

*Elements of  
Student-Centered  
Learning*



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*Elements of Student-Centered Learning*

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# Foreword



One of our most important goals in the Loyola Schools is the development of a *community of learners* among our students. By this is meant the formation of our students as persons who love and take joy in learning, who take responsibility for their learning under the guidance of their teachers, who are reflective, analytical, critical, and strategic in their thinking, and who are resourceful, creative, and motivated lifelong learners.

Developing our students in this way requires *student-centered learning*. What is student-centered learning? What teaching-learning processes create a student-centered learning environment? What is the role of the teacher in this environment? What learning activities inside and outside the classroom promote student-centered learning? These are some of the questions that this book addresses.

I urge you to read the book. For the young teacher, it will provide a new, exciting, and wonderfully fulfilling approach to teaching. For the veteran teacher, the book may offer fresh perspectives to enrich each one's teaching experience.

I would like to express my gratitude and appreciation to the authors, Mr. Rodolfo P. Ang, Dr. Ma. Celeste T. Gonzalez, Dr. Ma. Emma Concepcion D. Liwag, Dr. Benilda S. Santos, and Dr. Catherine P. Vistro-Yu, for the dedicated work they put in to define and enunciate the nature and processes of student-centered learning and to produce a very clear, interesting, and useful reference book. I also wish to acknowledge the participation of Mr. Francis Ted J. Limpoco in the initial discussions in preparation for the writing of the book.

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*The Fires of Excellence*, Dr. Ricardo G. Abad's response on behalf of the Awardees of the 2001 Metrobank Search for Outstanding Teachers

made an inspiring ending to the book. I thank him for allowing us to include it.

I wish to thank the senior professors who reviewed the first draft of the book and gave excellent comments and suggestions that greatly improved it: Dr. Ricardo G. Abad, Dr. Wilfredo F. Arce, Dr. Ma. Assunta C. Cuyegkeng, Dr. Rainier A. Ibana, Dr. Jesus C. Palma, and Dr. Soledad S. Reyes.

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I thank Dr. Doreen G. Fernandez who on short notice took time out from her very busy schedule and did a wonderful job editing the final draft of the book.

And finally I wish to thank Karen B. Cardenas, ORP Director, for supervising the publication, Nora Elenor V. Dela Cruz for the beautiful lay-out of the text, and Joanna P. Ruiz for the very fine and apt cover design of St. Ignatius offering himself, his gifts and talents, and his life in the service of God, *ad majorem Dei gloriam*.

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# *Introduction*



## *The Need for Student-Centered Learning*

**I**n 1995, the Ateneo de Manila School of Arts and Sciences (now the Loyola Schools) embarked on a long process of reviewing its Core Curriculum. This culminated in August, 1996 with the approval of a radically new curriculum grounded on three fundamental principles: the formation of competent persons-for-others, student-centered learning, and integrated learning. The Core Curriculum review was followed by a two-year review of the major curricula of each of the degree programs offered by the Ateneo.

The general review was precipitated by the realization that the world of today is far different from the world the Ateneo faced when our curricula were first developed. We are in an era when transportation and communication infrastructures are rapidly transforming the manner and speed in which we do things, when the amount of available information is growing exponentially and the very nature of knowledge is evolving, and when the world is being rapidly transformed by the sometimes conflicting yet oftentimes complementary processes of globalization and localism.

We have long recognized the dual aspect of our educational responsibility: the provision of content-based learning and formation. But what kind of graduates are we trying to form? We want to mold our students into persons who can interact with, compete in, and contribute to the Philippines and the world, persons who are critically rooted in their culture, proactive in the global context, imbued with the scientific spirit, professionally trained, and strongly oriented to faith and justice.

As the pace of change accelerates, we become increasingly aware that this process of educating and transforming our students cannot be achieved solely within the classroom. It is impossible for us to teach our students everything that they will ever need to know; to

anticipate in our classes all the different situations that they may someday encounter and come to terms with. Therefore, it becomes especially important for us to focus on forming our students into lifelong learners: independent, analytical, critical in their thinking, reflective, eager and able to explore learning opportunities on their own and take responsibility for their personal transformations.

Clearly, a new curriculum was needed to respond to these contemporary demands, and a reorientation in teaching style must follow — one more participatory than didactic, more critical than accepting, more creative than familiar. Our core and major curricula have thus been reoriented, and student-centered learning is made an integral part of our teaching. ∞

# Chapter I



## *What Student-Centered Learning Is and Is Not*

**W**hen first introduced to the term, most teachers are perplexed. “Haven’t we been delivering *that* all these years?” After all, when motivated and competent educators work with the welfare of students foremost in their minds, can classes be anything *but* student-centered?

After initial discussion of what student-centered learning might mean, teachers may be asking themselves the following questions:

- What is the difference between student-centered learning and the way that I have always done things? In what way have I not been student-centered?
- What is the difference between student-centered learning, outside the classroom learning, and learning how to learn?
- Does the focus on student-centered learning mean that I should avoid the use of the lecture method?
- Does student-centered learning mean that classroom interaction between teacher and student is less important, and that I can meet my classes less often?
- What can I do and what changes can I make in the way I teach my classes to make my approach more student-centered?

We hope that this book will be able to provide the answers to many of these questions.

## What is student-centered learning?

### What are its goals?

Student-centered learning is a system of instruction that places the student in its heart. It is teaching that facilitates active participation and independent inquiry, and seeks to instill among students the joy of learning inside and outside the classroom.

Thus, the term “student-centered learning” can be applied broadly to almost any type of learning activity. In the context of the present Core Curriculum, it refers specifically to those teaching and learning methodologies that will help our students develop the attitude, the resourcefulness, and the skills necessary for them to become lifelong, strategic, and motivated learners, eager and able to learn outside the classroom (even outside the Ateneo), with an ability for independent inquiry and a sense of responsibility for their own learning.

This goal can be achieved only if we recognize that learning is a process shared by both student and teacher. Far from diminishing the role of teachers, this pedagogical strategy underscores their importance. Through lectures and other teaching methodologies, the teacher provides the necessary content-based learning and plays the role of formator. Lectures, when delivered well, are excellent tools for developing the critical thinking necessary for lifelong learning. Through class discussions, the teacher can point to further areas of interest which students are motivated to pursue beyond the classroom, either individually or in a group, via library research or fieldwork. Outside of class, through a fuller use of the current practice of student consultation, the teacher can guide the students in their work and steer them in the right direction. All these activities are animated by the spirit of *cura personalis* in Jesuit education.

Our students should realize that the interaction between teacher and student in the classroom is only one of various possible modes of learning, and that there is also a lot that they can learn on their own outside of class. At the same time, they should not fail to appreciate the value of this interaction. While highlighting the need to require our students to engage in learning activities beyond the classroom, student-centered learning is *not* about minimizing the importance of learning activities *within* the classroom. Teachers

are encouraged to experiment with alternative teaching methods, but *not* discouraged from their continued use of effective classroom lectures. Student-centered learning is also *not* about devaluing the knowledge, expertise, and authority of teachers, in fact it demands more from us and draws on our wellsprings of creativity, forward planning, flexibility, and resourcefulness. 



# *Chapter 2*



## *Creating a Student-Centered Learning Environment*

**H**aving established that the interaction between teacher and student inside the classroom continues to be the single most important locus of learning, we move to the question of what environment should be created inside the classroom to engender student-centered learning.

Not every class can be called student-centered. Beyond the usual group work and class projects (activities often seen as characterizing a student-centered classroom) is a development process leading towards the creation of a student-centered learning environment. This process involves both student and teacher together, and takes shape only as far as both teacher and student will allow it.

We can describe some of the conditions that would exist if a class were truly student-centered:

### **The Role and Responsibilities of the Teacher**

A student-centered learning environment is one where, as teachers, we recognize our role as facilitators of learning and not just repositories of knowledge. We accept that we are not the sole authority on any subject matter. Our teaching approach moves away from conveying information towards facilitating students' personal discovery through discussion, consultation, and mentoring. We discourage students from relying on us to give them the "correct" answers all the time; we encourage them instead to come up with answers of their own. We avoid simply trying to cover course content. Instead, we allow our students to uncover our subject matter at their own pace, according to their own aptitude, while providing tools to help them keep pace with the class or raise them to a desired standard.

We also take greater responsibility for ensuring that every activity is meaningful to every student, whenever possible. We wean ourselves from delivering content en bloc to serving it a la carte, taking into consideration our students' varied needs and interests, and the requirements for more customized and interdisciplinary approaches to problem-solving. We do not insist on always using whole-class instruction methods as if all our students were alike in their learning styles, abilities, and interests. We depart from the mindset of treating all our classes the same way, or making sure that they all proceed at the same pace. However, it remains our responsibility to manage class time and the semestral schedule well, and within those time constraints, help students reach desired levels of competence without overloading them with activities and requirements.

## **The Role and Responsibilities of the Students**

Teachers are not the only ones who will change the way they see themselves and the role they play. Students will change too, not just in the way they see their teachers, but also in the way they see themselves.

In a student-centered learning environment, students accept that their teachers are primarily facilitators of learning and not simply walking encyclopedias, dispensing the information that they need. Students take greater responsibility for their own learning and do not rely exclusively on the teacher to provide direction. They find schoolwork valuable, and are therefore motivated to do well. They recognize the importance of every learning activity in which they engage. They do not have to be told what to do and when to do it. They are encouraged to be truth-seekers and meaning-makers.

Students are empowered in a student-centered learning environment. They share credit for their increased learning. They realize that they are capable of making decisions for themselves — they know when to accept or reject ideas. But, they also share in the blame if they do not meet desired learning outcomes. They realize that along with freedom and choice come responsibility and accountability to themselves and to others.

## **The Quality of the Student-Teacher Interaction**

A student-centered learning environment allows students and teachers to engage in genuine exchanges of ideas. We use instructional methods that encourage student involvement, avoiding an excessive use of classroom lectures that are not interspersed with nor followed by dialogue and group discussion. We invite our students to ask meaningful questions, to assemble, select, and organize data, and to interpret and apply these to important problems in their fields of knowledge. We actively listen to them and help them acquire the confidence to argue, challenge, and eventually prove and defend their ideas.

We also build enough confidence in our own selves so as not to feel vulnerable or defensive when students raise questions in our classes. We are not afraid to admit what we do not know. Without feeling threatened, we allow our students to offer conflicting ideas, disprove our claims, and offer alternative perspectives. We are mature enough to recognize that such acts are signs of critical and analytical skills being exercised. They are not necessarily willful acts of disrespect.

## **The Mode of Learning**

In a student-centered learning environment, students are encouraged to learn independently, with the appropriate guidance from the teacher as it becomes necessary. We adopt teaching methodologies that provide our students with opportunities to do independent work, either alone or in a group. The desire to learn much more than what the teacher presents in class drives the students to read, to do research, and to discuss on their own.

Collaboration is a prime feature of a student-centered learning environment. Students share information, help each other out and provide support for each other's learning. While students are driven to learn independently, they also enjoy working with classmates because they actually see for themselves that many heads are better than one.

## Turning the Dream Into Reality

All teachers dream of creating this kind of student-centered learning environment for their classes. However, to turn this dream into reality requires change in many aspects. A change in attitude is of primary importance. We cannot succeed in creating this environment without altering some of our beliefs about what learning is and what teaching ought to do. This is not easy. It will take a lot of resolve and conscious effort on our part to achieve this goal. ∞

# *Chapter 3*



## *The Teacher in a Student-Centered Learning Environment*

**T**he teacher is a key element in a student-centered learning environment. Our own growth as teachers contributes to the processes and activities that define this approach. But, where do we begin? What steps must we take?

The following attitudes and exercises can help us attain this goal:

- We genuinely believe that a student-centered learning environment is necessary for the total development of our students.
- Both students and we accept the changes in roles in this educational process.
- We locate within our curriculum opportunities for students to engage in more independent types of study.
- We begin developing instructional materials that support a student-centered learning environment.
- We sustain our interest in developing such an environment through constant dialogue and discussion of ideas.

We can add many more items to this list. It might be helpful, however, for us to acknowledge here that our ability to develop these attitudes and to undertake these activities successfully is also highly dependent on where we are in our personal and professional development as teachers.

Not everyone can be a teacher. Many people have tried it out only to realize that they do not have a calling for it. There are, however, many real teachers among us who have found satisfaction and fulfillment in teaching, and they are the ones who have stayed in the profession.

Most of us begin teaching without too much certainty that we are meant to be teachers. However, if we love our students and love our work, there is probably a “real teacher” within us, albeit waiting to be developed and to grow. We all go through a developmental process before we can truthfully say to ourselves, “I am now a real teacher.”

Our growth in teaching is the key to our ability to create a student-centered learning environment. The growth process may be characterized by the following stages, which most young teachers experience in their search for their identity as mentors.

### **Stage 1: “Look at Me” (Teaching is a job)**

When we first begin to teach, we are often most conscious about the image we project as teachers and classroom managers. We tend to put ourselves at the center of the class. Most of us are concerned about how we carry ourselves, how we perform in class, how we talk and communicate our ideas, and whether we are teaching the correct content. We may be defensive about our style of teaching, our answers to students’ questions, our solutions to problems, or the conclusions we draw. We are also easily affected by both extremely positive and extremely negative remarks from our students, colleagues, or Chairs.

At this stage, teachers may vacillate between the two extremes of being too lax or too strict in the way we handle our classes. On the one hand, we want our students to like us. We relate to our students as if they were friends. Thus, we may be very relaxed in managing our classes, often allowing disruptive behavior because we are afraid the students might get angry with us or resent us. We want to project an image of approachability. We may give easy exams.

On the other hand, some of us at this stage could worry about earning an image of being too lenient or unable to discipline our classes. Consequently, we end up being too strict and unrelenting.

Some of us young teachers might even entertain feelings of wanting to “get back at students” for the hardships that we ourselves went through as students. We, therefore, subject our students to the toughest exams we can think of.

We may experience a lot of stress, tension and worry because we have not yet developed teaching styles with which we are comfortable. We may be afraid of making mistakes. On the other hand, some of us may feel that the job is easy because “all I have to do is to go to the classroom, face the students and teach.” We tend to equate teaching with lecturing. Thus, as long as we deliver good lectures, some of us feel we are doing the job.

Generally at this stage, we assess our teaching performance on the basis of how “smoothly” our classes go, meaning no questions and no misbehavior from our students. We justify the grades we give our students by focusing more on *what* answers they give than on *how* they arrive at the answers.

## **Stage 2: “Let’s Look at Our Lesson” (Teaching is a career)**

At Stage 2, some of us feel we already have our own identities as teachers. We have developed our own teaching styles. We are comfortable with our classroom management techniques. We feel good because we have found ways to get our students to like us (or we do not get too anxious when they don’t).

We are more often concerned about the subject matter we teach. We continually seek to improve our teaching methods. We experiment with various classroom activities. We read a lot and do research on the different approaches to effective teaching and assessment of student performance. We are most creative at this stage. We seek to innovate in our desire to make our classes more exciting and interesting to our students. Teaching becomes a career and not merely a job.

We are not disheartened when students ask complicated questions. On the contrary, we grow excited about these kinds of questions because they attest to the students’ deepening interest in our subject.

### **Stage 3: “Let’s Look at You” (Teaching is a vocation)**

An important transformation has occurred when we reach Stage 3. Teaching goes beyond the career and turns into a vocation. We have transcended the “I” stage and are worried least about ourselves. We realize that the students are truly the center of the class — not ourselves, not the subject we are teaching. They are the core of the teaching-learning process. Now every decision we make is based on how much our students will gain.

We gradually see our students as many unique individuals as opposed to just one group of similar individuals. A parent-child interaction or a teacher-disciple relationship will often develop between our students and us at this stage. Sometimes, we reach a collegial relationship with them. There is a genuine sharing of ideas and of selves.

It is natural for us to think about our students much more than we used to. We are truly disturbed when they do not understand the lesson. We are concerned and extremely affected when they fail. We become more attentive to their needs. We listen carefully and we listen with our hearts.

### **Nurturing the growth of a student-centered learning environment**

The stages described above parallel our readiness to create a student-centered learning environment. At Stage 1, we are most likely unprepared to establish a student-centered learning environment because we are still attending to our own needs rather than to those of our students. At this stage, we still think that we know everything while the students don’t, yet we are not comfortable in engaging them in genuine discussion because we are afraid that they will find out what we don’t know. We are fearful of being labeled as ‘not knowledgeable.’ We are also concerned about getting immediately to the correct answers. We may not be patient enough to go through the entire process—we just want to ‘get the teaching done.’

At Stage 2, we might begin pressing some of the “start” buttons for creating a student-centered learning environment. We have the opportunity to do so, and we are almost ready. As we shift our focus from our own selves to the subject matter and eventually to our students, we are paving the way for a more student-centered setting.

At this second stage, we may begin to wonder why the students are not “getting it.” We then begin to search for answers. More often than not, we begin by looking at how we have “taught” the lesson, analyzing each step of the solution we gave or the approach we took in analyzing the story assigned to the class. At this point, we may perhaps admit that the “subject is truly difficult to grasp” and therefore has to be transformed to make it more understandable. We consult experts, go to the library, read journals, attend conferences, discuss issues with colleagues – all these in a genuine effort to find effective ways to teach.

If we do not stop asking why students are not learning as much as expected, we are ready to enter Stage 3. This is because we begin to realize that the key to unlocking learning difficulties lies in the students themselves and in their interactions with us, or with the subject matter. If, however, we continue to focus on content in our effort to become an effective teacher, we will have difficulty moving toward Stage 3.

At Stage 3, we are most ready and equipped to co-construct a student-centered learning environment with our students. At this stage, we come to appreciate the varying levels of readiness, needs, interests, learning styles, and thinking skills of our students. This is a prerequisite for student-centeredness. Because we are now focused on the learner, we are able to understand more fully the reasons for the success or failure of our teaching. The search for effective teaching techniques continues, but the search becomes more complex. We try to accommodate multiple approaches to match the different types of learners we encounter. We allow for more open, unstructured and well-guided learning to occur. When this happens, a student-centered learning environment begins to unfold, and teaching becomes truly a vocation for teachers.

### **Understanding the stages of a teacher’s development: Some limitations**

We close this segment on the teacher’s development with three cautionary notes. First, the stages are descriptive rather than prescriptive. They provide a tentative theory about the very complex processes that teachers go through at various stages of their teaching job, career, or vocation. They are meant to serve as indicators of teachers’ skills and attitudes attendant to the maintenance of a student-centered learning environment. At best, the stages can give teachers a clue as to what direction their growth should take if they

were to commit themselves to student-centered learning. The stages are an attempt to illustrate patterns that have often been observed among teachers with varying levels of experience and expertise, but these stages have not been scientifically studied nor established. In fact, they may not be as clear-cut as the above description might imply.

Second, the progression from one stage to another is different for each teacher. A teacher may linger in one stage, but move to the next stage quickly. Teachers also differ qualitatively in the way they conduct themselves at each stage and in the way they progress or even regress from one stage to another. The differences are most likely due to differences in the teachers' academic fields. The rate at which changes in content knowledge appear in the different disciplines, and the quality of such changes, can render certain approaches to teaching practically obsolete. Teachers trained as experts in these approaches will certainly find it difficult to forego favorite methods and simultaneously learn new ones. Here lies the challenge in teaching. In this age of accelerated pace in the discovery and accumulation of knowledge and information, chances are great that teachers will find themselves only slightly ahead of their students.

Finally, the stages are a reminder for teachers to reflect upon their own teaching. Teaching is a phenomenological moment and the best way for teachers to keep this in mind is through the practice of metacognition. Simply put, teachers need to become experts in teaching themselves the *art of teaching better* every step of the way.



# *Chapter 4*



## *A Framework for Student-Centered Learning*

**W**hen student-centered learning is the goal, learning is seen as a constructive process that occurs best when what is learned is relevant and meaningful to the learner. Students are identified as the prime factor in acquiring their own knowledge, while the teacher serves as the facilitator toward this acquisition. The role of the teacher is to “invite students to experience the world’s richness, empower them to ask their own questions, and challenge them to understand the world’s complexities” (Brooks & Brooks, 1993).

Viewed from this perspective, no longer is teaching alone an art; learning is, too, when we provide our students with opportunities to experience the pleasures that mental processes give. We are no longer the sole originators of questions; students question their teachers as well as themselves, and listen to the meanings generated by the answers. As teaching and learning turn into crafts practiced for the sheer excitement of doing and for the joy of relishing the end result, both cease to be lists of tasks to be done. Method and practice become one, and attain a high level of disciplinary expertise enlivened by innovation and creativity.

Student-centered learning sees the students as synthesizing new learnings and making new meanings based on prior knowledge, experiences, mental structures, and beliefs. The goals of instruction in a student-centered learning environment are problem-solving, reasoning, critical thinking, and the active use of knowledge.

To situate these principles within the context of constructing and managing classroom instruction, we present an outline of instructional events that foreground the need to design learning in order to produce learning with understanding and insight.

## **Eight Instructional Events for Student-Centered Learning**

### ***Event 1. Set Learning Challenge***

The first event in setting the stage for student-centered learning is to set the learning challenge. The challenge may take the form of a terminal objective, a goal statement, or a learning outcome. To promote fluent access to knowledge along the way to meeting the learning challenge, it is best to situate it within an authentic context and describe what students should be able to do as a result of instruction, as well as state why it is important for them to address the challenge.

### ***Event 2. Define Learning Goals and Objectives***

The purpose of Event 2 is to help students define their individual learning goals relative to the course, and to develop their ability to assess and identify learning requirements. The primary question to be addressed during the event is,

*“What do you have to know and be able to do in order to meet the challenge?”*

At this time, students are clearly given the opportunity to take control of their learning. The teacher sets goals to get the students to produce work and begin carrying out their activities. As the students set their own goals and objectives to meet the teacher’s challenge, active learning can now begin to be played out on the stage set up by the challenge.

### ***Event 3. Determine Learning Strategy***

The focus of this event is to help students determine how they are to go about achieving their learning goals. The key questions to answer here are:

*“Where will you obtain the information needed to achieve each of your learning goals?”*

*“How will you develop your skills and knowledge?”*

By Event 3, the teacher's own strategy to facilitate metacognition on the part of students is in place. Metacognition is the ability to reflect on one's own performance based on prior knowledge and understanding of one's own learning strengths and weaknesses, and the demands of the learning task at hand. Implicit in metacognition is self-regulation. The greater the students' ability to assess their preparedness (or lack of it) in meeting a challenge (or task), the greater will be their ability to regulate or orchestrate their learning. They can plan, monitor success, and correct errors when appropriate—all necessary for effective intentional learning.

#### ***Event 4. Set Performance Requirements***

The key questions to be answered during this event are:

*“How will you demonstrate that you have achieved your learning goals and objectives?”*

*“What is considered excellent performance, satisfactory performance, and unsatisfactory performance?”*

Allowing students to think and define the categories of their own performance certainly enhances student motivation, a perennial problem in the college classroom where we expect our students to be highly motivated learners from the outset (*“kung wala silang interes sa itinuturo ko, aba, pasensiya sila; guro ako, hindi sirkeró”*), and students consider our skill in motivating them essential to effective teaching (*“who naman does not want to learn, di ba? But the teacher and the subject matter are soooo boring...”*)

#### ***Event 5. Construct Knowledge***

Students work individually or in groups to develop their skills and gain more knowledge. In actuality, students are learning important problem-solving skills and much of the content information. Although learning continues in this event through the accumulation of content knowledge, it hardly becomes useful unless knowledge or information is structured into meaningful patterns; that is, learning by constructing knowledge includes the organization of what is learned.

It is important to note that Event 5 takes up the bulk of the hours traditionally allotted for the fulfillment of course requirements. Knowledge is mainly constructed in the classroom

with the facilitation of the teacher by using any of the following methods of college instruction: the lecture, classroom discussions, workshops, team-teaching, team-learning, the laboratory classroom, the case method, tutorials and independent study, field trips, or electronic teaching. With the advent of student-centered learning, the roles of teacher and student in the learning process have shifted towards a *shared responsibility* for learning.

### ***Event 6. Monitor and Assess Learning***

Students reflect on what they have learned and how they went about learning this. It is important to note that our students need to be constantly nudged to assess their own work and adjust their goals and behavior accordingly. In this event, students conduct self-appraisals and peer assessments to determine whether or not they are achieving their objectives. Course requirements are submitted to the teacher.

### ***Event 7. Provide Feedback***

In this event, we monitor our students' work and provide feedback. This becomes their guide in determining individual success or failure as well as in defining areas where learning methods need to be improved by teacher and student. Students can revise goals, learning strategies, or assessment criteria for continuous improvement.

On our part, we need to assess our feedback apparatus periodically. In constructing tests, for instance, it is good to note that planning and writing the test takes time. It is also best for us to administer the tests ourselves. We will learn a great deal by simply observing our students in the process of answering them. When we score tests, we should be systematic and guided by clear marking criteria. Listening to answers rather than for answers is also excellent practice for us who are so used to legislating accuracy and correctness that we overlook the need to understand why our students keep giving inaccurate and incorrect answers. Finally, returning tests promptly completes the feedback process.

### ***Event 8. Communicate Results***

Students are expected to formally communicate the results of their learning. This may take the form of individual and small group presentations and/or papers. During the entire semester, students actually communicate the results of their efforts in an informal

manner, discussing what they have learned with classmates and teacher. In Event 8, communications are formal and are used for summative evaluation purposes, and to reach closure on a particular topic and/or unit of instruction. 



# Chapter 5



## *Working Towards Student-Centered Learning in our Classes*

To achieve the goal of student-centered learning, many of us will have to reexamine the way we teach our classes, and to review the various course requirements that we impose. In designing our instructional activities and materials, we must ask ourselves how we are facilitating our students' active engagement in the learning process.

If genuine knowledge is not merely received, but actively constructed, then our role is to bring into our teaching more authentic tasks for our students — that is, learning activities that closely approximate the real-world problems they will encounter outside, and beyond, the classroom. What are some principles that could govern the design of these learning activities?

### **Student-centered learning activities are student-directed.**

These are learning activities that allow for a maximum of student choice, control, and regulation. They should promote students' acceptance of personal responsibility for their actions through the exercise of personal choice and decision-making (within the appropriate course parameters). Opportunities for strategic choice-making also help develop student competence and self-discipline, while the teacher's role as guide, facilitator, and supervisor remains critical.

*Example:* We can give open-ended projects where options for student choice might include how to structure and define the task, what topics to cover, what information and resources to utilize, the format of the outcome, and with whom they can work. In a language course, for instance,

aside from standard, textbook language exercises, students may be asked to write their own situation dialogues, and perform them in class.

### **Student-centered learning activities are personally, socially, and domain relevant.**

Classroom tasks and activities that connect with students' interests, needs, and personal goals, and are considered important within the accepted domain of the course, will make learning more meaningful, and therefore intrinsically motivating. Learning occurs best when what is being learned is relevant and meaningful to the learner. Designing such tasks requires, however, that we get to know our own students well — what they are interested in, what they are capable of.

*Example:* In our lectures and projects, we can use our students' personal experiences as a starting point, or we can design interesting, attention-sustaining activities that deepen their understanding of the real-life application of theories learned in class. A history class, for instance, may be asked to view a film or an exhibit on historical events and personalities to gain appreciation of the lessons from the past that can be applied to the present.

### **Student-centered learning activities are long-term, non-routine, and production-oriented.**

When students are required to generate new information or create new products, they are challenged to use diverse reflective, critical, and creative thinking skills - and possibly, interdisciplinary approaches - just like in real-world problems. Such complex tasks cannot be bound by traditional classroom time structures and may take from a few hours to an entire semester to accomplish.

*Example:* Our course requirements could allow for multiple and varied representations and products such as written reports, posters, poetry, oral presentations, panel discussions, simulated committee meetings, videotaped documentaries, mini-symposia, radio plugs, dramatizations and role-playing, mounting an exhibit, even organizing a festival. These projects require students to collect and assemble information from a number of sources, most of which are primary sources.

## **Student-centered learning activities are collaborative and interactional.**

Learning activities that are highly amenable to cooperative and collaborative work reflect the manner in which these tasks are performed in real life. Our students learn from one another, not just from the teacher. They also learn to work *with* one another.

*Example:* Class interaction can take place in many ways — spontaneously, as when students become passionately engaged in discussion and debate stimulated by a lecture topic, or in planned activities such as *SLEs* (structured learning experiences) or group dynamics activities, role-playing, letter-writing, games and skits in pairs or in groups, when appropriate. Collaboration is also required in group research and productions undertaken outside of the classroom.

## **Student-centered learning activities increase students' learning capacities.**

*Attention, focusing, critical and creative thinking* are necessary processes for life-long learning. Teaching methods and learning activities that increase the students' power of concentration and elaboration on the material inside and outside of the classroom, facilitate the development of life-long learning strategies.

*Example:* Kindling our students' attention through motivating starters and "hooks" (e.g., connecting the day's topic with a current news headline) or visually arresting teaching supports (e.g., multi-media instructional materials) is but the beginning. We need to sustain our students' authentic, serious, and critical interest in the material (aside from fleetingly captivating them with visual aids) through the challenging, thought-provoking questions that we raise in the lectures or class discussions, and through follow-up activities that allow them to expand and elaborate on the topics.

## **Student-centered learning activities facilitate students' personal awareness, growth, and formation.**

All our planned learning activities must be infused with the goal of promoting our students' "inner cultivation" of their person and growth in the human qualities of compassion, caring, sensitivity, good faith, and authenticity.

*Example:* We can integrate into our lessons methods that lead to greater self-awareness - such as individual or personal reflections, small group sharing, journal writing — and social consciousness and service — such as encouraging our students to engage in projects directly beneficial to the community.

## **Some specific strategies that can contribute to the delivery of student-centered learning**

- **Lecture supports**

We can support and enliven our lectures with visual aids (slides, acetates, power-point presentations), hand-outs with questions, and other supplementary reading materials.

- **Classroom interaction**

We can animate our classroom with various interactive activities such as recitation, group discussions, group dynamics activities, role-playing and skits, games, and poetry readings.

- **Cooperative learning**

We can facilitate cooperative learning among our students through group reports, group projects, peer review, and a "buddy system".

- **Enrichment activities**

We can plan on various enrichment activities such as field trips or exposure trips, interviews, films, video, music, museum visits, outdoor activities, and/or journal-writing, where they are appropriate to the topics at hand.

- **Hands-on projects**

We can provide hands-on experience for the students through practicum, workshops, literary output, design and production, computer programming and/or modeling lab experiments, field work, or projects like “adopt-an-animal” or “adopt-a-plant”.

- **Case studies**

We can move towards case-based learning and analysis, where students themselves are asked to conduct case studies and literature searches on a topic leading to the development of an oral presentation (seminar) or written report (term paper).

- **Independent research**

We can encourage our students to engage in independent research as in a thesis (with close supervision by a mentor) or an empirical paper; these projects could involve an original investigation of a problem, the application of an appropriate methodology, and the interpretation and write-up of the results.

- **Feedback and assessment**

We can construct fewer objective-type test instruments and develop assessment tools that require deeper reflection and discussion of issues, such as essay tests and oral exams, diagnostic exams, multiple evaluation techniques, student profiles, and consultations. 



# Chapter 6



## *How Can We Tell if We Have Delivered the Goods?*

**H**ow do we know that we have accomplished our goal of making student-centered learning the core of our teaching effort? How do we know that we have shifted from a teacher-centered or discipline-centered learning to the student-centered learning approach? The following checklist could help us to assess our actions or those of our fellow teachers. The checklist is made up of two parts. The first part looks at how successful we are in creating and maintaining a student-centered learning environment. The second part looks at the quality of classroom instruction that we deliver.

### **The Student-Centered Learning Environment**

#### *On the Role and Responsibilities of the Teacher*

- Do we take on a facilitator's role rather than an authoritative role or that of an information-provider?
- Do we provide students with opportunities for discovery and constructive learning through classroom activities and one-on-one interactions?
- Do we encourage students to use sources other than ourselves to determine the correct answers or ideas?
- Do we allow for flexibility in content coverage, thereby giving room for student choice, learning styles, pacing, and levels of aptitude within the parameters of the course?

- Do we show greater responsibility in making learning activities more meaningful to students?
- Do we employ a variety of teaching methods to accommodate each student's individuality and personality, allowing for non-whole class instructional methods as well?
- Do we provide the right amount of guidance and feedback needed by students in the course?

### ***On the Role and Responsibilities of Students***

- Do the students show a greater responsibility for independent learning?
- Do the students show resourcefulness in learning?
- Are the students motivated to learn?
- Do the students recognize and accept the role of their teachers as facilitators rather than the primary source of knowledge?
- Do the students find their work meaningful and valuable?
- Do they make an effort to find meaning in their work?
- Do the students feel empowered as learners?
- Do they share in the credit or blame for success or failure in achieving their goals?

### ***On the Quality of Student-Teacher Interaction***

- Is there genuine interaction between the teacher and students and among the students?
- Do students participate actively in class discussions and activities?

- Do the students ask meaningful questions? Do they get involved in discussions by arguing, proposing, suggesting, or defending ideas?
- Do we genuinely listen to the students and understand where they are coming from?
- Are we comfortable when students ask deep and disturbing questions for which we may not have ready answers?
- Do we let students offer conflicting ideas or alternative perspectives in class to allow for critical and analytical thinking to develop?

### ***On the Mode of Learning***

- Do the students have the opportunity to do independent learning?
- Do we provide opportunities for group work?
- Are the students able to express their own ideas and pursue independent thinking?
- Are the students able to work collaboratively among themselves and thereby have the chance to learn from their classmates apart from the teacher?
- Are the students encouraged to learn more?

## **Classroom Instruction**

### ***On the Learning Outcomes, Goals, and Objectives***

- Does classroom instruction aim for the development of higher order thinking skills such as problem-solving and genuine conceptual understanding?

- Does classroom instruction aim for the development of information processing skills such as accessing, organizing, interpreting, and communicating?
- Do students have the opportunity to work with teachers in selecting learning goals and objectives based on the students' prior knowledge and experience?

### ***On Instructional Strategies and Learning Activities***

- Do we work with students to determine the appropriate instructional strategies?
- Do we provide lecture supports such as visual aids and hand-outs? Do we give enrichment activities, hands-on projects, case studies, and independent research for students to work on?
- Are the learning activities self-paced and designed to meet individual students' needs?
- Is the course workload challenging but reasonable?
- Are students given access to multiple sources of information?
- Are the learning activities relevant to students? Production-oriented? Non-routine?
- Are the learning activities collaborative?
- Do the learning activities increase students' learning capacities?
- Do the learning activities facilitate students' personal awareness, growth, and formation?

### ***On Assessment***

- Do we make assessment and feedback-giving an integral part of learning?

- Do we make assessment an on-going activity in our instruction rather than a culminating activity?
- Do we provide students with the opportunity to work with us in defining performance criteria?
- Do we encourage the use of self-assessment and peer assessment to evaluate student performance?
- Do we use assessment procedures that allow for deeper reflection, discussion, and analyses of concepts and issues?





# Conclusion



## *Education as the Integration of Self and World*

Punning Shakespeare in the late 60s, Marshall McLuhan states, “All the world’s a sage,” and he could have punned Pope, too: “A little learning is the thing we need to drink of the world’s Pierian spring.” With the *knowledge web* right at our fingertips, we know from experience how our elders’ deepest meditations can seem to turn into platitudes. And yet we teachers know that there’s the rub: with all those springs of information emanating from cyberspace, we need to take more than a second look at the way we are educating our students and ourselves to keep the command “Delete” from being inflicted upon us.

In a world where virtually any place is a possible site of communication and learning, education needs to focus on the self that constantly monitors information from the classroom. *Student-centered learning* is the phrase educators have coined to re-direct the goals of educational systems. It foregrounds that *self*—the student—as the subject/object of revitalized instructional goals and strategies in order to facilitate learning that builds learning communities. Engaging students as conscious learners and not as information processors, teachers engage themselves as well in the process of allowing insight to arise on the road to knowledge.

Focusing on this self, however, requires certain adjustments in ourselves as teachers as well as in our *selves* as master learners. First, we need to understand and define what student-centered learning can be within the context of our specialization or knowledge domain. This way, we can set up strategies and methods of teaching that do not necessarily throw out the traditional ways in favor of clever innovations, but seek a dialogical midpoint that makes possible a *sharing* of experience, understanding and knowledge between teacher and student. We can direct student-centered learning in concrete ways offered by our discipline to turn our students into lifelong, strategic, and motivated learners like us.

Second, we need to examine how we set up intellectual and attitudinal environments in our classrooms to ensure our successful practice of student-centered teaching. Investing a critical edge upon our ways of appropriating teaching methods, and practicing what Bernard Lonergan describes as “perpetual alertness,” can make us wary of the plain transfer of pre-packed knowledge from teacher to student, strive for intelligibility and judgment, and transform classroom learning from the game find-out-what-the-teacher-wants-and-do-it, to the enterprise of self-transcendence.

As a direct consequence of student-centered learning, we arrive at the conclusion that our own personal development and growth as teacher/learner is implicated in the process. We, too, are selves that desire growth and change. Hence, the third adjustment we have to make, or skill we need to develop, is dealing with, or understanding, our own cognitional processes. We renew our commitment to being *conscious knowers* as we examine periodically how we have trained ourselves to keep learning, and why.

Fourth, we need to retool our *pagkaguro* to discover at what point in our careers we could have stopped altogether, and what can make us avoid that kind of comfort zone. After all, teachers are really masters at learning, or the art of transcending the limits of previous knowledge to arrive at the threshold of something new. Seen from this perspective, graduate and postgraduate studies become our gateways to higher and deeper learning, or to the cultivation of methods of thinking and integration that can shield us from the stresses brought on by the constantly changing realities of the postmodern world.

Fifth, we learn to lay down our lives for our students; that is, we surrender pet theories, adored sources of knowledge, treasured techniques of teaching or *that* road we have frequently taken to get to our classrooms in exchange for more collaborative work with our students, more intelligent and impassioned student participation in our classes, more interdisciplinarity in their work, more excursions into the unexpected and the unexplored, and more love and respect between our students and ourselves.

Recent studies conducted by neuroscientists on the development of the brain as a person interacts with the world reveal that “activity in the nervous system associated with learning experiences somehow causes nerve cells to create new synapses... [that is], unlike the process of synapse overproduction and loss, [a] lifelong process driven by

experience” (Bransford, et al, 1999). More than simply a theory of learning, this finding points to the fact that learning happens, perhaps despite ourselves or our ways of putting obstacles along its path. We can see ourselves as engines of integration churning out meanings and values as often as we are able to integrate ourselves and the world.

However, as soon as we accomplish this, we realize that a last challenge awaits us: to see whether we have found through teaching “*the love of God... poured forth in our hearts by the Holy Spirit which has been given to us*” (Romans 5:5). ∞



# Appendix I



## Case Studies<sup>1</sup>

### Case 1.

*X teaches four sections of Business Statistics classes: two for sophomore Management students, and two for junior Legal Management students. She strongly believes in standardization, and assigns the same homework to all of her classes. She requires all her classes to take the same examinations (all four sections take the exam together from 6:00 to 9:00 p.m.), and uses a combined curve in assigning letter marks to her students. She tries to make sure that her lectures are as uniform as possible, oftentimes to the point of cracking the same jokes at exactly the same points (her lecture notes indicate exactly where each joke might be appropriate.) When her 9:00 class is called off because of a community mass that has been scheduled, she will call off all of her other classes to make sure that all her four sections continue to be synchronized, and that all her students are at exactly the same point in her syllabus.*

The above could be an example of a teacher whose focus is still the lesson rather than the learner. Her approach does not take into consideration the differences in the levels of maturity and preparedness of sophomore versus junior students: should she really require the same pace of learning for both groups? Her approach does not consider the differences in the potential career paths and interests of her Management versus her Legal Management students: should she use different examples and assign different types of projects or exercises for each?

Although it is important for her to maintain consistent standards, using exactly the same approach to teach qualitatively different types of students might not be the best way for her to achieve

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<sup>1</sup>The cases were written by: Rodolfo P. Ang (Cases 1 and 2); Dr. Catherine P. Vistro-Yu (Cases 3 and 4); Dr. Stephen Henry S. Totanes (Case 5); Dr. Victor S. Venida (Case 6); Gad S. Lim and Marianne C. Gutierrez (Case 7); and Roy Allan B. Tolentino (Case 8).

this consistency in standards. Instead, she might be better able to achieve this consistency by being more flexible; that is, by using different modes of teaching with different types of students. She could provide more consultation hours for slower groups and less for others; change the pace of her lectures for the different sections, assign more or less classroom or homework exercises depending on the level of each group.

## **Case 2.**

*Mr. C teaches a five-unit class in Entrepreneurship and Marketing. He does not require any examinations in class, but instead requires his students to submit written analyses of cases (WACs) on an individual basis, and then work in groups on a term-long major project to develop a comprehensive business plan for a start-up venture.*

*To make his classes more student-centered, Mr. C requires his students to do a lot of field work and supplementary research work.*

*In working on their case analyses, students are not allowed to simply focus on the materials that have been handed out in class. To earn an excellent grade, they have to conduct supplementary research that can enrich their analysis. For instance, when they worked on a case about the Toys R Us attempt to penetrate the Japanese market, many of the students visited the Toys R Us website to find out more about the company and its relative success or failure in the Japanese market since the time that the case was written. Many of the students visited the website of the Japanese Ministry of Trade to study the structure of Japan's retail trade industry and to find out if there are any legal restrictions that might affect an American company's effort to penetrate their domestic market. They visited many different sites related to the toy industry to understand the structure of this industry and consumers' general toy-buying behavior. When the case was discussed in class, students were asked to share what they had found out in addition to the case facts, and all of these were considered in arriving at some conclusions about the case that had been assigned.*

*When working on their business plan, students were required to gather detailed information and make specific recommendations that could be possible only with extensive field work that included conducting surveys and market tests, interviewing resource persons who were knowledgeable about the industry, and even preparing prototypes of their proposed product. It was not enough that they would recommend that their store be located in a mall, they had to indicate which mall and which particular space in the mall, and then justify why they chose one mall over all the*

*others. It was not enough to say that they would subcontract production; they had to say which specific company was going to accept this subcontract, how much this company was going to charge, and where they were going to source their raw materials.*

*In assigning his students to groups, Mr. C made sure that better students were grouped with weaker students so that some degree of mentoring could take place within the groups. Although he knew that his students were doing a lot of field work and therefore hopefully achieving outside-the-classroom learning, he never called off his classes. Instead, he religiously held classes so that he could cover even more material that could help to enrich their project work.*

Mr. C's class is one which provides significant opportunities for learning outside the classroom, and one which will help our students to learn how to learn.

### **Case 3.**

*It is always a joy to be in Dr. Alpha's mathematics class. Although she lectures a lot, she always makes it a point to encourage the class to discuss. Her technique is simple. Every day, she assigns a difficult problem for homework. And every day, she, together with the whole class or a group of students, discusses the solution to one of these difficult problems. She gives the class about 10 minutes to discuss possible solutions to the problem for the day. After 10 minutes, she calls on student volunteers to discuss their solutions. We don't stop there. She extends the problem. She asks what-if questions such as "what-if the length of the ladder were not given, how do we determine the rate of change?" She never seems to run out of problems to give. We enjoy this portion of the class because the problems are always interesting and challenging.*

*Dr. Alpha's lectures are not boring. (Okay, we do fall asleep sometimes but that's because our class is right after lunch) She really seems to be talking to you as if you were the only one in the room. She allows questions to be asked even in the middle of the proof of a theorem. In fact, she makes proving a very exciting task for us. She even encourages us to provide alternative proofs. That starts a lot of argument and discussion in class.*

*Because of her personable and student-centered style, we are often late in finishing the departmental syllabus. She often asks for extra classes with us so that we can catch up. This is the part we don't like, but we don't take it against her. In fact, I think she has done a tremendous job. Many of us in class actually end up getting high scores in the departmental exams. There*

*were times when she would call us in small groups to find out how we were doing in her class, whether or not we could understand all the material she was teaching. Once I was confused about a lesson we had and I decided to see her. She was very accommodating and encouraging. Although it took me a while to understand that particular lesson (it took several more visits and a few group study sessions for me to get it), I was not bothered. This was my third semester with her and I know she would be able to help me through. And she did.*

As Student Epsilon testified, Dr. Alpha is successful in employing student-centered learning methods in her mathematics class. She has a very infectious character that influences students in a positive way. A drawback of using student-centered methods as mentioned by Epsilon is the slowing down of the class pace in covering the assigned material. Nevertheless, it seems that Dr. Alpha was very effective, since the performance of the students in the departmental exams has not been sacrificed.

#### **Case 4.**

*I like my Biology class under Dr. E. M. Bryo, especially when we do our experiments in the greenhouse. The whole class enjoys examining plant cells using the microscope. I like the simulations we see on video. And I was ecstatic when we had a visiting professor lecture to us about cloning. All the lessons have been very interesting, and I think very relevant to today's problems concerning food production. This class has gotten me so interested in plants that I now read a lot about them. I usually go to the library during my spare time to read journals and magazines related to our lessons in Biology. Other times I go to the computer labs and browse on the Internet. Dr. E. M. Bryo has been very accommodating. He would lend the whole class his books whenever we asked for additional materials to read. He never runs out of materials to share.*

*One day his lecture was very difficult to comprehend. We asked him to discuss the lesson further, which he did, but still we could not understand. Unperturbed, he decided to give us a research project on the same topic. He gave us guide questions to help us. At first, we were not too happy because it seemed that he couldn't teach well. But then we realized that there was value in the research work we did. We learned a whole lot more. What surprised us was that Dr. E. M. Bryo did not even mind that we learned more from our research than from him.*

A remarkable characteristic of Dr. E. M. Bryo was that he did not mind if students learned more from others than from him. He

was comfortable in the way he handled his class, making sure that the students got all the help they needed to complete their work. As written by Student Photosynthesis, their lessons were mostly interesting and relevant. In fact, the class got Student Photosynthesis to do a lot of reading on her own. This is a major feature of a student-centered learning environment. Dr. E. M. Bryo's class is a good example of a student-centered Biology class.

### Case 5.

*In my Philippine History classes, I promote student-centered learning through two methods: (1) graded recitation and (2) historical research in primary sources.*

*In graded recitation, my students are assigned a text for reading and discussion the following class day. The texts are either in English or Filipino, but are mainly historical interpretations (rather than a mere listing of facts) of a particular topic. During the graded recitation/discussion, I ask a student to express in Filipino his/her thoughts on the written text. Other students may add their own opinions on the topic and I note their contribution as well. By carrying out graded recitation, students are "compelled" to read the texts and formulate their opinions on the topic — then, they test these ideas against those of their peers. Graded recitation is therefore a form of focused group discussion, where I serve more as a facilitator/questioner rather than the deliverer of a straight lecture. This method is known as "markadong pagbibigkas" (MP) in my Philippine History courses (HI 166) which are taught in Filipino. In an average class size of 60-65 students (a large class), I can call on every student at least three times in one semester.*

*Historical research in primary sources is a method I use in smaller classes, mainly for undergraduate history majors and graduate level courses. Students are encouraged and given clear instructions to use primary sources — historical texts and rare manuscripts which are available in the Rizal Library or other specialized libraries in Manila (e.g., the National Library, the National Archives, etc.). By reading these texts and looking over rare photographs and unpublished materials, history majors are given an opportunity to see how "history is made" from these sources by historians. They then compare what they find in secondary sources (e.g., textbooks, published books, etc.) with what is available in "primary sources" in these specialized collections. Among these collections are the American Historical Collection (American period, from 1900-1946) and the Pardo de Tavera Collection (late 19th and early 20th century), both housed at the Rizal Library in the Ateneo de Manila. This method is ideal for smaller classes (10-12 students) since some of the materials are already in a fragile state and*

*their frequent use by too many students may cause permanent damage.*

## **Case 6.**

*When taught in the intermediate and advanced levels, economics is a subject matter that requires mastery of concepts, theories, models, analytical tools, quantitative methods and recent developments in theories, analysis and applications in actual current social and economic issues. A number of these ideas are actually quite exciting to explore, both for theoretical development, research and their application to the design of programs to address current social problems.*

*But to analyze these new ideas thoroughly and intelligently, a student still has to undergo the necessary training and instruction in basic theory, research and quantitative methods, analytical tools and case studies. This suggests that a substantial portion of learning will still involve traditional lectures and examinations by the professor, with questions being entertained as the lectures progress or during the professors' consultation hours. In effect, student participation is a matter of student initiative, which by itself is commendable since initiative is a trait that can be taught as part of our students' personal formation. But the learning process itself can still be extended to indeed encourage greater initiative and even participation.*

*In teaching a course like economic development, it is always a worthwhile educative experience to require students to work as a group in developing a research paper and presenting the results in class. The subject matter itself requires a substantial number of lectures, and students still need to be examined on their mastery of the minimum content requirements of the course. But to enhance student participation in the learning process, the group report has proven to be truly effective as a means of developing initiative, resourcefulness, teamwork and skills in written and oral communication.*

*Students normally form their own groups, the first exercise in initiative. They are instructed that the subject matter of their report is the application of the theories and analytical tools of economic development to the study of a current economic issue. They choose the topic and they are encouraged to consult with the professor regularly to help in developing the research paper.*

*At the outset, the formation of a group and the choice of a topic are basic exercises in initiative and teamwork. The teacher does not impose on their choice. But before they can even intelligently discuss the topic with the professor, they need to do their own reading and research. Often the teacher can only go a certain distance during the consultation because the teacher*

*himself could not possibly be an expert on all the intricacies of the students' topics. Several times, students themselves choose and develop topics the teacher may not be too familiar with, and in the process, the teacher can get as involved as the students in their own learning process. Recent examples of these new subject matter are estimation of the extent of graft and corruption in the bureaucracy, the market for entertainment and cultural heritage, non-government organizations in the delivery of health care to low-income communities, and women's participation in the informal sector. These are topics that are not generally highlighted in standard, usually Western textbooks on economic development, but are genuine concerns in developing countries like the Philippines. The professor can assist only to the extent of clarifying the students' analysis, reviewing the application of quantitative methodologies, identifying additional sources for data and reading materials, and instructing in correct format and presentation. But the substantial portion of the work belongs to the students.*

*Moreover, the students as a group are also required to present the results of their research to the class. They are given a maximum of 20 minutes for the presentation and about the same time for questions and comments from the teacher and their own classmates. They are given a completely free hand in the method of presentation, including the technology. They can choose to use just the blackboard, present illustrations and tables of data on manila paper or on acetates on overhead projectors. They may even do video presentations. They are warned also to prepare back-up presentation materials in case, for example, a video presentation is negated by a malfunctioning or uncooperative television set or even a power failure. The manner in which they respond to questions and comments from the floor is part of the grading. They therefore need to learn time management, creative techniques of presentation, teamwork, proper behavior under stress, and skills in oral communication, especially in fielding questions from the public.*

*This requirement for a group report has proven to be a satisfactory tool of student-centered instruction. Students do get to be assessed on their individual merits and capabilities by way of the standard examinations, usually the midterms and finals. But they also are assessed for teamwork. They are able to develop an idea or research question and apply what was taught in the lectures, and the required and supplementary readings. Even the teacher learns from the experience, not just by way of new ideas but by the very interaction with the students. These reports have been kept and have proven to be excellent resources for use by future students and even by the teacher in subsequent lectures.*

*Even a theoretical course like economics becomes more exciting through this bit of student-centered learning.*

## **Case 7.**

### **Teaching the English Sonnet**

*Teacher divides the class into small groups and gives each group 2-3 sonnets. Teacher then asks students to find out what features are common to the poems. Teacher then asks each group what they came up with, and writes these on the board.*

This activity allows students to discover for themselves the definition and features of a sonnet, instead of getting all these from the teacher. The small group set-up maximizes students' participation and increases their confidence in doing the task.

*Teacher gives each group a copy of a new sonnet, Sonnet 130 by William Shakespeare, whose lines are cut into 14 strips. Students are asked to reconstruct the sonnet. They are allowed to consult the dictionary for words they do not understand.*

This is clearly a problem-solving activity which requires negotiation of meaning for students to fulfill the task. Indirectly, it also tests students' knowledge of a sonnet, albeit in a more creative way. The dictionary use is contextualized. Students need to define words not for their own sake, but to be able to reconstruct the sonnet.

*Groups present their reconstructed poem to the class, explaining why they arranged the lines the way they did.*

Students discover that the poem has several possible meanings, primarily because language is rich and diverse. Thus, meaning is not absolute, nor should it come entirely from the teacher.

*After the presentations, Teacher shows the original sonnet to the class, and gives one copy of the following worksheet to every group:*

The worksheet guides the students in determining possible meaning/s of the sonnet by allowing them to pay attention to the language used.

1. Read Sonnet 130 again. Identify the features of the mistress, and the things they are compared to. Discuss with your group why such comparisons were made:
2. Does the speaker think his mistress is beautiful? Why?

*Teacher reconstructs worksheet on the board, and elicits answers from the class to complete the chart. He or she then gives input on comparison and asks students different ways of comparing (like, than, If...then).*

The input on comparisons allows students to see the general principle and thus understand why comparison was used in the sonnet and how this helps in delivering the meaning.

*Teacher gives each student the following worksheet:*

Mistress' features	Compared to	Not compared to	Because
<i>eyes</i>		<i>sun</i>	

The worksheet serves as a more advanced practice for comparisons to help students realize that these are essential in descriptions. This activity is also a preparation for the final task.

*Imagine you are taking a walk in the park. Name a few things that you see (inmost circle), what they can be compared to (middle circle), and the reason for the comparison (outmost circle).*

*Teacher assigns students to make a brochure promoting the park as a tourist attraction. The brochure should contain pictures or drawings of the park, and a write-up based on the previous activity.*

The task is both relevant and real. Students see that there is a purpose to their learning the language of comparisons as this is necessary to come up with a good brochure — an authentic and real life material.

The principles discussed all place learning and the learners themselves as central to the learning process. As such, students take the driver's seat and determine their own route to learning. Teachers are not so much concerned with the transmission of knowledge (or delivery of content) as the development of students' critical thinking and problem solving skills. Therefore, learning does not depend on what the teacher gives the students, but rather on how students use these skills to accomplish the tasks and opportunities provided for them by the teacher. As a result, students develop self-sufficiency and take responsibility for their own learning.

### **Case 8.**

*Guro ng Pilosopiya si Padre X, at sa pagtuturo ng pilosopiya ng mga sinaunang Griyego, hindi maiiwasan ang tuwirang leksiyon. Gayon pa man, hindi ito nagiging sagabal sa pagpapatubo sa kaalaman at pag-iisip.*

*Halimbawa, sa isang malikhaing pag-uulit sa pagtanaw sa mundo ng mga Griyego, kailangang balikan ang mga salitang ginagamit natin sa paglalarawan sa kalahat-lahatan, tulad ng “sanlibutan” o “sansinukob”. Sa pag-uulit sa salitang “sansinukob”, ipinapakita ni Padre X ang salitang-ugat na “sukob”. At upang maging higit na malinaw ang kahulugan ng “sukob”, nagsasalaysay si Padre X ng isang kuwento tungkol sa isang inahing nakapansin sa isang lawing pumapalibot sa himpapawid. Tumitindig ang balahibo ng inahin at inuunat ang pakpak upang masilungan at itago ang mga sisiw: sinusukuban ng inahin ang kanyang mga sisiw. Sa mismong pagsasalaysay, binubuhay ni Padre X saguniguni ng mga mag-aaral ang imahen ng inahing sinusukuban ang mga sisiw; ginagaya niya ang kilos ng manok, at ginigising ang interes ng mga mag-aaral. Sa katapusan ng pagsasalaysay ng pag-uunat ng mga pakpak ng inahin, naganap din ang isang pag-uunat ng isipan ng mga estudyante. Sa pakikisabay nila sa pag-iisip at pagsasalaysay ni Padre X, nag'ising din ang kanilang kakayahang mag-isip at tumingin, at maari silang matauhan sa isang pagtanaw sa daigdig bilang sansinukob: isang pagkilala sa sanlibutan bilang sumusukob sa ating lahat. Sa gayong paraan, naihatid ni Padre X ang kanyang mga estudyante sa pag-iisip ng mga sinaunang Griyego, isang simulain sa pamimilosopiya.*

# *Appendix 2*



## *The Fires of Excellence*

**Ricardo G. Abad, Ph.D.<sup>1</sup>**  
**Ateneo de Manila University**

Good evening, ladies and gentlemen. Tonight, Metrobank and the Metrobank Foundation celebrate excellence, and most especially excellence in teaching. In that spirit, I wish to tell a tale on excellence, and to draw from this tale, a notion of what excellence in teaching entails.

In ancient China once lived an old master potter who was known throughout the land for making beautiful porcelain vases. To improve his craft, the master potter decided to find a new glaze for his porcelain vases. The search became the most important focus of his life. Everyday he set the flames of his kilns to a glowing, white heat and tried out different temperatures that would give his vases the shine he wanted. Everyday he baked his vases for different hours, determining the precise length of time it took to capture the right glow on his vases. Everyday he experimented with different mixtures, figuring out the best chemical combination for the glazes he applied. Everyday, however, he failed.

The master potter grew sadder and sadder. He could not achieve the beauty he desired and imagined as possible in the glaze. One night, despondent over having tried everything — but yielding nothing — he decided his meaningful life was over. He sat on his table, gazed at the smoldering fire in one of his large kilns, and felt the orange light of the dying flame warm his body. Suddenly, and without hesitation, he stood up, raised the flames of the kiln to a full blast, took some porcelain vases from the shelf, and walked into the molten, glowing, high-intensity heat of the fully fired kiln.

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<sup>1</sup>A response on behalf of the Awardees of the 2001 Metrobank Search for Outstanding Teachers, Metrobank Auditorium, 7 September 2001

The night passed quietly. Not a bamboo tree outside the shop bent and squeaked. When morning came, the master potter's assistants reported for work and did their usual chore of cleaning the kiln. What the assistants saw when they opened the kiln and took out the vases amazed them. In their hands were the most exquisite porcelain vases they had ever seen in their entire life. The master himself had disappeared into his creations.

Ladies and gentlemen, teachers and lovers of teachers, we stand before you as the twelve new master potters from the 202 that the Metrobank Foundation has anointed in the last 17 years. We have come from the pottery shops that are our schools, and carry with us many years of work in the glowing, white heat of the classroom. We have spent our lives searching for ways to make students shine like porcelain vases with a perfect glaze, and have happily found many of them beaming brightly in their chosen professions. But we don't want to stop there.

We want to continue this quest, seeking for other kinds of glaze to suit the tempo and temper of today's times. We do not know when that new glaze will come, if it ever does come. But like the master potter of ancient China, we shall embrace the task with open hearts, and walk once more into the molten white heat of teaching until the that perfect glaze, that oneness of teacher and student, appears.

We shall thus continue to bring joy and laughter in our classrooms. We shall make the blind see, the deaf hear, and the mute speak. We shall bake the rough clay, our students, with the fervor of literature, the blaze of art, the flash of math and the sparkle of science. We shall tell the tales hidden in rocks and stones, in poems and plays, in fractions and square roots, in atoms and molecules, and in the grand and ordinary gestures of everyday life. "And all shall be well and/All manner of things shall be well," says the poet T.S. Eliot, "when the tongues of flame are unfolded/ Into the crowned knot of fire/And the fire and the rose are one."

We are twelve teachers —the "twelve apostles," if you prefer — who have taken the path of fire. To take the alternative path, the path of ice, gives us the shivers. This would be to freeze everything and everyone around us so that they cannot move or shine. This

would be to keep students at a cold, frosty distance, to solidify lesson plans, to chill creativity, or to duck from questions the way

we duck from hailstones. The path of ice is also the place where teaching and learning take a backseat to institutional security and claims to power — where the concern centers on the slush rather than the snow of teaching life. But while we recognize that security and power are realities we must face day in and day out, we also know that a life of teaching utterly dependent on security and power makes us nothing more than the mummified pharaohs of ancient Egypt: preserved in all their splendor for generations to see, but dead frozen to the present in which we now live.

We are blessed that we come from schools and homes that keep the torches of our teaching life aglow in our increasingly naughty world. Many of our fellow teachers across the country are not as fortunate as we are. They are locked in “structures of ice,” enduring in schools where superiors wield a cold hand over anything combustible in school life — ideas, initiatives, innovations; where departments run without the fuel of resources and equipment; and where bureaucratic hoarfrost extinguishes the fire of spontaneity. Other teachers feel minimally rewarded and are forced to replace whatever fulfillment they have found in teaching with the icy comforts of modern life — the position and the promotion, the pension and the pay increase. Yet many teachers still stay in school and excel, or struggle to excel, tending the flames of their classrooms and boldly resisting a fatal attack of academic frostbite.

How do they do it? How do we Metrobank potters do it? By playing with fire.

Excellence does not come from a flick of a match or a click of the lighter. It comes through the long and arduous process of rubbing two stones together to create fire. We received little or no outside reassurance at the start. We only listened to inner voices, perhaps the same voices Joan of Arc heard long ago, that told us we were doing something of worthwhile. Along the way, we built a hearth, gathered twigs, chopped wood and kept the small fire we created constantly burning in oil lamps. Like the master potter, we experimented with temperatures and chemicals until something worked. And then one day, in the thick of persisting and persevering, something mysterious happened: “suddenly the heavens unfastened and opened,” as Pablo Neruda puts it, and from within us out came a fireball of energy and confidence that plunged us deeper into our work. It’s a mind blowing awareness of service that the Jesuits call *magis*, meaning more, meaning doing more than what you think you have already done.

We didn't grumble that the children had no books and teachers had no instructional materials; we wrote them ourselves. We didn't gripe that the school didn't have funds to buy stirring rods for chemistry class; we used popsicle sticks in the meantime. We didn't bewail society for impoverishing many of its citizens; we organized nutrition programs, founded cooperatives, trekked to distant barrios to teach the physically impaired. We didn't lament the lack of culture among the youth; we read poetry and staged plays for them. We didn't let our research findings turn to dust; we voiced them out every chance we got. We didn't let the threat of violence in the South spoil an opportunity for scientists there to learn more about the earth we lived in; we went down for a series of lectures.

Some people call these acts "outstanding achievements." We are happy to hear it. To us, it's simply playing with fire, and having fun along the way.

The Metrobank Foundation honors teachers who have played with fire, the fire of excellence, and we who are among the keepers of the flame accept this honor with humility and hope. Humility because this award is not ours alone; it is one we share with many who have walked with us along the path of fire. Hope because we expect this award to ignite the continuing quest for excellence among our fellow teachers. The Network of Outstanding Teachers and Educators, or NOTED, to which we now belong, will surely help to boost this quest.

To Metrobank and the Metrobank Foundation, its officers and staff, the board of judges in both the semi-final and final stages, our fervent thanks for this honor. We are proud to be part of Metrobank's 39<sup>th</sup> anniversary. To our national and local leaders, several of whom have written us letters of congratulations or honored us with recognition rites in our hometowns, another round of fervent thanks. To the officials, faculty members and staff of our schools, who have given us the freedom to play with fire, a third

round of fervent thanks. To our families and friends, who keep the hearth of our personal lives suffused with the heat of glowing embers, a fourth round of fervent thanks and with it, our warm and eager embrace. The love you have shown us, the love where the self is less important than the other, is the same kind of love we try to share in the exercise of teaching.

How much this exercise of teaching is like a medieval "alchemical

wedding,” as the poet David Whyte writes, where the interior world of a single human being meets with the great soul of the world. In this wedding, the petty concerns of the individual are slowly burned away until the self reaches a state of self-forgetfulness. In this state of self-forgetfulness, the last debris of myopic self-preoccupation vanishes into smoke, leaving in its wake the pure gold of the ancient philosopher’s stone. The stone of pure gold or the perfect glaze: it’s the same thing. It is the spiritual encounter where the soul is seated at the bridge between the world we imagine and the world as we find it. How much is this like teaching. To teach well – indeed to attain a meaningful, creative life — is neither to look up towards the sky nor look down to the mud. It is to hover between sky and mud, to shoot for the stars but to stay grounded on the earth and rock below.

Suddenly the heavens unfastened and open. The master himself had disappeared into his creations. *Magis*, more, more.. The fire and the rose are one.

*Good night to one and all. You surround us twelve potters with the warmth of your appreciation and love.*



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