

**The Challenge of Establishing a Common Set of Terms for Discourse,  
Inquiry, and Research in Educational Science:  
An Analytically Oriented Philosophy of Educology**

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Introduction by Co-Editors

*This article was first published in the 2003 Vol. 17, No. 1 and 2 issue of cd-IJE and was edited and introduced, then, by the previous co-editors of cd-IJE, i.e. Drs. Christensen and Fisher, as follows.*

*“A brief history of the use of the term educology in the world and Lithuania is presented. A comparative analysis of various educational phenomena such as education, self education, pedagogy, andragogy, training, fostering, teaching, learning and others is conducted. The difference between educology (knowledge about education) and education as process are identified. Three main processes - child education, child partial self-education, and adult full self-education - encompassing education as phenomenon are presented. A semantic analysis is made of the words education and educology in Greek, Latin, Italian, English, Russian and Lithuanian. The main finding of the research is that educology can be understood as research on the three levels of education, viz. child education, child self-education, and adult self-education. Educological research has as its purpose the extension of knowledge about these processes.”*

*Having been selected for re-publication in the 2005 African Special Issue of cd-IJE, it will be re-edited and re-introduced by the present co-editors of cd-IJE, i.e. Drs. Fisher and Sprindziunas, as an article in educology.*

*The intention of the re-introduction adheres to the meaning of the following statement from the first paragraph of the Recurring Editorial that started in the 2005 issue of cd-IJE.*

*“The format for future content recognizes the existence of the newly forming body of knowledge, i.e. philosophy of educology, as knowledge about educology, and the existence of the already developing body of knowledge, i.e. educology, as knowledge about education.”*

*From the perspective of the editorial, Pukelis and Savickiene conduct their research in philosophy of educology, specifically analytical philosophy of educology in contrast to experiential, rationalistic, and phenomenological philosophy of educology, in that their goal was said to be:*

- “1. To conduct a brief review of the origin and uses of the term educology.*
- 2. To analyze the development of the meaning of the term educology as it is used in the works by Lithuanian authors.*
- 3. To analyze the structure of the concept of the term educology and carry out a short logical analysis of the concept.”*

*With this goal the authors’ presuppose the meaning of the word ‘educology’, as follows, when saying:*

*“Literally, educology means educational science or knowledge about education: educology = educational science = education + logos.”*

*The implication of this statement, then, is that the meanings of words ‘science’ and ‘knowledge’ are taken to be identical, hence, ruling out the meanings of the words ‘praxiologic educology’ and ‘axiologic educology’ to refer to kinds of educological knowledge other than scientific educology.*

*The authors of the paper, rather than focusing on the logic, psychology, problematics, methodology, composition, and object of educology, as is done in the Recurring Editorial, they focus on only the object of educology, when saying:*

*“The term educology started to become more clearly defined and described more accurately when a few scientists of education initiated the discussion typical for any scientific discourse. They asked the obvious question as to what is the object of educological research.”*

*With this focus, then, the authors, after analyzing the development of the meaning of the term educology as it is used in the works of Lithuanian authors, state that:*

*“We take the position that child education (the referent of the term *ugdymas*), child self-education (the referent of the term *ugdymasis*) and adult self-education (the referent of the term *saviugda*) are all part of the larger general process of the development of human maturation.”*

*And, with this focus, the authors account for three levels of educational processes, i.e. the child educational process, the child-self-educational process, and the adult-self-educational process as constituting the object of educology, though, as accounted for in the Recurring Editorial, not accounting for: (1) educative experiences organically inhering in these three levels; (2) the features of (i) someone (ii) meeting (iii) someone for the (iv) purpose of (v) managing them so as to (vi) teach them to (vii) study and (viii) learn (ii) something (x) somewhere as features of the educational process at these three levels; (3) the effects of the physical and cultural environments on these features, nor: (4) the fact that these features exist in, and are effected by physical and cultural environments on, educational processes conducted in home and community situations, as well as in school situations.*

#### Introduction by Authors

In Lithuania in the last decade of the 20th century, L. Jovaiša used the controversial term *educology* for the first time in the history of Lithuanian discourse about the educational process. Jovaiša introduced the term *Educology* in the books *Introduction to Educology* (1993) and *ABC's of Educology* (1993), but he did not indicate clearly the set of phenomena about which *educological* investigation might conduct inquiry and research. For example, he did not explain clearly whether the term *educology* refers to the science of child education, i.e. pedagogy, or the investigation of self-education, i.e. andragogy or to the inquiry into effective coordination among educational systems, i.e. studies of the management of education. Jovaiša defined the term in a rather controversial way. He stated there is no “... doubt [that] both words – educology and pedagogy - have the right to exist. The Lithuanian equivalent *should be* [our italics] the “science of child education” (L. Jovaiša, 1993, p. 9).

According to S. Šalkauskis, “pedagogy is the science of child education, or theory” (S. Šalkauskis, 1992, p. 2). The question is whether it is necessary to have two different terms with the same referent, i.e. the *science of child education*. Using the words “*should be*” L. Jovaiša obviously held reservations about the usage of the term *educology*, since in another part of his book he stated that educology is not pedagogy because “the concept of pedagogy is

too constricted to express the reality of education.” Jovaiša argued that the science of education which encompasses the scientific study of the educational process as it functions throughout the entire lifespan of human beings needs a new term to refer to that science. A term which does the job is *educology*. That is why it is possible to define *educology* as “. . . the science exploring permanent human and group education”<sup>1</sup> (L. Jovaiša, 1993, p. 14). Having asserted the necessity of a new term, Jovaiša paradoxically does not use the term in the main text of his book, but keeps to the traditional term of *pedagogy*.

Nevertheless, Jovaiša inaugurated the use of the term *educology* in the Lithuanian language. Despite the odd circumstances in which the term had appeared, academic society started using *educology* rather widely. Its wider usage was related to the fact that the term *educology* instead of the term *pedagogy* was registered in the national register of sciences as one of the domains of social sciences (such a domain does not exist in any other country). And only the successive scientific discussion about the meaning of the concept of the term *educology* started the search for its more precise definition and its place in relation to inquiry and research about the set phenomena which constitutes educational reality. However, different scientists treat the term *educology* differently and give different definitions. That is why there is no wonder the word *educology* is included neither in the *Vocabulary of International Words* nor in the *Vocabulary of Contemporary Lithuanian* since there is no clear and widely accepted answer as to what its research object is. The question remains as to what specific set of phenomena is researched by *educology* which is not studied by *pedagogy*, *andragogy*, or studies of management of education or other educational sciences.

Thus the **problem** arises that if *educology* is a distinctive set of research and inquiry, then to what kind of inquiry and research does the term *educology* refer and which set of educational phenomena does *educological* research and inquiry investigate? Equivocal definitions of the term *educology* prove that different advocates of the term *educology* are intending different referents of the term. In order for fruitful, meaningful progress to be made in scientific discourse, research and inquiry about educational phenomena, a situation in which the term *educology* is used equivocally can not be tolerated. The strong implication is that it is very important to identify the kind of inquiry and research which is referred to by *educology* and the set of educational phenomena which is inquired about and researched by *educology*.

The **goal** of our investigation is to clarify whether the term *educology* refers to or can be made to refer to any inquiry and research about any as yet unexplored educational phenomena. If the answer is “yes,” then the related question is which set? We set ourselves the following **research tasks**:

1. To conduct a brief review of the origin and uses of the term *educology*.
2. To analyze the development of the meaning of the term *educology* as it is used in the works by Lithuanian authors.
3. To analyze the structure of the concept of the term *educology* and carry out a short logical analysis of the concept.

The **methods** we used in our investigation were those of literature resource analysis and comparative analysis.

In analyzing the use of the term *educology* in historical terms, it is important to note it is not used widely in the works by foreign authors. The more common and accepted term is *educational science* or *educational psychology* or *foundations of education* or *educational studies* or simply *Education* in the USA, *science of education* is an uncommon term as well, although the term *social sciences* is widely used.

J. Fisher (2001) states that the term *educology* originated from the works of several scholars in Europe, North America, and Australia almost 50 years ago. One of the first to use the term was Professor Elizabeth Steiner Maccia, who taught philosophy of education at Indiana University. She initially coined the term “*educatology*” (in her paper, *Logic of Education and Educatology: Dimensions of Philosophy of Education, 1964*). Later, in response to criticisms from her colleagues, she used the term *educology*. Earlier, in 1951, the term was used by Professor Lowry W. Harding of Ohio State University. He treated the use of the term *educology* as a joke in witty anecdotes about education.

Others who worked independently of E. Steiner Maccia included Rachel Elder of the University of California, Berkeley, who wrote the paper *Three Educologies, 1971*), Professor Diana Buell Hiatt of Pepperdine University (Los Angeles, California), John B. Biggs of Newcastle University (Australia.), who wrote *Educology: The Theory of Educational Practice, 1976*), Wolfgang Brezinka (Konstanz University, Germany, in his book *Metatheorie der Erziehung, 1978*), and Professor Anton Monshouwer (University of Nijmegen, The Netherlands, in his publications *Educational Theory as Science of Education, 1978, 1979*). Many other scholars have worked on the problem of the concept of the term *educology*. They include George S. Maccia, David Denton, James E. Fisher, James E. Christensen, William E. Eaton, Gregory J. Pozovich, Jerome A. Popp, Richard Snow and others. After 1980, the term *educology* was introduced not only in discourse about the educational process, but also in the names of organizations. In 1981 the publishing group, Educology Research Associates, was formed by James E. Christensen in Australia. In 1989, Educology Research Associates/USA was established in South Carolina by James E. Fisher.

An international conference, *Educology '86*, was held at Australian National University in Canberra in 1986. Educology Research Associates published the proceedings of the conference in 1986 (*Educology '86*), and ERA commenced publication of the *International Journal of Educology* in 1987. At least two universities, Vytautas Magnus University, Lithuania, and Stockholm University, Sweden, have established Departments of Educology.

Especially noteworthy are the works of Professor J. Fisher, one of the few overseas scientists of education who uses the term *educology* in his works. Fisher notes the meaning of the term *education* in the English language depends on the context. The term has at least two common referents: (1) the educational process as it functions in any social and cultural setting for all ages and (2) knowledge about that educational process. The term *education*

“is ambiguous by equivocation, in that at one time the word has the meaning to reference the scope of the process of education, as conducted in some setting, and another time to name a domain of knowledge that references the scope of the process of education.” [J. Fisher, 2001, p. 175]

To resolve the ambiguity, Fisher and other English speaking scientists of education (Steiner Maccia, Christensen, Biggs, etc.) argue that the term *educology* be used to name knowledge about the educational process and that the term *education* be used to name the educational

process itself in all of its manifestations. In addition, E. Steiner Maccia, G. Maccia, J. Fisher, and J. Christensen argue that the referent of the term *educology* is not only scientific knowledge about the educational process, but also historical, philosophical and praxiological knowledge about the educational process. Historical educology, in their conception, describes and explains past educational practices. Scientific educology describes and explains current educational phenomena. Praxiological educology describes effective practices within the educational process.

And philosophical educology addresses issues such as the meaning of discourse about educational phenomena, the ethics of conduct within educational processes and the value and merit of educational outcomes, goals and aims. These researchers refer to themselves as educologists, and they use the term *educology* to refer to the entire fund of knowledge about the educational process, including philosophical, historical, scientific and praxiological knowledge. They eschew the name *scientists of education* because they at times conduct research and inquiry about education which is other than scientific. They argue that their inquiry about the educational process may be historical, philosophical, scientific or praxiological, depending on the kinds of questions being asked in the research. But whatever the kind of inquiry, if it is about educational phenomena, then in their conception, they are conducting *educological* research and inquiry. The discussion about the proper use of the term *educology* among Western scientists of education (and historians, philosophers and praxiologists of education) has carried on since 1951. However, even today, after more than 50 years, despite logical argumentation from the semantic point of view academic society has not reached consensus on the referent of *educology*, and the term *educology* has not been accepted into common usage among educational scientists.

Here the diverse nature of scientific culture of Lithuanian and Western scientists who conduct inquiry and research about educational phenomena becomes important to consider. It is also important to consider what scientific discussion has occurred in Lithuania about the appearance and use of the term *educology*. And it is important to ask to what new inquiry and research about phenomena within educational reality does the term *educology* refer. In relation to *educological* research, is it unique? Is there any set of educational phenomena which is not studied by pedagogy, andragogy, studies of management of education, and other categories of studies about educational phenomena? I. Kant has warned that the proliferation and delineation of scientific boundaries “is not expansion of sciences, but their deformation” (I. Kant, 1996, p. 36). This is a telling point, and it should be heeded. In general, what are the implications and what are the benefits or otherwise of bringing a new term such as *educology* into the discourse of science of education?

#### Analysis of the Concept of *Educology* in the Works of Lithuanian Authors

The term *educology* started to become more clearly defined and described more accurately when a few scientists of education initiated the discussion typical for any scientific discourse. They asked the obvious question as to what is the object of *educological* research. What are its differences compared to child education (studied by pedagogy), adult self-education (studied by andragogy), studies of educational management and studies of other phenomena which are researched by educational sciences? Various scientists have tried to answer the question. The list includes K. Pukelis in the books *Teacher Training and the Culture of the Nation* (“Mokytoju rengimas ir tautos) kultura”, 1995), and *Teacher Training and Philosophical Studies* (“Mokytoju rengimas ir filosofines studijos”, 1998), and in the article *Educology: What is it?* (“Edukologija: kas tai?”, 1999); B. Bitinas in the article *Actual*

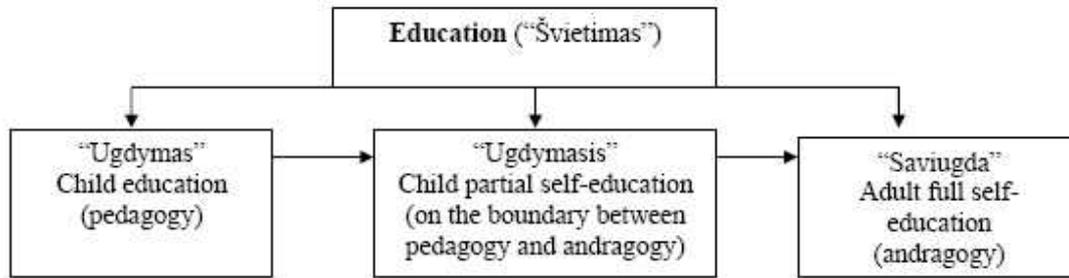
*Problems of Development of Educological Science* (“Aktualus edukologijos mokslo vystymo klausimai”, 1996); P. Juceviciene and the joint authors in the book *Comparative Educology* (“Lyginamoji edukologija”, 1997) and *The Development of Educational Science: From Pedagogics to Modern Educology* (“Ugdymo mokslo raida: nuo pedagogikos iki šiuolaikines edukologijos, 1997), V. Jakavičius in *Human Education: Introduction to Educological Studies* (“Žmogaus ugdymas: ivadas i edukologijos studijas”, 1998) and other scientists of education.

As mentioned above, L. Jovaiša in 1993 grounded the use of the term *educology* on the idea that the term *pedagogy* refers to inquiry and research about the set of phenomena which is included in the processes of children’s and young people’s education. The referent of *pedagogy* does not include inquiry and research about adult education. On the other hand, the term *andragogy* refers to inquiry and research about the set of phenomena included in the process of adult education. So, Jovaiša argues, that both terms *pedagogy* and *andragogy* are too narrow and exclusive in their meanings to refer to inquiry and study about the whole of the educational process, in all social and cultural settings and throughout the lifetime of all human beings. It is Jovaiša conclusion that research and inquiry about human education, including life-long education, needs a new term to refer to it, i.e. *educology* meaning the science for permanent human and group education. But in his argument, Jovaiša uses the word *education* in the sense of child education (“ugdymas”), and not in the broader sense of education (“švietimas”).

To translate properly into English, the definition which Jovaiša advocates for *educology* would read like this: Educology is the science of permanent human and group child education. In his understanding of the term *educology*, Jovaiša intends the concept of *educology* to encompass research and inquiry only about the period of childhood education and not the whole of the educational process. In Diagram 1, a more detailed explication is presented of the structure of the educational process and the referents of the Lithuanian terms within the educational process.

At first glance, it could seem educology is the science which includes pedagogy and andragogy. However, a very simple and important question to ask is whether it is correct in a scientific context to speak only about adult education. Is andragogy only research and inquiry about adult education? Is it proper to research and inquire only about adult education, or it is more proper to develop scientific discourse about self-education? To what extent does the process of education differ from that of self-education? In other words, are education, child education, child self-education and adult self-education identical to each other?

If they are different, what measures need to be taken to conduct fruitful research and inquiry about the different sets of phenomena within the educational process? We take the position that child education (the referent of the term *ugdymas*), child self-education (the referent of the term *ugdymasis*) and adult self-education (the referent of the term *saviugda*) are all part of the larger general process of the development of human maturation.



**Diagram 1.**  
*Structure of process of education ("švietimas") through human ontogenesis*

In the Lithuanian language, the etymological structure of these words indicates their differences. The term *child education (ugdymas)* has no semantic part pointing to a child's autonomy because the child's education is specific and fully influenced by a teacher. The teacher's proper role is to manage the child's educational process, to nominate educational goals for the child, to choose teaching methods and aids. The teacher must perform these tasks on behalf of the child because the child is not able to do these tasks or to conceive of what needs to be done. Education (the referent of the term *ugdymas*) is "conveyance of specifically generalized historic experience of humanity" (K. Pukelis, 1995, p. 31), but not conveyance of all the knowledge to a child without consideration of the child's age and the content of teaching material. The child's behavior in the educational process takes on mainly the features of reproductive activity. "Ugdymas" Child education (pedagogy) "Ugdymasis" Child partial self-education (on the boundary between pedagogy and andragogy) "Saviugda" Adult full self-education (andragogy) **Education ("švietimas")**.

The term *child self-education (ugdymasis)* has at the end of the word a semantic meaning of *me*, fixed by the particle *self* (denoted by the suffix of *-is*), which indicates a certain level of personal autonomy in education. Child self-education (*ugdymasis*) means a child is an active participant in the educational process, but the leading role is reserved for a teacher. A child chooses methods and aids for achievement of a set of educational objectives, but the child does not formulate educational and self-educational goals.

In this stage of child self-education, however, the child's behavior already has some features of limited creativity. Adult self-education (*saviugda*) implies that the learner himself or herself nominates and clarifies self-education goals, and a teacher assists the learner to attain the learner nominated goals. In the word *saviugda*, the *self (savi)* is at the beginning of the word. It points to the priority for adult decisions with regard to the adult's educational goals, methods and learning outcomes. In this stage, an adult has full freedom of educational creativity. It means it is not correct in a scientific context to speak about permanent human and group education (*ugdymas*), since it is impossible to educate an adult. Mentioning only the term *education* suggests the unrealized essential mission of education, viz. its transformation into personalized full self-education. It is the reason why the concept of educology presented in the last work of Jovaiša is problematic. Jovaiša writes: "The object of educology has been defined as human education for a long time" (2001, p. 8). It is telling that Jovaiša does not refer to any discussions among scientists about the meaning of the term *educology*. Moreover, the ending *-logy* of the word *educology* points to the scientific mission of educological research activity. The activity relates to the research about all the educational

processes which are included within the set of educational phenomena, including child education or *ugdymas*, child self-education or *ugdymasis* and adult self-education or *saviugda*.

Jovaiša's evasion of a clear definition of the term *educology* raises doubts about the possibility that there can be any sound and clear argumentation mounted to establish what is the object about which educology might research and inquire. Child partial self-education and adult full self-education are not mentioned at all. If educology is a "science of education," what is pedagogy? Jovaiša treats educology and pedagogy as the same science – science of education. It seems as if Jovaiša tries to substitute the term *pedagogy* with the term *educology*, but this is not justifiable. B. Bitinas and P. Juceviciene also analyze the concept of the term *educology*, but they do not ignore child self-education and adult self-education. B. Bitinas rightly notes that a person develops continuously and that is why any individual human being is both an object and subject at any period of life, so "self-education exists in all the levels of education" (1, p. 53).

However it is odd B. Bitinas does not distinguish child self-education and adult self-education as a separate components of education. Are they not different and independent phenomena of educational reality? P. Juceviciene, in defining the concept of educology, introduces child self-education (P. Juceviciene, 1997a, p. 22). In her other work the author does not mention child self education, but presents adult self-education: "educology is the science of human education and adult self-education, and organization of educational systems" (P. Juceviciene, 1997, p. 11).

This definition relates to the concept of *pansophia* (universal wisdom) expressed by J. A. Comenius. This conception of educology implies that educology has no independent research object, but at the same time it studies everything which belongs to pedagogy, andragogy and educational management. Later P. Juceviciene partly withdraws this definition (especially the concept of adult full self-education), and accepts L. Jovaiša's ideas by the definition: "educology is human education through all his/her life, and the science of assuring such education by formal and informal educational organization" (P. Juceviciene, 1998, p. 5). This definition has the same shortcomings of *pansophia* and other flaws related to disregard for child self-education and adult self-education, which should be encompassed in permanent human development. V. Jakavius' (1998) conception of educology, similar to L. Jovaiša's, is expressed in the title of the book – "Human Education: Introduction to Educological Studies".

On the other hand, the author introduces the concept of "*educatio*", identifying it with child education: "process of education ("pedagogy" – *K.P. and I.S.*) should be called process of *educatio*, and its components should be pedagogical and andragogical processes" (V. Jakavius, 1998, p. 83). It should be understood as if educology is the science of child education ("pedagogy"), and process of education is the process of child education ("pedagogy").

Then it is not clear why it is necessary to have the two terms for the same science and process. Besides, it means child education (pedagogy) involves child education (pedagogy) and adult self-education (andragogy). Is it logical to assert that *A* (child education or pedagogy) is equal to *A* (pedagogy) plus *B* (self-education or andragogy)? One of the authors of this article, trying to clarify the conception of educology, has not avoided mistakes either. He identified educology with andragogy: "educology can be the science of adult self-education analyzing preconditions, goals, consistent patterns and educational assistance for permanent physical

and spiritual development of a mature person in various periods of his/her life” (K. Pukelis, 1995, p.48). Later, in 1998, the author suggested the two concepts of educology for the discussion: 1) educology is equivalent to andragogy, encompassing the science of full self-education or 2) educology is *formalized (specialized)* education, and andragogy is *non-formalized* education (K. Pukelis, 1998, p. 68). However, the author stressed both the versions could be criticized.

#### Logical Analysis of the Concept of Educology and its Place in Educational Reality

It has been mentioned that the concepts educology and andragogy are included neither in *Vocabulary of International Words* (2001) nor in *Vocabulary of Contemporary Lithuanian* (2000). The latter publication gives only the definition of pedagogy. It could be explained by conditional novelty of the two concepts in the Lithuanian language, though foreign authors have used the concept of educology for several decades, and the concept of andragogy was introduced even in the 19th century.

The term *educology* has been derived from the two different languages -- Latin and Greek. The Latin word *educatio* is defined ambiguously in Latin-Lithuanian vocabularies. In K. Kuzavinas' Latin-Lithuanian vocabulary (1996, p. 275) the term *educatio* is translated as *education, upbringing*. In K. Jokantas' *Latin-Lithuanian Vocabulary* (1995, p. 328) the term *educatio* is translated as *suavity/good training*. In Italian-Lithuanian vocabulary (Petrauskas V., 1983, p. 250) the term *educatione* is translated as *upbringing, training; teaching, education*. In English-Russian vocabulary (1979, p. 429) the term *education* is translated as *obrazovanie, prosveš enie*. It means the Latin word *educatio* is translated controversially in the context of educational sciences. There is no wonder since the compilers of the vocabularies had no striving to deeply analyze educational phenomena.

The Greek word “*logos*” (λογος) means “*language, reasoning, word, argument*” (Dum ius J., 1989, p.299), however it does not mean “*science*” as many researchers often declare. On the other hand, reasoning is certainly an element of scientific activity. That is why “*logos*” can be treated as science in a way. In Greek the word “*science*” means *epistimi* (ἐπιστήμη, Salnova A.V., 2000, p. 429).

The word *education* has several meanings in Greek: a) *diafotisi* (διαφώτισι, Salnova A.V., 2000, p. 498); b) *morfosi* (μορφωσι, Ioannidis A.A., 1983, p. 559); c) *paideia* (παιδεία, Ioannidis A.A., 1983, p. 559). Dum ius J. (1989, p. 259) translates *paideia* as *upbringing*. In the context of educational phenomena it is not the most exact translation, e.g. the combination of Greek words *ministry of education* contains the word *paideia* for *education* - (παιδεία).

The Russian word *vospitaniye* into Lithuanian is translated as *upbringing, education* (Lemchenas Ch., 1982, p. 253), and in Greek - *anatrofo* (ἀνατροφή, Ioannidis A.A., 1983, p. 84). Hence, in Greek “*child education*” (*ugdymas*) would be not *paideia* (*education* or *švietimas*) and not *pais* (*child* or *vaikas*), but *anatrofo*. That is why *science of child education* (*ugdymas*) in Greek would be *anatrofo epistimi* (*anatrofoepistimija*); for formulation of this word in Lithuanian the help of specialists would be important. – *K.P. and I.S.*) or at least *anatrofologos* (*anatrofologija*), but not *paidos gogos*, as it was suggested by S. Šalkauskis, the great scientist of pedagogy, and many Lithuanian authors keep to this explanation. Literally, *paidos gogos* means *guidance of a child*, and this combination reflects education as process. Figuratively, *pedagogy* could mean *education*

because a child is guided spiritually. But pedagogy cannot be the science of education, which researches educational process. Here we can make an important conclusion: the Greek word *pedagogy* could have the same meaning as the Lithuanian word *ugdymas* (child education). But, what is the Greek translation of *science of education*? Literally it would be *paideia epistimija* or *paideia logija*. In Latin it would be *educatio science*, in English – *educational science*. Educology as a combination of the Latin and Greek words should also mean *educational science*.

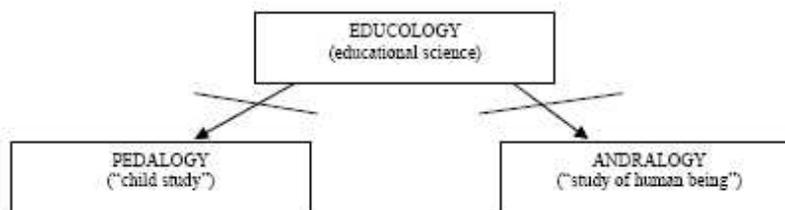
Literally, *educology* means *educational science* or *knowledge about education*: *educology* = *educational science* = *education* + *logos*. *Pedagogy* in Lithuanian usually means science of child education, and *andragogy* means science of adult self education. Logical analysis of the concepts raises the question of why the two terms are defined as a science when the structure of the words does not contain the *epistimi* or *logos* suffixes? The hint of inaccuracy of the concept *pedagogy* can be found in the works of S. Šalkauskis:

“Nowadays pedagogy is usually treated as a science. The object of this science is child education [*ugdymas* or child education – *K.P. and I.S.*]” [S. Šalkauskis, 1992, p.2]

The doubt can be felt in the words of S. Šalkauskis about whether the term *pedagogy* is the most appropriate name for educational science, since the author places two qualifications in his definition. The first one is “nowadays,” and the second is “usually.” It could seem the author allows other interpretations, but the one mentioned was taken as the basic one, and it was used for almost the whole of the 19<sup>th</sup> century till the appearance of the term *educology* in the Lithuanian pedagogical culture. Besides, S. Šalkauskis notes the root of *pedagogy* contains the word *child* (in Greek, the referent of the word *pais* is child, and the referent of the term *andros* is human being). It is interesting that Šalkauskis suggests that two other terms could be used beside *pedagogy*: *pedagogija*, meaning the art of education, or practice reflecting educational process, and *pedalogy*, or child study (S. Šalkauskis, 1992). It means that S. Šalkauskis understood *pedagogy* as educational science, *pedalogy* as child study, and *pedagogija* as educational process, since in Greek *paidagogike(techne)* stands for art of upbringing, signifying process, and process of adult education could be *andragogy*.

According to the semantic meaning of the word *educology*, educational science should not be *pedagogy*, but *anatrofology*, having translated *education* into Greek and added the word *-logos*. *Andragogy*, meaning “logos of self-education”, should be *andralogy*. However, the terms *pedalogy* and *andralogy* are not appropriate because *pais* stands for *child*, and *andros* for *human being*, but science of child is not the same as educational science, and science of human being is not the same as science of self-education. That is why the relationship of the concepts illustrated in Diagram 2 is not valid in a scientific approach.

Meanwhile the scheme in Diagram 3 can be appropriate in a scientific context. On the other hand, the concepts presented below would bring chaos in conceptualizing and discerning educational phenomena, and all of them should be defined anew. But perhaps it is a necessary step to take in order to create an exact system for classifying and identifying all educational phenomena.



**Diagram 2.**

*Process and subject are treated as the same dimension,  
and it is not exact in scientific approach*

Logical analysis of the concepts allows us to make the assertion that the term *pedagogy* should mean the process of child education, and the term *andragogy* has as its referent the process of full adult self-education. It is important to note that the set of all educational phenomena includes child education, child partial self-education and adult full self-education.

Moreover, these processes are part of the larger process of maturation of human beings. Children are initially educated, then as they mature, the educational process evolves into partial self-education, and as children emerge into adulthood, the educational process transforms into full self-education. Child education, partial and full self-education comprise the set of educational phenomena involving all the other educational phenomena, e.g. teaching and learning, training and self-training, upbringing and self up-bringing, etc.

### Conclusions

1. The analysis of the concept of educology shows this term is not used widely, but it has been used from the mid 20th century.
2. The analysis reveals different scientists use the term *educology* differently, and do not indicate specificity of its research object.
3. Our analysis of the concept of *educology* permits us to state that *educology* means educational science, which involves such phenomena of educational reality as child education, child partial self-education and adult full self-education. Distinctive branches of educational sciences analyze aspects of the educational process, e.g. pedagogy for child education, and andragogy for adult full self-education. Hence, educology could be understood as a science of education (*švietimo mokslas*), not as a part of it, e.g. science of child education (*ugdymo mokslas*).

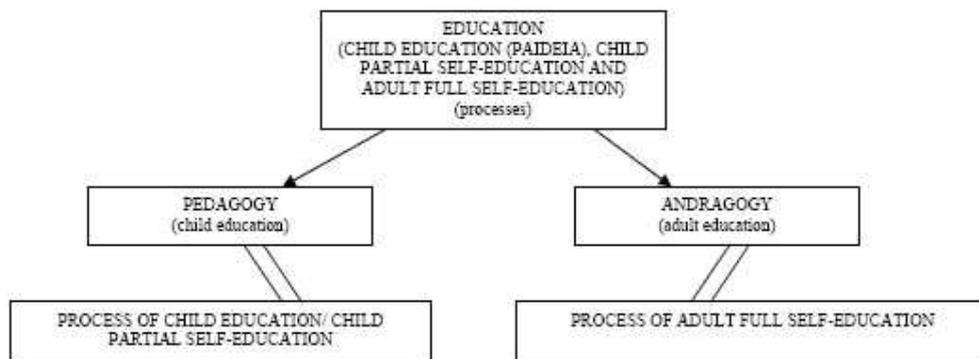


Diagram 3 Phenomena composing education as process

4. It is an obvious necessity that the concepts of pedagogy and andragogy need revision. Semantically they do not convey the meaning of science, which should be expressed by the Greek words “epistimi” or “logos.” It is possible to choose to set aside the term *educology* in favor of *educogogy* (education as process) in order to keep the same semantic paradigm. Then we would have pedagogy for process of child education, andragogy for process of adult self-education, and educogogy for process of education in general. These concepts would mean process, but not science. On the other hand, the term *educology* is a hybrid of the Latin and Greek words, and merger of the two different cultures in one word could indicate that the term is inappropriate semantically and scientifically. Could it be more precise to use the Greek word *paideia* instead of the Latin *educatio*, and to name educational science as *paideology*? (The Lithuanian author J. Vabalas-Gudaitis made such a suggestion many years ago).

5. Questions which need to be addressed within the educational scientific community include the following:

\_ Is the referent of the term *educology* a new, undiscovered phenomenon of educational reality, which has not been defined by any established educational science?

\_ Could *educology* (*paideology*) be treated as educational science, which involves the three main phenomena: child education (teaching, training, upbringing, etc.), child partial self-education (limited freedom in learning, self-training and self-upbringing), and adult full self-education (learning, self-training, self-upbringing and etc.)?

\_ If *educology* has no specific research object, could it be treated as science, which systematizes all the knowledge about education and encompasses all the research on educational phenomena (child education, partial child self-education and full adult self-education)?

\_ Would it not be worth organizing an international discussion to decide on the main concepts describing phenomena of educational reality, which could become an “Esperanto” version in the science of education, and be understood by the researchers in all the countries? In such a case is it necessary to decide which language should be the basic one for the definition of the concepts. Greek? Latin? English? Or is it possible to use the words of the Esperanto language?

1 A more detailed explanation is given in Diagram 1. Describing the concept of educology L. Jovaiša uses the term *ugdymas*, which in the Lithuanian language should be understood as *child education*, but not as education, encompassing child education (*ugdymas*), child self-education or partial self-education (*ugdymasis*) and adult education or full self-education (*saviugda*). Therefore there is a logical contradiction in the definition since permanent human education encompasses all the stages of human life - from childhood to senescence.

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