Self-Integration as a Task in the General Education Curriculum

Ciriaco M. Sayson, Jr.

ABSTRACT

In the metaphors that they use in describing their tasks, educators reveal the theory of mental activity that they accept or assume. The idea that in a G.E. Program, the four tasks of (a) creating literacies, (b) broadening knowledge, and stimulating (c) critical thinking and (d) creativity will come into confluence through the curriculum involves the metaphor of streams coming together into a single, inclusive stream. Several discussions of the G.E. Program in the University of the Philippines in the early 1960s have already established links between the concepts of critical thinking and creativity that allow us to integrate the two notions more closely, but also to see the idea of self-integration as an important task of G.E. Here we must go beyond the metaphor of confluence, towards a conception of the learner as simultaneously an epistemic agent and a moral agent, who actively brings into confluence in herself the elements of G.E. education.

Keywords: mental activity, metaphor, literacy, knowledge, critical thinking, creative thinking, self-integration, epistemic agency, moral agency.

I

Educators, in describing their tasks, have often used the metaphor of "molding" or of "shaping" minds. Perhaps this is nothing more than a convenient way of speaking. Or, on the other hand, it could be that the metaphors we use in speaking of the mind do influence what we say about it. Without our realizing it, our metaphors reveal the theory of *mental activity* that we accept or assume.

Philosophers have long theorized about the nature of mental activity. From Plato onwards, every major philosophical thinker can be said to have had a theory of what the mind is and how the mind functions. The mind has been variously understood by philosophers: as a pure interiority that stands in the presence of its sublime objects (Plato); as an active faculty that abstracts the *form* of the objects of its knowledge from the *material* of those objects (Aristotle); as a pure thinking ego that introspects itself into a certainty of its own existence (Descartes); as a spectator of impressions and ideas, which it somehow arranges into a world, by the principles of habit and association (Hume); as an active synthesizing faculty that constructs out of the sensible manifold of experience, and its own innate categorial structure, an orderly, law-like system of objects (Kant). Each of these philosophers holds a certain picture in his own mind of what mental activity is, and the picture is essentially a metaphor for what he is trying to understand.[1]

In the past twenty years or so, great strides have been made by what philosophers call the *computational theory* of the mind. For this theory, the *computer* provides the proper metaphor for understanding the nature of mental functions. The mind, according to this metaphor, is a computing machine of immense complexity. The theory suggests that all, or pretty nearly all, mental functions are computational and

[1] Cf. the notion of a "root metaphor" in Pepper 1942. Pepper was the first to propose that metaphysical theories rested on metaphors, referring to the central metaphor that guides a metaphysical theory as a root metaphor. Thus a philosopher can conceive of the universe as if it were an organism, or a mechanism, etc. Organicism and mechanism would then be fundamental root metaphors.

therefore algorithmic, which means that they proceed according to statable, formal rules. This includes even functions and mental activities that we have long classified as creative. The computational theory of mind is a type of mechanistic theory; it sees the mind as a *machine* that computes its given tasks—perception, behavior, action, and valuation—in the process of surviving and flourishing in its environment. The machine does this without benefit of an ultimate, overarching purpose or a cosmic teleological design. Here, the ultimate metaphor is that of the machine.

II

Towards the end of his discussion of the UP Diliman General Education program, Professor Robin Rivera in a White Paper on the G.E. Program (Rivera 2014) proposes a metaphor that will help us to better understand the nature of the undertaking that we now confront, i.e., the drawing up of a new G.E. program for the university, not long after the adoption of the Hybrid G.E. program in 2011, which revised the RGEP of 2001. He proposes *confluence*, with its correlated images of streams coming together into a larger, inclusive stream, as a guiding metaphor to direct our efforts. He also discusses four issues that are to serve as our guideposts. These issues are: (a) Literacies; (b) Broadening Knowledge; (c) Critical Thinking; and, (d) Creativity.

Indeed, many of the discussions of the G.E. program since the 1950s are informed by a concern for just these issues. Thus, Augusto Tenmatay wrote of the "broadening of education" as one of the central aims of G.E. A student who has gone through General Education realizes that to be educated is to be "marked by a general cultivation, by certain scholarly traits, and by an attitude toward learning and the process of thought, rather than by the [mere] possession of a fund of general information and the mastery of a set of technical skills" (Tenmatay 1961, p. 34). The broadening of education and knowledge is envisioned by Tenmatay as a counterfoil to excessive specialization, which engenders "wasteful proliferation and fragmentation of subjects," and which favors the "restrictive compartmentalization of knowledge and pursuits," producing "technical men and specialists" found wanting both as professionals and as citizens (p. 34). Tenmatay describes the "truly educated man" as "marked, not by the possession

of a great deal of information nor by the years spent in mastering an area of knowledge, but by an attitude toward learning and mode of thought and action" (p. 42). The student must learn to "force himself to think, to solve problems. He must constantly strive to express his ideas clearly and concisely in order to develop rational habits of mind. Creative potential is released and new sources of powers are generated only by intense persistent effort" (p. 34). The educative process must generate the will to learn and the passion for hard intellectual effort (p. 38). What is noteworthy here is the attempt to link *disciplined thinking* and *creativity*.

In Tenmatay's discussion, what is employed is a *picture* of the truly educated man. For Tenmatay, the truly educated man is not simply one who is a specialist in a narrow field, or who has trained for a vocation or for adjustment to life, although he is of course both of these. Rather, the aim of a G.E. education is to produce "men of cultivation with trained disciplined minds, who can rise to cultural appreciation and be capable of putting sense into life and living" (Tenmatay, p. 36). Thus, for Tenmatay, the task of the university is to produce men and women who are not merely competent in their fields of professional training, but who are also capable of living life in a meaningful way. We might go further and suggest that such men and women are also capable of *enjoying* the lives they live, for, surely, to live a meaningful life is to experience life in a fundamentally creative and pleasant way. This means that, during the college years, the skill of living well and creatively has been successfully *cultivated*. And so, after all in this picture of Tenmatay's, a metaphor is at work, for the image of cultivation is part of the metaphor of the mind as a soil in which different possibilities of growth, flourishing, and coming to fruition, are cultivated.

In the same vein as Tenmatay, Teodoro Agoncillo wrote of General Education as addressing the problem of producing graduates of professional degree programs who are admittedly "bright" as practitioners in their professional fields, but are "so thoroughly one-sided in outlook" that they can be described as "educated barbarians" (Agoncillo 1961, p. 98). Addressing this problem within his own disciplinal field of History, and discussing specifically the G.E. Course

Philippine History and Institutions I (PHI I), Agoncillo presented a much broadened conception of Philippine history that discusses "not only the political development of the Filipinos, but also their social, economic, artistic, literary, and linguistic development" (1961, p. 93). Agoncillo attacked the restrictive view of History as concerned mainly with social and political events, leaving out many other aspects of the "huge and moving mural" that is History, an account of the meaningful events in the life of a people (p. 94). He also attacked the view of History as mere narration of what "actually happened," defending instead a view of the teaching of Philippine history that explains the role of these events in the formation of the Filipinos' character and the development of their institutions.

But Professor Agoncillo went farther, proposing that, in addition to imparting knowledge of Philippine history, culture and society, the teaching of Philippine History and Institutions I should aim to generate in the student "the ability to communicate thought effectively and to read with feeling and deep understanding materials of high value," and, "the ability to think critically and to make relevant conclusions" (p. 95). So, what we have here is a view according to which, the teaching of a certain set of skills is part and parcel of the teaching of a particular subject matter. The learning of facts about the development of Philippine history and the institutions of our society goes hand in hand with learning to read texts *with feeling and deep understanding*.

One may ask, what is added to the study of a subject matter when one studies its texts with feeling and deep understanding? I suggest that to read with feeling and deep understanding is to read with passion, with concern, and with a sense that one's self is fundamentally at stake in the process of intellectual discovery. There is in this kind of learning an incipient sense that a different self will emerge out of the process of discovery, because something new and different has been integrated into the self.

I would like to cite one last example of the role of the idea of integration in past discussions of the G.E. curriculum. Ricardo Pascual, in discussing the then-proposed G.E. Course Humanities II, which subsequently came to be known as Speculative Thought, emphasized

in his discussion of the proposed course the importance of viewing knowledge as a whole, instead of in terms of compartmentalized perspectives (Pascual 1961, p. 142). In this viewing of knowledge as a whole, Pascual sees *speculative philosophy* as the crucial element. It is the speculative element that makes the study of Philosophy an adventure in ideas, and this adventure "is such a fascinating intellectual excursion that we must not lose sight of the mental enjoyment that the adventurous minds of the youth can derive from it" (p. 144).

Surely Pascual is right to characterize philosophizing as an activity that involves enjoyment, the enjoyment of the adventure of ideas. One is reminded of Aristotle's view of how pleasure and activity are related: "(A)ll thought and study … has its own pleasure and is pleasantest when it is most complete; but it is most complete when … the object … (is) the worthiest of all that fall within its range; *pleasure completes the activity*."[2] But, here again to be adventurous is to risk the self, for the self that will emerge out of the adventure of ideas is a different, transformed self. It is a *newly integrated self*.

Thus, reading over many of the documents about the G.E. program that have been produced since its inception over fifty years ago, one is struck by how much agreement there is concerning the main issues. Nevertheless some of these issues are capable of further refinement.

Consider Creativity. As we noted in mentioning Tenmatay's views, creativity can be thought of as something that emerges out of a long process of learning to think in a disciplined way about a subject matter. One is reminded here of the long years of training involved in mastering the elements of Chinese calligraphy and painting, before a Chinese artist can become creative in expressing himself. Here creativity is correlated with spontaneity of expression, and the capacity to be spontaneous is the result of mastery of a technique that only comes after long years of hard work.

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[2] Nicomachean Ethics 1174b20-25. Translation by Martin Ostwald, in Aristotle 1962, p. 281.

But creativity can also be correlated with sheer openness to experience, a boldness of spirit that spurs one to try out new identities, new forms of being oneself and being with others, i.e., new forms of individuality and sociality. The college years are fertile years for this kind of experimentation. Robert Paul Wolff puts the point very well when he writes that "every young person should grow to adulthood with a style of intellect and sensibility which he has freely chosen in order to express his own needs, thoughts, and feelings in an appropriate and spontaneous way" (Wolff 1969, p. 16).[3]

Or consider now Critical Thinking. While there is significant agreement about the need to impart the skill of critical thinking through the curriculum, there is less agreement about what exactly critical thinking consists in, in the context of a General Education curriculum. The current G.E. Course Philosophy I, Philosophical Analysis, is a course on critical thinking that is based on what is usually referred to as *informal logic*, that is, the analysis of arguments from the point of view of what can go wrong in the use of natural language. In such a course much time is devoted to the study of informal fallacies. Now surely that is an important aspect of critical thinking, essential to any attempt to teach students to become clear thinkers. But critical thinking is also taught using *formal logic*, which emphasizes the formal rules of thinking and argument. The G.E. course Philosophy 11, Logic, is a course on the formal rules of argument. The teaching of formal logic essentially consists in drills involving the use of *valid argument forms*. It may be less obvious that such a course is an essential component in the teaching of critical thinking, and there are those who might oppose it on various grounds. And yet such drills serve the function of making the use of correct argument forms *second nature* to a student. Another way of putting this is to say that it is the goal

[3] Wolff raises this point not in connection with General Education, but in the course of discussing a certain ideal of what the university is, namely, as a training ground for the professions. But the larger point he makes concerning this is that a university cannot simply be such a training ground; it must also provide the venue for creative experimentation on the self.

of the teaching of formal logic to build a student's *sensitivity* to the formal aspect of correct argumentation.[4]

Armando Bonifacio (1961) discusses yet another dimension of critical thinking as an objective of a General Education curriculum. Bonifacio sees critical thinking as essentially involved in the process of integrating the various areas that need to come together as a student's knowledge of the world and of himself is broadened in the process of taking G.E. courses. Critical thinking refers to "the very thought-process that is involved in every act of integration," and hence is "the very methodology that is used in the attempt to form [w]hat we call knowledge" (Bonifacio, p. 168). The end-result of such thinking is the discovery by the student of the unity of the subject matter, "whether such unity be internal or external" (Bonifacio, p. 169). Bonifacio concludes:

> Critical thinking therefore becomes essentially a constructive effort and a person who has been trained to think in this manner is always dissatisfied with mere isolation or recording of facts. He always seeks to go beyond the bare data presented to him. He looks for the unity of things or of ideas, and by extension, the unity of the world as such, for it is a part of the assumption of science or of knowledge that the world is an integral world, that there are invariant relationships which bring events or things together into one system (Bonifacio, p. 169).

This is certainly a much-enlarged view of critical thinking, one that goes beyond the idea of criticizing arguments in terms of formal or informal fallacies, or of criticizing the use of language in terms of its usual pitfalls like ambiguity, vagueness, and so on. Bonifacio's

[4] One problem, however, is that there may be no way to quantify the results of such an effort. I am not aware of any standardized test that purports to measure whether a student's capacity for formal thinking has been enhanced by taking a course in formal logic. And yet decades of teaching Philosophy 11 have left me unalterably convinced that the learning of formal logic is a valuable component in a college education. To take advantage of a widely accepted theory of learning in Psychology (Piaget), the learning of formal logic can be said to enhance, and perhaps to complete, a student's entry into the formal operations stage of cognitive life.

conception of critical thinking is a *non-atomistic one*; it arises in connection with the attempt to synthesize, to bring together into a higher unity, the various elements that have been presented to a student's attention and consideration.

This ultimately leads us to question the separation of critical from creative thinking. We are not, of course, saying that there is no difference between the two, only that they may be more closely linked than we previously assumed. I propose that this is the link between them: creative and critical thinking are separate moments in the single act of integrating the self through knowledge and understanding. If I am right, then when one thinks, one is never merely critical, nor merely creative. True creativity implies a critical mind, and the truly critical mind is always creative because such a mind is always working towards a synthesis or integration of the knowledge at her disposal. There are, of course, individuals who by temperament are predominantly critical, and others who are predominantly creative. But neither impulse can really stand alone. Imagine, if you will, what happens when a student is (improperly) taught that to be critical consists merely in criticizing everything that is pointed out in the course of an argument. Such a person engages in critique without a simultaneous effort at creating a synthesis in his own mind of the problem under discussion. Or imagine, on the other hand, a person who merely engages in an imaginative fantasy without any attempt to critically appraise how what he imagines in this way matches up with the way things really are. Are we really bound to call such a mind, a creative mind? A truly integrative mind is capable of critiquing others and also itself, but this is done as part of the process of arriving at a higher integration of one's knowledge and understanding of reality. Thus, a G.E. curriculum that is integrative will seek to achieve a correct balance between courses that teach a critical awareness of reality, and courses that are more oriented towards a creative concern with possibilities of human fulfillment.

III

How is this integration to be achieved? It is tempting to think that we could put in something in the G.E. curriculum itself that will guarantee this integration. Describing Cardinal Newman's views

in England in 1852 on the central role of the study of theology in a university curriculum, Alasdair MacIntyre points out that for Newman, theology is the key discipline, so that without the study of theology, the university curriculum "will disintegrate into a fragmented multiplicity of disciplines, each self-defining, each claiming autonomy in its own sphere" (MacIntyre, p. 349). Few people today would accept such a claim on behalf of theology, but it is the *idea* which is here significant, namely, that among the various disciplines which go to make up a curriculum, there is one which serves by itself to integrate all the others, and that when this integration is achieved, the end-result will be an educated *mind*.[5]

Cardinal Newman's view assumes that the unity that is the hallmark of an educated mind is mainly the result of a certain type of curriculum, one where the various branches of learning are given a unity by being shown to radiate from a single main trunk (another metaphor there, surely). Viewed thematically, no doubt we can always detect some unity arising out of any multiplicity, but I think that it will usually turn out on closer inspection that this unity is something that we have ourselves projected. A theme, after all, restricts the boundaries of what can be perceived as relevant to an inquiry.[6] This point, however, far from rendering the attempt to find unity futile, actually leads us into a new and more fruitful direction.

IV

But, here we must go beyond the metaphor of a *confluence* of streams. For, it is a *passive* metaphor, and the integration of knowledge is not simply a matter of different streams coming together on their own, powerful as that image is. Rather, the different streams are, if you please, *brought* into confluence by an active, synthesizing self, a self that in its *epistemic* acts—of perceiving, knowing, understanding—and

[5] MacIntyre argues that for Cardinal Newman, the real question is not, What is a university? as the title of Newman's book (The Idea of a University) suggests, but rather, What is an educated mind? (MacIntyre, p. 353).

[6] See, for instance, Holton 1973, passim.

its *valuational* acts seeks an ever-higher integration of himself and the world, and an ever-clearer understanding of who he is.

What metaphors of mental activity and of learning often miss is the idea of the *intentionality* of the knowing act. Knowing is always integrative, and the key element in the integration is always the self.[7] In understanding itself, however, the self always seeks to take into account the total horizon of the world.[8] And this understanding always involves a progressive reintegration of the self with its horizon. Perhaps Understanding, as distinct from Knowledge, is reached when a certain level of integration is arrived at. (Perhaps Wisdom is the highest stage of integration?)

It is this kind of knowledge, and of *understanding*, that truly empowers a learner. A college education that is based on nothing more than the teaching of a specialized skill, or that is exclusively focused on transforming a student into an expert in one field, could never achieve this integration and enrichment of the self. Indeed it would not, properly speaking, be an *education*, but mere *training*. Mere training can only produce specialists who will turn away in indifference when confronted with problems of the world that are beyond their own immediate concerns. For, not only do they have no understanding of those problems—they have never been able to integrate those problems within the sphere of their own cognitive concerns and sensibilities, that is to say, within the horizons of their world.

V

The constant need to revisit the G.E. program should not surprise us, then. It is those four issues identified by Professor Rivera that actually need to be revisited constantly. We have considered in some detail the two issues of Critical Thinking and Creativity. But the other

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[7] In the language of phenomenology, the self is "always-already" there in its acts of inquiry and integration. It is both at the starting-point and at the end-point of the process of inquiry.

[8] As Dreyfus 1993, pp. 37ff., points out. Dreyfus' discussion is in critique of Marvin Minsky's version of AI and in defense of a Husserlian, i.e., phenomenological, account of knowledge and understanding.

two are equally important, and in fact they form significant overlaps both with Critical Thinking and with Creativity. Literacies are a foundation of any General Education program. A G.E. program must ensure the competent teaching of the basic literacies: skills in the use of language, logic, and various forms of empirical and formal reasoning as employed in the humanities, social sciences, the natural sciences, mathematics, and physics. Such skills form what Aristotle referred to as the *organon* (roughly, "instruments") of thinking. Likewise, the importance of Broadening Knowledge cannot be exaggerated. All the skills that make up the *organon* of the mind can only be taught in the context of the competent teaching of the most current and up-to-date knowledge available in all the various disciplines. One cannot teach understanding without also imparting knowledge.

But, another thing that makes it necessary to keep revisiting these issues is that ours is a time of rapid changes, particularly in the technologies of communication and information processing. These technologies, and their pervasive and constantly evolving role in our daily lives, continually alter our understanding of ourselves. They challenge our understanding of what it means to be simultaneously a *knowing* and a *valuing* mind. A particular instance of the sort of integration that results from this, I think, is to be found in the current debate in Philosophy concerning "virtue epistemology." One surprising idea that emerges from virtue epistemology is the idea that the *epistemic* self is at the same time a *moral* self. There are significant connections between being a reliable truth-seeker and being a good person.[9]

[9] A good introduction to virtue epistemology is Zagzebski 2009. The seminal treatise in virtue epistemology is Zagzebski 1996. Zagzebski there argues that intellectual virtue is a species of moral virtue (cf. especially Part II). To be fair, we must note here that Zagzebski is not arguing that philosophers have misclassified intellectual virtue; rather, she argues for a revisionist position: she claims that the concept of the moral "is too narrow as commonly understood and that it ought to be extended to cover the normative aspects of cognitive activities" (Zagzebski 1996, p. 255).

Perhaps in revisiting the G.E. program and its attendant issues we the educators are also put into question. The very idea of a General Education program has always been aimed against the insidious effects of "crippling specialization," against the fragmented mentality and sensibility of the "two cultures." In addressing the problems of General Education we are also accepting the opportunity to ask ourselves, what it is that we have given up by becoming specialists in our respective fields. On the other hand, in confronting the problems of the G.E. curriculum we also provide ourselves with the opportunity to imagine how we can pass on to our students an education that is more integrative and holistic than the one that we ourselves had, without giving up the obvious advantages for our students of becoming specialists in their chosen fields of intellectual and professional concern.

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