

Interdisciplinary Study Programmes: Controversies of Concept and Structure

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crossref <http://dx.doi.org/10.5755/j01.ss.86.4.9262>

Abstract

Institutions of higher education often create and implement study programmes designed on the basis of several disciplines. In pursuing for success and vitality of study programmes, the constant observance of the requirements characteristic for a programme is necessary; thus it should be important for every institution to clearly identify the characteristics of different study programmes. However, the experience shows that in most institutions terms of different multiple disciplinary study programmes are not clearly defined.

Due to this reason this article analyzes definitions of different study programmes presented in scientific literature and some characteristics of these programmes are highlighted.

First of all the article discusses the phenomenon of interdisciplinarity (multiple disciplinarity) as well as coherences and differences of multidisciplinary, interdisciplinarity and transdisciplinarity are pointed out. It also analyzes what aspects of multiple disciplinarity are distinguished in defining different interdisciplinary study programmes.

The main aspects, which characterize different study programmes in defining them in scientific literature are the following: aim, structure of programme content and requirements for collaboration of lecturers and students. Multidisciplinary study programmes consist of disciplinary modules, aim to convey the knowledge of assigned disciplines and do not highlight particular requirements for collaborating among lecturers of different disciplines. Interdisciplinary study programmes consist of modules designed on the basis of several disciplines and they are intended for students' critical and analytical thinking. In the case of these study programmes active collaboration of lecturers from different disciplines is necessary. Modules of transdisciplinary study programmes are constructed by overstepping the borders of science fields and combining different forms of knowledge. Members of non-academic community are involved into creation and implementation of the programme.

Keywords: study programme, multidisciplinary, interdisciplinarity, transdisciplinarity.

Introduction

As the process of higher education is becoming massive, the global knowledge economy influences contemporary university curriculum. The need to develop competencies for the labour market is relevant even in university (Barnett, 1996; Bulajeva and Duobliene, 2009; Davies and Devlin, 2010). So the need to integrate disciplines into the university curriculum is evident.

Higher education curriculum also discloses the changed relations among higher education, knowledge and society (Light, Cox and Calkins, 2009). On the one hand, social problems become more and more complex; it becomes impossible to solve them by means of one discipline. This requires multidisciplinary and interdisciplinarity in research and study. On the other hand, the need to solve these problems by considering the context and specificity of their emergence, as well as the necessity to strengthen collaboration between public and private sectors, to integrate fundamental and practical knowledge occurs. These tendencies highlight the need to produce dynamic, easily applied, constantly rethought knowledge 'beyond' disciplines. This requires transdisciplinary curriculum (Carayannis and Campbell, 2006; Light et al., 2009; Davies and Devlin, 2010; Hyun, 2011).

Multidisciplinary, interdisciplinary, transdisciplinary study programmes are designed and implemented at higher education institutions. But a clear definition of such study programmes is a problem. As Knight et al. (2013) note, experience shows that even lecturers of the same programme name it differently.

However, different trends of multiple disciplinarity raise different aims for studies, require different consolidation of disciplines and collaboration intensity of persons participating in the study process. Thus confusion of terms can provoke misunderstandings and even conflicts in academic strata; and this aggravates or even makes the emergence of new study programmes designed on the basis of several disciplines impossible.

Different study programmes are understood differently not only by practitioners. It also becomes evident that different scientists not only define these programmes in different ways but also disclose different aspects and characteristics of separate study programmes. Thus it is necessary to provide rationale for the characteristics of different study programmes and identify essential

differences of these programmes, which become evident in defining these programmes.

Due to these reasons the article seeks to answer the following questions: how particular is the phenomenon of interdisciplinarity? How is it possible to define different study programmes and what essential characteristics of these programmes should be disclosed in order to properly identify them, and later to construct and realize them?

The aim of the article is to disclose the controversies of study programmes' concept and structure. It employs the method of scientific literature analysis.

The first part of the article discusses the typology of interdisciplinary activities and discloses the duality of the term 'interdisciplinarity'. The second part analyzes how it is possible to define different trends of multiple disciplinarity. The third part analyzes the definitions of multidisciplinary, interdisciplinary and transdisciplinary study programmes as well discloses essential characteristics of these programmes.

Phenomenon of interdisciplinarity

As soon as interdisciplinary activities emerged, attempts to define the term of interdisciplinarity started. Most often the obtained level of disciplines' integration is emphasized (Lattuca, 2001). However, such definition has not been sufficient as interdisciplinarity has become more frequent and more various. The first typology of interdisciplinarity was published in 1972 by the OECD (Lattuca, 2001; Klein, 2010). Having integrated the approaches defining interdisciplinarity, which have existed so far, three main characteristics of interdisciplinarity were disclosed: the level of interaction of disciplines; intensity of integration of knowledge, methods, procedures of different disciplines, importance of communication among representatives of different disciplines. These aspects are also highlighted in contemporary literature (e.g., Choi and Pak, 2006; Klein, 2010; Hyun, 2011; Kanisaukas, 2011; Wright et al., 2011; Bajada and Trayler, 2013; Knight et al., 2013; and so on) in defining interdisciplinarity.

The three main characteristics can manifest in different intensity creating a broad field of interdisciplinarity. Three trends of interdisciplinarity – multidisciplinary, interdisciplinary and transdisciplinary – were distinguished in order to indicate the specific features of these activities. This typology remains relevant so far, but terms are used as synonyms without thinking about their differences (Choi and Pak, 2006; Knight et al., 2013). This causes a confusion of terms.

It should be mentioned that it is possible to find research (e.g., Max-Neef, 2005; Davies and Devlin, 2010; Kanišauskas, 2011; Wright et al., 2011) about pluridisciplinarity, paradisciplinarity, cross-disciplinarity. However, the descriptions show the possibility to attribute them to one of three above-mentioned main trends of interdisciplinarity.

In analyzing scientific works, the second reason, why the search for the definition of interdisciplinarity is difficult, becomes evident. The term of interdisciplinarity names both any activity when one works on the basis of several disciplines and the narrower 'trend' between

multidisciplinarity and transdisciplinarity. Most often every researcher solves this problem individually and a consensus on this question does not exist. The activity when it is not important to highlight the strength of disciplines' interaction and integration is named in different terms. For example, Choi and Pak (2006) suggest to call it multiple disciplinarity, Badley (2009) speaks about 'integration of disciplines', whereas Marcovich and Shinn (2011) use terms 'new disciplinarity' or 'antidisciplinarity'.

As this question is important, further on the term 'multiple disciplinarity' will be used when speaking about research or studies when one works on the basis of several disciplines; however, it is not important to highlight the strength level of these disciplines' interaction and integration. In the meantime the term 'interdisciplinarity' will be used with reference to the offset of this multiple disciplinarity being between multidisciplinary and transdisciplinarity.

So how can separate trends of interdisciplinarity be defined? What similarities and differences of them can be found?

Jacobs (1989), Russell, Wickson and Carew (2008), Klein (2010), Hyun (2011), Knight (2011), Wright et al. (2011), Knight et al. (2013) and others define **multidisciplinarity** as coexistence, comparison, junction of separate and autonomous disciplines without trying to integrate them. In this case a comparison of disciplines provides a broader choice of knowledge, information and methods in pursuing to analyze the complex phenomenon or explore general problem. Hyun (2011) also adds that the space of the main discipline seems to be broadened though aims of the activity remain 'bound' to the main discipline. Choi and Pak (2006) add that the result of the multidisciplinary is the sum of separate parts.

Max-Neef (2005), Choi and Pak (2006), Hyun (2011), Bossio et al. (2013) interpret multidisciplinary through the prism of collaboration among researchers. They note that every person participating in multidisciplinary remains in the frame of own discipline and applies the methods and concepts of this discipline. Members of a multidisciplinary team carry out their analysis independently, work on different aspects of a project (in parallel or in sequence). In multidisciplinary no interaction of participants is hardly necessary.

Thus it is possible to define *multidisciplinarity* as *coexistence of disciplines in research or studies when a common problem is analyzed or general phenomenon is explored; however, different disciplines do not make more a vivid influence upon one another, and produced knowledge and applied methods remain in the frame of separate disciplines.*

Hyun (2011) notes that **interdisciplinarity** can be perceived as a junction of disciplines that retain their methods and knowledge to solve the problems. Knight (2011) and Knight et al. (2013) add that synthesis of disciplines' knowledge in interdisciplinarity provides a more holistic understanding of the phenomenon analyzed. They explain that in the case of interdisciplinarity broad and complex questions are answered, or problems are solved. These questions or problems are too broad or too

complex to solve or answer on the basis of a single discipline. Choi and Pak (2006) point out that in interdisciplinarity common methodologies are used, epistemological integration appears, new knowledge, approaches or even new disciplines are created.

Choi and Pak (2006), Barrett (2012), McCulloch (2012) emphasize that interdisciplinarity is based on a disciplinary basis. It depends on disciplinary knowledge, but broadens it. Larson, Landers and Begg (2011) add that development of knowledge takes place when researchers from different disciplines work 'on the border' of these disciplines. Russell et al. (2008) argue against this opinion in a way. They note that interdisciplinarity manifests when representatives of two or more disciplines analyze the questions in the fields that emerge in the places of disciplines' intersection or overlap. Choi and Pak (2006) agree with this approach by stating that in the case of interdisciplinarity one works between several disciplines.

Klein (2010, p.18) treats the existence of interdisciplinarity 'between' disciplines differently. The author notes that in the case of interdisciplinarity 'integration and interaction [of disciplines] become proactive', i.e. interdisciplinary approach makes to restructure existing knowledge by interrelating and intermerging it. Such approach allows solving problems and raising questions that are not specific for any separate discipline, and solution of these questions requires researchers' active collaboration. Interdisciplinary collaboration, according to most researchers (e.g., Newell, 1992; Bossio et al., 2013; O'Brien et al., 2013; Spitzer, 2013; VanWylen et al., 2013, and others), should be based on sharing of experience, intensive learning or even re-education as well as the wish to glance at common problems or phenomena in different ways.

Choi and Pak (2006) also add that the result of interdisciplinarity is more than only the sum of separate parts, i.e. the synergy is achieved in the case of interdisciplinarity.

Thus, when generalizing the thoughts of the authors, it is possible to state that *interdisciplinarity is the coherence and integration of equal disciplines created in research or studies as the result of active collaboration of researchers and/or lecturers, which aims to solve complex problems or analyze complex phenomena by acquiring a more comprehensive understanding of these problems or phenomena.*

Klein (2004) indicates that the meaning of **transdisciplinarity** is linked to comprehensive paradigms, broad interdisciplinary fields and synoptic disciplines. The works by Choi and Pak (2006), Russell et al. (2008), Hyun (2011), Mittelstrass (2011) disclose a similar opinion. They state that transdisciplinarity transcends disciplinary boundaries when analyzing and solving complex problems or phenomena. It seeks to unify knowledge 'beyond' the borders of disciplines and defines what at the same is 'among', 'beyond' and 'across' disciplines. In the case of transdisciplinarity, a common methodology is created and used, and integration, assimilation, amalgamation, incorporation, unification, and harmonization of disciplines and approaches takes place. Transdisciplinarity involves researchers from different disciplines, as well as

stakeholders, non-scientists, and non-academic participants.

Hyun (2011) indicates that the aim of transdisciplinarity is the understanding of contemporary world. Transdisciplinary research is used in order to solve complex public problems. In this case disciplinary knowledge is 'fused' with available practical knowledge and by this a 'hybrid', which is completely different than its components, is created. Klein (2004) points out the reasons for the need of practical knowledge: transdisciplinarity seeks to newly rethink the relations of science and society, and this requires to overstep the borders of not only disciplines but also of interdisciplinarity.

Klein (2004) points out one more important aspect of transdisciplinarity. It is related not only to the solution of problems but also to the choice of the problems solved by raising value questions. Max-Neef (2005) complements this thought by distinguishing weak and strong transdisciplinarity. The first one means the application of much more systemic research methods than usual in solving practical problems (this kind of transdisciplinarity is apparently analyzed in the above-discussed works), and the second one – the research, which is related to the very nature of the reality. This second kind of transdisciplinarity, according to the researcher, is real transdisciplinarity because it unites all integration levels of different science branches. Here one reaches the value level by formulating questions 'what should we do?' or rather 'how should we do what we want to do?'

Therefore, it is possible to note that *transdisciplinarity is the amalgamation and assimilation of disciplines in research or studies when collaborating representatives of different disciplines and members of non-academic community solve complex public problems or analyze complex phenomena, which should be chosen in pursuing to answer value questions.*

Thus phenomenon of interdisciplinarity involves a broad spectrum of disciplines' interaction, integration of knowledge, methods and so on, as well as communication among members of different disciplines. Due to this reason the phenomenon is hard to define: the term of interdisciplinarity can be understood in two ways – both as any activity when one works on the basis of several disciplines and as a narrower field of this activity existing between multidisciplinary and transdisciplinarity.

Multidisciplinary is characterized by combining several disciplines, uplift of the main discipline and minimal need to collaborate among representatives of different disciplines. Interdisciplinarity shows the activity between or 'on the border' of several equal disciplines, the need to reconceptualise possessed knowledge, intensive collaboration of different disciplines' representatives. Transdisciplinarity manifests as full integration, assimilation, amalgamation of disciplines in research and studies. In this case practical knowledge is also applied aside scientific knowledge. In transdisciplinarity intensive collaboration not only of researchers and lecturers but also of non-academic community members is important.

Differences and similarities of separate multiple disciplinary trends are presented in Table 1.

Table 1

Coherences among different trends of multiple disciplinarity

Multidisciplinarity	Interdisciplinarity	Transdisciplinarity
one works in several disciplines	one works BETWEEN several disciplines	one works BEYOND, ACROSS disciplines; integration of science fields takes place
one main discipline is distinguished	disciplines are equal	separate disciplines disappear
disciplinary basis is maintained	disciplinary basis is maintained	separate disciplines disappear
knowledge remains within disciplines	re-structurization and re-conceptualization of disciplinary knowledge	fundamental and practical knowledge is integrated, united, and amalgamated
broad questions are solved	the questions, which are not specific for a separate discipline, are solved	complex public problems are solved; value questions are raised
collaboration among representatives of different disciplines is almost unnecessary	active collaboration among representatives of different disciplines is necessary	active collaboration among representatives of different disciplines and members of non-academic community is necessary

Definition of multiple disciplinary study programmes¹

The first part of the article has disclosed the essential aspects of multiple disciplinarity and has defined its different types. Further we analyze what aspects of multiple disciplinarity are distinguished in defining different study programmes.

Davies and Devlin (2010) note that students in *multidisciplinary study programmes* when specializing in one discipline can also choose additional subjects from other disciplines. Barnard et al. (2013), who state that such programmes emerge when knowledge of other disciplines is incorporated into disciplinary curriculum, express a slightly different approach to multidisciplinary study programmes. However, such definitions are not precise. They rather show the possibility to acquire a minor, but not multidisciplinary study programmes.

Max-Neef (2005) suppose that multidisciplinary studies take place when at the same time more than one discipline is studied; however, a clearer coherence between the knowledge of these disciplines is not made. As Bajada and Trayler (2013) state, a multidisciplinary study programme is ‘a collection’ of disciplinary courses presented as one programme but without clear coherences. However, the questions remain about how to highlight the aim of such a ‘programme’ and whether it can have any consistency at all.

Davies and Devlin (2010) define a multidisciplinary study programme as collection of separate modules from different disciplines, which is somehow related to the main phenomenon analyzed or the problem solved. They add that in this case the main problem is analyzed in different

aspects; however, though the knowledge of other disciplines is recognized, one does not seek to integrate it.

Rives-East and Lima (2013) present a rather imaginative definition. They state that a multidisciplinary study programme is ‘a puzzle’ constructed of different parts when each discipline creates own part in the solution of a broader problem, and these parts integrate almost not overlapping. Such definition of multidisciplinary study programmes involves essential characteristics of multidisciplinary – the necessity for existence of a common broad problem or phenomenon, analysis of this phenomenon or problem by means of several disciplines, a weak need to relate knowledge of different disciplines into the common entirety.

In generalizing the highlighted remarks of scientists, it is possible to state that a *multidisciplinary study programme is a study programme, which consists of the entirety of modules from two or more disciplines aimed to analyze the main problem or phenomenon on the borders of these disciplines; the aim of this programme is to acquire the knowledge of these disciplines by not seeking for their integration.*

The presented definitions disclose the difficulty of defining multidisciplinary study programmes. More and more uncertainties occur in attempting to evaluate how it would be possible to define *interdisciplinary study programmes*. The existing definitions are quite fragmentary. In addition, in scientific literature one can detect a certain confusion of terms. Klein (2010) indicates a possible reason for such confusion – universities take the easiest way and instead of interdisciplinary study programmes create multidisciplinary collection of modules.

So what characteristics should be inherent in a real interdisciplinary study programme? How is it possible to define it?

Newell (2007, 2011) notes that interdisciplinary studies is a process, which uses academic disciplines and

¹ According to Juceviciene and Simonaitiene (2008, p. 4), a study programme is ‘a teaching/learning plan that includes the system of study content and ways of lecturers’ and students’ activity, and is aimed to implement the means planned by education institution (-s) in order to achieve the formulated learning aims’.

requires their integration. Such studies are the process of two parts: they critically evaluate a disciplinary approach and integrate insights of different disciplines in designing more distinct understanding of the existing phenomenon. A similar approach is expressed by Jones (2010), who states that interdisciplinary studies take place when students are allowed to see the problem from different perspectives; and the essential aim of studies is to create the synthesis of disciplinary knowledge. Thus several aspects should be important for interdisciplinary studies (as well as for study programmes): emphasis of the phenomenon analyzed during studies, disciplinary basis of studies, critical analysis of disciplinary knowledge as well as integration and synthesis of the knowledge when creating new insights.

How these aspects are treated by researchers who define interdisciplinary study programmes?

Rives-East and Lima (2013) state an interdisciplinary study programme is designed in considering the principle of a 'kaleidoscope' when disciplines treat one problem from different points, these approaches are presented for students at the same time, and the range of disciplines is not clear. Badley (2009) complements that an interdisciplinary curriculum has to coordinate two or more disciplines as well as stimulate students to see coherences between these disciplines.

Bajada and Trayler (2013) treat interdisciplinary study programmes from different perspectives. They note this is a common activity being performed by representatives of different disciplines, sub-disciplines or professions when approaches are assembled and synthesized in a certain way. The thought is complemented by Brint et al. (2009), who state: an interdisciplinary study programme should employ at least two thirds of teachers from different academic units. Of course, such a clear indication of lecturers from different units can cause certain doubts. However, it discloses the real necessity for the representatives of different disciplines to collaborate.

Bajada and Trayler (2013) state that in merging from multidisciplinary study to interdisciplinary ones it is not necessary to reconsider the content of particular study programme; however, the content must be reorganized, restructured and presented differently. In this case a disciplinary basis of interdisciplinary study programmes' content is recognized. The programme's content must be designed by referring to disciplinary knowledge; however, this content has to be presented for students by invoking different access than in the case of multidisciplinary study programmes. Particular questions analyzed during the study programme should not be discussed in the range of one discipline – every question must be analyzed from different positions of disciplines at one and the same time.

Newell (2007) states interdisciplinary study programmes integrate (not compare) what they intercept from disciplines and/or consciously control this process. So a clear difference is found between multidisciplinary and interdisciplinary programmes – the essential aspect showing interdisciplinarity in studies is the integration of disciplines. However, here one does not limit only in this factor. A conscious control of the integration process shows that interdisciplinarity must be constantly analyzed

and maintained – thus collaboration of representatives of these study programmes must be active and intensive.

Referring to the above-mentioned definitions, it is possible to define *interdisciplinary study programme* as the study programme consisting of the courses prepared on the basis of two or more disciplines, which aim is to develop understanding of phenomena being analyzed when integrating and synthesising the knowledge in determined disciplines. Active collaboration of lecturers (and, possibly, of students) from different disciplines is important in creating and realizing these programmes.

The problem when searching for the definition of interdisciplinary study programmes is confusion with multidisciplinary study programmes. When analyzing definitions of **transdisciplinary study programmes** the different challenge emerged. The identified scientific works speak about transdisciplinary studies and what features should be characteristic of transdisciplinary studies. However, they are not defined in a clearer way.

Klein (2010) states the design of transdisciplinary study programmes must be comprehensive and particularly integrated. This statement does not tell much about what these programmes must look like.

Rives-East and Lima (2013) write that a transdisciplinary study programme is designed by referring to the problem, which oversteps any discipline; and the aim of studies is not to acquaint students with several disciplines but rather to emancipate them from disciplinary approach. Hyun (2011) presents references how overstepping of disciplinary basis should take place in including transdisciplinarity into the university curriculum: every person acting in study process should, first of all, attempt to especially deepen disciplinary knowledge, at the same time to deconstruct and reconstruct it in relation to the knowledge of other disciplines. As the author states, 'contextualized complex' knowledge, which would be important both in the activity of theoretical and practical level should be created in such a way. Another important condition is to create the concepts beyond disciplinary borders in order to have 'relating factor'.

Klein (2004) develops this thought in a simpler way. Multidisciplinary and interdisciplinarity in study programmes does not raise the question of disciplinary thinking whereas transdisciplinarity refuses the disciplinary basis when coordinating different forms of knowledge. Thus both Klein and Hyun (2011) not only disclose the refusal of disciplinary basis but also highlight the question of different ways, which help to produce knowledge included into transdisciplinary studies. Taylor (2011) agrees that transdisciplinary studies eliminate differences between fundamental and applied knowledge. Burgett et al. (2011) note that due to this reason community partners become creators and implementers of study programmes together with university representatives.

With reference to the highlighted aspects, *transdisciplinary study programmes* can be defined as study programmes, the content of which is constructed by overstepping not only disciplinary but also borders of science fields as well as coordinating different forms of knowledge; one of the main aims of these programmes is seeking to get rid of the disciplinary approach. Not only

members of academic community but also stakeholders take part in creation and realization of transdisciplinary programmes.

It is quite hard to define study programmes of different type because it is possible to detect only rather fragmentary definitions of such programmes.

As one may notice, the main differences that allow identifying different study programmes are disclosed in speaking about the aim and structure of study programmes. Also certain peculiarities of common activity both of lecturers and, possibly, of students were identified when analyzing definitions of interdisciplinary and transdisciplinary study programmes

Multidisciplinary study programmes consist of the entirety of courses comprised of two or more disciplines. In interdisciplinary study programmes the courses constructed on the basis of two or more disciplines are important. In courses of transdisciplinary study programmes the knowledge of science fields is overstepped as well as different forms of knowledge are coordinated. Learning outcomes of the study programmes reflect these tendencies. In the case of multidisciplinary study programmes this is acquisition of determined disciplinary knowledge, in interdisciplinary programmes – understanding based on critical analysis and synthesis of disciplinary knowledge and transdisciplinary study programmes aim to liberate students' thinking from disciplinary approach. In order to implement these aims in interdisciplinary study programmes the need for collaboration of lecturers from different disciplines becomes obvious, and in transdisciplinary programmes – the need for collaboration of not only academic but also of non-academic community representatives. Definitions of multidisciplinary study programmes do not disclose particular requirements for the ways of lecturers' activity.

Conclusions

- Research works and practice do not often disclose clear borders in defining different trends of interdisciplinarity (multiple disciplinarity). Tendencies when different constructs are referred to by the same name or a particular construct is attributed to the content not characteristic of it are noted.
- Multidisciplinarity, interdisciplinarity and transdisciplinarity show integration and interaction of disciplines, as well as collaboration of researchers and/or lecturers in studies and/or research. In multidisciplinarity these main characteristics manifest themselves most weakly; in this case disciplines are compared, their intensive interaction is not sought and collaboration of researchers/lecturers is not active. Transdisciplinarity shows the most intensive manifestation of three identified characteristics: disciplines merge so that separate disciplines disappear, fundamental and practical knowledge is integrated, representatives of separate disciplines and members of non-academic community intensively collaborate. In the case of interdisciplinarity, one works between disciplines, disciplinary knowledge is

re-conceptualized and re-structured as well as intensive collaboration of different disciplines' representatives takes place.

- The main aspects of multidisciplinarity, interdisciplinarity and transdisciplinarity are visible in seeking to define different study programmes. The main characteristics, which become evident in searching for definitions of different study programmes, are the structure of programme, learning outcomes as well as peculiarities of lecturers' (and possibly students') collaboration during studies. Multidisciplinary study programmes consist of disciplinary courses' entirety that allows acquiring knowledge of these disciplines. An interdisciplinary study programme should consist of the courses designed on the basis of different disciplines in pursuing for integration and synthesis of determined disciplines' knowledge. In the case of transdisciplinary study programmes, courses are constructed by overstepping knowledge of different disciplines as well as integrating fundamental and practical knowledge. The aim of such study programmes is liberation from disciplinary approach.

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N. Putrienė

Tarpdalykinės studijų programos: sampratos ir sandaros kontroversijos

Santrauka

Aukštojo mokslo institucijos vis dažniau kuria ir realizuoja kelių disciplinų pagrindu parengtas studijų programas. Siekiant studijų programų sėkmės ir gyvybingumo, svarbu aiškiai identifikuoti skirtingų studijų programų charakteristikas. Visgi patirtis rodo, kad daugelyje institucijų skirtingų daugiadalykinių studijų programų terminai nėra aiškiai apibrėžiami.

Dėl šios priežasties šiame straipsnyje siekiama atsakyti į tokius probleminius klausimus: kuo ypatingas tarpdalykiškumo fenomenas? Kaip galima apibrėžti skirtingas daugiadalykines studijų programas ir kokias esmines šių programų charakteristikas reikėtų išryškinti, siekiant jas tinkamai identifikuoti, o vėliau – konstruoti ir realizuoti? Šio straipsnio tikslas – išryškinti tarpdalykinių studijų programų sampratos ir sandaros kontroversijas. Siekiant šio tikslo naudotas mokslinės literatūros analizės metodas.

Ankstvyvuosiuose tarpdalykiškumo apibrėžimuose buvo akcentuojamas pasiektas disciplinų integracijos laipsnis, tačiau ilgainiui tokios apibrėžties ėmė neužtekti. Pirmojoje tarpdalykiškumo tipologijoje, publikuotoje 1972 metais, buvo išryškintos jau trys pagrindinės tarpdalykiškumo charakteristikos: disciplinų tarpusavio sąveikos lygis, skirtingų disciplinų žinių, metodų, procedūrų ir t.t. integracijos intensyvumas, komunikacijos tarp skirtingų disciplinų atstovų intensyvumas. Šie aspektai išryškunami ir naujausioje literatūroje apibrėžiant tarpdalykiškumą.

Minėtoje tipologijoje buvo išskirtos ir trys pagrindinės tarpdalykiškumo kryptys - multidalykiškumas, tarpdalykiškumas bei transdalykiškumas, - rodančios disciplinų integracijos ir sąveikos intensyvumo skirtumus nuo minimalaus multidalykiškumo atveju iki maksimalaus transdalykiškume. Nepaisant to, kad ši tipologija išlieka aktuali iki šiol, neretai mokslo darbuose šie terminai vartojami kaip sinonimai, nesusimąstant apie jų skirtumus.

Mokslinėje literatūroje išryškėja ir antra priežastis, apsunkinanti tarpdalykiškumo apibrėžimo paiešką. Tarpdalykiškumu įvardinama tiek bet kokia veikla, kai dirbama kelių disciplinų pagrindu, tiek ir siauresnė tokios veiklos „atšaka“, esanti tarp multidalykiškumo ir transdalykiškumo. Kai kurie mokslininkai bando spręsti šią problemą, tačiau vieningo sutarimo šiuo klausimu nėra: veikla, kai nesvarbu išryškinti disciplinų sąveikos ir integracijos stiprumą, įvardinama skirtingais terminais (šiuo straipsnyje tokia veikla įvardijama „daugiadalykiškumo“ terminu).

Buvo nustatyta, kad *multidalykiškume* disciplinos yra sugretinamos, nesiekiami intensyvios jų sąveikos, o mokslininkų/dėstytojų bendradarbiavimas nėra aktyvus. Taigi multidalykiškumą galima apibrėžti kaip disciplinų koegzistavimą moksliniuose tyrimuose ar studijose, kai tirama bendra problema ar analizuojamas bendras fenomenas, tačiau skirtingos disciplinos nedarą ryškesnės įtakos viena kitai, o kuriamos žinios ir naudojami metodai pasilieka atskirų disciplinų rėmuose.

Tarpdalykiškumo atveju dirbama tarp kelių disciplinų, rekonceptualizuojamos ir restruktūrizuojamos disciplininės žinios bei vyksta intensyvus skirtingų disciplinų atstovų bendradarbiavimas. Vadinasi, tarpdalykiškumas yra dėl aktyvaus mokslininkų ir/ar dėstytojų bendradarbiavimo moksliniuose tyrimuose arba studijose kuriama lygiaverčių disciplinų sąveika bei integracija, skirta tam, kad būtų sprendžiamos kompleksinės problemos ar analizuojami kompleksiniai fenomenai, įgaunant labiau visuminį šių problemų ar fenomenų suvokimą.

Transdalykiškume disciplinos susilieja tiek, kad atskirų disciplinų nelieka, jungiamos fundamentaliosios ir praktinės žinios, intensyviai bendradarbiauja skirtingų disciplinų atstovai bei neakademinės bendruomenės nariai. Taigi transdalykiškumas - tai disciplinų susiliejimas ir asimiliacija moksliniuose tyrimuose ar studijose, kai bendradarbiaudami skirtingų disciplinų atstovai ir neakademinės bendruomenės nariai sprendžia kompleksines visuomenines problemas ar analizuoja kompleksinius fenomenus, kurie turėtų būti pasirenkami siekiant atsakyti į vertybinius klausimus.

Pagrindiniai multidalykiškumo, tarpdalykiškumo ir transdalykiškumo aspektai atsispindi ir siekiant apibrėžti skirtingas studijų programas.

Nustatyta, kad pagrindiniai aspektai, kuriais charakterizuojamos skirtingos studijų programos yra šių programų mokymo(si) tikslas, programos turinio struktūra ir reikalavimai dėstytojų (bei, galimai, studentų) bendradarbiavimui. Remiantis išanalizuota literatūra, *multidalykinė studijų programa* buvo apibrėžta kaip studijų programa, kurią sudaro modulių iš dviejų ar daugiau disciplinų visuma, skirta išanalizuoti pagrindinę problemą ar fenomeną šių disciplinų ribose, o mokymosi tikslas yra įgyti šių disciplinų žinių, nesiekiant jų tarpusavio integracijos. Tuo tarpu *tarpdalykinę studijų programą* galima apibrėžti kaip studijų programą, kurią sudaro dviejų ar daugiau disciplinų pagrindu parengti moduliai, kuriuos kuriant ir realizuojant svarbus dėstytojų (ir galimai studentų) iš skirtingų disciplinų aktyvus bendradarbiavimas, o mokymosi tikslas yra su(su)kurti analizuojamų fenomenų supratimą, paremtą nustatytų disciplinų žinių integracija ir sinteze. *Transdalykinės studijų programos* galima apibūdinti kaip studijų programas, kurių turinys yra konstruojamas peržengiant ne tik disciplinines, bet ir mokslo sričių ribas bei derinant skirtingas žinių formas, kurias kuriant ir realizuojant dalyvauja ne tik akademinės bendruomenės nariai, bet ir bendruomeniniai partneriai, ir kurių vienas iš pagrindinių mokymo(si) tikslų yra siekis išsilaisvinti iš disciplininio požiūrio.

Reikšminiai žodžiai: studijų programa, multidalykiškumas, tarpdalykiškumas, transdalykiškumas.

First received: October, 2014

Accepted for publication: December, 2014