit of mind” of the individuals and the institution for it to bear fruit (Figure 1). We propose that to be productive, the learning outcomes movement should promote a disposition in individuals and institutions to think of the process of developing learning outcomes, assessing them, and using results for improvement as an an-going spiral process that aims for sustainable improvement.

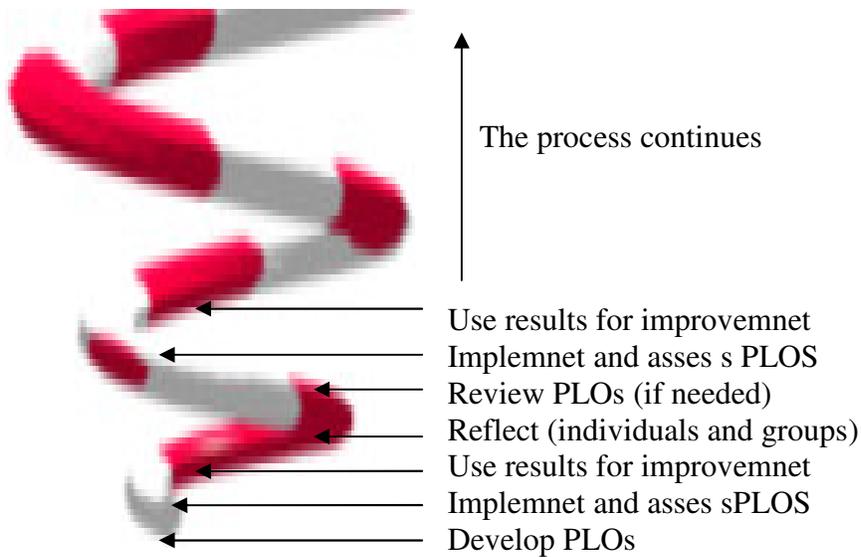


Figure 1. The spiral process of developing and assessing PLOs, using results for improvement, and reflecting on the results.

When an institution and its members are disposed to take evidence-based decisions and to reflect on these decisions individually and collaboratively, this institution is heading towards becoming a professional learning community. According to Hord (1997), professional learning communities are communities of continuous inquiry and improvement. They consist of individuals who share similar values and beliefs regarding teaching and learning and are dynamically involved in learning together and from each other; they provide opportunities for their members to examine their practice, teaching and learning in the case of universities, in order to become more effective in improving learning (Morrissey, 2000). According to DuFour (2004), professional learning communities are characterized by emphasis on student learning, nurturing a culture of cooperation, and a focus on results.

Developing and Assessing Program Learning Outcomes at AUB

At the American University of Beirut (AUB), we have employed 5 steps in order to help faculty members become well versed in developing and assessing learning outcomes and in

using assessment results for to improve student learning. The 5 steps were intended to transform this process into “habits of mind” which will ultimately lead the University to become a learning community in this area. The 5 steps are: (1) setting our goals, (2) identifying the training framework/model that would align with our goals, (3) delineating the learning outcomes plan, (4) implementing the plan, and (5) reflecting on the entire learning outcomes process. Below we detail briefly each of the 5 steps.

Setting our Goals

Our goals have been basically three-fold: (1) creating a learning outcomes culture, (2) employing learning outcomes as a sustainable habit of mind, and (3) initiating a process which aims to transform university units (faculties, departments, and programs) into learning communities. In order to achieve these goals, we decided to ultimately have a team of faculty members who would become the experts in developing and assessing learning outcomes and who would assist others in this respect; they would become the local talents who could communicate such skills and habits of mind faculty-wide. In addition, we embedded a process of reflection in the learning outcomes plan in the hope that this reflection exercise would also become a “habit of mind”.

Identifying our Training Framework/Model

In order to translate our set goals into a viable mechanism, we had to identify a framework within which a learning outcomes plan can be processed. The model selected was the “trickle-down”/ “top-down” model. The Center for Teaching and Learning (CTL) was responsible for supporting and monitoring the implementation of this model. This meant that we had to prepare a team of experts who were charged with training others in the process of learning outcomes. The model we used is shown in Figure 2 below.

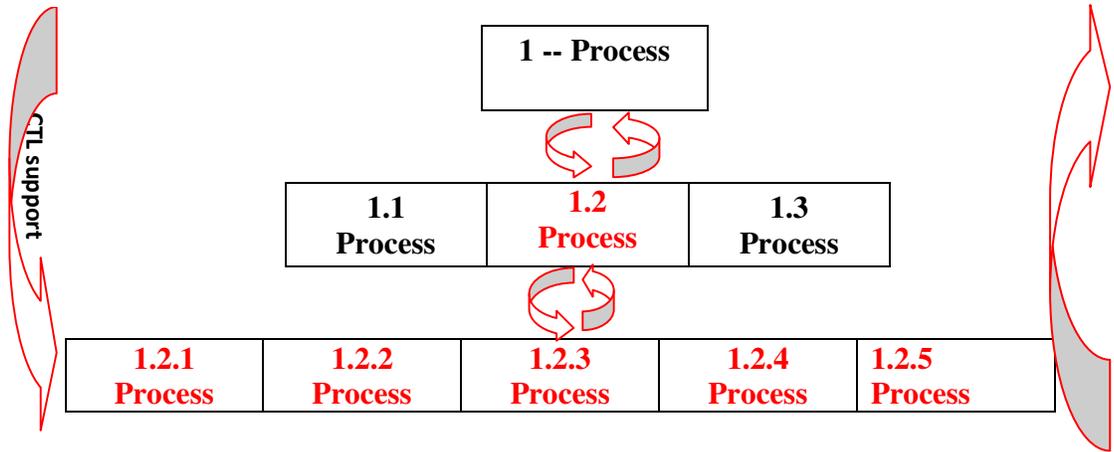


Figure 2. The training model used in the process of deviling and assessing program learning outcomes.

Simply stated the model is an adapted “training the trainer” model which is commonly applied to disseminate knowledge in a pyramid design and at a rather fast pace. However, to insure the authenticity of the training, CTL was available for advice, support, and in-depth individual/one-on-one training for a number of the trainers.

Delineating the Plan for Developing and Assessing Learning Outcomes

Once the goals and framework were defined, we delineated a four- year plan (2007/2008 to 2010/2011) with the aim of meeting our set goals in alignment with the selected framework. The plan is presented in the next section.

Implementing the Plan

We, as CTL, implemented the plan as follows:

1. Developed CTL training materials (2007-2008) which included
 - 1.1. A concept paper on educational goals, objectives and learning outcomes

- 1.2. Two handbooks, one for Program Learning Outcomes and another for Course Learning Outcomes. The handbooks consisted of guidelines and steps for articulating learning outcomes. In addition, they included:
 - 1.2.1. Definition of program and course learning outcomes
 - 1.2.2. Domains (types of learning outcomes): Skills, knowledge, and attitudes.
 - 1.2.3. Alignment between mission and learning outcomes of programs and courses
 - 1.2.4. Examples of program and course learning outcomes
 - 1.2.5. Examples of course syllabi
 - 1.2.6. A “glossary of terms” to reach a common understanding.
2. Detected faculties at AUB which had not worked on developing and assessing program learning outcomes. Two faculties were identified: Faculty of Arts and Sciences (FAS) and Faculty of Agriculture and Food Sciences (FAFS). All other faculties and schools were going through accreditation; hence, they were already in the process of developing and assessing their program learning outcomes
3. Provided training on **developing** program and course learning outcomes using the trickle down/top down model presented in Figure 3. This process took a full year (2008-2009) by the end of which all programs in FAS and FAFS had developed program and course learning outcomes with the support of CTL.
4. Provided training on **assessing** program and course learning outcomes (2009-2010) using the trickle down/top down model presented in Figure 3. By the end of spring 2009-2010, most FAS and FAFS programs had developed a 3-year program learning outcomes assessment plan and some of them piloted one or two assessment tools.

- Held a mini-conference on assessment of program learning outcomes (Spring 2009-2010). The Mini Conference was held in order for some programs to share their assessment plans, results of piloting these plans, and their plans for using the results.

The trickle down/top-down model as applied is presented in the figure 3 below.

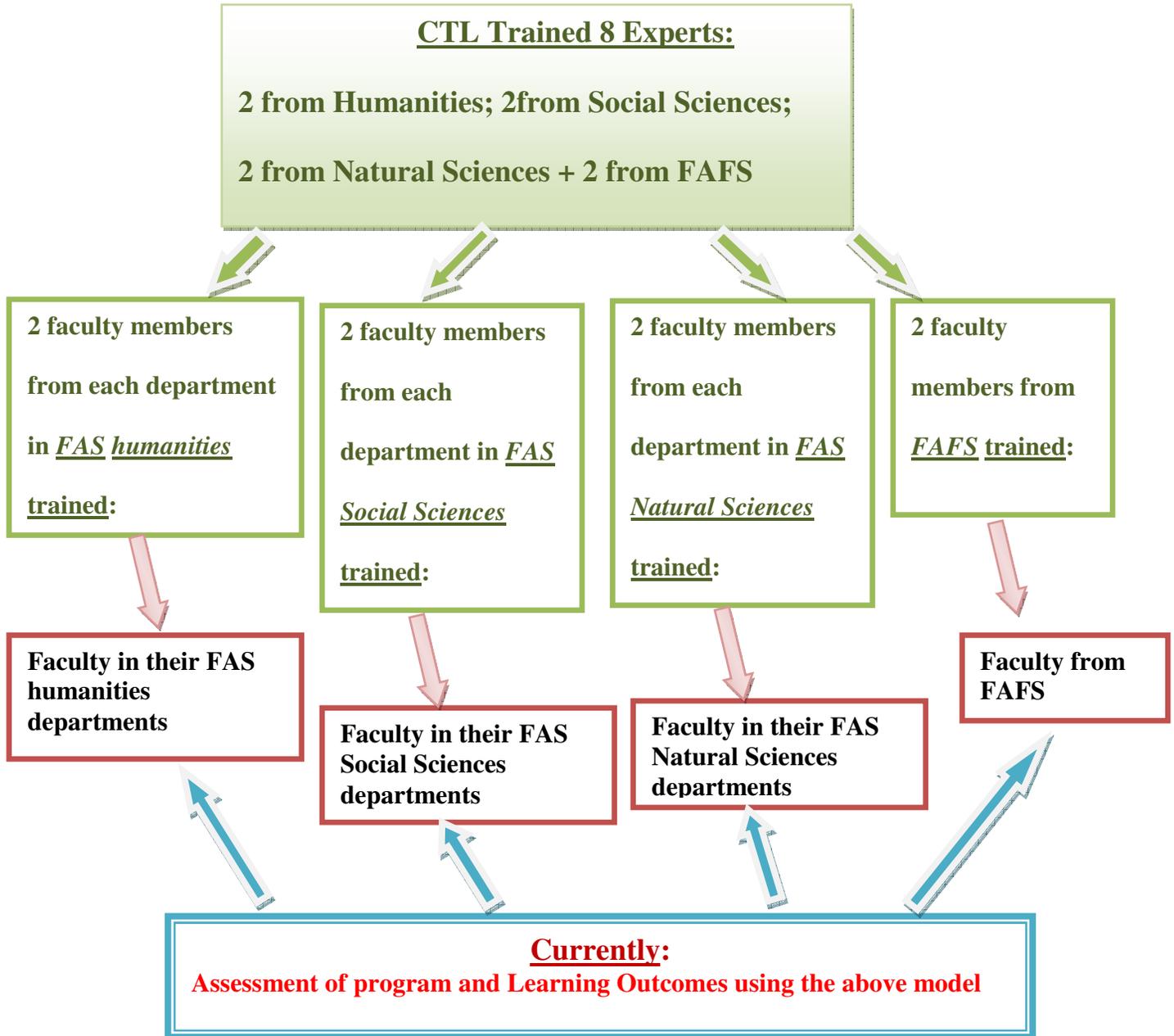


Figure 3. The Trickle down model as it was implemented at AUB.

6. Audited program learning outcomes assessment plans produced by FAS and FAFS and gave individual feedback to programs about these plans. This process started in the summer of 2010 and will be concluded by the end of November 2010. In this process, programs have been audited for assessment timelines, clear articulation of program learning outcomes and alignment of assessment tools with program learning outcomes.
7. Planned workshops for training trainers on developing assessment tools and writing assessment reports. This workshop will be offered in November of 2010. These workshops were planned using the trickle down/top down model presented in Figure 3 earlier.

During November and December 2010 and January 2011, programs are expected to collect assessment data in line with their assessment plans, write assessment reports, and identify areas for improvement based on these results. The data will be collected for a maximum of two program learning outcomes and will involve use of at least one direct and one indirect assessment tools.

Reflecting on the Learning Outcomes Process

As we indicated earlier, we have the dual aim of helping faculty members become well versed in developing and assessing learning outcomes and using results for improvement and transforming this process into “habits of mind” that will ultimately lead to the University to become a learning community. The question is have we achieved our aim and if not what more do we need to do?

We think that we now have a good number of faculty members who are able to develop and assess program learning outcomes. The number of faculty members who were involved in

the training workshops related to learning outcomes is more than 80 out of approximately 350 faculty members at the University. The faculty members have worked on developing program and course learning outcomes and on developing assessment plans. Moreover, more of them will be involved in collecting and interpreting assessment data, writing assessment reports, and using results for improvement when and where it is needed.

Summary of Learning Outcomes Plan Dates	
Fall 2007	Program Learning Outcomes Train the Trainers hands-on Workshop
End of Spring 2007-2008	Develop mission statements and program learning outcomes.
March 2008	Course Learning Outcomes Train the Trainers hands-on Workshop
End of Spring 2008-2009	Develop course learning outcomes. Reflection mini conference
Fall 2009-2010	Assessment of Program Learning Outcomes Train the Trainers hands-on Workshop Reflection mini conference
End of Spring 2009-2010	Develop a plan to assess program learning outcomes.
November 2010	Training of assessment tools and assessment reports
End of fall 2010-2011	First assessment report with plans for improvement based on results

Figure 4. Four year plan used to develop and assess program and course learning outcomes.

However, being involved in the activities required in the learning outcomes process is not sufficient to transform peoples' thinking and for them to adopt the habits of mind required for the sustainability of the process and does not transform program faculty members into a learning

community. All these activities could have been done in response to external requirements such as institutional accreditation. Therefore, do we have any evidence that there are new “habits of mind” and consequently learning communities? In our opinion, evidence for this comes from the following activities:

1. The number of faculty members who participate in sessions planned to reflect on developing and assessing program learning outcomes and the quality of the discussions in these mini-conferences.
2. The quality of discussions in meetings planned to discuss program learning outcomes and assessment plans. Invariably discussion move from technical matters to more in-depth discussion related to the effect of assessment on programs and how assessment results can be used for improvement.
3. The number of faculty members and department chairs who request individual meetings with CTL staff to discuss not only the technical matters related to developing and assessing learning outcomes but more important matters such as making assessment a sustainable process in the departments.
4. The number of programs who have decided to complete the process earlier than others because they are interested in using results to review their programs.

It is obvious that the evidence provided above is insufficient to claim that most university units have adopted new habits of mind and that all programs have become learning communities. Much more time and effort are needed for this to happen because in our opinion changing structure and requirements will not change a very strong culture of academic freedom and independence from the effect of outside forces. Changing habits of mind and becoming learning communities will require a change in the culture of universities, a process that will take time. It

is when university faculty members start thinking of developing and assessing program and course learning outcomes as an integral and necessary constituents of a teaching/learning process that is student- rather than teacher-centered; rather than as a requirement by “outsiders” –be they university higher administration or accreditation institutions -- that this process is transformed into new habits of mind and that leads academic units to become learning communities.

References

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