Forging a philosophical foundation for Outcomes-Based Education

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ABSTRACT

This paper is divided into two main parts. Part one is a discussion on the distinctive character of outcomes-based education (OBE) using the Aristotelian philosophical lens. The second part deals with philosophical themes of knowledge paradigm, ontological, epistemological and pedagogical assumptions and tries to locate them in OBE where they are embedded.

Keywords: Outcomes-based education, philosophy, education, Philippines

1. OUTCOMES-BASED EDUCATION (OBE)

Philosophy has long been one of the critical foundations in the conception of education. The very notion of 'outcomes-based' orients us to a preoccupation with the primacy of the Aristotelian final cause or *telos,*the purpose or end of education. Taking a cue from this Aristotelian theory one may easily argue: Is education not outcome-based by nature? Isn't that all education institutions and programs have goals that guide their work? Is it not that in planning curriculums or planning lessons for their classes, educators start by clarifying the purposes and objectives? Yet, our overall education practice and ethos will have alternative evidence to argue from: Isn't it true that in schools all curriculum and lesson plans are time-based and bound? Is it not that while professors and teachers want students to learn something, they allocate a certain amount of time to study of that topic and then move on, whether or not students have mastered it? How much does the purpose or end matter? More and more it seems the discourse is between 'coverage' and 'uncovering' or put simply 'content' verses 'outcomes'. To say it's just a matter of semantics or style is an oversimplification of the issue.

1.1 THE OBE PHILOSOPHY OF EDUCATION

The term philosophy in education is often used inappropriately. What it means by philosophy is that we can think or say a philosophy of OBE to refer to the embodied and expressed set of beliefs and assumptions about learning, teaching and the systemic structures within which these activities take place. Lest we forget, the early philosophers sow themselves as itinerary teachers whose basic obsession was the love of wisdom, a praxis of which gave rise to the huge philosophical lexicon we so cherish today in all our philosophical discourses. In his opening to *Metaphysics,* Aristotle states "All men by nature desires to know." To this end, "Aristotle places the man who seeks for knowledge for its own sake above him who seeks for knowledge of some particular kind with a view to the attainment of some practical effect" (Copleston, 2003, p.287). Therefore our conversation about philosophy of education will revolve around the concept of knowledge. The philosophy of education, then, implied in Outcomes-Based Education may be explicated through a careful revisiting of the philosophical concepts associated with knowledge: as reality (ontology), its theory

(epistemology), its dissemination (pedagogy) and its context (consciousness) which taken together may provide basic principles for practical application.Such principles can then provide coherence to a wide array of outcomes-based education models and practices and to lay a foundation for their successful implementation.

2. ARISTOTLE'S FOUR CAUSESAND OBE

At the time when this concept has become a buzzword in both basic and higher education, it is imperative that this attempt is made. This paper stems from Aristotle's delineation of causes, but goes on to explore the knowledge paradigm, ontological, epistemological and pedagogical assumptions upon which the notion of outcome-based education rest within a philosophical frame of reference.

Aristotle proposed in *Physics* II, 3 that we employ four very different kinds of explanatory principle (aition) to the question of why a thing is. He calls them the four causes: material cause, formal cause, efficient cause, and final cause. But *cause* for Aristotle means that which is responsible for the phenomenon to be explained (Copleston, 2003).

David Furley (1997) calls this Aristotle's schema in the study of the natural world and observes that:

> Aristotle insists that it is inadequate to mention material constituents alone as responsible for the nature of the compound: in anything but the simplest object in the world, form is of much greater importance. But form alone is still insufficient: it is necessary to specify whatever it is that is responsible for giving form to this matter – efficient cause. And many cases, for a full explanation we need to know the goal or end served by the possessor of this form in the matter. (p.27)

The **material cause** is the basic stuff out of which the thing is made. The material cause of education would include the education inputs,students, curriculum, course contents, teachers and the teaching-learning process. All of these aspects belong to an explanation of the educationbecause it could not exist unless they were present in its composition.

The **formal cause**(eidos) is the pattern or essence in conformity with which these materials are assembled(Kemerling, 2011). Thus, the formal cause of education would be the sort of thing that is represented on a blueprint of its design. This includes the curriculum standards, competencies, regulatory and statutory requirements, quality assurance mechanisms, and various specifications. This, too, is part of the explanation of education, since all these would simply be list of ideas and pile of materials if they were not put together in this way.

The **efficient cause** is the agent or force immediately responsible for bringing the matter and the form together in the production of the thing(Kemerling, 2011). Thus, the efficient cause ofeducation would include the state, regulatory bodies, investors-owners, the school campus, pedagogies, curriculum developers and other workers who brought together the education system in accordance with the blueprint for its development. Clearly the school would not be what it is without their contribution.

Lastly, the **final cause**(télos) is the end or purpose for which a thing exists, so the final cause of education would be the educational outcomes. This is part of the explanation of the education's existence because had it not for the outcomes, education system would never have been developed.

We dare not discount the value of each of the educational components because:

> Causes of all four sorts are necessary elements in any adequate account of the existence and nature of the thing, Aristotle believed, since the absence or modification of any one of them would result in the existence of a thing of some different sort. Moreover, an explanation that includes all four causes completely captures the significance and reality of the thing itself. (Kemerling, 2011, the four cause section, para. 9).

However, in uncertain terms we must declare that the four causes are not on equal footing and that one is a capstone that galvanizes them all to give meaning to the entire enterprise. "Knowledge is the object of our inquiry, and men do not think they know a thing till they have grasped the 'why' of (which is to grasp

its primary cause" (Aristotle, Book II, Part 3). Therefore it is but logical that we give an epistemological privilege to the final cause, the primary one, the*raisond*'ê*tre* of the existence of the entiretyand because only it, gives sense and direction to the rest of the causes.

OBE proponents reflect this in their assertion of what it is that OBE is set to achieve. "The learning outcomes comprise the knowledge, understanding, skills and attitudes that students should acquire to enable them to reach their full potential and lead successful and fulfilling lives as individuals, as of the community and at work" (Northern Territory Board of Studies, 1998, p.2).

The more you listen to and reflect on OBE, the more you sense a strong Aristotelian 'final cause' as a definitive philosophical character of OBE on one level. The Gold standard for defining outcomes-based education is simply an educational approach that emphasize what a student becomes and performs over and above other aspects of education. Does it mean that the professor now pre-defines or pre-destines a student? Or does it entail an approach to teaching and learning that Biggs (2007) defines as constructive alignment? Which means that we do not do away with inputs and process as CMO 46 (CHED, 2012) equally indicates but shift the defining elements of education to the purpose or the ends while maintaining the ecology (material cause), inputs (formal cause) and processes (efficient cause). No doubt, outcomes are epistemologically privileged or taken as epistemologically prior. They are self-evident, not needing to be proven. The emphasis is on the finality, the end purpose, a full realization of the final cause. For example, looking at non-reader Christina as a reader is a reason for providing a learning ecology, crafting a curriculum and instruction for Christina.

Spady illustrates this well when he defines OBE: "Outcome-Based Education means clearly focusing and organizing everything in an educational system around what is essential for all students to be able to do successfully at the end of their learning experiences. This means starting with a clear picture of what is important for students to be able to do, then organizing the curriculum, instruction, and assessment to make sure this learning ultimately happen" (1994, p.1).

Mirroring the Aristotelian framework, OBE designs reverse the ordering of causes: Spade (1994) and Killen (2000) provide a priority ordering of the OBE stages as: clarity of purpose (final cause), designing backwards (material cause), high expectations (efficient causes), and expanded opportunity (formal cause).

And because of this ordering and epistemological starting point, Killen (2000) argues that "Outcomes-based programming makes teaching purposeful and systematic, rather than haphazard, while still allowing students to discover, to follow their interests, to take responsibility for their own learning, and to develop both personally and academically. It enables teachers to provide students with *appropriate* and *purposeful* learning experiences and opportunities so that they can develop originality, self-motivation and independence at the same time as they acquire useful knowledge and skills.Against this philosophical backdrop, it is possible to appreciate Spady's (1993) definition of Outcome-Based Education(OBE) as "focusing and organising a school's entire program and instructional efforts around the clearly defined outcomes we want all students to demonstrate when they leave school."

2.1. 'KNOWLEDGE' PHILOSOPHICAL THEMES AND OBE

In exploring these themes that I identify as constructivism, relativist, subjectivism and naturalism in their application to knowledge paradigm, ontology, epistemology, and pedagogy,I will seek to merge them using four hypotheses for the purpose of narrowing down the subject properly. I wish to proceed with the following hypotheses. First, that OBE reflects a constructivist knowledge paradigm; second is that OBE is grounded in relativist ontology; third that OBE embraces a subjective epistemology; and fourth that OBE thrives on naturalistic pedagogy.

2.1.1. First hypothesis: OBE reflects a constructivist knowledge paradigm.

The first consideration is to posit that knowledge is made, not found and that there is an existence of multiple realities. James Bruner (1990) is considered to be one of the founding fathers of constructivist theory, a broad conceptual framework with numerous perspectives. Bruner's theoretical framework is based on the theme

that learners construct new ideas or concepts based upon existing knowledge. Learning is an active process. Facets of the process include selection and transformation of information, decision making, generating hypotheses, and making meaning from information and experiences.

Bruner's theories emphasize the significance of categorization in learning. "To perceive is to categorize, to conceptualize is to categorize, to learn is to form categories, to make decisions is to categorize." Interpreting information and experiences by similarities and differences is a key concept. In the Constructivist theory, learners invent their own ideas through interaction with others and the environment. The learner selects and transforms information, constructs hypotheses, and makes decisions; its focus is on knowledge construction. Knowledge is constructed through one's personal experiences, previous knowledge, and beliefs. Learners have to be simply encouraged, to discover principles by themselves through varied opportunities for dialogue among their peers and with the teachers. Teachers' task is to present information to be learned that matches or closely matches the student's current level of learning. The curriculum is to be organized in a spiral manner, so that students continually build upon what they have already learned. The teaching strategies have to be diversified to suit student responses and encourage them to analyze, interpret, and predict information in the course of their learning. Determining what things are "essential for all students to be able to do" is also a transitional one. It goes further to provide a more dynamic approach to understanding learning outcomes to include both emergent outcomes and unintended outcomes that are equally beneficial to the purposes (Biggs, 2007). In light of constructivist knowledge paradigm, William (as cited in Tavner, 2005), makes a lot of sense in his conceptualization of OBEas follows: "The basic tenets of OBE are shifting the focus of educational activity from teaching to learning; skills to thinking; content to process; and teacher instruction to student demonstration."

2.1.2. Second hypothesis: OBE is rooted in relativist ontology.

Relativism per se refersto a family of doctrines whose common theme is that some central aspect of experience, thought or reality is somehow relative to something else.This implies that all understanding is a form of interpretation using lens of choice or of some kind such as culture, prior experience, status, gender

and the like. This makes all experience mediated experience. Relativistic ontology implies an existence of multiple realities, multiple answers, multiple perspectives and so forth. Therefore, all knowledge gives only a limited or an aspect of reality or a version of it. Hence, it is more appropriate to speak of convergence or hybridization of knowledge rather than homogeneity and purity of reality. Therefore, when OBE is defined as a process that focuses on what is to be learned - the outcomes (Kudlas, 1994), it is arguable that there is an implied relativistic ontology there.

2.1.3. Third hypothesis: OBE embraces a subjective epistemology.

Broadly, epistemology concerns itself with the creation and dissemination of knowledge and in a narrower way, epistemology deals with the study knowledge and justified belief. Dancy and Sosa (1997) claim that "Epistemology is conceived as a project of determining necessary and sufficient conditions for justifying knowledge claims and refuting skepticism" (p.141). Subjective Epistemology therefore implies that the teacher and the student co-create understanding. It is not a one way track. If the call to learner-centered approaches to teaching and learning are ordained, it honors this basic principle. The teacher has something to offer but knowledge in this philosophical mode is a product of encounter between the teacher and the students, and it is this meeting or convergence of thought and experiences that provide justification of knowledge and refutation of skepticism. Given this subjective epistemology, Spady's (1994) claim is not without solid foundation when he speaks of assessing outcomes as "a culminating demonstration of learning. It is a demonstration of learning that occurs at the end of a learning experience. It is the result of learning which a visible and observable demonstration of three things is: knowledge, combined with competence, combined with orientations." Elsewhere it is argued that "Education that is outcome-based is learner-centered, results-oriented system founded on the belief that all individuals can learn" (Towers, 1996).

2.1.4. Fourth hypothesis: OBE thrives on naturalistic pedagogy.

A big part of naturalistic pedagogical procedures is the emphasis on the natural or real world. Knowing things involves experiencing them and this renders acquaintance. This is epistemically basic and provides infallible epistemic foundation for knowing about things which is essentially propositional knowledge (Russell, Grote, & James in Dancy & Sosa, 1993). Propositional knowledge "can be more or less complete, justified inferentially and on the basis of experience and can be communicated" (Dancy & Sosa, 1993, p. 240). The orientation is from empirical to rationalization and replication, innovation and recreation. Echoing this philosophy is Spady and Marshall (1991)"Outcomes are clear, observable demonstrations of student learning that occur after a significant set of learning experiences. They are not values, attitudes, feelings, beliefs, activities, assignments, goals, scores, grades, or averages, as many people believe. Typically, these demonstrations, or performances, reflect three things: (1) what the student knows; (2) what the student can actually do with what he or she knows; (3) the student's confidence and motivation in carrying out the demonstration. A well-defined outcome will have clearly defined content or concepts and be demonstrated through a well-defined process beginning with a directive or request such as 'explain', 'organize', or 'produce'." Elsewhere, Boschee and Baron (1993)apply this naturalistic pedagogy to OBE when they say "Learning is facilitated carefully toward achievement of the outcomes, characterized by its appropriateness to each learner's development level, and active and experienced-based."

SYNTHESIS

One of the lessons I have learned from interacting with teachers in trainings and mentoring activities is this 'The worst thing you can do to teachers is to tell them what to do because they will do it!'It is better to give them instead the foundations, then they will be creative and dynamic in their work. What understanding OBE from this philosophical stand does is to ground our assumed principles in their philosophicalaffiliate so that we can be freer to innovate and to be more dynamic. OBE is not one thing. It is a family of approaches to teaching and learning. Spady (1993) captures it best when he says, "Outcome-Based Education is NOT a

program, a package, a technique, a fad, a quick-fix, a panacea, a miracle or an event. It is a transformational way of doing business in education."

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