

Educational Ecology

By

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It has become trendy to relate various facets of everyday life to ecological cycles: carbon cycle, water cycle, nitrogen cycle, oxygen cycle, and so forth. Some of the most popular and widely used transferences are Industrial Ecology and Energy Ecology, which are used to model idealized manufacturing systems, designing systems which create no unusable by-products, used as ways to explain natural system. The end result becomes a description of a seamless technology continuum.

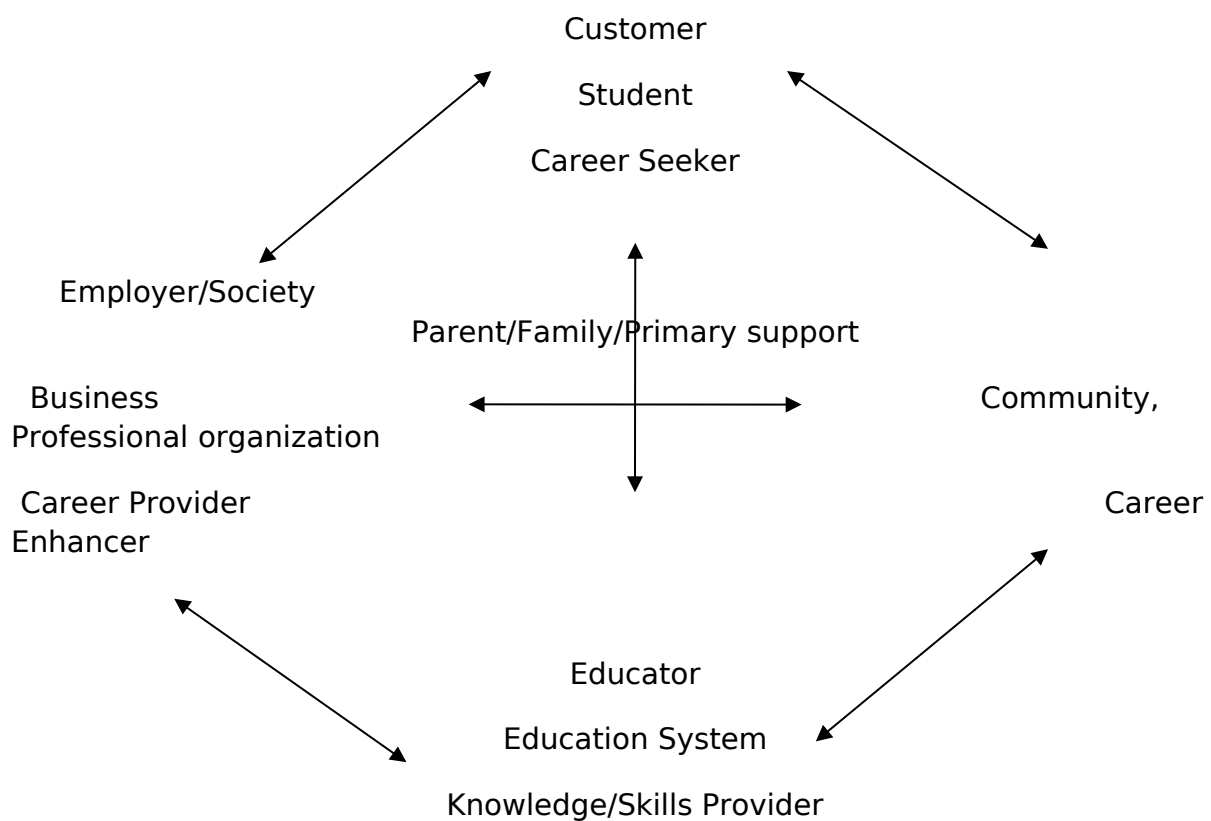
A main attribute of this thought/design effort is the inter-connections of each of the elements of the various processes, and that each receptor/participant and by-product has a specific role in the completion of a particular cycle. All of the by-products, as do the products, become beneficially used in the creation of other viable products, all of which become part of a whole, which is this seamless continuum.

In Industrial Ecology, for example, the by-products of a particular manufacturing process or industry become the usable raw material feedstock for another, and the by-products created in that entity similarly become feedstock for another. This cycle continues until the original process is rekindled. In essence it is a totally closed loop manufacturing process. It simply models the natural ecological cycles that encompasses a systemic universe sustaining life.

An "ecological cycle" thought process of this ilk can be extended beyond manufacturing or natural systems to others such as education. The objective of the education process is to create a person who has certain skills and knowledge that will enable positive contributions to society and the ability of self sustenance. In simple terms, it is to become a successful worker and/or positive contributor to the furtherance of society's goals. By accepting this proposed hypothesis, the use of ecological cycles can be used to create an "**Educational Ecology**" model. This would meld the various elements of the education and employment process into a career oriented seamless educational continuum.

In this model, the interaction and integration of the complex elements of career oriented education are designed to create a well planned and reinforced, yet flexible, life-long learning/education model.

This **Educational Ecology** model can be visualized through the use of following diagram:



Consider the following explanation:

Customer - traditionally termed the "student", and in reality, is the person seeking career skills. This is essentially the basic entity that this model is designed to serve. The customer can be of any age and receives assistance from a vast spectrum of service providers - whether they are classical educational institutions, training institutions, skills enhancement institutions, tutors and the like. The system provides the customer with essential knowledge and skills while also developing

positive attributes such as “work ready” attitudes which can include punctuality, precision, personality and perseverance.

Essential to the customer’s success is a community support system – parent, spouse, family, professional organizations, and specific care givers, all termed “career enhancers”. The common thread here is that these groups provide the support and encouragement that is needed to sustain the “customer” as he or she strives to complete the education/skill enhancement process. As the “customer” derives support such as moral, monetary, psychological, or physical, in turn, the customer provides this support system with usable knowledge, assurance, assistance and companionship. They both receive back, as they both also give.

Both the “customer” and the “support system” maintain a necessary relationship with the “educator/education system/skills provider”. This education provider may or may not be formalized, and can consist of various levels of distinct elements – educational aide, professional educator, job coach, administrator, tutor or remediator. Additionally, the setting can be a formal classroom, a work setting, cubicle with a computer, or a workshop/laboratory. The method of instruction can be formal or independent. In fact, in today’s environment, it may largely be computer-based, even at the most elementary of levels.

None-the-less, this educational system is dependent upon the resources of the support community (e.g. taxes, grants, donations, in-kind outreach) and is focused at the needs not only of the customer, but of the employer/society as well. The skills and knowledge provided by the educational system need to be matched with the abilities of the customer, the resources of the career enhancers, and the needs of the career provider. This interaction and inter-relationship creates a synergistic system that supports a customer with specific education and training requisites, reflecting the inherent possessed abilities. Such integration is designed for the greatest success with the customer acquiring those skills which would be of greatest service.

The final segment of this rubric that needs explanation is that of the employer –“the career provider”. It must be recognized that the need of an education is to acquire knowledge and skills that will enable and empower the customer to obtain and maintain employment. Such employment will, hopefully, enable the customer to become a productive member of society and be able to not only pay his or her own way, but to also become a positive member and contributor to one of the segments of the Educational Ecology Model. The customer will possess the requisite skills to become a valued employee, an employer/career provider himself or herself, an educator, or a solitary service provider.

In order to become successful in any of these options, the “customer” will have acquired those essential skills and attributes that enable such success. Key in all of this is that the customer recognizes the need for those particular skills and

knowledge that will be of long term value and works diligently to acquire them. Additionally, it is vital that the “career providers” articulate what skills they need from those customers who will be entering and establishing careers. Career seekers and “knowledge/skill providers” need to know what factors do influence their successes.

Of course, the “knowledge/skill providers” need to open up to the “career providers” in this communication/articulation process. Unfortunately, in many cases this is the weakest link in our present system. Many “knowledge/skill providers” have created institutional barriers, and are not always responsive to the needs of the “career providers”. This is very evident in many traditional high school, college and university systems. For example, in many colleges and universities, there are a plethora of advisory groups which are essentially window dressing, necessary evils to obtain or maintain grants. These are groups are pedantically spoken at, but whose suggestions fall upon deaf ears. The attendees are there just to concur with ‘the way it is going to be’.

To ensure success, each segment of the ‘**Educational Ecology**’ Model must actively buy into the process and facilitate the process so that the best system is in place and the best product, “the customer”, is produced. Many times this can be accomplished with measurable goals and assessments.

Yes, of course this is an idealized concept; however, it does define the inter-relationships of the various constituencies and how the educational/knowledge/skills acquisition process is not myopic and that there is a complex inter-relationship of specific entities that need to be recognized, nurtured, and exploited in order to ensure the model functions at its best.

For the furtherance of quality education this concept not only needs to be recognized, but it needs to be embraced by educational leadership, at all its levels. Over the years, it has become very apparent that the decline of our education system has been through the establishment of institutional roadblocks by the education system that breakdown the synergism of this model. Such apparent paranoia of the education community regarding such partnering outside of their present comfort zone has brought us all to the “Waterloo” that we now face. The reality is that the “customers” lack the ‘first-day employability skills’ necessary to enable them to acquire employment and to sustain such employment. This is the challenge that befalls all of us. The question becomes, what are each and every one of us going to do to correct this situation? The answer is elusive but must be provided.