

Educology

Educational Theory > Educology

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Abstract

This article presents an overview and tenets of educology theory and its uses and impacts in public education and other educational based programs. Also presented are insights into ways educology impacts current educational thought and an examination into strategies educational professionals could look at themselves through a new lens – the educologist lens. Insights into different models of thinking are offered drawn from a philosophical perspective. Further discussed are roles and impacts of students, teachers, and administrators in helping students understand and gain advantage from the educologist perspective. A conclusion is given that offers solutions for conceptualizing this relatively new area of thought and strategies for synthesizing the tenets of educology theory into teaching practices.

Overview

Differences between Educology & Education

Before examining an overview of educology, it is important for readers to have some understanding of the contrasts between education and educology to determine reasons for the study of educology. Education is typically a process that encompasses both form and function. The form includes the teacher, student, content, and setting. The function includes teaching, studying, and intentional guided learning. Teaching can be discerned with the functions and transaction of all people. The social environment in which education takes place is in peer groups, families, social parties, schools, universities, and work places. Moreover, education is typically guided by a given culture, which is usually the country where the education system is established.

In contrast to education, educology implies the inclusion of all interrelated terms like pedagogy and andragogy. Educology also implies that all aspects of education will be included from early childhood through senescence, as well as including the actual teaching process within other disciplines (Christensen, 1987, p. 5). Educology consists of warranted assertions about the influences in which teaching and studying take place. These influences are constructive, destructive, and reconstructive and are guided by physical, social, and cultural features, (p. 6). From these contrasts it can be concluded that education and its functions is one subsystem of the larger system of educology.

Overview of Educology

Educology is a relatively newly developed philosophical lens to look at and understand education, educational processes, and educational practices. Educology serves as both as a research methodology and as a foundation on which to build other edu-

Keywords

Capacity

Functional Strategies

Gap/glut

Grand Strategy

Material Requirements Planning (MRP)

Operational Velocity

Resource Planning

Safety Stocks

Supply Chains

Support Strategies

cational related theories. From the literature, the term educology has been described in a variety of ways, but the hallmark of educology theory is that it is primarily an umbrella term to look at the ways and methods of educating both children and adults. Pukelis (1998) investigated the relationship between educology as a science and philosophy as a science and indicated that trends in both of these sciences "try to relate thought and activity and foresee the methods and perspectives of the latter" (p. 204). To underscore these relationships, the hallmark characteristic is the idea of meta-educology or meta-educational inquiry which essentially is a way of thinking about education through a meta-cognitive lens. Like meta-cognition is a lens for thinking about our thoughts, meta- educology is a lens for understanding education through a philosophy derived from the philosophies that govern education. These are existentialist lenses for viewing ourselves, our thoughts, and our work. This topic requires stretching and growing on the part of the learner and should be considered as a constructivist process to complement the theoretical development of the learner. The learner could utilize the method of educology to better consider norms for understanding the processes and practices of education.

The term "educology" means the act of having knowledge about education; it is a blending of the terms "education" and "-logy." The term was first created from work done by Professor Lowry W. Harding at Ohio State University in the 1950s. The discipline of educology was formulated, because it was "necessary for conducting analytic, empirical (experimental and non-experimental) and normative (or evaluative) inquiry. The educological perspective is inclusive of "scientific praxiological, historical and philosophical discourse about the education process" (International Journal of Educology, 1987). Educology is distinctive from educational language, because of the ways educology classifies, describes and explains human transactions in relationship

to teaching, studying, and coming to know with guidance and intentionality (Christensen, 1987, p. 2). Within the conceptual framework of educology, the educological perspective treats the educational perspective like it is the dependent variable or the subject for study, and educology methodology can be used to conduct research and inquiry about the effects of other factors, such as social settings, economic activities and political attitudes, upon the educational process (p. 3, Steiner, 1986, p. 5).

The System that Guides Education

The primary example included within this definitional structure is that education typically has been concerned with the relationship between teaching and learning primarily represented between adults and children. This traditional relationship is known in the literature as "pedagogy." It has been a relationship about the functions and transactions of people (Christensen, 1987, p. 4). Educology on the other hand encompasses the terms of "pedagogy," "andragogy," "ethology," "education," "professional education," and "psychopedagogy" (p. 5). To better conceptualize, educology can be viewed as a system that encompasses educational theories, practices, inquiries, and subsystems. These systems' practices can then be applied to other disciplines which utilizes these practices to teach students. For example, students in medical school are recipients of educational practices. These educational practices are cross-disciplinary and derived from philosophies of educology that are used to drive the inquiry and teaching strategies of medical students. Educology can best be thought of the system that guides the educational system. In order to grasp the full concept of this idea, individuals must think and reflect and then question.

Important to the knowledge of its practices, the word "educology" was formulated to reduce ambiguity and increase understanding and relevancy of terms bringing into alliance the term with other disciplines studies as part of educational programs such as "psychology" and "sociology" (Christensen, 1987, p. 6). To theorists, it would seem that educology was more of an alliance of terms than "education." However, more than just the term itself, educology relates to the philosophies related to education. The philosophy of educology includes the "logic, epistemology, ethics, and praxiology of the educational process" (p. 12).

Inquiry

Framed within the philosophy are techniques and products of educology, which is inquiry. Specifically, inquiry can be considered in terms of the

- · Logic Of Inquiry;
- Techniques Of Inquiry, And
- · Products Of Inquiry.

The techniques of inquiry include: conducting surveys, experimentation, drawing analogies, running simulations, locating documents, taking notes, classifying objects, defining terms, and clarifying concepts. These techniques are critical for forming educology, because they "constitute the discipline requisite

for conducing educological research or inquiry, including retro-search, research, and neo-search (p. 16). The philosophy of educology can be applied to multiple disciplines including: scientific educology, praxiological educology, normative philosophical educology, analytic philosophical educology, historical educology, and jurisprudential educology (p. 18). In layman's terms, this indicates that all levels of education and all subtopics that require educational models of inquiry or delivery can be viewed through the lens of educology. In this way, educology acts as a philosophical and theoretical foundation upon which "educational" practices are constructed.

Educology: An Education Perspective

Professional education and training have two main purposes identified as personal and social criteria aimed at preparing students for personal, social, and professional gain. In the past, professional education and training has defined the curricula of basic professional studies and general education defined the curricula of cognition and the development of human personality and social relationships. As adult and child education programs have developed, a need for change in the studies from professional education only to professional education and training has been accompanied by the need for strengthening general education. Within this need and subsequent development, educologists have recognized the inseparability from the cultural context and its role in providing a well-rounded educologist approach in higher educational institutions. A well rounded education at a higher education institution should strive to achieve three goals. The first goal is to help students develop cognitive competence; the second goal is to encourage personal competence, and the third goal is to ensure the development of professional competence. These goals are achieved by synthesizing new knowledge and skills into professional activity while honoring the "social treatment of the person" (Bruneviciute & Veckiene, 2003, p. 702). These goals are aimed at improving how educationalists educate in both adult and child settings.

In reviewing adult education fields that express vocational education and training, it should be noted that educological theory can be derived from three different personality trends which can be distinguished and derived from different philosophical traditions. These philosophical traditions include:

- Person-oriented trends aimed at raising self-realization and individuality originating from the ideas constructed in humanistic psychology and liberalism;
- Productivity-oriented trends originating from behaviorism and libertinism; and
- Principal problem-solving skill oriented philosophical trends directing the "development of active, critical, and cognitive thinking skills originating from cognitive psychology, progressivism, and pragmatism" (Danilevicius, 2005, p. 62).

Also important to note is the opinion that "every trend of personality development lays a constructive basis for the determination of the role and functions in education for the profession of

vocational education and training" (Danilevicius, 2005, p. 62). Each of these originating tenets that would later become the philosophical foundation of educology can be traced back to originating philosophical traditions such as idealism, humanism, and romanticism.

Romanticism

The romanticist philosophy developmental principles are based on Kant's (1724 – 1804) notion of interpersonal growth and in developing and strengthening the relationship with one's internal reality in consideration that the person should always be treated "as an end in her/himself." Taking these philosophies into the humanist philosophical tradition, Allport (1897 – 1967), Maslow (1908 – 1970), and Rogers (1902 – 1987) utilized the existentialist lens to transfer the principles of romanticism to what we know as contemporary educology, psychology, and sociology. All of these disciplines form the foundation of how educators educate and how educologists view education both in adult and in child settings like schools, for example" (Danilevicius, 2005, p. 64).

Further expressed in this philosophical framework of the educological theory is the need to discover and reveal the qualities of the inherent internal good of man, natural human health, and the requirement for humans to search for methods to make "personal sense and personal expression actual." Within this philosophical foundation is implied the opportunity for the learner to reveal oneself through their work and in whatever potential can be achieved (Danilevicius, 2005, p. 65). Atkouf (1992) maintained that educology's aim was "to develop student's attitude to working experience as a real self-continuation, a possibility for self-expression, and satisfaction of one's personal needs and interests" (p. 419). Bandura (1986, 1997) advocated for a similar trend, and suggested that behavioral indicators are created through a dynamic and mutual interaction between personal, environmental, and behavioral factors.

An example in a classroom of how these behaviors might look as indicated by Bandura is that a person might establish goals and standards, manage behaviors related to the achievement of the goals, and then utilize their own control and consciousness to display their own human power. According to Danilevicus (2005) with the combined use of critical thinking and problem solving, goals of principal problem solving skill oriented education are formulated resulting in "functional optimization" of a given situation combined with an integration of internal and external needs and a balance of inter-competitive statements" (p. 68).

Critical Thinking

The hallmark attribute of the educological lens is that critical thinking and problem solving are central to the theory. With the use of critical thinking and problem solving, skill-oriented education is facilitated. Through integration of these attributes several educological objectives can be met. Firstly, functional optimization of a given situation will be realized. Secondly, educologists will be able to integrate internal and external needs.

Thirdly, educologists will be able to balance inter-competitive statements in order reveal their own internal assumptions. Similarly, other theorists have proposed a similar notion that once internal assumptions are revealed than humans can begin to change their external commitments.

Applications

Students

Education students need to have a basic understanding of educology, because it is important to begin to envision the field of education as a subsystem of a larger system that has a relatively broad influence. Education is broken into two main components with several interrelated subsystems and cultures. The two main components are the K-12 education system, and education that takes place at the college level. Within the K-12 education system, the discipline is most closely related to teaching practices and processes primarily for children. At the college level, many Professors are concerned with teaching about a selected discipline. Unless Professors have had extensive training in teaching and learning strategies, there may be inconsistency in ways material is taught and individual learning styles may be unidentified and instruction may go undifferentiated. For public education students studying other disciplines or seeking a double major, this experience may be difficult and misunderstood.

Therefore, it should be noted that educology impacts students in different ways. At the public school level, students are impacted by educology to the extent that their educators examine their own teaching practices and understand socio-emotional development and are then willingly and developmentally able to examine their own educational practices. Younger students should be aware that adults in education mainly see themselves as dedicated professionals constantly looking for ways to develop their own teaching practice. Having this awareness should enable students to contemplate their own strengths and areas of needed growth as a learner. Students need to be aware of their own learning styles and investigate ways of seeking accommodation if accommodation is necessary. In this way, students must be self-advocates to assure the most appropriate learning experience.

Moreover, in order to grasp the theoretical lens of educology, students need to understand that all disciplines have a philosophical underpinning. When students enroll in courses that are not education related, most students do not consider the educational practices and methodological integration. It can be argued that most students do not understand that in order for teachers of any discipline to teach, the educator or Professor must have some background of educational processes to use in their teaching. Educology enables theorists and researchers to examine education through a philosophical lens. Dissertations or studies can be explored through the educological lens which can be characterized by a meta-cognitive lens.

Teachers

Teachers need to be aware of educology, because individuals may hear the term and be unaware of the full meaning. Also, teachers should understand the importance of integrated systems and educology's role within the systemic framework. Teachers should be particularly cognizant of understanding systems, because there is a strong relationship between systems' thinking and teaching children about science. Science is based on systems, and it could be argued that one of the significant breakdowns in scientific instruction is the lack of knowledge of systems. If teachers attempt to understand their internal forms and functions in relationship to external forms and functions, teachers should be able to understand their own teaching functions and forms.

Teachers also need to understand educology, because part of their role is in preparing students for advanced education. Much of a teacher's role is in helping students find their strengths to prepare them for education at the university level. To prepare students for this journey, teachers should have an understanding of how students are taught at the college level. Perhaps, as a way of preparing students for an educological experience, students should be encouraged to take more advanced or college level classes while still in high school. Teachers play in integral role in facilitating positive outcomes for all students. Educology frames educational goals by enabling students to understanding underlying philosophies and theoretical applications within a larger context.

Administrators

Administrators help articulate goals and facilitate much of the educational process for teachers and students operating within the broader systems of educology. Picturing a school as a microcosm, and then understanding that educology includes a broader system of understanding the microcosm are two helpful ways that enable administrators to examine their role from another viewpoint. Administrators support much of the professional development available in schools. Since administrators do facilitate much of the professional development, it would be confusing if new terms were introduced and used and no one shared the meaning of those terms.

Another reason that administrators should understand educology is for their own professional awareness. Occasionally, principals participate in educological practices in which they publish their work or present findings, asserting their own professionalism or strengths in a given area of education. Understanding relevant terms and practices underscore the administrator's role and their responsibility for facilitating scholarly practices within the school.

Even more important is the need for administrators to articulate systemic roles and responsibilities. Having some knowledge of educology should enable educators to look more at their practice of how they teach and the processes and practices of teaching. Knowing that education fits within a broader framework and has multiple integrations, administrators need to understand the rich ways of building capacity for scholarship and meta-cognition within the framework of a school.

Issues

Overcoming Barriers to Educology

Educological thought encompasses a variety of questions and concerns that must be overcome in order to increase understanding of practices and processes that relate to the practices of teaching. In order to begin to overcome barriers, educators must get used to the new way of thinking about their work and practices. Also, educators must begin to think about their thoughts from a meta-cognitive framework. These are not easy tasks.

Next, educators must seek to understand educology by looking at the research that frames the theory. Given that educology is a relatively new discipline or systemic thought, an abundance of research is not available about its framework. Much of the research is only available in international journals, which must be diligently combed for answers regarding educological theory and practice.

In order to implement educological ways of thinking, teachers must be open to their own internal structures, which in itself are more of a journey and way of being, than many individuals have previously experienced. Educology is a way of thinking and experiencing how education is practiced. It is a lens for self-evaluation and policy. The work is hard and requires diligence. Good fortune is offered in pursuing educological endeavors.

Conclusion

This article purposed to improve understanding of educology and its relevance in school settings. Several elements of educology were introduced in order to provide a brief overview of the multiple aspects of educology and its integration of the education process in public school environments. These aspects included the roles of teachers and administrators in understanding educology and in using the educological lens to meta-cognitively exam their own practices and strategies, and in helping educators to see the ways educology impacts multiple disciplines. Specific activities and theories were studied in order to enable teachers and administrators to understand their role in furtherance of these goals.

The main difficulty for educators in seeing through the theoretical lens of educology is in scaffolding meta-cognitive understanding integrated with a relatively new theory that operates as both a science and philosophy. The educological lens reminds educators that every discipline that requires learning as a function is included in a larger framework. Also, the educological lens requires that educators examine their own assumptions and internal functions and processes regarding their teaching processes and impacts within a larger system of learning. In order to better understand this lens research and professional development are required to guide the process of discovery in better understanding educology, its systems, and its practices. Educators must determine whether their own self-discovery is work to which they want to commit in order to drive the internal transformation regarding assumptions and teaching. One could argue that in order for education to do its job effectively for the next generation, our students are relying on us to ask ourselves tough questions.

Terms & Concepts

Androgogy: Androgogy typically refers to the education of adults or adult males.

Ethology: Ethology can be described as having or developing knowledge about character development.

Pedagogy: Pedagogy is typically known as the education of children.

<u>Praxiological Educology:</u> The fund of recorded propositional knowledge about effective practices, procedures of methods for doing something.

Psychopedagogy: This term is known as a combination of psychological knowledge and the practice of teaching.

Bibliography

Atkouf, O. (1992). Management and theories of organizations in the 1990s: Toward a critical radical humanism? *Academy of Management Review, 17*(3), 407 – 431.

Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: W.H. Freeman.

Bruneviciute, R., & Veckiene, N. (2003). Educology and languages for the educational development of medical studies. *Medicina*, *39*(7), 702 - 706.

Christensen, J. (1987). Education, educology, and educological discourse: Theory and structure and structure for education and constructive action in education. *International Journal of Educology, 1*(1), 1 – 31.

Danilevicius, E. (2005). The impact of philosophical trends on the conceptualization of an educology of vocation. *International Journal of Educology*, 18(1), 64 – 71.

Pukelis, K. (1998). Mokytoju rengimas ir filosofines studijos. Kaunus: Versme. Stryker, S., & Statham, A. (1985).
Symbolic interaction and role theory. In G. Lindzay and E. Aronson (eds.), *The handbook of social psychology, Vol. 1*.
New York: Random House.

- International Journal of Educology. (1987). *The Journal*. Sydney, Australia: Editors.
- Steiner, E. (1986). Crisis in educology. In J. Christiansen (Ed). (1986). Educology 86. *Proceedings of a conference on educational research, inquiry and development with an educological perspective*. July 10 12, 1986. Canberra, Australia: Australian National University. Sydney: Educology Research Associates, 221 226.

Suggested Reading

- Deming, W. E. (1982). *Out of the crisis*. Cambridge: Massachusetts Institute of Technology.
- Flew, A. (red.), (1979). *A dictionary of philosophy*. New York: St. Martin's.

- Herzberg, F. (1966). *Work and nature of man*. Cleveland, OH: World.
- Knowles, M. S. (1984). Adult learning: theory and practice. In L. Nadler (ed.), *The handbook of human resource development*. New York: John Wiley and Sons.
- Maslow, A. H. (1970). *Motivation and personality*. New York: Harper and Row.
- Maslow, A. H. (1979). *The farther reaches of human nature*. New York: Penguin Books.
- Richards, G. (1992). *Mental machinery: The origins and consequences of psychological ideas*. Part 1: 1600 1850. London: Athlone.

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